Women, Gender and Climate Governance in Peninsular Malaysia





This policy paper is developed with support from the Women's Fund Asia (WFA) © 2025 Klima Action Malaysia - KAMY

Principal Investigator : Ili Nadiah Dzulfakar

Researcher : Anise Kaz

Reviewer: Sunitha Bisan, Adjunct Professor University of Ottawa

Reviewer : Marisa Hutchinson, Gender, Development and Environment Practitioner Reviewer: Myrah Nerine Butt, Gender Justice Policy Advocacy Manager, Oxfam in Asia

Suggested citation

Klima Action Malaysia - KAMY, Women, Gender and Climate Governance in Peninsular Malaysia, October 2025

Reproduction of the text for educational or non-commercial use is not authorised without prior permission from Klima Action Malaysia - KAMY. Ensure proper citation and that material is used accurately and not in a misleading context.

Online policy paper download:



Front artwork and illustration by Perempuanmelawanart © www.instagram.com/perempuanmelawanart/
Report Visual Design by Najihah Sharif © 2025 (https://www.behance.net/notjojo)

FOREWORD

Foreword

Ili Nadiah Dzulfakar, Klima Action Malaysia

This policy paper is rooted in KAMY's mission as a feminist climate justice organisation that combines research and advocacy. As its principal investigator, I have sought to bring together the lived realities of women in Peninsular Malaysia with the urgent need for structural reform in our climate governance. While the chapters of this paper organise the evidence thematically, the themes are deeply interconnected, reflecting how gender equality challenges cut across finance, participation, data, and just transition. Addressing these challenges is not a matter of isolated fixes but of sustained commitment to dismantling systemic barriers.

This work stands as part of a wider movement to centre women's voices, knowledge, and leadership in shaping equitable climate futures for Malaysia. It represents both an act of documentation and a call to action, one that is anchored in solidarity with communities most affected by the climate crisis.

KAMY extends its deep appreciation to IWRAW Asia Pacific and Women's Fund Asia for their support, and most importantly to the women who shared their time and experiences. We also acknowledge the contributions of interviewees, experts, and community leaders, whose insights and courage helped shape this paper. Their perspectives are the foundation of this work and the reason it speaks with urgency and hope.

Myrah Nerine Butt, Oxfam in Asia

There can be no climate justice without gender justice. Climate change is not just a technical issue that could be fixed through technocratic solutions. It is an issue that is directly linked to the well-being of people and the planet. While events like COP focus on big numbers and jargon heavy reports, communities at the frontlines struggle to survive in the face of increasing frequency and intensity of climate events. Lived realities of women and girls are changing in profound ways and policies are struggling to catch up. We hope this research would equip the feminist civil society with knowledge and concrete pathways to influence national decisions on climate and would lead to gender transformative policies and investments in climate in Malaysia. Towards feminist solidarity!

Table of Content

Foreword	2
Table of Content	3
Glossary	5
List of Tables, Figures and Boxes	7
Executive Summary	8
Introduction	9
Methodology	1
Roadmap	19
CHAPTER 1: Baseline	20
1.1 Status of Environment and Climate Disasters in Malaysia	21
1.2 Malaysia's Policies, Treaties, and International Obligations	21
 1.21 Climate Change, Energy Transition, and Disaster Risk Reduction 1.22 Women and Gender Equality 1.23 Indigenous Peoples in Peninsular Malaysia 1.24 CEDAW Review and UPR Recommendations 	21 26 27 27
1.3 Concept of Gender and Intersectionality	29
CHAPTER 2: Impacts of Climate Change and Climate Change Projects on Women	30
2.1 Healthcare	31
 2.11 Impact of Climate Disasters and Environmental Degradation on Women's Health 2.12 Compromised Safety and Gender-Based Violence During Climate Disasters 2.13 Collapse of Healthcare Systems During Climate Disasters 2.14 Recommendations for Healthcare 	31 34 35 36
2.2 Care work, Workplace and Employment	39
 2.21 The Context of Care 2.22 Compounding Effects of the Climate Crisis on Gendered Roles in Care Work 2.23 Integrating Climate Action into Malaysia's Evolving Care Economy 2.24 Workplace Flexibility in Times of Disaster 2.25 Mobility of Women 2.26 Recommendation for Care work, Workplace and Employment 	39 40 41 42 43 45
2.3 Education and Community Knowledge	50
2.31 Disrupted Education During Disasters 2.32 Systemic Gaps In Climate and Gender Awareness in Education 2.33 Community-based Climate and Disaster Education 2.34 Bridging The Intergenerational Knowledge Gap 2.35 Recommendation for Education and Community Knowledge	50 50 51 52
2.35 Recommendation for Education and Community Knowledge	53

TABLE OF CONTENT

2.4 Energy Transition Projects	56
2.41 Energy Access and Electrification	57
2.42 The Reality Behind the Energy Transition Projects	57
2.43 Emerging Climate Infrastructure and Governance Risks	61
CHAPTER 3: Systemic Issues	63
3.1 The Impact of Data Gaps on Women	64
3.11 Insufficient and Inadequate Data	64
3.12 Data Accessibility, Control, and Governance	65
3.13 Institutional Memory Loss and Gender Blindness in the State	66
3.14 Reframing Data as a Matter of Justice, Not Just Measurement	67
3.15 Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) 3.16 Traditional and Indigenous Knowledge for Climate Adaptation and Resilience	67 68
3.17 Recommendation for Data Gaps on Women	69
3.2 Policy Instruments and Legal Framework	73
3.21 Gender Mainstreaming National Policies	73
3.22 Gender Analysis of Malaysia's Key Climate Related Policies	75
I. National Women's Policy (Dasar Wanita Negara, DWN 2025-2030)	78
II. National Climate Change Policy 2.0 (NCCP 2.0)	80
III. National Energy Transition Roadmap (NETR)	82
IV. National Action Plan of Business and Human Rights (NAPBHR)	85
3.23 Legal Mechanisms	88
3.24 Development of Key Upcoming Policies and Legal Frameworks	90
3.25 Institutional Challenges in Subnational Gender and Climate Governance	91
3.26 UNFCCC National Gender and Climate Change Focal Point 3.27 Recommendation for Policy Instruments and Legal Frameworks	93 95
3.3 Finance	101
3.31 Climate Financing	101
3.32 Gender Responsive Budgeting	102
3.33 Gendered & Inequitable Disaster Aid	104
3.34 Systemic Gaps in Financial Inclusion for Rural and Indigenous Women	106
3.35 Recommendation for Finance	107
CHAPTER 4: Recognising Women as Agents of Change	112
4.1 Participatory Decision Making	113
4.11 Lack of Participation of Women in Climate Decision Making Space	113
4.12 Safety and Risk of Women in Participation	114
4.13 Meaningful Consultations	115
4.14 Recommendations for Participatory Decision Making	117
4.2 Just Transition : Why Is It Important	119
4.21 From Vulnerability to Agency	120
4.22 Gap Analysis: Where Are We Now?	120
4.23 The Dual Opportunity Frame: Where Change Can Begin4.24 GEDSI as a Cross-Cutting Strategy in JET	121 123
4.24 GED31 as a Cross-Cutting Strategy in JET 4.25 Empowerment Pathways for Women in JET	125
Conclusion	129
Reference	131

Glossary

BHEUU | The Legal Affairs Division under the Prime Minister's Department

BIA | Beneficiary Impact Assessments

BIncA | Beneficiary Incidence Analysis

BTR | Biennial Transparency Reports

CCUS | Carbon Capture, Utilisation and Storage

CEDAW | Convention on the Elimination of All Forms of Discrimination Against Women

COP | Conference of Parties

CRC | Convention on the Rights of the Child

CRPD | Convention on the Rights of Persons with Disabilities

DOSM | Department of Statistics Malaysia

DRR | Disaster Risk Reduction

DWN 2025-2030 | National Women's Policy (*Dasar Wanita Negara*)

EHRD | Environmental Human Rights Defenders

EIA | Environmental Impact Assessment

EPU | Economic Planning Unit

FPIC | Free, Prior, and Informed Consent

GAP | Gender Action Plan

GCF | Green Climate Fund

GDP | Gross Domestic Product

GEDSI | Gender Equality, Disability, and Social Inclusion

GHG | Greenhouse Gas

 \mathbf{GR} | General Recommendations

GRB | Gender Responsive Budgeting

ILO | International Labour Organization

IPCC | Intergovernmental Panel on Climate Change

JAKOA | Department of Orang Asli Development

JKM | Jabatan Kebajikan Masyarakat

KKDW | Ministry of Rural and Regional Development

KPKT | Ministry of Housing and Local Government

KPM | Ministry of Education

KPWKM | Ministry of Women, Family and Community Development

LLA | Locally Led Adaptation

LWPG GAP | Lima Work Programme on Gender and Gender Action Plan

MEL | Monitoring, Evaluation and Learning

MET | Malaysian Meteorological Department

MOF | Ministry of Finance

MOFA | Ministry of Foreign Affairs

MOH | Ministry of Health

MOHE | Ministry of Higher Education

MOHR | Ministry of Human Resources

GLOSSARY

MOSTI | Ministry of Science, Technology and Innovation

MyCAC | Malaysia Climate Action Council

MyRER | Malaysia Renewable Energy Roadmap

NADMA | National Disaster Management Agency

NAP / MyNAP | National Adaptation Plan

NAPBHR | National Action Plan on Business and Human Rights

NBABHR | National Baseline Assessment on Business and Human Rights in Malaysia

NC | National Communication

NDC | Nationally Determined Contributions

NETR | National Energy Transition Roadmap

NGCCFP | National Gender and Climate Change Focal Point

NGO | Non Governmental Organisation

NCCP 2.0 | National Policy on Climate Change 2.0

NRES | Ministry of Natural Resources and Environment Sustainability

OSH | Occupational Safety Health

PET | Public Expenditure Tracking

PETRA | Ministry of Energy Transition and Water Transformation

PPS | Pusat Pemindahan Sementara

PWD | Persons with disabilities

RE | Renewable Energy

RMK 12/13 | Twelfth/Thirteenth Malaysian Plan

RUUPIN | Rang Undang-Undang Perubahan Iklim Negara (Climate Change Bill)

SDG | Sustainable Development Goals

SGBV | Sexual and Gender-based Violence

SIA | Social Impact Assessment

SLAPP | Strategic Lawsuit Against Public Participation

SRH | Sexual and reproductive health

STEM | Science, Technology, Engineering and Mathematics

SUHAKAM | Human Rights Commission of Malaysia

TVET | Technical and Vocational Education and Training

UNDRIP | UN Declaration on the Rights of Indigenous Peoples

UNFCCC | UN Framework Convention on Climate Change

UPR | Universal Periodic Review

WEDO | Women's Environment and Development Organisation

WGC | Women and Gender Constituency

WHO | World Health Organization

List of Tables, Figures, and Boxes

Tables

Table 1: Methodologies used for data collection

Table 2: List of Respondents

Table 3: Six Parameters with Definitions & Guiding Questions for Chapter 3.22 Gender Analysis of Malaysia's Key Climate Related Policies

Table 4: Gender Equality Continuum

Diagnostic by Parameters

Table 5: Summary of national level climate-related policies

Table 6: Summary of Gender Analysis of Malaysia's Key Climate Related Policies

Table 7: Assessment Tools for Gender-Responsive and Participatory Climate and Disaster Budgeting in Malaysia

Table 8 : Financial aid distribution according to disaster and gender in 2016.

Table 9: Key gender-related gaps in Malaysia's JET landscape

Table 10: Alignment Table - Women's Economic Participation in JET

Table 11: Mini Toolkit: Empowerment Pathways for Women in JET

Figures

Figure 1: Methodology Framework

Figure 2: Mapping the interaction of climate change and women

Figure 3: Gender Equality Continuum Tool

Figure 4: Chapter Roadmap

Figure 5: The 5R's of Carework

Figure 6: Disasters in Malaysia Data Overview from Info Bencana Jabatan Kebajikan Masyarakat Website

Figure 7: Key UNFCCC COP Decisions on Gender Figure 8: ASEAN countries with National Gender and Climate Change Focal Point under

the UNFCCC

Figure 9: Meaningful participation from our analysis of Malaysia's practices and international standards

Figure 10: Gender Gap Index in ASEAN by Economic Participation and Opportunity

Boxes

- Box 1: CEDAW Concluding Observations on the Sixth Periodic Report of Malaysia (2024)
- Box 2: Thematic List of Recommendations UPR of Malaysia (4th Cycle 45th Session)
- Box 3: Case Study Contamination of Natural Resources
- Box 4: Case Study Hydropower Megadams in Nenggiri, Kelantan
- Box 5: Case Study Mining and Environmental Health in Kampung Kelaik, Kelantan
- Box 6: Case Study Adaptation strategies in agriculture by women farmers
- Box 7: Synthesis: Cross-Policy Insights
- Box 8: Case Study Systemic Inequities in Disaster Relief Distribution Among Orang Asli Communities

Executive Summary

This policy paper highlights the complex and often overlooked challenges faced by women in the context of Malaysia's evolving climate crisis. Drawing on new evidence and case studies that surface previously undocumented issues, the analysis brings to light the gendered dimensions of climate impacts including healthcare, carework, education, employment, climate governance, finance and systemic barriers across social, economic, and environmental spheres. These include reflections on impacts of current climate mitigation efforts on women and communities.

Grounded Malaysia's international in commitments such as the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the Paris Agreement, this paper assesses the extent to which national frameworks reflect these obligations. Article 7 of the Paris Agreement calls for gender-responsive approaches to adaptation, and CEDAW outlines binding obligations to advance women's rights. However, implementation at the national level remains uneven. Recently revised national policies such as the National Women's Policy (Dasar Wanita Negara, DWN 2025-2030), the National Climate Change Policy 2.0 (NCCP 2.0), and the forthcoming National Adaptation Plan and key economic sectoral plans including the National Energy Transition Roadmap (NETR) and New Industrial Masterplan 2030 (NIMP) present important entry points to develop and apply Malaysia's gender transformative agenda into Malaysia's climate governance. In addition, proposed climate-related legislation, including the Climate Change Bill (RUUPIN) and the passed Carbon Capture, Utilisation and Storage (CCUS) Bill, marks a pivotal moment to ensure that women's voices, leadership, and agency are not only recognised but integrated into law and practice.

The first section establishes the baseline by outlining Malaysia's environmental and climate disaster context, its policy and international commitments, and the foundational concepts of gender and intersectionality that frame the paper. The second section outlines how climate change disproportionately affects women and impedes progress towards gender equality. The third section examines systemic gaps and institutional while identifying opportunities challenges, for reform. The fourth section emphasises the importance of women's leadership in climate action and the need to strengthen their role, especially in the context of a just and equitable transition.

This paper calls for deliberate and systemic inclusion of women. Not only as a means of addressing gendered climate vulnerabilities, but also to structurally realise women's full participation in decision-making and access to resources that enable transformative, communitylevel change. This paper aims to inform and influence public sector decision-makers, civil society, and researchers by offering a coherent roadmap for integrating gender into national climate responses. By aligning local policy with international standards and best practices, the paper not only fills a critical knowledge gap but also serves as a catalyst to drive inclusive, rightsbased climate action. The recommendations presented seek to inspire long-term structural change, ensuring that climate solutions are equitable, inclusive, and truly transformative for all, especially women.

Introduction

As Malaysia continues to experience the worsening impacts of climate change, the urgency to implement effective policies, safeguards, and adaptive measures has never been greater. While national efforts to address climate change are gaining momentum, one critical dimension remains underexplored: the role and experiences of women in all their diversity within Malaysia's climate landscape.

Globally, the differentiated impacts of climate change on women have been extensively documented. International frameworks such as the United Nations Framework Convention on Climate Change (UNFCCC) and scientific assessments like the Intergovernmental Panel on Climate Change (IPCC) Sixth Assessment Report (AR6) have clearly established that climate change is not gender-neutral. Instead, it intersects with existing inequalities such as gender, class, age, disability and others, resulting in disproportionate vulnerabilities and limited access to decision-making processes for many women.

Despite this recognition at the global level, Malaysia lacks a systematic national approach to analyse and address the gendered dimensions of climate change. These studies remain limited, fragmented, or conducted in isolation. Despite the lack of comprehensive data, emerging patterns from available evidence reflect regional and global trends: climate change does, indeed, impact women differently and more severely. This raises an urgent question: what are we going to do to ensure that these disparities do not persist or, worse, exacerbate the discrimination already faced by women?

As Inuit activist Sheila Watt-Cloutier aptly states: "The root cause of the problems we face is that we were given no sense of our own wisdom to deal with the issues at hand and that we were not given the voice to be able to address these issues from our perspectives." This testimony underscores the need to create enabling environments that dismantle systemic barriers, recognise lived experiences, and harness the leadership of women in shaping climate resilience.

This policy paper exists precisely to initiate a sustained action and drive momentum among policymakers, researchers, and civil society actors to implement gender-responsive climate action grounded in the principles of climate justice and human rights. This requires moving beyond performative inclusion and towards meaningful participation, where women are empowered as agents of change and contributors to climate solutions not merely as beneficiaries.

Methodology

The methodology for this policy paper integrates diverse research approaches to combine findings and generate evidence-based recommendations on women, gender, and climate governance in Peninsular Malaysia, as shown in **Figure 1**.

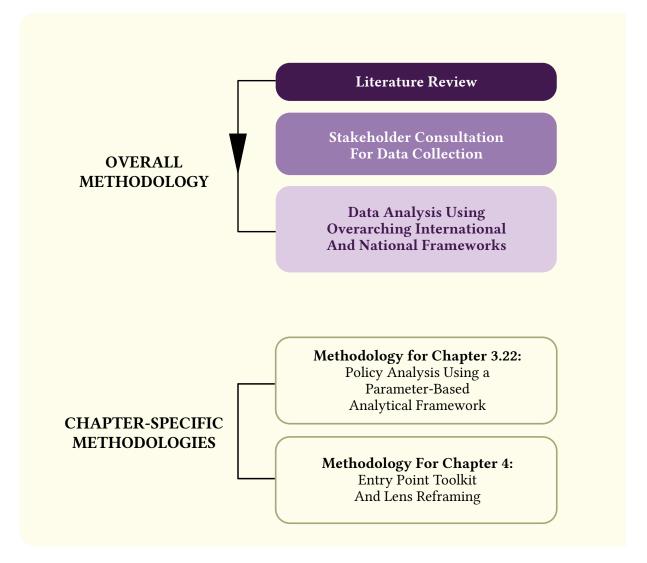


Figure 1: Methodology Framework

1. Literature Review

The first step involved a literature review of existing studies, reports, and policy documents to map the intersection of women and climate change. This process identified gaps in knowledge and practice, as well as relevant stakeholders involved in the discourse. The outcome of this review is presented in **Figure 2**, which illustrates how existing gender inequalities are reinforced cyclically through interactions with climate disasters, slow-onset climate change, and environmental degradation. The mapping also highlights critical points where interventions can shift trajectories toward gender-transformative outcomes. By clarifying what is needed to break recurring patterns of vulnerability and exclusion, it provides a framework for both analysis and action.

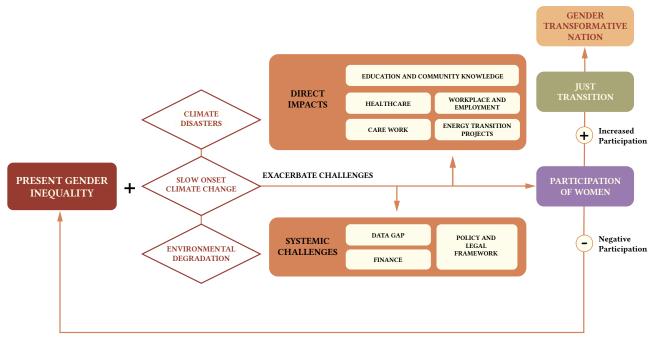


Figure 2: Mapping the interaction of climate change and women

2. Stakeholder Consultation for Data Collection

Findings were informed by stakeholder consultations through focus group discussions (FGDs) and key informant interviews (KIIs) (**Table 1**). These engagements provided insights from diverse actors across civil society, academia, and affected communities.

Methodologies used for data collection			
Focus group discussion (FGD)	Participants included representatives from non-governmental organisations, think tanks, international organisations, women's rights groups, environmental and climate change organisations, community associations, disaster relief organisations, and labour and human rights advocates. These discussions captured collective perspectives, lived experiences, and sectoral concerns		
Key informant interviews (KIIs)	In-depth interviews were conducted with Malaysian academics, human rights specialists, experts in climate finance, environmental and social scientists, Indigenous women's community leaders, and farmers. The purpose was to gather context-specific, academically informed insights and recommendations. Expert contributions were critical in linking local realities with state, national, and international policy processes, and in complementing FGD findings.		

Table 1: Methodologies used for data collection

Data from both FGDs and KIIs were compiled and analysed to identify recurring themes and patterns, which then informed the design of the policy paper roadmap and the policy assessment framework.

METHODOLOGY

Respondents engaged in the data collection period

_	Name	Organisation
Civil	Society Organisations (CSOs)	
1	Abinaya Mohan	Women's Aid Organisation (WAO)
2	Zati Hanani Binti Zainol Abidin	Women's Aid Organisation (WAO)
3	Afiq Noor	Human Rights Commission of Malaysia (SUHAKAM)
4	Hilary Kung	Sahabat Alam Malaysia (SAM)
5	Ita Bah Nan	Pertubuhan Wanita Orang Asal Malaysia (PWOAM)
6	June Tan	Gabungan Darurat Iklim Malaysia (GDIMY)
7	Mohani Raja Shaharul Niza	Reproductive Rights Advocacy Alliance Malaysia (RRAAM)
8	Shoba Aiyar	Reproductive Rights Advocacy Alliance Malaysia (RRAAM)
9	Nathasvari	All Women's Action Society (AWAM)
10	Nurul Shakila	KUASA Perak
11	Patricia Low Pek Wan	Family Frontiers Malaysia / The Malaysian CSO-SDG Alliance
12	Puspavali Mahalinggam	Charles Santiago Office
13	Suri Kempe	Kemban Kolektif
14	Tan Booi Charn	Kuala Lumpur Residents Action For Sustainable Development Association (KLRA+SD)
15	Anonymous 1	Councillor MBPJ
16	Anonymous 2	Gender Budget Group (GBG)
17	Anonymous 3	MERCY Malaysia
18	Anonymous 4	National Council Of Women's Organisations (NCWO)
Acade	emia	
19	Dr Hanim Kamaruddin	University Kebangsaan Malaysia (UKM)
20	Associate Prof. Dr. Sharina Abdul Halim	Institute for Environment and Development (LESTARI) Universiti Kebangsaan Malaysia
21	Sunitha Bisan Singh	University of Ottawa
22	Prof. Dato' Dr Aishah Bidin	Malaysian Representative to ASEAN Intergovernmental Commission on Human Rights

METHODOLOGY

	Name	Organisation
Comn	nunity	
23	Asmidah A/P Kadir	From the Jahut tribe, Pahang
24	Aswaliza Binti Johanisan	From the Temiar tribe, Kelantan
25	Chai Mee See	From the Jahut tribe, Pahang
26	Diana Tan Beng Hui	From the Jakun tribe, Pahang
27	Hamalidah A/P Tip	From the Jakun tribe, Pahang
28	Kamaliah A/P Esof	From the Jahut tribe, Kelantan
29	Liana A/P Suwadi	From the Jakun tribe, Pahang
30	Lungey A/P Uda	From the Temiar tribe, Kelantan
31	N'dang Seliman	From the Semai tribe, Perak
32	Norhida A/P Mddn	From the Jahut tribe, Pahang
33	Nur Aida A/P Esof	From the Jahut tribe, Pahang
34	Reboy A/P Uda	From the Temiar tribe, Kelantan
35	Siti Khatijah Kirin	Farmer, Melaka
36	Subaidah A/P Tajuddin	From the Jahut tribe, Pahang
37	Sylvia Ordina A/P Othman	From the Temiar tribe, Perak
38	Anonymous 5	From the Jahut tribe, Pahang
39	Anonymous 6	From the Jahut tribe, Pahang
40	Anonymous 7	From the Jahut tribe, Pahang
41	Anonymous 8	From the Jahut tribe, Pahang
Interr	ational Organisation	
42	Hwei Mian Lim	Former facilitative Committee member of the Women and Gender Constituency of UNFCCC
43	Deepa Chandra	The Asian-Pacific Resource & Research Centre For Women (ARROW)

Table 2: List of Respondents

3. Analysis using overarching international and national frameworks

The synthesis of findings from the methods above was analysed through the lens of international and national frameworks. At the international level, the assessment drew on key commitments and standards, including:

- UNFCCC Enhanced Lima Work Programme on Gender (LWPG) and Gender Action Plan
- Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)
 including Concluding Observations for Malaysia and General Recommendations 37 and 39
- Universal Periodic Review (UPR)
- UN Guiding Principles on Business and Human Rights (UNGP-BHR)
- International Labour Organization (ILO) Just Transition Guidelines
- ASEAN Gender Mainstreaming Strategic Framework 2021-2025 and ASEAN Centre for Energy's Guide to a Just and Inclusive Energy Transition in ASEAN

At the national level, relevant policy instruments were mapped and reviewed to capture Malaysia's broader landscape of commitments and implementation. This included policies, treaties, and obligations relating to the environment, climate change, Indigenous Peoples, women, and the Just Energy Transition, as detailed in **Table 5**, Chapter 1.21.

Together, the international and national frameworks serve as reference points for this paper's recommendations and guiding notes, highlighting opportunities to align Malaysia's

national policies with its international obligations and to strengthen gender-responsive climate governance.

Supporting Tools and Indicators Applied include:

- IUCN Draft Guidelines for Mainstreaming Gender in NAP Development (2011)
- IRENA Renewable Energy: A Gender Perspective (2019)
- SIDA Gender Equality Policy Marker (2020)
- IIED Principles for Locally Led Adaptation (2021)
- UN Women & ARROW Training Manual on Gender and Climate Change Resilience (2021)
- WEDO and CDKN Guide to Strengthening Gender Integration in Climate Finance Projects (2021)
- UN Women Handbook on Gender Mainstreaming for Gender Equality Results (2022)
- OECD Gender Equality and the Empowerment of Women and Girls (DAC Guidance for Development Partners) (2022)
- PWYP GEDSI: Guideline for Monitoring Gender Equality, Disability, and Social Inclusion (2024)
- ISSD Toolkit for Monitoring, Evaluation, and Learning for National Adaptation Plan Processes (2024)
- BASE Best Practices for Mainstreaming Gender in Climate Finance (2024)
- UNDP Gender and Recovery Toolkit (2025)
- IEA Blueprint for Action on Just and Inclusive Energy Transitions (2025)

4. Chapter 3.22 Methodology: Parameter-Based Analytical Framework

Chapter 3.22: Gender Analysis of Malaysia's Key Climate-Related Policies applies a parameter-based analytical framework to assess the integration of gender into Malaysia's climate-related policies. Six parameters were identified as critical levers for advancing a rights-based, inclusive, and transformative approach to gender and climate governance: Participation & Leadership, Institutional & Policy Coherence, Capacity Building, Finance, Implementation, and

Accountability (Monitoring & Reporting) (Table 3). Each parameter is supported by definition and guiding questions that translate abstract commitments into concrete evaluative criteria. Together, they provide a systematic way to examine whether policies advance gender justice, align with international commitments, and uphold the rights of women, girls, and gender-diverse individuals.

The parameters were developed with reference to the international and regional frameworks, standards, and toolkits outlined in Section 3 above, including Malaysia's obligations under gender and climate governance instruments. By consolidating these into a single analytical

lens, the framework situates Malaysia's national policies within broader commitments and creates a basis for measuring progress towards rights-based and gender-responsive climate action.

Parameter	Definition	Key Guiding Questions		
1. Participation & Leadership	Representation and active involvement of women and gender-diverse individuals in decision-making at all levels of climate governance.	 Are women and gender-diverse individuals meaningfully represented in decision-making bodies? Are there leadership pathways or quotas for underrepresented groups? Are women-led or gender-focused CSOs consulted in policy processes? 		
2. Institutional & Policy Coherence	Alignment of climate policies with national gender equality frameworks and international obligations.	 Do climate policies reference gender equality laws, CEDAW, or the DWN 2025-2030? Is there coordination between climate, gender, and planning ministries? Are gender objectives integrated across sectors (energy, agriculture, DRR)? 		
3. Capacity Building	Strengthening institutional and individual capacity, knowledge management, and competency to deliver gender-responsive climate action.	 Are there training programmes for policymakers on gender and climate? Is gender-disaggregated data collected, used, and shared? Are knowledge products inclusive of local and Indigenous gendered knowledge? 		
4. Finance	Allocation, accessibility, and tracking of climate finance towards gender-responsive or gender-transformative initiatives.	 Are gender criteria applied in climate budgeting or funding mechanisms? Is funding allocated to women-led or gender-just climate projects? Are financial instruments accessible to marginalised groups? 		
5. Implementation	Operationalisation of gender commitments in climate action plans and programming.	 Are gender indicators included in implementation plans at federal and state levels? Are gender-specific activities and outcomes articulated? Are gender-responsive technologies or approaches deployed? 		
6. Accountability (Monitoring & Reporting)	Mechanisms for tracking progress and ensuring accountability to gender-related commitments.	 Are gender indicators included in climate MEL frameworks? Are gender outcomes reported regularly and transparently? Is there public access to gender-related data and reports? 		

To strengthen the assessment, the six parameters were evaluated using the Gender Equality Continuum (GEC) (Figure 3). This tool categorises policies as gender-blind, gender-sensitive, genderresponsive, or gender-transformative (see the diagnostics Table 4). Applying the GEC to each parameter ensures that the analysis goes beyond identifying whether gender is mentioned, and instead interrogates the depth of integration. This approach makes it possible to diagnose where policies remain symbolic or fragmented, and where they embed measures that are substantive and structural. Importantly, it also generates clear insights into the strengths and weaknesses of each policy, showing how they either perpetuate inequalities or advance gender-responsive climate governance.

This parameter analysis was applied to the following key policies:

- National Women's Policy (Dasar Wanita Negara, DWN 2025-2030)
- National Climate Change Policy 2.0 (NCCP 2.0)
- National Energy Transition Roadmap (NETR)
- National Action Plan on Business and Human Rights (NAPBHR)

By grounding rights-based and gender equality critiques in a structured framework, this methodology creates a practical basis for institutional reform, investment, and leadership. It bridges international standards with Malaysia's policy environment and offers a clear pathway to evaluate and strengthen gender integration in climate governance.

Gender Gender Gender Gender Gender **Exploitative** Blind Sensitive Responsive Transformative Interventions that go beyond Activities or policies Interventions that Interventions that Interventions that addressing gaps to that cause harm, ignore or work deliberately address acknowledge and challenge reinforce around gender gender inequalities consider gender discriminatory stereotypes, or inequalities, and strengthen differences and norms, power assuming that worsen existing gender equality. inequalities in relations, and women, men, and inequalities. They They allocate analysis and structural barriers. diverse groups are may exploit resources, adjust planning. They They aim for women's unpaid affected equally. By systems, and ensure recognise the long-term systemic labour, exclude failing to recognise that women and existence of barriers change by power dynamics, marginalised marginalised groups but do not redistributing groups, or increase they risk benefit equitably, necessarily take resources, risks of violence and perpetuating with accountability active steps to promoting shared discrimination. discrimination and mechanisms to track change them. leadership, and unequal outcomes. progress. shifting social and institutional norms. Goal Gender Equality and Better Development Outcomes

Figure 3 : Gender Equality Continuum Tool, synthesis from The Gender Continuum Training Session User's Guide (2017) and OECD Gender Equality and the Empowerment of Women and Girls (DAC Guidance for Development Partners) (2022)

	Key Criteria within GEC Categories				
Parameter	Gender Blind	Gender Sensitive	Gender Responsive	Gender Transformative	
1. Participation & Leadership	Women and gender-diverse groups not mentioned in climate governance. No disaggregated participation data.	Mentions inclusion of women/youth/ Indigenous groups, but only in consultation or symbolic roles.	Quotas/targets established; women's CSOs formally consulted; women represented in decision-making platforms.	Women and gender-diverse actors hold equal decision-making power; shared leadership and influence over resource allocation and policy outcomes.	
2. Institutional & Policy Coherence	No reference to gender equality laws or gender policy frameworks.	References gender equality or CEDAW in principle but without operational mechanisms.	Mandates interministerial coordination (e.g. climate, gender, finance ministries); gender integrated in sectoral policies (energy, DRR, agriculture).	Binding gender obligations embedded across all national climate frameworks; gender and climate governance mutually reinforcing and enforceable.	
3. Capacity Building	No gender dimension in training or knowledge systems. Data and capacity programmes treated as gender-neutral.	Acknowledges women's vulnerabilities or skills gaps in climate adaptation/ mitigation.	Provides targeted training for women (green jobs, DRR, renewable energy); mandates sex- disaggregated data; includes Indigenous/ local knowledge.	Institutionalises gender- responsive curricula; centres women's and Indigenous ecological knowledge as equal to technical expertise in climate governance.	
4. Finance	Climate finance treated as gender- neutral; no criteria or allocation for women/ marginalised groups.	Mentions women's access to finance but no pathways or dedicated mechanisms.	Applies Gender Responsive Budgeting (GRB) to climate finance; tags allocations for women-led projects; improves accessibility of instruments.	Redistributes resources structurally; mandates equal access to subsidies, funds, and entrepreneurship support; ensures women shape financial decision-making.	
5. Implementation	Climate projects/ programmes designed and rolled out without gender or social impact assessments.	Mentions gendered vulnerabilities (e.g. women as disaster victims) but limited to welfare framing.	Requires gender/social impact assessments for climate projects; implementation includes gender-specific outcomes and technologies.	Embeds rights-based, gender-equal safeguards; co-designs programmes with women and marginalised communities; advances systemic empowerment.	
6. Accountability (Monitoring & Reporting)	No sex-disaggregated data, indicators, or gender accountability mechanisms.	Mentions gender data but inconsistently applied; reporting not mandatory.	Institutionalises MEL systems with gender indicators, independent verification, and transparent reporting.	Establishes legally binding accountability for gender outcomes in climate law; remedies and redress mechanisms available; public access to data guaranteed.	

 $Table\ 4\ : Gender\ Equality\ Continuum\ Diagnostic\ by\ Parameters$

5. Chapter 4 Methodology: Entry Point Toolkit and Lens Reframing

Chapter 4: Recognising Women as Agents of Change adopts a reframing approach, positioning women as agents of change in climate governance. To operationalise this, an entry point toolkit was developed as an operational foundation to guide implementation. The toolkit does not prescribe a fixed model but identifies starting points and indicators that can be adapted and built upon by ministries, local governments, researchers, and civil society in Malaysia's Just Energy Transition (JET).

The toolkit provides modular and adaptable entry points across six areas: governance, labour, finance, energy access, accountability, and data systems.

It applies an intersectional lens, recognising that women's experiences are shaped by overlapping identities including indigeneity, age, disability, and informal work status.

By translating analysis into practical strategies, the toolkit offers a baseline structure for systemic inclusion and women's empowerment in JET. It builds on the analytical framework applied throughout the paper, while being supplemented by international practice-based guidance that users can further customise to their own contexts.

19 ROADMAP

Roadmap

Figure 4 presents the roadmap outlining the chapters and subchapters of this policy paper, building on the cycle mapping introduced in **Figure 2**.

CHAPTER 2: Impacts of Climate Change and Climate Change Projects on Women CHAPTER 1: Baseline 2.1 Healthcare 1.1 Status of Environment and Climate Disasters in Malaysia. 2.2 Care work, Workplace and Employment 1.2 Malaysia's Policies, Treaties, and 2.3 Education and Community Knowledge International Obligations 2.4 Energy Transition Projects 1.3 Concept of Gender and Intersectionality This chapter establishes the foundation for This chapter examines how climate change and projects affect women across healthcare, care understanding gender-climate intersections in Malaysia. It covers the status of climate disasters, work, employment, education, and energy transitions. Using case studies and overarching national and international data, it highlights unequal frameworks, while introducing gender and intersectionality. burdens, vulnerabilities, It provides essential and opportunities, context before exploring showing how social roles intersect with women's lived experiences and climate risks. systemic challenges. Report Roadmap This chapter reframes women as climate leaders and agents of change, This chapter analyses shifting the lens from systemic drivers of inequality in vulnerability to agency. It adopts climate governance, focusing on data, policy, and a forward-looking approach that emphasises finance. It identifies blind spots, governance gaps, participation, leadership, and inclusion as core to and barriers that reinforce gender disparities, integrating gender equality into climate solutions. while outlining opportunities for reform and The chapter concludes with a practical toolkit institutional transformation offering entry points to strengthen women's roles in governance, communities, and the Just Energy Transition, advancing gender-transformative climate action. 3.1 The Impact of Data Gaps on Women 4.1 Participatory Decision Making 3.2 Policy Instruments and Legal Framework 4.2 Just Transition: Why Is It important 3.3 Finance CHAPTER 4: Recognising Women CHAPTER 3: Systemic Issues as Agents of Change

Figure 4: Chapter Roadmap



1Baseline



1.1 Status of Environment and Climate Disasters in Malaysia

Malaysia is already experiencing severe and accelerating impacts of climate change, reflective of broader patterns across the Global South. The country's temperate Southeast Asian climate is undergoing notable shifts, with projections indicating an average temperature increase of 1.1–1.5°C by 2050¹. Rising maximum daily temperatures and prolonged dry spells are affecting water availability and agricultural yields, exacerbated by El Niño events. Sea levels have risen by an average of 3.2 mm in Peninsular Malaysia and 2.9 mm in Sabah, Sarawak, and

Labuan, with projections of up to 0.25 m rise by 2050 and 0.74 m by 2100¹. Simultaneously, climate-related disasters, particularly floods, have surged dramatically, from 91 reported cases in 2002 to 1,057 in 2021. Between 2021 and 2023 alone, flood-related damages cost the nation at least RM7.9 billion, with 2021 accounting for the highest losses at RM6.1 billion. These figures reflect the urgent and growing environmental and socio-economic vulnerabilities Malaysia faces under current climate trajectories.

1.2 Malaysia's Policies, Treaties, and International Obligations



1.21 Climate Change, Energy Transition, and Disaster Risk Reduction

Malaysia ratified the Paris Agreement in 2016, which is the overarching international treaty on climate change under the UN Framework Convention on Climate Change (UNFCCC)². The legally binding treaty seeks to limit global temperature rise to well below 2°C above pre-industrial levels, while urging efforts to cap it at 1.5°C, as recommended by the Intergovernmental Panel on Climate Change (IPCC)³. Its implementation requires wide-ranging

economic and social transformation grounded in the best available science. Other crucial international agreements include the United Nations Sustainable Development Goals (SDGs)⁴ and the Sendai Framework for Disaster Risk Reduction (SFDRR) 2015-2030⁵ which calls for measures addressing three dimensions of disaster risk (hazard exposure, vulnerability and capacity, and hazard characteristics) to prevent new risks, reduce existing ones, and strengthen resilience.

These international conventions and agreements outline comprehensive guidelines for key signatory ministries, namely the Ministry of Natural Resources, Environment and Sustainability (NRES) which serves as Malaysia's official ministerial focal point for all climate change matters and communicates directly with the UNFCCC, and the Ministry of Energy Transition and Water Transformation (PETRA), which oversees energy-related matters.

The Paris Agreement, at Article 4, paragraph 2, mandates that each participating Party must formulate, communicate, and maintain a series of Nationally Determined Contributions (NDCs) outlining their intended achievements and actions ⁶. Malaysia's current NDC commits to reducing carbon intensity relative to Gross Domestic Product (GDP) by 45% by 2030, compared to the 2005 baseline⁷.

In line with the Paris Agreement, the Malaysian government is further required to develop and implement both a National Adaptation Plan (MyNAP) and Long-Term Low Greenhouse Gas Emission Development Strategies (LT-LEDS). These initiatives are currently in progress and form part of Malaysia's broader climate policy landscape that represents the transparency requirements under the Paris Agreement under Articles 9(1), 9(3) and 13(4). **Table 5** provides a summary of key existing and forthcoming climate-related policies, frameworks, and international commitments.

The National Climate Change Policy 2.0 (NCCP 2.0), launched in 2024, represents Malaysia's most comprehensive and up-to-date climate policy framework¹. It builds upon the foundation laid by the original National Policy on Climate Change introduced in 2009⁸, incorporating new priorities and strategies in response to evolving national

and global climate challenges. Complementing this, the National Energy Transition Roadmap (NETR) aims for a 70% renewable energy target by 20409.

Malaysia's forthcoming National Climate Change Bill (RUUPIN) aims to create a comprehensive legal framework to advance the country's climate commitments. NRES has released a consultation paper seeking public input on nine key components with consultations running from 2024¹⁰. The Bill is expected to be tabled in Parliament in 2025

In parallel, the Legal Affairs Division of the Prime Minister's Department (Bahagian Hal Ehwal Undang-Undang - BHEUU), in collaboration with the United Nations Development Programme (UNDP), launched the National Baseline Assessment on Business and Human Rights (NBABHR) in 2024¹¹. The NBABHR provided the foundation for the National Action Plan on Business and Human Rights (NAPBHR), launched in 2025 and set to run through 2030^{12} . Guided by the three UN Guiding Principles (UNGP) Pillars, the plan focuses on three thematic priorities: governance, labour, and environment. A key commitment under the NAPBHR is the amendment of the Malaysian Constitution to enshrine the Right to a Clean, Healthy, and Sustainable Environment, strengthening the legal basis for environmental protection and the recognition of environmental rights.

An important emerging issue in times of climate crisis is food sovereignty. Malaysia's latest agrofood and food security policies reflect a forward-looking, comprehensive approach that prioritises sustainability, technological advancement, inclusivity, and resilience. The National Agrofood Policy 2.0 (NAP 2.0)13 serves as the overarching framework for transforming the sector, while the National Food Security Policy Action Plan 2021-2025¹⁴ outlines concrete strategies to protect and enhance the national food supply chain through coordinated action across multiple ministries.

${\it 1.2 \mid Malaysia's Policies, Treaties, and International Obligations}$

Year	Policies/Treaties	Summary	Status
2019	National Transport Policy 2019-2030	The National Transport Policy outlines 5 thrusts and 23 strategies to create a competitive and efficient transport ecosystem. It aims to boost trade through seamless logistics, enhance inclusive and accessible mobility, increase public transport usage, and develop a smart, safe, and secure transport system—all while promoting sustainability and reducing environmental impact.	Published
2021	National Agrofood Policy 2.0 2021-2030 (NAP2.0)	NAP 2.0 aims to boost the agrofood sector's economic contribution through five thrusts: modernising agriculture, improving market access, developing human capital, ensuring food system sustainability, and enhancing governance. It prioritises food security by strengthening key sub-industries—paddy and rice, fruits and vegetables, livestock, and fisheries—to raise self-sufficiency levels and increase farmers' income.	Published
2021	National Action Plan on Forced Labour	The National Action Plan on Forced Labour outlines a collaborative framework to eliminate forced labour in Malaysia by 2030, aligned with SDG 8.7, ILO Convention 29, and the UN Guiding Principles. It focuses on raising awareness, strengthening legal enforcement, improving recruitment and migration management by 2025, and ensuring better protection, support, and access to remedies for victims.	Published
2021	12th Malaysian Plan (RMK 12)	Under the 12th Malaysia Plan (RMK 12), Malaysia aims for net-zero GHG emissions by 2050. Key measures include ending new coal projects, boosting renewable energy to 31% by 2025, and introducing carbon pricing, a carbon tax, and a Domestic Emissions Trading Scheme (DETS). The plan targets a 45% reduction in GHG intensity by 2030 (from 2005 levels) and promotes carbon capture, utilisation, and storage (CCUS) with tax incentives to support a low-carbon transition.	Published
2022	National Energy Policy (2022-2024)	The National Energy Policy (DTN) 2022–2040 charts Malaysia's path toward a resilient, low-carbon energy future. It supports the Low Carbon Nation Aspiration 2040, positioning the energy sector as a driver of economic growth, job creation, and investment, while promoting energy security, equity, and environmental sustainability.	Published
2023	National Energy Transition Roadmap (NETR)	The National Energy Transition Roadmap (NETR) supports Malaysia's net-zero target by 2050, building on the National Energy Policy (DTN). It targets 70% renewable energy by 2050 and outlines six transition levers—energy efficiency, renewables, hydrogen, bioenergy, green mobility, and CCUS—delivered through ten flagship projects. NETR aims to cut energy sector emissions by 32% (from 2019) and attract RM25 billion in investments, while ensuring a just and inclusive transition.	Published
2023	New Industrial Masterplan 2030 (NIMP 2030)	NIMP 2030 is Malaysia's strategy to revitalise manufacturing and position the country as a global industrial leader. Targeting 6.5% annual manufacturing GDP growth and RM587.5 billion in economic contribution by 2030, it focuses on increasing economic complexity, creating high-value jobs, strengthening domestic linkages, developing industrial clusters, promoting inclusivity, and advancing ESG practices. It prioritises sectors	Published

${\it 1.2 \mid Malaysia's Policies, Treaties, and International Obligations}$

Year	Policies/Treaties	Summary	Status
		like Electrical & Electronics, Specialty Chemicals, Aerospace, Pharmaceuticals, and Medical Devices, while expanding into Electric Vehicles, Renewable Energy, and Carbon Capture.	
2023	National Food Security Policy Action Plan 2021-2025 (DSMN Action Plan)	The National Food Security Policy Action Plan (2021–2025) outlines 5 core strategies, 15 strategies, and 96 initiatives to ensure a stable and sustainable food supply, especially during crises. Developed by the Ministry of Agriculture and Food Security, it focuses on expanding technology use, strengthening data systems, enhancing governance, empowering research and development, and deepening strategic collaborations.	Published
2024	National Baseline Assessment on Business and Human Rights (NBABHR)	The National Baseline Assessment evaluates Malaysia's business and human rights landscape, assessing implementation of the UN Guiding Principles (UNGPs). It identifies human rights impacts from business activities, especially on vulnerable communities, highlights legal and policy gaps, and offers recommendations to guide the NAPBHR. The assessment is structured around three pillars: governance, labour, and the environment, with a strong focus on environmental and climate dimensions.	Published
2024	National Climate Change Policy 2.0 (NCCP 2.0)	NCCP 2.0 sets the strategic direction for Malaysia's climate action through 5 thrusts, 15 strategies, and 92 key actions. It aims to accelerate the low-carbon transition and build climate resilience by strengthening governance, enabling low-carbon development, enhancing adaptation, mobilising climate finance, and advancing global partnerships. Aligned with the Paris Agreement, it integrates climate into national planning, supports tools like carbon pricing, and complements sectoral policies such as the NETR. It also guides key national climate plans, including the NDC Action Plan, LT-LEDS, and the National Adaptation Plan.	Published
2024	National Sustainability Reporting Framework (NSRF)	The NSRF is designed to help companies provide reliable, consistent, and comparable information on their sustainability practices, with a strong emphasis on climate-related commitments. The framework adopts the International Financial Reporting Standards (IFRS) Sustainability Disclosure Standards issued by the International Sustainability Standards Board (ISSB) as its baseline. Specifically, it incorporates IFRS S1: General Requirements for Disclosure of Sustainability-related Financial Information, and IFRS S2: Climate-related Disclosures.	Published
2024	Pelan Tindakan Perubahan Iklim Sektor Perikanan 2024 - 2030	Recognising the impacts of climate change on fisheries, including food security, resource sustainability, and community livelihoods, this plan is built on five core areas, supported by 16 strategies and 26 dynamic initiatives. It aims to strengthen governance, enhance resilience and adaptation, promote green technology, and improve incomes, while aligning with key national policies such as the NCCP 2.0 and NAP 2.0	Published
2024	National Disaster Risk Reduction Policy 2030	The National Disaster Risk Reduction Policy aims to build a safer, disaster-resilient Malaysia by integrating inclusive and comprehensive DRR across all sectors, in line with the Sendai Framework. It focuses on prevention, preparedness, response,	Published

${\it 1.2 \mid Malaysia's Policies, Treaties, and International Obligations}$

Year	Policies/Treaties	Summary	Status
		and recovery to safeguard public well-being and environmental sustainability through effective governance, resource mobilisation, stakeholder engagement, and community empowerment.	
2025	Carbon Capture, Utilisation and Storage Bill (CCUS Bill)	Malaysia's Ministry of Economy has tabled a CCUS Bill to regulate the full carbon capture, utilisation, and storage value chain. The Bill aims to establish governance structures, subsequent laws, and support CCUS deployment in line with NETR Targets. The CCUS Act will come into operation on a date to be appointed by the Minister by notification in the Gazette.	Passed
2025	Long-Term Low Emission Development Strategies (LT- LEDS)	LT-LEDS outlines practical programs and policies that are essential for reducing GHG emissions measurably by 2050, reflecting Malaysia's dedication to mitigating climate change in a comprehensive and action-oriented manner.	Published
2025	National Action Plan on Business and Human Rights (NAPBHR)	The NAPBHR builds on the NBABHR, maintaining its three thematic pillars: governance, labour, and environment. It sets out specific actions, indicators, and collaborative partners for a five-year implementation period. The plan places strong emphasis on environment and climate, including advancing constitutional amendments to recognise the Right to a Clean, Healthy, and Sustainable Environment, pursuing legal reforms for transparency, accountability, and compliance with Malaysia's Net Zero 2050 goals, and strengthening provisions on environmental justice and climate governance. These priorities, recommended in the NBABHR, are to be delivered through multi-stakeholder processes involving government, business, civil society, and affected communities, supported by robust monitoring, reporting, and evaluation mechanisms.	Published
2025	13th Malaysian Plan (RMK13)	The 13th Malaysia Plan (RMK13) outlines key climate and green growth strategies, including the development of a National Adaptation Plan, the introduction of climate change legislation, and a review of the Environmental Quality Act to strengthen enforcement. Malaysia reaffirms its commitment to reduce greenhouse gas emissions intensity by 45% by 2030, targeting a 35% share of installed renewable energy capacity while also considering nuclear energy. Building on RMK12, the plan places strong emphasis on CCUS and enhancing carbon trading schemes, alongside advancing the green economy through policies such as the NETR and NIMP 2030. It also seeks to restructure and strengthen Technical and Vocational Education and Training (TVET) programmes to prepare the workforce for emerging HGHV sectors.	Published
+	National Adaptation Plan (MyNAP)	The Malaysia National Adaptation Plan (MyNAP), a key strategy under NCCP 2.0, aims to identify medium- and long-term climate risks and develop strategies to reduce vulnerability, build resilience, and integrate adaptation across national, sectoral, and sub-national policies, especially in development planning and budgeting.	In development
-	National Climate Change Bill (RUUPIN)	Malaysia's upcoming Climate Change Bill, aims to act as an overarching national climate legislation by facilitating the transition to a low-carbon economy and strengthening climate resilience.	In development

Year	Policies/Treaties	Summary	Status
		It proposes establishing an independent regulatory authority, institutionalising governance on data, finance, and enforcement, enabling compliance and emissions reduction mechanisms.	
-	National Carbon Market Policy	Malaysia's upcoming National Carbon Market Policy will guide the development of a transparent and robust carbon market aligned with UNFCCC, ICAO, and voluntary market standards. It aims to support national climate goals through federal-state collaboration and lessons from the existing Voluntary Carbon Market.	In development

Table 5: Summary of national level climate-related policies

1.22 Women and Gender Equality

Since 1995, Malaysia has been a State Party to the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)¹⁵, committing to the implementation of its Articles and the development of gender-sensitive laws, policies, and programmes. In the context of the climate crisis, CEDAW General Recommendation No. 37 (GR 37)¹⁶ offers a vital framework for addressing the gender-related dimensions of disaster risk reduction and climate adaptation.

That same year, Malaysia also adopted the Beijing Declaration and Platform for Action¹⁷, a landmark global agenda which outlines strategic objectives across 12 critical areas of concern, including women and the environment. Malaysia has reaffirmed its commitments to gender equality through the Sustainable Development Goals (SDGs), particularly Goal 5: Achieve gender equality and empower all women and girls. The Phase II: 2021–2025 SDG Roadmap for Malaysia articulates national targets and indicators to accelerate progress in this area across all development sectors.

At the regional level, ASEAN has taken steps to institutionalise gender mainstreaming through key frameworks such as the ASEAN Gender Mainstreaming Strategic Framework 2021–2025¹⁸ and the ASEAN Declaration on the Gender-Responsive Implementation of the ASEAN Community Vision 2025¹⁹. In 2024, Malaysia, through the Ministry of Women, Family and Community Development (KPWKM), chaired the ASEAN Committee on Women (ACW) and played a lead role in launching the ASEAN Gender Outlook 2024, in collaboration with the ASEAN

Secretariat and UN Women^{20,21}.

Domestically, KPWKM leads the implementation of the National Women's Policy (*Dasar Wanita Negara*, DWN 2025-2030)²², which upholds the principle of non-discrimination as enshrined in the Federal Constitution. This policy is aligned with international frameworks including CEDAW, the Convention on the Rights of the Child (CRC), the SDGs, the Beijing Declaration, and regional instruments such as the Non-Aligned Movement Putrajaya Declaration. Together, these commitments form the backbone of Malaysia's national strategy for advancing women's rights and gender equality.

These global, regional, and national commitments take on renewed significance in the face of the climate crisis. Gender equality is not only a matter of rights but a prerequisite for effective and equitable climate action. Under the UNFCCC, gender was formally recognised in 2014 through the adoption of the Lima Work Programme on Gender, which aimed to promote gender balance and integrate gender considerations into climate decision-making and implementation. This was followed by the UNFCCC Gender Action Plan, which outlines specific activities under five priority areas, including capacity building, genderresponsive implementation, and monitoring and reporting, all aimed at ensuring climate policies and actions are inclusive, equitable, and transformative²³.

The Kunming-Montreal Global Biodiversity Framework (2022), under the Convention on Biological Diversity (CBD), explicitly includes a gender equality target (Target 23) that calls for the full, equitable, inclusive, effective, and genderresponsive participation of women and girls in biodiversity decision-making and benefit-sharing at all levels²⁴. This marks the first time gender equality is recognised as a standalone target in a global biodiversity agreement.

For climate finance, the Green Climate Fund (GCF) requires all funded projects to include a gender analysis and gender action plan as part of its proposal process. The GCF's Gender Policy and Action Plan promotes gender equality as a core principle, ensuring that climate finance benefits women and men equally and contributes to reducing gender inequalities²⁵. Similarly, the Adaptation Fund has adopted a Gender Policy and Action Plan that mandates gender mainstreaming across project cycles, from design to monitoring and evaluation, with the aim of enhancing the adaptive capacity of vulnerable groups, including women²⁶.

Multilateral financial institutions have also moved to integrate gender into their climate strategies. The World Bank Group's Climate Change Action Plan 2021–2025 includes gender as one of its core principles, recognising that climate change has differentiated impacts and that empowering women is key to building climate resilience²⁷. The Bank has committed to ensuring that at least 55% of its climate finance supports gendertagged activities, those that address gender gaps and contribute to women's empowerment in the context of climate mitigation and adaptation.

Taken together, these frameworks signal a growing global consensus: gender equality is not peripheral, but central to achieving effective, just, and durable outcomes in climate and environmental governance. Malaysia's obligations under CEDAW, its leadership in ASEAN, and its national gender policies provide a critical foundation and potential for embedding gender justice into its climate and biodiversity strategies and governance. The next sections of this paper assesses to what extent these principles are reflected in Malaysia's climate policies, identifying key gaps and opportunities for strengthening gender-responsive approaches.

1.23 Indigenous Peoples in Peninsular Malaysia

The UN Declaration on the Rights of Indigenous Peoples (UNDRIP) is a comprehensive international

instrument that outlines minimum standards for recognising, protecting, and promoting the rights of Indigenous Peoples²⁸. It encompasses individual and collective rights, and cultural and identity rights, and emphasises non-discrimination, full participation, distinctiveness, and harmonious state-Indigenous People relations.

The UNDRIP emphasises the principle of Free, Prior, and Informed Consent (FPIC), requiring that parties seek the consent of Indigenous Peoples transparently, without coercion or manipulation, and respect their right to withhold consent. FPIC applies to legislation, administrative policies, and projects affecting indigenous rights to land, territory, and resources, as outlined in Articles 19 and 32 of the declaration. Similarly, CEDAW provides guidelines to eliminate discrimination against indigenous women and protect their rights, as detailed in CEDAW General Recommendation No. 39 (GR 39)²⁹.

At the national level, the Aboriginal Peoples Act 1954 (Act 134) provides for the protection, wellbeing, and advancement of the Aboriginal peoples of Peninsular Malaysia. It contains 19 articles, primarily related to land matters, and was last amended in 1967 and reviewed in 1974³⁰. The Department of Orang Asli Development (JAKOA) is responsible for matters concerning Orang Asli welfare.

In 2010, the Human Rights Commission of Malaysia (SUHAKAM) initiated the National Inquiry into the Land Rights of Indigenous Peoples in Malaysia which aims to comprehensively address the long-standing issues related to indigenous customary land rights by taking a human rights-based approach³¹. The report calls upon the three branches of the Malaysian government (Executive, Legislative, and Judiciary) to consider and act upon its recommendations to protect the inherent rights of marginalised indigenous citizens, particularly regarding land issues, with the hope of broader impacts on other indigenous rights concerns.

1.24 CEDAW Review and UPR Recommendations

Malaysia submitted its 6th Periodic Report to the CEDAW Committee in May 2024³². As part of the process, civil society organisations submitted thematic shadow reports to surface structural gaps

and emerging human rights concerns. Among these, Klima Action Malaysia (KAMY) submitted a written report focusing on CEDAW GR 37 on the gender dimensions of disaster risk reduction and climate change³³, while the Pertubuhan Wanita Orang Asal Malaysia (PWOAM) contributed a submission aligned with CEDAW GR 39 on the rights of Indigenous women and girls³⁴. These contributions helped bring attention to the gendered and disproportionate impacts of the climate crisis on women and girls, especially from rural and Indigenous communities.

For the first time, the CEDAW Committee issued Concluding Observations³⁵ that directly addressed climate change, disaster risk reduction, and energy transition, by affirming the right of women in Malaysia to a clean, safe, and healthy environment, and the importance of their participation in shaping a just and equitable climate response (**Box 1**).

CEDAW Concluding observations on the sixth periodic report of Malaysia

- 52. The Committee welcomes the initiatives aimed at green growth and advancing climate action implemented by the Malaysian Green Technology Corporation. However, it notes with concern:
 - a. Reports of river water contamination in indigenous areas, which disproportionally affect Indigenous women and girls;
 - b. Challenges faced by Indigenous women and girls in maintaining their traditional lifestyle, adversely impacting their health, due to climate change and territorial loss, coupled with changes in their food systems;
 - c. The lack of a gender perspective in policies and programmes on climate change, disaster risk reduction and transition to renewable energy.
- 53. The Committee recommends that, in line with its general recommendations No. 37 (2018) on the gender-related dimensions of disaster risk reduction in the context of climate change and No. 39 (2022) on the rights of Indigenous women and girls, the State party review its climate change and disaster response strategies, taking into account the negative effects of climate change on the livelihoods of women, especially rural and Indigenous women, and ensure that women are meaningfully involved in the development, adoption and implementation of legislation, policies and programmes on climate change, disaster response and disaster risk reduction by, in particular:
 - a. Collecting disaggregated data on the impact of climate change and natural disasters on women and girls, including rural and Indigenous women and girls;
 - Ensuring the incorporation of a gender perspective in climate change and disaster risk reduction strategies, renewable energy legislation, financing and programmes in order to address the specific and unique needs of women and girls and build their resilience and effective adaptation to climate change;
 - c. Taking measures to address the specific impact of climate change on women's livelihoods, access to resources and ensuring their economic empowerment in the transition to a green economy

Box 1: CEDAW Concluding Observations on the Sixth Periodic Report of Malaysia (2024)

Malaysia also completed its 4th Universal Periodic Review (UPR) cycle in 2023. As part of the UPR process, the Coalition of Malaysian NGOs (COMANGO)³⁶ coordinated a joint civil society submission, which included a section by KAMY on the intersection of gender, environmental rights, and climate governance. This submission contributed to shaping the framing of recommendations by member states on inclusive climate strategies³⁷ (Box 2).

UPR Outcome Document

Recommendations that Malaysia accept in full:

55.207 Take into consideration the rights of women, children and persons with disabilities in climate change strategies (Timor-Leste);

55.208 Take into account the rights of women, children, older persons and persons with disabilities in climate change adaptation strategies (Viet Nam);

55.209 Take into account the rights of women, children, older persons and persons with disabilities in climate change strategies (United Arab Emirates);

55.210 Incorporate the rights of women, children, older persons and persons with disabilities into climate change strategies (Russian Federation).

Box 2: Thematic List of Recommendations UPR of Malaysia (4th Cycle - 45th Session)

1.3 Concept of Gender and Intersectionality



Gender is a social construct shaped by cultural norms, power relations, and societal expectations. An intersectional approach recognises that gender does not operate in isolation as it intersects with race, class, age, disability, sexual orientation, and other identities to shape how individuals experience privilege, discrimination, and access to resources³⁸.

This intersectional approach rejects the notion of women as a homogenous group. Instead, it acknowledges that structural inequalities, often rooted in patriarchy and historical injustice, systematically affect different groups in different ways and are compounded when multiple marginalised identities overlap. Addressing these inequalities requires intentional effort to surface and dismantle deeply embedded barriers.

In the context of climate change, intersectional inequalities are further magnified. Climate impacts are not gender-neutral; they interact with and intensify existing forms of discrimination. Research by UN Women, OHCHR, and the IPCC affirms that gender shapes how people experience, respond to, and recover from climate-related stressors. This paper is grounded in the understanding that climate change is a risk multiplier, especially for those already at the margins.

2

Impacts of
Climate Change and
Climate Change
Projects on Women

2.1 Healthcare

2.11 Impact of Climate Disasters and Environmental Degradation on Women's Health

Physical Health

The World Health Organisation (WHO) recognises climate change as a major threat to human health. While its impacts are widespread, vulnerability to health risks is shaped by gender roles, social norms, and systemic inequalities. Factors such as biological differences, socioeconomic status, geographic location, and political context all contribute to unequal health outcomes³⁹.

Although global forums such as the UNFCCC COP, IPCC, and WHO have increasingly acknowledged the gendered health impacts of climate change, national-level data remains scarce, largely due to the lack of gender-disaggregated data and limited sustained research by government, academia, and civil society.

Nonetheless, emerging evidence from the Asia-Pacific region, based on consultations with women from diverse communities, has begun to document these interlinkages. Regional studies point to heightened physical health risks for women in the context of climate-induced disasters, food insecurity, heat stress, and displacement^{40,41}.

Floods are among the most frequent climate-related disasters in Malaysia, posing both immediate and long-term health risks. Exposure to contaminated water increases the incidence of water-borne diseases such as diarrhoea and cholera, while IPCC findings link increased flood frequency to the spread of vector-borne diseases like dengue and malaria⁴², driven by heavy rainfall and stagnant water, which create ideal mosquito breeding conditions. Even during droughts, household water storage can contribute to similar risks.

Floods also disrupt water supply and sanitation systems, compounding hygiene-related and sexual and reproductive health (SRH) risks. Women are disproportionately affected due to caregiving roles such as sourcing clean water, carrying children, and preparing food—tasks that increase exposure to unsafe environments. Physical strain, fatigue,

and injuries (e.g., slips and falls during evacuation) are common, especially in overcrowded shelters and areas with poor infrastructure.

Prolonged heatwaves and droughts linked to climate change have serious health impacts, particularly for women in agriculture and manual labour. Common conditions include heatstroke, skin diseases, fatigue, malnutrition, and cognitive effects such as brain fog.

During the 2023–2024 El Niño, Malaysia recorded 127 cases of heat-related illness, including five deaths, two of whom were children in 2023⁴³, and two more deaths in 2024⁴⁴. With temperatures projected to rise, such cases are expected to increase⁴⁵.

Consultations with rural and Indigenous women, many of them subsistence farmers, revealed widespread health symptoms such as vomiting, migraines, and fainting due to prolonged heat exposure. To cope, many stop working by midday, but this leads them to resume work in the evening, often alone and in unsafe conditions. One woman farmer respondent in Melaka described working at night to prepare fertilisers, highlighting the trade-off between rest and personal safety. These conditions are contributing to the decline of women's participation in farming.



Pollution and Contamination

Air and water pollution emerged as major health concerns among respondents across urban and rural areas. In Indigenous and rural communities, respiratory illnesses were frequently reported, often linked to nearby palm oil processing facilities. One community in Pahang described regular exposure to thick, pungent smoke, with rising cases of asthma among children. A respondent shared that her child, once ill monthly, was now falling sick up to five times a month with persistent coughing and suspected asthma.

Although many cases remain undiagnosed due to limited healthcare access, community members strongly associate these symptoms with cumulative exposure to air pollution, water contamination, and erratic weather conditions. These accounts underscore the urgent need for epidemiological research and stronger pollution control, particularly in vulnerable areas.

Contamination of Natural Resources

The following cases highlight the environmental health risks faced by Indigenous women due to natural resource contamination in Pahang.

A Jakun woman respondent reported that the river, her community's primary source of water, often appears reddish with visible particles. Despite this, they are forced to use it for drinking, cooking, and hygiene. The community suspects that the discolouration is caused by runoff from nearby tin mining operations.

In two other accounts, Indigenous women shared that they had experienced skin rashes and irritation after using river water for bathing and sanitation. They believe the contamination stems from both logging activities and effluent discharge from palm oil mills. Although they try to avoid using the river water, they are often left with no choice during water shortages or when alternative sources are inaccessible. These accounts reveal the daily health compromises faced by Indigenous communities and the urgent need for stronger environmental safeguards and access to clean, safe water.

Box 3: Case Study - Contamination of Natural Resources

Sexual and Reproductive Health

Climate change poses significant risks to women's sexual and reproductive health (SRH), particularly through its effects on water security, food systems, and heat exposure. Water scarcity and poor sanitation, especially during floods, exacerbate challenges in menstruation management and hygiene. Women frequently report dehydration, urinary tract infections (UTIs), and reproductive tract infections (RTIs) due to exposure to contaminated water and lack of access to clean facilities.

Pregnant and lactating women face heightened vulnerability during climate disasters. Exposure to polluted water, high salinity, and undernutrition can lead to serious complications, including intrauterine growth retardation, premature labour, low birth weight, stillbirth, and perinatal mortality⁴⁰.

Climate change also affects reproductive physiology. Prolonged exposure to extreme heat disrupts hormonal regulation and impairs the function of reproductive tissues, which depend on stable temperature ranges⁴⁶. These effects, though underexplored in Malaysia, may influence fertility outcomes over time.

Malaysia's Total Fertility Rate (TFR) has declined from 4.9 in 1970 to 1.8 in 2018⁴⁶. As climate pressures intensify, this downward trend may continue, raising long-term demographic implications that require deeper investigation.

Finally, climate-related stressors such as droughts, aridity and floods have been linked to increased rates of child marriage and adolescent births in the region²⁰. While data in Malaysia remains limited, child marriage persists despite a 37% decline between 2019 and 2023⁴⁷. Legal inconsistencies

such as the minimum marriage age of 16 for Muslim girls compared to 18 for boys and non-Muslims⁴⁸ compound this risk and undermine protections for adolescent reproductive health.

Nutrition-loss

Climate change threatens nutrition security through both immediate disruptions and long-term degradation of food systems. In response to increasingly erratic weather, the use of chemical fertilisers and pesticides has intensified to preserve crop yields. While intended to improve resilience, these practices can degrade soil health and reduce the nutritional quality of food over time.

At the same time, extreme weather events, such as floods, droughts, and storms, have destroyed farms and food sources, especially in Indigenous and rural communities reliant on subsistence agriculture and local ecosystems. These losses undermine both food access and traditional food systems, increasing dependence on external food supplies that are often less nutritious and less affordable.

Gendered food practices further exacerbate these impacts. In many households, women often prioritise feeding children and male family members, leaving themselves with smaller portions or lower-quality food. This increases women's vulnerability to undernutrition and related health complications⁴⁰.

Undernourishment among women can lead to amenorrhoea, infertility, and delayed menarche in adolescent girls. In the ASEAN region, an estimated 38% of pregnant women are affected by anaemia, a key indicator of malnutrition. While Malaysia-specific data remains limited, regional trends point to likely risks particularly among women in low-income, rural, and Indigenous communities. Poor maternal nutrition is strongly linked to anaemia, pre-eclampsia, haemorrhage, and maternal mortality, as well as increased risks of stillbirth, low birthweight, wasting, and long-term developmental delays in newborns²⁰.

Mental Health

Respondents reveal a growing prevalence of mental health challenges linked to the increasing frequency and unpredictability of climate-related disasters. Commonly reported conditions associated with repeated exposure to climate events include anxiety, depression, post-traumatic stress disorder (PTSD), and insomnia. These psychological effects are exacerbated by cumulative stress and prolonged uncertainty, contributing to rising levels of climate anxiety and fatigue, particularly among vulnerable communities.

Emerging data indicate that lower- and middle-income groups, particularly those in the B40 and M40 categories, are more acutely affected due to limited access to psychosocial support and reduced capacity to absorb economic shocks or displacement. These factors compound the mental health burden and constrain recovery.

Evidence from women-led civil society organisations during the 2021 floods, one of the most severe climate events to impact urban areas in Malaysia, highlights the disproportionate impact on urban women. Many faced significant challenges in managing both the physical aftermath of the floods and the emotional toll on their households. For women with no prior exposure to large-scale climate disruptions, the experience triggered heightened emotional distress, particularly in managing caregiving responsibilities under conditions of uncertainty and disruption.

Young people, particularly girls and young women, have also reported feelings of pessimism, frustration, anxiety, and helplessness when reflecting on an uncertain climate future. These emotions, if not adequately addressed, may contribute to long-term psychological distress, distrust and reduced civic engagement.

A study conducted in Johor among five women affected by the 2006 floods further illustrates the mental health consequences of climate disasters. The study documented emotional, behavioural, and cognitive changes, including persistent fear, hopelessness, and heightened vigilance during rain or thunderstorms. Several participants reported regularly monitoring river levels and weather conditions as a result of their traumatic experiences⁴⁹.

Concerns around access to aid, medication, and safety, as well as fears about property damage and the well-being of family members, were frequently cited as additional stressors. The mental load of caregiving, particularly among mothers, was a recurring source of anxiety and depression.

Despite increasing awareness of these issues, there remains a lack of comprehensive documentation and limited access to mental health services that address the specific psychological impacts of climate change on women. This gap underscores the urgent need for policy interventions to strengthen community-based mental health support, integrate gender-sensitive psychosocial services into disaster preparedness and response frameworks, and invest in long-term mental health resilience, particularly for women and marginalised groups.

2.12 Compromised Safety and Gender-Based Violence During Climate Disasters

Safety and Protection Risks in Temporary Shelters

Women and girls face heightened safety risks across all phases of a climate disaster. Consultations reveal persistent fears of gender-based violence (GBV), particularly in temporary shelters such as *Pusat Pemindahan Sementara (PPS)*. These communal facilities are often overcrowded and lack adequate privacy, security, and designated spaces for vulnerable groups. Women who are breastfeeding, pregnant, elderly, or in need of sexual and reproductive health (SRH) services face particular risks when basic gender-sensitive infrastructure is absent.

The threat of violence in these settings can come from both known and unknown individuals, including fellow evacuees and volunteers. The lack of formal safeguarding protocols, combined with minimal oversight and limited reporting mechanisms, makes it difficult to prevent or address violence. Although formal cases of GBV in Malaysian shelters remain underreported, documented incidents in the Philippines and Bangladesh demonstrate that poorly managed shelter environments heighten the risk of sexual violence⁵⁰. Even in the absence of recorded incidents, women's widespread fear of such violence indicates a significant protection gap that must be addressed as part of disaster preparedness and response.

Efforts to introduce collapsible tents and privacy

partitions in PPS centres are positive steps. However, these measures are not yet standardised across all shelters. Studies have also documented the absence of facilities that meet the needs of older persons, people with disabilities, and lactating mothers, or who require privacy due to cultural and religious norms related to aurat (modesty)^{51,52}. As Malaysia's ageing population is projected to exceed 20 over the age of 65 by 2056, disaster strategies must adapt to incorporate both gender- and age-sensitive approaches⁵³.

Effective disaster risk reduction cannot treat safety as an auxiliary concern. The design and management of shelters must centre the dignity, privacy, and protection of women and other vulnerable populations through clear standards, training, and enforcement mechanisms.

Climate Stressors and Domestic Abuse

Climate change, through both rapid-onset disasters and slow-developing environmental stressors, contributes to increased levels of domestic and intimate partner violence. Economic loss, displacement, and the breakdown of coping systems can intensify household stress, especially among low-income families

Recent regional studies show a measurable correlation between rising temperatures and intimate partner violence (IPV)⁵⁴. In India, Nepal, and Pakistan, a 1°C increase in annual average temperature was associated with a 4.5% rise in IPV incidents. In Kenya, the likelihood of reporting IPV rose by 60% during heatwaves. These findings suggest that climate-related stressors have both direct and indirect effects on household violence.

In Malaysia, research by Universiti Kebangsaan Malaysia (UKM) and UNICEF among families living in *Projek Perumahan Rakyat (PPR)* flats found that children, particularly girls, felt increasingly unsafe during adverse weather⁵⁵. Small, overcrowded homes provided limited space for privacy or study and intensified household tensions. These conditions mirror those experienced during disaster-related displacements, where school closures and confinement further elevate the risk of abuse.

Insights from focus group discussions with Indigenous communities illustrate how environmental stress can manifest in high-

conflict domestic situations. Women from farming communities shared experiences of emotional and physical violence following crop failures or land disputes. In one case, a male partner unilaterally sold ancestral land, leading to domestic violence and the eventual breakdown of the marriage. These stories underscore the intersecting vulnerabilities Indigenous women face as both caretakers and land stewards.

Despite these realities, GBV remains underreported due to stigma and taboos around discussing household conflict. The resulting silence reduces the visibility of gender-based violence within climate and disaster planning, limiting opportunities for prevention and redress.

Climate-Informed Gender-Based Violence Risks: A Systemic Concern

The patterns outlined above demonstrate that gender-based violence in the context of climate change reflects broader structural inequalities embedded in environmental and social systems. These risks are not confined to moments of crisis but are intensified by existing power imbalances, insecure housing, unequal access to resources, and the absence of protective infrastructure.

Across urban poor, rural, and Indigenous settings, climate stressors deepen vulnerabilities among women and girls. Unsafe shelter conditions, rising household tensions, and limited access to support services compromise safety, autonomy, and participation in recovery and decision-making.

Framing GBV as a governance issue shifts the lens from short-term protection to a more just and inclusive understanding of resilience. Recognising the lived realities of affected communities is essential to ensure that climate responses do not perpetuate marginalisation but instead support structural transformation and collective safety.

2.13 Collapse of Healthcare Systems During Climate Disasters

Climate disasters expose the fragility of healthcare systems, with accessibility emerging as the central concern. While healthcare services may be physically present, various structural, social, and logistical barriers prevent timely and equitable access, particularly for women. These barriers are most acute during the response phase, when time-

sensitive care is crucial for survival and recovery.

Evacuation and medical response efforts are often delayed due to hazardous conditions and uneven geographic impacts. In such situations, first responders struggle to reach affected populations, and many communities report relying on nongovernmental organisations due to the slower mobilisation of government aid. These gaps have significant consequences for women, especially those requiring maternal, reproductive, or chronic health services.

Even when services are available, many women avoid clinics or hospitals out of fear of contracting infections or due to concern for children left at home. These deterrents further restrict access and increase health risks.

Healthcare system breakdowns also include the loss of medical records during disasters. When clinics and hospitals lose documentation, women may be unable to access appropriate treatment or follow-up care, especially if they lack identification or proof of prior conditions.

In addition to these systemic failures, access to healthcare and aid can be shaped by race, language, or informal networks. Respondents noted that women from minority or marginalised communities were often overlooked during the distribution of medical services. These localised exclusions reflect broader patterns of discrimination that must be addressed in disaster and healthcare planning.

2.14 Recommendations for Healthcare

RECOMMENDATIONS ACTIONS GUIDING NOTES

I. Foundational Climate and Women's Health Linkages

Integrating Climate-Health Linkages through an Intersectional and Gender-Responsive Lens in National Policy Frameworks

Line Ministries and Supporting Actors:

MOH, Institute for Medical Research, Jabatan Kesihatan Negeri, National Institutes of Health, KPWKM, NRES, JKM Formally recognise the link between climate change and women's health in national health strategies (e.g. *Pelan Strategik KKM*) and mandate sex- and gender-disaggregated data collection across all health agencies.

Strengthen databases on climate-related health risks for women, prioritising under-researched areas such as sexual and reproductive health impacts of heatwaves and drought, environmental contamination in Indigenous and rural communities, and climate-related mental health.

Develop intersectional environmental health approaches including integrating sexual and reproductive health, address multiple vulnerabilities (geography, race, class, gender, age, disabilities), and engage reproductive health experts.

Allocate dedicated funding and set measurable targets for research, policy integration, and expanded insurance coverage through government, academia, and civil society partnerships.

UN CEDAW GR 37

(67 and 68) urges
States to ensure that
health systems remain
gender-responsive and
fully functional during
disasters, with integrated
policies, budgets, and
services that guarantee
access to quality sexual
and reproductive health
care for all women,
including those in
marginalised groups.

DWN 2025-2030 (Strategy 11.1.10) calls for strengthened research on the physical and mental health impacts of climate change on women, ensuring that evidence informs national policies and programmes.

II. Gender-Responsive Health Data, Monitoring, and Early Warning Systems

Build integrated health information systems and multilevel monitoring

Line Ministries and Supporting Actors:

MOH, Institute for Medical Research, Jabatan Kesihatan Negeri, National Institutes of Health. KPWKM, NRES, JKM, DOSM, NADMA Establish systematic data-funnelling mechanisms and integrated health information systems from the public health sector to inform evidence-based policy development, including through the *Pelan Strategik Pendigitalan KKM*.

Enhance healthcare system resilience by using public health data to develop feedback loops between service delivery and policy formulation.

Establish inter-agency data-sharing protocols for comprehensive health policy development, and ensure that national health information systems also incorporate data from the private sector and civil society organisations.

Short-Term Healthcare Access Tracking

Line Ministries and Supporting Actors: MOH, NADMA, JKM, DOSM, KPWKM Establish real-time systems and protocols to track healthcare facility accessibility across the disaster cycle, defined as women's utilisation before, during, and after climate events. These should integrate gender-disaggregated data collection, rapid assessment of women's urgent healthcare needs, and early warning systems to anticipate access disruptions.

UN CEDAW GR 37

(68e) urges States to monitor health services from all providers to ensure they deliver equitable, high-quality care that is tailored to the diverse needs of women during climate crises.

RECOMMENDATIONS	ACTIONS	GUIDING NOTES
	Integrate community-led reporting mechanisms into disaster health responses. This ensures accountability, captures women's lived experiences, and strengthens institutional capacity to deliver timely and inclusive healthcare.	
Long-Term Healthcare Access Analysis Line Ministries and Supporting Actors: MOH, DOSM, Universities, EPU	Conduct comprehensive long-term analyses of healthcare utilisation trends, identifying geographic and demographic areas with consistently low or improving access. Use findings to design targeted interventions, strengthen healthcare systems, and guide equitable resource allocation, while integrating results into national climate adaptation and resilience planning.	
	Develop predictive models to anticipate healthcare access patterns under different climate impact scenarios, ensuring preparedness for future risks.	

III. Emergency Healthcare Services and Preparedness

Expand and safeguard mobile, resilient healthcare delivery

Line Ministries and **Supporting Actors:** MOH, NADMA, MOT, Ministry of Communications

Develop gender-sensitive mobile healthcare protocols for disaster contexts, and train providers across public, private, and community systems, including midwives and health workers to address sexual and reproductive health and climate-related complications.

Establish resilient transport, communication, and supply chain systems with contingency planning and early warning mechanisms to prevent service disruptions during crises.

Diversify procurement channels, strengthen local and regional sourcing, and maintain strategic stockpiles of essential medicines and equipment to ensure continuity of care.

UN CEDAW GR

37 (68g) encourages States to train healthcare workers on the ways climate change heightens health emergencies, with particular emphasis on safeguarding the rights of women with disabilities, Indigenous women, and other marginalised groups.

IV. Mental Health and Psychosocial Support

Strengthen mental health preparedness and integration in disaster health response

Line Ministries and **Supporting Actors:** MOH, NADMA

Develop gender-sensitive disaster mental health training for practitioners and create clear protocols for trauma care, stress management, and long-term psychosocial support.

Establish dedicated mental health response teams and strengthen community-based support networks to provide immediate and sustained care during and after disasters.

Integrate psychosocial services into PPS design, ensuring they are accessible for women, the elderly, and persons with disabilities.

DWN 2025-2030 (Strategy 11.1.11/ 12) urges the strengthening of mental health education and the enhancement of women's psychological resilience in the face of climate-related disasters.

RECOMMENDATIONS ACTIONS GUIDING NOTES

V. Protection and GBV Response in Disaster Health Systems

Embed GBV prevention and survivor support in all health and shelter systems

Line Ministries and Supporting Actors: NADMA, KPWKM, MOH, KPKT, NRES, JKM, PDRM Design gender-sensitive PPS standards that meet safety, privacy, and dignity needs, including secure SRH areas, adequate lighting, locks, and deployment of female security personnel.

Integrate safeguarding protocols to protect older persons, persons with disabilities, and communities with specific cultural privacy needs.

Establish confidential GBV reporting mechanisms in healthcare facilities with multiple access points, and ensure clear referral pathways for survivors.

Train healthcare workers in gender sensitivity, SGBV recognition, and survivor-centred care, embedding GBV and referral pathway modules into disaster risk management and health training curricula.

UN CEDAW Article

12 calls on States to guarantee nondiscriminatory access for women to all healthcare services, including reproductive health care.

UN CEDAW GR 37

(68g) calls for training curricula for health workers, including those in emergency services, to incorporate comprehensive, mandatory, gender-responsive courses on women's health and human rights, with particular focus on gender-based violence.

DWN 2025-2030 (Strategy 11.1.7) aims to enhance women's safety in disaster management.

DWN 2025-2030 (Strategy 11.1.8) aims to provide gendersensitivity training to agencies and personnel involved in disaster management.

VI. Food Security, Nutrition, and Women's Leadership in Food Systems

Promote genderresponsive food security and sovereignty

Line Ministries and Supporting Actors: Ministry of Agriculture and Food Security, KPWKM, MOH, KKDW Support women's participation in sustainable agriculture and food systems by reducing their burden in food production, preparation, and distribution during crises, and by prioritising the nutritional needs of pregnant and lactating women in assistance programmes.

Strengthen women-led community nutrition initiatives by promoting agroecology, Indigenous food systems, and climate-resilient seed banks as core strategies for long-term food security.

Recommendations for Civil Society Organisations						
Support women- led organisations in climate-health advocacy and service delivery	Build CSO capacity in policy advocacy, service delivery, data gathering, and monitoring of health outcomes.					
Include women's voices in disaster preparedness planning and policy development	Engage women in decision-making forums; train community health workers in gender-sensitive disaster response; participate in mental health and trauma support networks; link CSOs to GBV prevention efforts.					

2.2 Care work, Workplace and Employment



2.21 The Context of Care

Care work, as defined by the International Labour Organization (ILO), refers to the provision of support for the physical, psychological, emotional, and developmental needs of others. This includes childcare, elder care, and care for persons with disabilities and chronic illnesses. It comprises both direct care work, such as tending to or interacting with care recipients, and indirect care work, such as cooking, cleaning, and household maintenance 56 . Oxfam through the 5R's of

Carework, as per **Figure 5**, further expands the definition to include environmental care, referring to efforts that sustain livelihoods and ecosystems beyond traditional domestic boundaries⁵⁷.

The significance of care work is longstanding and foundational. Globally, and in Malaysia, there is consensus that women disproportionately shoulder the burden of unpaid care responsibilities. This imbalance has been identified as a key barrier to women's full participation in economic, social, and political life. Although recognition of both

paid and unpaid care work has gained traction in national and international discourse, it remains undervalued, under-resourced, and largely invisible in economic and policy frameworks until recent years.

Empirical evidence substantiates this inequality. Malaysian women spend 63.6% more time on unpaid care work than men, despite contributing nearly equal hours to paid work⁵⁸. Among those who are not part of the formal workforce due to caregiving obligations, the majority are women. The high dependency on informal care arrangements is shaped by several interlocking factors: the prohibitive cost of formal care services, entrenched gender norms rooted in filial obligations, and limited accessibility to public care services and social protection⁵⁹.

Malaysia's increasing national focus on the care economy is driven by several pressing concerns. An ageing population signals rising demand for elder care. Low labour force participation among women persists, with 98% of the 3.2 million people outside the labour force or engaged in part-time work due to care responsibilities being women⁵⁹. Despite a 66.7% decline in fertility rates, demand for accessible and quality childcare continues to grow⁵⁸. A coordinated response is required across all levels of government and society, addressing care needs across the life cycle.

While these findings have informed policy shifts, one critical dimension remains underexplored: the intersection between care work and climate change. Despite the increasing visibility of climate policy and energy transition agendas, care work is rarely acknowledged within these frameworks. This omission is significant, given the global evidence that climate change exacerbates the burden of unpaid care work and deepens gender inequalities. As Malaysia progresses toward a low-carbon and climate-resilient future, care work must be integrated into development and climate strategies to ensure transitions are just, inclusive, and responsive to the needs of caregivers.

2.22 Compounding Effects of the Climate Crisis on Gendered Roles in Care Work

The intersection of climate change and unpaid care work is not new, but rooted in longstanding structural inequalities. The climate crisis intensifies these vulnerabilities by deepening gender disparities and straining already fragile systems of environmental protection, social welfare, and public services ⁶⁰. Women in marginalised and resource-scarce communities, with limited capacity to adapt, bear the greatest burden. Addressing this complex convergence requires context-specific, gender-responsive interventions.

In Malaysia, societal expectations often position women as primary caregivers, responsible for both domestic and income-generating tasks. During climate-related disasters, this burden becomes more pronounced. Respondents reported that women often prioritise family safety, are the last to evacuate, and resume caregiving roles in post-disaster recovery, including cleaning homes, sourcing clean water, and caring for dependents. These responsibilities expose women to health risks and psychological stress, particularly when caring for ill family members while managing treatment costs and household duties.

Disaster experiences have also led to greater preparedness among women. One study found women were more likely than men to plan evacuation routes and engage in community emergency preparedness, with 58.6% reporting planning and 55.6% practising evacuation strategies⁶¹. For example, an Indigenous woman respondent from Pahang monitored seasonal flooding to protect household assets, though ultimately still faced loss due to unpredictable weather. This underscores both the emotional toll and adaptive leadership roles women assume.

The impact of repeated climate disasters is cumulative. Destruction of caregiving infrastructure, such as clean water sources, food supplies, and childcare centres, forces women to work longer hours without support. Strict leave policies and barriers to re-entry into the workforce exacerbate economic exclusion. In frequently affected regions, many women exit the workforce permanently.

Women in climate-sensitive sectors, especially in agriculture, forestry, and food production, face compounded vulnerabilities. Extreme weather events disrupt crop yields and household stability, forcing women to seek alternative income, manage caregiving shocks, and cope with deteriorating

health. Yet social safety nets for these women remain weak or absent⁵⁷. In many rural areas, male migration to cities for work leaves women solely responsible for agricultural labour, childcare, and household survival. These gendered dynamics intensify women's exposure to both climate risks and care burdens, without adequate institutional support.

Respondents highlighted that women prioritise their children's wellbeing and education even under strain, but limited financial autonomy and decision-making power restrict their ability to respond effectively. This caregiving burden often extends to daughters, who may sacrifice education to assist at home. An Orang Asli mother from Jerantut shared, "Tak kira hujan lebat ke tidak, akan hantar anak ke sekolah" ("No matter how heavy the rain, I will send my child to school"), illustrating the extent of mothers' sacrifices.

Despite these challenges, Indigenous women continue to model resilience through collective care systems. Practices such as rotating childcare, mutual aid, and traditional ecological knowledge contribute to adaptive capacities⁵⁷. These strategies strengthen community ties and reflect an ethic of communal care that supports climate resilience.

In summary, climate change exacerbates inequalities in unpaid care work, pushing women; particularly in rural and Indigenous communities into deeper cycles of caregiving, economic hardship, and social vulnerability. Simultaneously, these women play critical roles in adaptation and recovery. Recognising and supporting their contributions is essential to designing equitable, climate-resilient policy responses.

2.23 Integrating Climate Action into Malaysia's Evolving Care Economy

Malaysia has demonstrated regional leadership by endorsing the ASEAN Declaration on Strengthening the Care Economy and recognising care work as an essential component of development⁶². Estimates indicate that valuing unpaid care work could contribute up to RM379 billion to national GDP⁵⁹, indicating the sector's untapped economic potential. Care work is increasingly seen as integral to national planning.

Social infrastructure initiatives reflect growing

momentum. For instance, the Employees Provident Fund (EPF) has introduced schemes such as i-Suri and i-Sayang, which enable contribution transfers to support housewives and female-headed households. While such schemes mark progress, they fall short of addressing broader income loss and employment gaps experienced by informal caregivers⁵⁹.

Malaysia's budgets have incorporated incentives and relief measures for caregivers, including cash transfers, tax reliefs, and targeted support for persons with disabilities, the elderly, and children. Policies promoting family-friendly workplaces have also been introduced to assist working adults with caregiving responsibilities. However, informal caregivers remain largely unsupported despite their essential contributions to the care ecosystem. Further action is needed to revalue care as a public good, alongside more ambitious and equitable budget allocations that support both care recipients and those providing unpaid or informal care⁶³.

KPWKM is developing The Strategic Framework and Care Action Plan in Malaysia 2026-2030. This strategy is expected to address supply-demand dynamics, improve workforce training, reform regulation, and set policy direction for a sustainable care sector⁶⁴.

An Orang Asli mother from Jerantut shared,

"Tak kira hujan lebat ke tidak, akan hantar anak ke sekolah."

"No matter how heavy the rain, I will send my child to school."



Figure 5: The 5R's of Carework
Source: Adapted from Oxfam⁵⁷ and UN Women⁶⁰

Malaysia has made progress on several of these fronts. Moving forward, it is essential to align care economy reform with climate governance. This integration will optimise resource use, avoid policy fragmentation, promote integrated implementation and support more inclusive outcomes. Policies must reflect the diverse experiences and needs of women, enabling greater autonomy and resilience.

As the care sector becomes more institutionalised, climate-related risks such as exposure, facility resilience, and the safety of informal caregivers during climate shocks should be mainstreamed across policy domains. This approach positions Malaysia to lead in integrating gender, care, and climate governance.

2.24 Workplace Flexibility in Times of Disaster

As of 2022, Malaysia's female labour force participation rate remains significantly lower

than that of men, at 55.8% compared to 81.9%65. This persistent disparity, despite rising education levels among women⁶⁶, reflects entrenched structural barriers. Although women constituted more than half of STEM graduates in 2021, only 69% transitioned into the workforce. Dr. Norasikin, Director of the Solar Energy Research Institute at UKM, observed that despite high graduation rates, women in STEM face significant barriers to employment primarily due to entrenched societal norms and caregiving responsibilities that limit their workforce participation⁶⁷. This disconnect reveals that educational attainment alone does not overcome workplace exclusion when labour systems continue to undervalue or penalise women's participation.

The high rate of underemployment among tertiary-educated women is another indicator of systemic inefficiencies. Job roles are often shaped by expectations of constant availability, mobility and uninterrupted performance, which tend to disadvantage women with disproportionate

caregiving responsibilities. These constraints are not merely individual burdens but are embedded in how the labour market is structured and how employment is rewarded.

Climate-related disruptions further expose the fragility of women's economic participation. Environmental hazards such as extreme heat, flooding, and air pollution affect health and productivity in all sectors, but their impacts are uneven. The ILO has observed that women, especially those in agriculture and informal economies, face higher exposure to climate-induced risks. These include pregnancy complications and heightened vulnerability to heat stress, which are rarely considered in mainstream labour or occupational safety and health (OSH) planning⁶⁸. The ILO has documented that environmental hazards, many of which are intensified by human activity, have significantly undermined global workforce productivity. Between 2000 and 2015, these hazards contributed to an estimated loss of 23 million working years⁶⁹. Crucially, the burden of climate-related OSH risks is not equally distributed. Women, particularly those engaged in subsistence agriculture and other forms of informal labour, face heightened exposure due to the nature of their work and their limited access to protective infrastructure. These risks are further compounded during critical life stages; for example, pregnant workers are especially vulnerable to climate-induced complications such as hypertension, miscarriage, and stillbirth⁶⁸.

In Malaysia, amendments to the Occupational Safety and Health Act via Act A1648 have broadened regulatory coverage to include employers, employees, and Safety and Health Officers⁶⁷. While this expansion signals a growing recognition of the need for more inclusive workplace protections, it falls short of addressing how climate-induced hazards intersect with gendered labour realities. Current policy and enforcement frameworks continue to treat climate-related OSH risks as genderneutral, overlooking how exposure, vulnerability, and capacity to cope differ across groups. As climate-related disasters become more frequent, these gaps expose significant blind spots in the national approach to workplace health and safety. Women engaged in non-permanent or informal employment are especially vulnerable to climate-related disruptions. When climate

disasters strike, many must prioritise household recovery and caregiving, which often results in prolonged absences from paid work. Without formal employment contracts or entitlements, these women face income insecurity and long-term workforce detachment. These patterns reflect more than just policy omission; they reveal a wider systemic assumption that women's labour is secondary, flexible and ultimately disposable in times of crisis.

Compounding these challenges are restrictive work arrangements and performance-based pay structures that discourage time off. Non-permanent workers frequently lack access to health coverage or leave benefits, which exacerbates their economic precarity. Gender-specific health needs such as menstruation and reproductive risks remain largely absent from workplace considerations, signalling a broader institutional neglect of women's wellbeing across different life stages.

The intersection of climate shocks, gender norms, and precarious labour exposes how the existing employment paradigm fails to account for lived realities. Instead of supporting continuity of work for women during crises, prevailing systems reinforce exclusion and deepen existing inequalities.

2.25 Mobility of Women

Access to employment is intimately linked to mobility. For many women in Malaysia, daily travel is marked by insecurity, unpredictability, and lack of choice. Public transportation remains the most affordable option, yet it often exposes women to risks such as sexual harassment, overcrowding, and limited-service coverage, particularly during early or late hours when many caregiving and shift-based jobs require travel.

These challenges are intensified during climaterelated disruptions. Events such as floods, heatwaves, and storms frequently impact transport infrastructure, delaying commutes or rendering routes inaccessible. For women working in lowwage or hourly-paid sectors, missed shifts can result in income loss or reprimand. In contrast to higher-income earners with flexible schedules or private vehicles, women from working-class backgrounds face compounded penalties when mobility is compromised.

The structural design of transportation networks often fails to account for the rhythms of women's lives, particularly those balancing paid work with unpaid care responsibilities. Urban respondents shared that long commutes, unsafe waiting areas, and unreliable last-mile connectivity contribute to time poverty and emotional fatigue. These burdens disproportionately fall on women, especially those managing multiple household responsibilities without support.

Although Malaysia's Low Carbon National Aspiration (LCNA) 2040 and Smart City Framework outline broad commitments to gender inclusion, participatory planning, sustainability, and the use of monitoring indicators to identify discrimination in regulatory systems^{70,71}, their implementation remains uneven. In practice, infrastructure and urban design continue to be shaped more by technical standards than by the lived experiences of diverse users. As a result, mobility systems still reflect male-centric assumptions about safety, working hours, and travel patterns.

While initiatives such as women-only coaches on MRT trains and gender audits of public transportation services have introduced genderconsiderations into the mobility agenda, these efforts remain largely piecemeal. Studies such as the Women's Safety in Public Transport study documented by the Malaysian Institute of Planners⁷² and pilot initiatives like the Sustainable and Gender-Responsive City Budgeting Programme, implemented by Urbanice Malaysia in collaboration with the Ministry of Economy and the Ministry of Housing and Local Government (KPKT)⁷³ have contributed valuable data and raised awareness about gendered mobility needs. However, without institutionalisation within national transport planning, regulatory frameworks, and budgeting systems, these efforts risk remaining tokenistic. The persistence of mobility systems designed around normative assumptions of male trip patterns, work schedules, and spatial access continues to treat women's transport needs as marginal rather than integral to urban and climate-resilient infrastructure planning.

The impacts of climate-related transport

disruptions are particularly severe for women in low-wage and precarious employment. These workers often lack formal leave entitlements, job security, or access to social protection mechanisms. When extreme weather events disrupt public transportation, women in these sectors face missed workdays, income loss, and, in some cases, reprimands from employers. This is especially acute in manual labour roles where remote work is not feasible and physical presence is mandatory. These conditions expose how existing transport and labour systems systematically disadvantage women whose livelihoods depend on continuous, uninterrupted mobility. Rather than being incidental, these vulnerabilities reflect the structural failure to integrate gender, class, and climate resilience into employment and infrastructure planning.

Further, the limited representation of women in transport sector leadership and planning roles restricts the inclusion of diverse perspectives in infrastructure design. The exclusion is not only institutional but also cultural, as the transport sector remains male-dominated in both workforce composition and decision-making spaces.

2.26 Recommendation for Care work, Workplace and Employment

RECOMMENDATIONS ACTIONS GUIDING NOTES

I. Recognition and Valuation of Care Work in a Climate Context

Recognise care work as essential labour for climate resilience and social systems

Line Ministries and Supporting Actors: KPWKM, DOSM, MOF (GRB Unit), EPU, MOHR Value care as essential labour by integrating both paid and unpaid work into statistics, budgets, and climate policy. Use time-use surveys, care-sensitive economic indicators, and care economy satellite accounts to capture its full contribution to GDP, social resilience, and climate adaptation.

Recognise carers' expertise including disaster caregiving and community health practices as a vital knowledge system that must inform economic planning and climate adaptation strategies.

Invest in a resilient care economy framework that prioritises women's well-being during crises, rewards paid care workers (including informal and migrant workers) with fair wages and labour protections, and builds systems that prevent care burdens from excluding women from economic participation.

Adopt active labour market measures that expand carers' real choices: support those who wish to transition into formal employment with re-skilling and progression pathways, while ensuring that remaining in care work is a dignified option through fair valuation, adequate pay, and social protections. This dismantles the systemic bias that treats care as secondary labour and repositions it as essential to climate resilience and the wider economy.

UN CEDAW GR

37 (64e) requires climate and disaster policies to recognise and address women's disproportionate care burden.

Oxfam's 5R Framework (Recognise)

highlights the importance of valuing care work for a decarbonised and climate-just society. It calls for the collection of qualitative and quantitative data for the integration of care into policies and programmes.

II. Redistribution of Care Responsibilities and Norm Change

Challenge gender norms and ensure equitable sharing of care work

Line Ministries and Supporting Actors: KPWKM, Ministry of Digital, Ministry of Communications, KPM Challenge narratives that place women as default caregivers, and normalise men's role in unpaid and paid care.

Use public education, media campaigns, and school curricula to shift norms on caregiving.

Reduce reliance on women through funded and regulated public care services, employer-supported leave, and men's active participation in the care sector.

Ensure carers, including women in informal and migrant care work, are represented in climate policy consultations and decision-making processes.

Oxfam's 5R Framework (Redistribute) calls

for care responsibilities to be shared equally across households, workplaces, and public systems by promoting collectivisation and socialisation of care through state policies, services, facilities, and media campaigns.

RECOMMENDATIONS ACTIONS GUIDING NOTES

III. Climate-Resilient Care Infrastructure and Services

Build care infrastructure and services that reduce time and physical burdens

Line Ministries and Supporting Actors: KPWKM, MOF, MOHR, HRDF, MOH, KPKT, KPM, NRES, NADMA Expand public infrastructure (health, education, transport, housing) with climate-resilient design (renewable energy, clean water, flood/heat-proof facilities).

Introduce labour-saving technologies that support adaptation and ease care work.

Establish community care providers to support unpaid carers in rural, Indigenous, and disasterprone areas.

Ensure continuity plans and mandate OSH compliance in all facilities for extreme weather (energy backup, safe evacuation, secure shelter for care recipients).

Oxfam's 5R Framework (Reduce)

calls for infrastructure, labor-saving technologies and services that lessen care burdens.

UN CEDAW GR 39

(48a iv) recommends interdisciplinary support systems to ease Indigenous women's and girls' care responsibilities.

IV. Gender-Responsive Social Protection and Workplace Policies

Strengthen safety nets and workplace policies to address unpaid care burdens arising from climate disasters and maladaptive transition projects

Line Ministries and Supporting Actors: MOHR, KPWKM, SOCSO, EPF, NADMA, MOF, HRDF Expand disaster- and transition-responsive social protection schemes including maternity, paternity, and compassionate leave to reduce women's unpaid care burden during floods, heatwaves, displacement, or when maladaptive transition projects increase care demands or erode livelihoods.

Institutionalise flexible work arrangements and re-entry pathways for women forced to leave the workforce due to intensified care responsibilities during climate crises or prolonged recovery. Introduce gender-responsive climate risk insurance that covers not only women's livelihoods and small businesses but also household-level care costs such as healthcare, childcare, eldercare, and nutrition needs during disasters or maladaptive project impacts.

Extend social protection and insurance coverage to informal and migrant care workers who face heightened risks during climate disasters and transition projects. Provide public insurance schemes for women-owned MSMEs affected by disasters.

Guarantee equal pay and access to childcare, eldercare, and disability care services in adaptation and mitigation projects (e.g. renewable energy zones, resettlement, infrastructure), to avoid maladaptive outcomes that shift additional care burdens onto women

Embed diversity, equity, and inclusion principles across climate-related employment, ensuring

UN CEDAW GR 37

(64a) calls for genderresponsive social services and protection that addresses inequalities arising from climate risks and is accessible to all women, including women heads of households, unmarried women, internally displaced persons, migrants, refugees, and women with disabilities.

UN CEDAW GR 37

(46d) stresses access to risk reduction schemes such as social protection and insurance.

DWN 2025-2030

promotes women's economic participation through improved workplace conditions and expanding access to care services.

UN CEDAW GR 39

(50 a v) urges states to broaden social protection schemes and ensure accessible, adequate childcare services for Indigenous women

RECOMMENDATIONS	ACTIONS	GUIDING NOTES
	women's participation at all levels, including leadership.	
	Require all sectoral climate adaptation and transition plans to integrate unpaid care work risks into assessments, preventing maladaptation that increases women's time poverty.	

V. Climate-Responsive Occupational Safety and Health (OSH)

Strengthen OSH systems to address climate-related risks

Line Ministries and Supporting Actors: MOHR, DOSH, MOH, NADMA, KPWKM Adopt a risk-based planning framework that explicitly addresses climate-related hazards, environmental stressors, and risks arising from energy transition industries. This framework should recognise how unpaid care responsibilities compound occupational risks, especially for women balancing multiple roles.

Expand the Occupational Safety and Health Act (Act A1648) to include provisions on climate-specific risks such as heat stress, pollution, floods, and disaster exposure. Extend coverage to sectors often excluded from formal OSH systems, including domestic, childcare, eldercare, and disability care work.

Integrate equity and care into OSH systems by acknowledging differential vulnerabilities based on gender, disability, pregnancy, unpaid care burdens, and job type. Train safety and health officers to apply gender-, care-, and climate-sensitive standards in workplace inspections.

Recommendation No. 164 of the ILO's Occupational Safety and Health Convention, 1981 (No. 155) outlines frameworks for workplace safety and health, emphasising the roles of governments, employers, and workers in fostering a safe and healthy working environment

CEDAW GR37 (68g) calls for training curricula for health workers, including those in emergency services, to incorporate comprehensive, mandatory, genderresponsive courses on women's health and human rights, with particular focus on gender-based violence.

VI. Mainstreaming Care into Climate Policy, Data, and Monitoring

Integrate care into climate governance with genderdisaggregated data and indicators

Line Ministries and Supporting Actors: NRES, KPWKM, NADMA, EPU, DOSM, MOF Ensure national climate strategies (NDCs, NAPs, NCs) explicitly address care work by including measures to reduce and redistribute burdens, and align monitoring frameworks with national anchors such as the DWN 2025-2030.

Integrate care indicators into climate budgeting, adaptation planning, and sectoral strategies, ensuring care is embedded in both financial and programmatic decision-making.

Collect intersectional data on care work through time-use surveys and other tools, linking it to climate and environmental impacts to identify who bears the heaviest burdens.

Apply care data in practice by using it in disaster risk assessments and vulnerability mapping to

Oxfam's 5R Framework (Recognise, Reduce, Redistribute, Reward, Represent)

addresses unpaid care work in climate interventions, with 'Recognise' calling for qualitative and quantitative data to integrate care into caresensitive and gender-just climate policies and programmes.

CEDAW GR 37 (40)

urges States to collect, analyse, and manage gender-disaggregated data by developing indicators and monitoring

RECOMMENDATIONS ACTIONS GUIDING NOTES

target high-burden areas, and by monitoring the application of the 5Rs (recognise, reduce, redistribute, reward, and represent) across national and subnational decision-making. mechanisms to inform gender-responsive national and regional DRR and climate resilience legislation, policies, programmes, and budgets. In line with this, CEDAW GR 37 (64e) highlights the importance of specialised policies and initiatives that recognise and integrate care responsibilities within disaster and climate policies.

VII. Care Workforce Development

Formalise and strengthen the care workforce for resilience and just transition

Line Ministries and Supporting Actors: KPWKM, MOHR, TVET Council, MOE, MOH Formalise the employment of care workers in domestic, childcare, eldercare, and disability services by guaranteeing fair wages, enforceable labour rights, and comprehensive social protections.

Strengthen the care workforce's skills and resilience by providing crisis-ready training on disaster response, climate-related health risks, and psychosocial support. Scale up TVET and digital programmes to equip care workers for remote service delivery and climate-adaptive caregiving.

Integrate care workers into just transition frameworks to safeguard livelihoods and prevent maladaptive outcomes.

CEDAW GR37 (68g)

calls for training curricula for health workers and emergency responders to incorporate comprehensive, mandatory, genderresponsive courses on women's health and human rights.

ILO's Care Work and Care Jobs for the Future of Decent Work highlights the need to address climate change through green jobs and care-responsive policies, including investment in carerelated infrastructure that reduces drudgery while helping to mitigate climate impacts.

VIII. Women's Empowerment and Leadership in the Green Economy

Strengthen women's skills, leadership, and access to resources in the green economy

Line Ministries and Supporting Actors: MOHR, TVET Council, MOE, MAFS, KPWKM, EPU, MOF Expand women's participation in green skills programmes by scaling up TVET and certification in areas such as care work, community health, renewable energy, and climate-resilient agriculture. Develop gender-sensitive curricula that embed caregiving and resilience into training across adaptation, low-carbon industries, and sustainable livelihoods.

Strengthen mentorship and enterprise support through apprenticeships, business development assistance, and targeted financing for women-led enterprises in the green economy, including carebased services such as childcare, eldercare, nutrition, ILO's Just Transition guidelines and Care Work and Care Jobs for the Future of Decent Work highlight that advancing a just transition requires women's full participation and leadership in the green economy, alongside equal access to skills training and support for youth,

redeployed workers,

and MSMEs, through

RECOMMENDATIONS ACTIONS GUIDING NOTES

and community caregiving initiatives.

Establish leadership pipelines to increase women's representation in unions, cooperatives, boards, and policy spaces across green sectors, ensuring that care perspectives and caregiving expertise are reflected in decision-making. Guarantee equitable access for Indigenous women, migrant women, and women with disabilities.

Embed financing for women's participation in the care and green economy within national budgets, gender-responsive climate finance, and MSME support mechanisms, applying care as a cornerstone of climate-resilient societies.

flexible learning and care-responsive policies that create decent work, strengthen livelihoods, and reduce unpaid care burdens.

UN CEDAW GR37 (64c and 64f) calls for guaranteeing women's equal right to decent and sustainable employment in disaster and climate contexts, including access to training in non-traditional green economy sectors and sustainable livelihoods

The ASEAN TVET Council offers an entry point for gender mainstreaming by harmonising skills development in emerging industries, including renewable energy, aligning with Malaysia's RMK13 commitment to TVET and women's labour force participation, while LWPG GAP **D.3** calls for fostering women's and girls' full participation and leadership in science, technology, research, and development.

IX. Mobility and Climate-Resilient Transport

Ensure gender-safe and climate-resilient mobility systems

Line Ministries and Supporting Actors: MOT, KPKT, MOF, Urbanice Malaysia Institutionalise gender-responsive transport planning in LCNA 2040, the Smart City Framework, and related urban planning policies to ensure women's mobility and safety are central to climateresilient systems.

Strengthen mobility infrastructure and safety by mandating gender-responsive standards for emergency routes and shelters during climate disasters, and by expanding last-mile connectivity, safe waiting areas, and affordable transport options that specifically address the mobility needs of women, including low-income workers.

Increase women's representation in transport sector leadership and planning roles to embed gender perspectives in long-term mobility strategies.

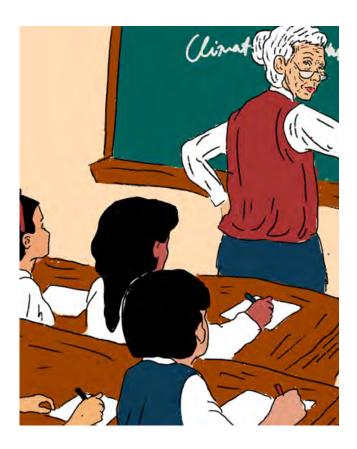
The **LCNA 2040** goal of increasing public transport's modal share creates an opportunity to align with the Smart City Framework's commitment to safe and reliable transport and its gender equality and social inclusion strategy. This can be supported by evidence from studies such as the Malaysian Institute of Planners' Women's Safety in **Public Transport** Study.

Recommendations for Civil Society Organisations

Strengthen CSO leadership in care-climate advocacy

Resourcing CSOs to generate participatory evidence, coordinate gender- and GBV-sensitive community care responses, promote male engagement and norm change, and influence decision-making forums through strong links to monitoring and accountability mechanisms.

2.3 Education and Community Knowledge



2.31 Disrupted Education During Disasters

Several challenges impede the continuity of education during climate-related disasters. Public schools are often used as flood relief shelters due to their size and location, leading to shortened school sessions. In late 2021, 311 schools functioned as relief centres and 174 were completely inundated, affecting 485 institutions⁷⁴. Damaged infrastructure, including roads, bridges, and public transport, prevents students from reaching school, while necessary repairs further delay attendance. Air pollution from haze and El Niño events can also prompt closures. In September 2019, nearly 2,500 schools were closed due to very unhealthy air quality (API 201–300), affecting more than 1.7 million students⁵⁵.

These disruptions compress syllabi, reduce examination preparation, and halt extracurricular activities, which together compromise education quality and limit holistic development. The dropout rate for female secondary students rose from 0.40% in 2019 to 0.71% in 2022⁷⁵. This may worsen as disasters become more frequent.

The impacts are particularly severe for B40 and Indigenous communities. Floods result in destroyed books and uniforms, adding financial pressure. Rural families often lack devices and stable internet, making remote learning difficult. Among Orang Asli families, some children leave school early to contribute to household income or caregiving. These conditions risk reinforcing long-term poverty cycles.

2.32 Systemic Gaps in Climate and Gender Awareness in Education

A global UNESCO review found that nearly half of 100 countries made no reference to climate change in their national curricula⁷⁶. The 2021 Berlin Declaration on Education for Sustainable Development urged governments to better integrate climate and sustainability into education systems at all levels⁷⁷.

In Malaysia, consistent public investment in education, estimated at around USD 14 million annually²⁰, has sustained a strong national education framework. The upcoming 2026–2030 education blueprint presents a possible opportunity to address climate change or the environmental education gap⁷⁸.

In practice, climate education remains limited and inconsistent. Students are more likely to encounter climate issues through extracurricular programmes, social media, or mainstream news than through structured classroom content. Although these sources contribute to general awareness, they tend to lack scientific depth, consistency, and pedagogical framing. The absence of age-appropriate, contextualised climate education weakens environmental literacy and limits students' ability to understand the interconnected drivers and consequences of the climate crisis.

Similarly, gender is rarely integrated into formal education. Often treated as a sensitive or peripheral issue, gender remains underexplored in ways that reflect how different social roles and inequalities shape lived experiences of climate change. As a result, students may leave school without the tools to recognise the gendered nature of environmental risks or the differentiated impacts on women, girls, and marginalised communities.

Where gender is absent from climate education, students may also lack the conceptual grounding needed to understand unequal access to resources, decision-making, and recovery support in climate-affected contexts. This gap in understanding may limit the potential for more inclusive, socially informed climate engagement in later life.

Legal and civic dimensions of environmental rights are also underrepresented in current curricula. The absence of content on the right to a clean and healthy environment, particularly as it relates to gender and climate justice, restricts students' ability to critically assess how environmental harm intersects with social inequality. This limits not only environmental awareness, but also civic empowerment particularly among girls and young women who may otherwise benefit from greater confidence in advocating for their communities.

Furthermore, the burden of understanding gendered climate impacts often falls disproportionately on women and girls. When education systems do not address these issues broadly, they risk reinforcing the assumption that caregiving, adaptation, and environmental responsibility are inherently gendered. A more inclusive approach to education could challenge these assumptions and support shared responsibility for environmental care and leadership across all genders.

UNESCO's Greening Curriculum Guidance highlights the importance of developing cognitive, social-emotional, and behavioural learning outcomes related to climate action, tailored to learners' age and context⁷⁹. Without adequate integration of these approaches into formal education, the potential of young people to engage critically and equitably with the climate crisis remains limited.

2.33 Community-based Climate and Disaster Esducation

Climate and disaster education can also be delivered at community level. In communal spaces, children, adults, and elders gather to discuss climate risks, adaptation strategies, and local environmental changes. Women often act as key knowledge sharers, offering lived experience that enhances local climate education. Despite this, their contributions are rarely acknowledged in broader climate discourse.

Community engagement strategies must consider gendered priorities. Respondents noted that men often focus on immediate economic effects, while women prioritise long-term outcomes such as their children's future. As one respondent from the *Kemban Kolektif* shared, "It's really interesting to understand these dynamics within the community and use that as a starting point to engage with different people and their interests."

One major challenge is the lack of shared understanding or accessible language around climate issues. This can hinder participation. Grassroots groups have addressed this by using local languages and relatable framing. For instance, an environmental activist from KUASA described how, during the Penang Tolak Tambak campaign, shifting the conversation to rising fish prices resonated with coastal communities. She noted, "Kalau you biarkan tambak...ikan akan lagi mahal" ("If you allow reclamation, fish will become more expensive").

By grounding advocacy in everyday realities, these strategies help communities understand and respond to environmental threats more meaningfully.

2.34 Bridging The Intergenerational Knowledge Gap

An intergenerational gap often shapes how youth and elders engage with climate education. While it can present communication challenges, it also brings complementary strengths. Elders possess deep ecological knowledge based on lived experience and oral tradition, while youth contribute digital literacy, scientific understanding, and the ability to connect local insights to global issues.

In Orang Asli communities, elders play a crucial role in interpreting environmental signs. Among the Orang Jakun in Rompin, the nesting behaviour of *Burung Manau* is used to predict floods, guiding actions such as relocation or raft-building⁸⁰. Such knowledge provides natural early warning systems and strengthens local adaptation.

Elders also hold strong beliefs in *Penali*, a concept of nature's retribution for human wrongdoing. Stories about environmental disturbances being caused by harm to animals or forests foster environmental ethics and intergenerational accountability. These narratives offer pedagogical

tools to teach young people environmental responsibility.

However, youth are often more influenced by external media, making them less likely to engage with traditional knowledge. Despite their enthusiasm and global outlook, younger generations may approach issues more individualistically. This underscores the need for stronger intergenerational bridges.

When traditional and modern knowledge are combined, communities benefit. For example, a successful initiative on Perhentian Island trained children in coral reef conservation and diving. These children later educated their parents, shifting family perspectives over time.

An Indigenous woman activist noted that while youth bring energy and courage, elders provide social memory and care-centred leadership vital for resilience. Respectful intergenerational exchange fosters cohesive, climate-aware communities, while embedding gender in curricula challenges stereotypes and promotes shared leadership across genders.

2.35 Recommendation for Education and Community Knowledge

RECOMMENDATIONS ACTIONS GUIDING NOTES

I. Formal and Inclusive Climate Education

Embed Gender-Responsive Climate Education in key levels as entry points

Line Ministries and Supporting Actors: KPM, MOHE, KPWKM, DOSM, MOF, State Women's Development Departments, Malaysian Communications and Multimedia Commission (MCMC), MITI Integrate climate and environmental education in the Education Blueprint 2026–2030, with modules on climate science, resilience, disaster risk reduction, post-carbon economies, and sustainable lifestyles. Civic and environmental rights literacy should be included so students understand the right to a clean and healthy environment and how climate harms disproportionately affect women, girls, and marginalised groups.

Train sustainability educators in gender-responsive pedagogy using tools that challenge stereotypes, and work with non-formal providers such as Girl Guides, youth groups and networks and women's groups to expand access for girls and young women.

Improve digital infrastructure for underserved communities to ensure equal access for girls and women to the internet, devices, and safe digital spaces. Public–private partnerships and tax incentives should support women- and youth-centred education campaigns, particularly in rural and low-income areas.

Commission universities to research how climate disasters affect girls' education, particularly dropout risks, and link findings to Gender Responsive Budgeting and retention schemes. Expand co-curricular initiatives that promote girls' leadership in STEM, sustainability clubs, and climate action, while framing caregiving, adaptation, and leadership as shared responsibilities across genders.

Paris Agreement (Article 12) and UNFCCC (Article 6) require Parties to promote education, training, and public participation and awareness on climate change.

UNESCO's Education for Sustainable
Development framework and the Berlin Declaration emphasise transformative and action-oriented learning, ensuring students not only understand climate science but also develop civic skills for sustainability.

UNCRC (Article 28) affirms every child's right to education, making inclusive, climate-informed schooling a rights-based obligation

Invest in Climate Communication

Line Ministries and Supporting Actors: KPM, MOHE, Ministry of Digital, Ministry of Communications, KPWKM, Media Organisations, CSOs, Media Councils Establish climate communication modules in schools, universities, and community programmes that integrate gender and climate justice perspectives, delivered in partnership with media organisations.

Support the development of climate journalism, with media organisations as the main player in providing training and mentorship for women and youth journalists to cover climate impacts, policies, and solutions in accessible ways.

Leverage digital and social media platforms (Instagram, TikTok, Twitter, etc.) through collaboration with news outlets and media networks to promote inclusive storytelling, ensuring content is gender-sensitive, uses local languages, and resonates with diverse audiences.

LWPG GAP A.5

promotes climate communication that is accessible and inclusive through social media, web platforms, and innovative tools to share information on gender and climate actions in ways that are relatable, widely disseminated, and responsive to local contexts.

RECOMMENDATIONS	ACTIONS	GUIDING NOTES
	Develop public campaigns co-led by media organisations that amplify women's and marginalised groups' voices in climate narratives,	

II. Indigenous and Intergenerational Knowledge

Integrating Traditional and Intergenerational Knowledge in Education Systems

Line Ministries and Supporting Actors: KPM, JAKOA, State Governments Facilitate school-based and community programmes where elders, particularly Indigenous women knowledge-holders, transmit oral traditions and ecological practices alongside scientific content, ensuring girls and boys have equal opportunities to learn.

Recognise and respect Indigenous ecological indicators (e.g., flood prediction from bird behaviour) by formally incorporating them into local curricula, while valuing the contributions of women custodians of biodiversity and land-based knowledge.

Support youth, especially girls, to document and digitise traditional knowledge, making it accessible across generations and safeguarding against loss.

Establish intergenerational projects, such as storytelling, environmental monitoring, and cultural exchanges, that centre women's ecological wisdom and foster continuity of Indigenous knowledge systems in climate education.

UN CEDAW GR 39

(23h) requires States to recognise and protect Indigenous women's knowledge systems and ensure respect for their rights to land, territories, and culture.

Integrating elders' ecological knowledge with modern science respects intergenerational wisdom while upholding the principle of FPIC.

III. Disaster-Responsive Education

Ensuring Education Continuity During Disasters

Line Ministries and Supporting Actors: KPM, NADMA, KPKT, JKR, State Disaster Management Committees Introduce flexible subsidies (e.g., uniforms, materials) and rural incentives for families affected by disasters, with priority support for girls at risk of dropping out.

Establish remote learning systems with stable internet, shareable devices, and offline modules, that access reaches B40, Indigenous, and refugee girls who face compounded barriers.

Provide psychosocial support programmes in schools post-disaster, tailored to address gender-specific risks such as early marriage pressures and increased unpaid care burdens.

Allocate "bounce-back budgets" for schools functioning as relief centres to ensure recovery of facilities and learning materials, necessary to prevent long-term dropouts among vulnerable groups, especially young girls.

The Sendai Framework for Disaster Risk Reduction calls on States to strengthen the resilience of education systems and safeguard access during crises.

UN CEDAW GR 37 (64e) requires

disaster policies to recognise women's disproportionate care burdens, which often drive girls out of school.

UN CEDAW GR 37(60) highlights that girls' education is disproportionately

RECOMMENDATIONS	ACTIONS	GUIDING NOTES
		disrupted during disasters, and governments must adopt measures such as Gender Responsive Budgeting and retention schemes.
Embedding Emergency Preparedness in Education Systems Line Ministries and Supporting Actors: NADMA, KPM, State Disaster Committees, Local Councils	Develop inclusive school-level preparedness plans with the participation of girls, female teachers, and parents, ensuring their perspectives inform safety protocols, and the efficacy of simulations, evacuation drills, and continuity protocols are tailored to various disaster scenarios. Train teachers and student councils to act as local disaster educators and protection focal points, with sensitivity to gendered vulnerabilities. Establish coordination mechanisms between schools and community disaster committees to strengthen early warning systems and joint response strategies.	UNFCCC Article 6 underscores the obligation to integrate education, training, and public awareness into climate action. The ASEAN Safe Schools Initiative highlights the need for preparedness and safety planning at the school level.
V. Community Education	on, Capacity Building, and Outreach	l
Recognising Women as Community Climate Educators Line Ministries and Supporting Actors: NADMA, Local Councils, KPWKM, CSOs	Institutionalise women's role as knowledge brokers in community climate education, ensuring their participation is visible, acknowledged and resourced.	UN CEDAW GR 37 (36b) stresses that women must be supported to participate in political and community life,
	Provide funding for women-led community workshops, using accessible language and local framing of climate issues.	including disaster preparedness and climate planning.
	Promote intergenerational dialogue platforms where women, youth, and elders share strategies for adaptation and resilience.	LWPG GAP A.5 highlights the importance of accessible, gender-sensitive communication.
Recommendations for C	ivil Society Organisations	
Expanding Civic and Public Climate Education	Organise civic climate education forums by engaging elected representatives (ADUNs and MPs) to host townhalls on climate and environmental rights, ensuring women, youth, and marginalised groups	UN CEDAW GR 37 (36b) stresses that women must be supported to

are visible as speakers and participants.

Strengthen civil society contributions to climate education by documenting case studies of community resilience and preparedness, and by advocating for structured feedback mechanisms that integrate local lessons and gendered experiences into national education policy.

participate in political and community life, including disaster preparedness and climate planning.

LWPG GAP A.1 - A.5

prioritises capacitybuilding, knowledge-

Recommendations for Civil Society Organisations

Leverage digital platforms and social media to amplify accessible climate content, using gendersensitive language, diverse women's representation, and targeted strategies to engage girls and young women. sharing, and innovative communication to strengthen genderresponsive climate policies, evidence on differentiated impacts, and recognition of women as agents of change.

2.4 Energy Transition Projects



As of the end of 2021, Malaysia's primary energy supply remained heavily dependent on fossil fuels, with 95.8% of the energy mix sourced from non-renewable sources⁶⁷, and the energy sector accounting for over 81% of total GHG emissions 81. Malaysia's NETR outlines targets to increase renewable energy (RE) capacity to 31% by 2030, 41% by 2040, and 70% by 2050, with solar energy expected to drive most of this growth and natural gas positioned as the primary transitional fuel. These efforts support the national goal of achieving net zero emissions by 2050, as stated in the Twelfth Malaysia Plan (RMK12)82. However, the current trajectory raises fundamental concerns about justice, inclusivity, and accountability particularly in how energy transition projects are designed, financed, and implemented.

Malaysia's transition remains largely anchored in techno-centric and market-led approaches. Despite official commitments to sustainability, the implementation of energy projects continues to rely on extractive development models that harm ecosystems, displace communities, and reinforce gender and social inequalities83. These include overreliance on fossil gas, large-scale infrastructure projects such as dams, mineral extraction for renewable technologies, inequitable access to electricity in rural areas, and highly contested carbon trading schemes. Rather than addressing the root causes of the climate crisis, such approaches may risk deepening vulnerability and environmental injustice. Solutions that may result in maladaptation, as flagged in the IPCC's 2022 report, by increasing vulnerability instead of reducing it⁸⁴.

Women, particularly Indigenous, rural and lowincome are disproportionately affected by these transition pathways. They face multiple and intersecting burdens as caretakers, food providers, and custodians of land and water, yet remain systematically excluded from decision-making processes. The energy transition, if designed without meaningful participation and rightsbased safeguards, risks replicating the very power structures it should dismantle.

These dynamics have direct implications for women in marginalised and energy-poor communities. Energy systems are inherently gendered, as women and men participate differently across various stages such as extraction, production, system management, and consumption. Because of their distinct social, household, and community roles, changes to energy systems tend to affect women more significantly⁸⁵. These impacts include limited access to healthcare, education, and mobility, and increased burdens on unpaid care work86. Without deliberate attention to these dynamics, energy access programmes risk deepening existing inequalities. Conversely, the energy transition offers a critical opportunity to promote genderresponsive planning, accountability, and inclusive climate action.

2.41 Energy Access and Electrification

Although Malaysia reports near-universal electrification, energy poverty persists in rural and Indigenous areas. Local investigations and community-led data suggest that at least 142 Orang Asli villages lack consistent and reliable electricity access⁸⁷, with some communities entirely unelectrified. Where solar systems have been installed, the absence of user training, long-term maintenance plans, and community ownership models has led to frequent system breakdown, forcing households to revert to diesel generators⁸⁰, which are costly and environmentally burdensome.

In these settings, energy access is not merely a matter of infrastructure provision; it is a determinant of access to healthcare, water, education, safety, and livelihoods. Women, who shoulder the majority of care responsibilities, are disproportionately affected when electricity fails. During floods and other emergencies, the loss of lighting, water pumps, and communication tools can severely compromise household safety and well-being.

Unreliable electricity also contributes to digital exclusion, especially for girls and young women. Without consistent power supply, students face barriers to participating in online education, while adult women encounter limitations in accessing income-generating opportunities and civic information. The Multidimensional Energy Poverty Index (MEPI) framework highlights how energy poverty encompasses not only availability, but also affordability, reliability, and quality of service⁸⁸, dimensions that are often overlooked in rural electrification programmes.

While electrification efforts are often framed as household-level upgrades, their implications are deeply structural. In some areas, the financial burden of installation and maintenance falls entirely on the community, with limited government support or long-term service mechanisms. These patterns reinforce cycles of energy inequality, particularly among marginalised groups.

Addressing these disparities requires more than expanding grid or off-grid coverage. A gender-responsive and community-informed approach to energy access must include long-term maintenance strategies, technical training for local users, affordability measures, and inclusive planning processes and service design that reflect the lived realities of women and Indigenous communities.

2.42 The Reality Behind Energy Transition Projects

Fossil Gas: A Risky Transition Pathway

Malaysia's continued reliance on fossil gas plays a central role in its energy transition planning. According to the NETR, gas is positioned as a transitional fuel, with projections indicating it will contribute 56% of Malaysia's Total Primary Energy Supply by 2050 — surpassing all renewable sources. This strategy aims to meet rising energy demand while reducing emissions relative to coal. However, this continued reliance on fossil gas raises important questions about alignment with long-term climate targets.

Fossil gas is no longer regarded internationally

as a benign bridge fuel, as evidence highlights its long-term environmental, social, and economic risks. Its main component, methane, has over 80 times the global warming potential of carbon dioxide over a 20-year timeframe⁸³, and leakage from pipelines and infrastructure contributes to short-term temperature spikes^{89,90}. Without significant mitigation measures, transitioning from coal to gas risks locking in carbon-intensive infrastructure and delaying deep decarbonisation.

Health and social impacts linked to fossil gas infrastructure are not evenly distributed. Urban poor and peri-urban communities often bear the brunt of air pollution, heat stress, and inadequate health services. Women and young children face heightened risks of respiratory illnesses and reproductive health complications due to proximity to polluted sites and poor indoor air quality. These health vulnerabilities intersect with energy poverty, where unreliable or unaffordable energy further constrains access to cooling, clean cooking, and medical care.

Economically, the gas sector tends to exclude women from its benefits. Employment opportunities are concentrated in technical and male-dominated fields, while women, particularly in informal work and domestic care roles are more exposed to energy cost fluctuations and infrastructural risks. Energy access schemes tied to gas expansion rarely account for the specific safety, mobility, and affordability concerns faced by women in low-income settings⁹⁰.

This reflects a broader pattern of systemic exclusion where fossil fuel projects often proceed without meaningful consultation with frontline communities and women, despite these groups shouldering the heaviest burdens of environmental harm. The framing of fossil gas as a neutral or transitional technology often conceals these inequities.

The ASEAN Center for Energy's Guide to a Just and Inclusive Energy Transition in ASEAN explicitly caution against "false solutions" including overreliance on fossil gas and market-based tools such as carbon offsetting that delay structural change and exploit marginalised communities. Without deliberate gender-responsive planning, accountability mechanisms, and investment in community-owned alternatives,

fossil gas expansion risks reproducing the same injustices that the energy transition aims to correct.

Hydropower and Large Dams

Although promoted as renewable energy, large-scale hydropower projects in Malaysia have been shown to infringe on Indigenous rights and reinforce gender inequality, issues largely overlooked in national energy plans and ASEAN strategies. These megaprojects displace communities, degrade ecosystems, and sever women's relationships with rivers, forests, and ancestral lands that are central to caregiving, food systems, and cultural life.

For many Indigenous women, the forest is a source of labour, knowledge and care, and damrelated displacement disrupts this relationship. Women lose access to herbal medicine, firewood, clean water, and safe mobility routes, leading to increased unpaid care work, compromised health, and reduced food security. The submergence of sacred sites disrupts the intergenerational transmission of Indigenous knowledge and identity.

FPIC processes are often formalistic at best, and manipulated at worst. Decision-making processes are frequently led by male community heads or government-aligned intermediaries, leaving women and youth excluded from meaningful participation. Consent becomes symbolic rather than substantive.

These procedural gaps are reinforced by the absence of gender-sensitive requirements in Malaysia's legally mandated Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA) frameworks. EIAs focus largely on environmental degradation and economic risk, with no requirement to include gender-disaggregated data or analyse gender-differentiated impacts.

There is also a notable disconnect between Malaysia's EIA/SIA legislation and broader development frameworks promoted by international agencies such as UNDP, which emphasise gender equality and social inclusion (GESI) mainstreaming⁹¹. As a result, the lived experiences, unpaid care burdens, and safety concerns of Indigenous women are routinely

excluded from formal assessments and planning decisions. A study of the Bakun Dam found that nearly 90% of community members were dissatisfied with the EIA process, and over 80% reported that procedures were not properly followed, emphasising the gap between formal requirements and actual practice⁹².

Legal challenges have further illustrated that these governance failures are not limited to large dams. In September 2024, the Malaysian High Court ruled in favour of the Semai Indigenous community of Ulu Geruntum, Perak, in a landmark case against the development of a micro-hydropower dam on their customary land. The court found that the project had proceeded without proper consent, causing destruction to ancestral burial sites, fruit

trees, and forest areas vital to community life⁹³. The judgment ordered the companies and state authorities involved to vacate the land and pay legal costs, affirming that even small-scale energy projects can lead to serious rights violations when developed without proper safeguards.

These realities echo broader regional patterns, where gendered assessments of hydropower projects—such as those conducted in Laos and Vietnam—have shown that women disproportionately bear the burdens of ecological loss, relocation, and care burdens, while being largely excluded from benefit-sharing or planning 94 95. Without gender-responsive and rights-based safeguards, such projects reproduce extractive development under the banner of sustainability.

Hydropower Megadams in Nenggiri, Kelantan

The Nenggiri Dam, a hydroelectric project in Gua Musang, Kelantan, is set to flood approximately 5,834 hectares of land and is financed in part by RM 2 million in sustainability sukuk wakalah⁸³. It is expected to provide over 2,000 jobs, contribute 300 MW to the national grid, and reduce carbon emissions by an estimated 355,000 tonnes compared to a conventional fossil fuel plant⁹⁶. However, the project has also generated significant concern due to its potential social and environmental impacts—particularly on the Indigenous Temiar community, whose 5,000 members reside in the affected area.

Civil society groups and Temiar representatives have raised concerns about the displacement of communities, the loss of ancestral land and biodiversity, and the adequacy of consultation processes. Reports from local activists suggest that FPIC procedures were incomplete or unevenly implemented. While some media outlets have reported local Indigenous support for the dam, JKOAK (Jaringan Kampung Orang Asli Kelantan) has stated that the majority of community members were not meaningfully consulted. The network also reported that attempts by villagers to protect their forests through non-violent blockades were met with forceful removal, including the use of chainsaws to dismantle the barriers they had erected.

This case illustrates the risks associated with large-scale renewable energy infrastructure developed without robust social safeguards. While hydropower may contribute to emissions reduction goals, the Nenggiri Dam raises concerns about procedural fairness, land rights, and the long-term well-being of Indigenous communities. It highlights the need for community-led, rights-based approaches in energy planning to ensure that decarbonisation efforts do not result in further marginalisation or ecological harm.

Box 4: Case Study - Hydropower Megadams in Nenggiri, Kelantan

Mining for Transition Minerals

Rising global demand for transition minerals, including rare earth elements (REEs) used in electric vehicles and renewable energy technologies, is intensifying extractive activities in the Global South. The International Energy Agency (IEA) projects a sixfold increase in demand for these minerals by 2040⁹⁷. In response, Malaysia is renewing its focus on the mining sector through the upcoming revision of the National Mineral

Policy and through sectoral strategies outlined in the New Industrial Master Plan (NIMP) 2030. These frameworks position REE extraction and mineral-based downstream industries as critical to achieving Malaysia's energy transition goals and enhancing its role in the global clean energy supply chain.

However, the expansion of extractive industries raises significant environmental, health, and social risks, particularly in rural and Indigenous People's lands. Mining activities in Malaysia have been associated with deforestation, biodiversity loss, river contamination, and prolonged exposure to hazardous substances⁸⁰. These environmental impacts are often felt most acutely by women in affected communities, many of whom rely on land and natural ecosystems for subsistence, water access, food security, and caregiving responsibilities^{86 96}. Despite this, women are often excluded from key decision-making processes related to land use, resource governance, and benefit-sharing mechanisms.

In some Orang Asli villages, community members have reported increased human-wildlife conflict, degradation of water sources, and loss of access to traditional lands and cultural sites. Without adequate safeguards, mining for transition minerals risks amplifying existing vulnerabilities and deepening inequalities. The framing of such minerals as inherently "green" or sustainable can obscure the social and ecological consequences of extraction, particularly when regulatory oversight is weak or unevenly enforced.

Malaysia's current REE mineral governance frameworks, through its respective SOPs⁹⁸, are not fully equipped to address these intersecting concerns. The absence of gender analysis in the EIA process, alongside the lack of disaggregated data and inclusive consultations, reflects a systemic governance gap. Current SIA practices similarly overlook gender-sensitive approaches and exclude meaningful engagement with those most affected, particularly Indigenous women and informal workers.

These regulatory limitations are at odds with Malaysia's international human rights obligations under CEDAW, General Recommendation No. 34 (GR 34), which calls for the integration of gender perspectives into environmental and development planning⁹⁹. Even as the government promotes "green" and "inclusive" development through the NIMP 2030 strategy, its mineral sector roadmap reflects a predominantly growth-oriented and technocratic approach. A review of the NIMP 2030 mineral industry blueprint shows no reference to Indigenous communities, customary land rights or gendered impacts¹⁰⁰. Informal and subsistence livelihoods, often led by women, are overlooked, and past environmental harms from mining

remain unaddressed. While environmental, social and governance (ESG) compliance is mentioned, it is framed largely as a business certification mechanism with no clear connection to EIA, SIA or participatory governance processes.

This omission of gender-responsive mineral governance stands in contrast with global best practices, such as the Intergovernmental Forum on Mining, Minerals, Metals and Sustainable Development's "Gender and Mining Governance" guidance¹⁰¹, and with Malaysia's existing commitments under CEDAW. Without the inclusion of gendered risk assessments, accountability mechanisms, and grievance redress systems, the current policy trajectory risks reinforcing extractive, exclusionary patterns under the guise of energy transition.

At the regional level, ASEAN energy frameworks prioritise downstream deployment, such as renewable roll-out and power-sector planning, with little attention to the upstream phase of raw-material extraction and processing. APAEC Phase II focuses on grids, gas, coal, energy efficiency, renewables, regional planning and nuclear energy, while ASEAN Centre for Energy's Guide to a Just and Inclusive Energy Transition in ASEAN advances social inclusion but does not address extractive governance90. ASEANaffiliated institutions have nevertheless begun to recognise the strategic role of critical minerals. The Economic Research Institute for ASEAN and East Asia (ERIA), for instance, has proposed a regional Critical Minerals Strategy to strengthen energy security and industrial competitiveness¹⁰². While Malaysia is identified as a key actor in rare earth supply chains, these proposals remain limited by the absence of social inclusion, gender and Indigenous safeguards.

As Malaysia becomes more integrated into this regional ecosystem, it must also address structural gaps in its domestic mineral governance. A rights-based and gender-responsive approach is essential to ensure that mineral development advances energy and industrial goals while upholding social equity and environmental sustainability.

Mining and Environmental Health in Kampung Kelaik, Kelantan

Kampung Kelaik is an Indigenous community of approximately 200 residents who have lived in the area for over six decades. The village is currently facing severe environmental degradation due to encroachment by multiple mining and logging operations. Community members report that the river, once a vital source of drinking water and daily use, has become polluted and unsafe for consumption.

Health assessments conducted on six residents revealed alarming findings. One 19-year-old villager exhibited elevated levels of chromium and aluminium in his blood. Experts estimated his Lifetime Cancer Risk (LCR) at 0.064—meaning he is 64,000 times more likely to develop cancer—and a hazard quotient (HQ) of 79.14, far exceeding safe exposure thresholds¹⁰³. These findings point to significant public health risks associated with prolonged exposure to industrial contaminants.

Despite these challenges, villagers remain committed to protecting their ancestral land. They have filed legal action against 14 parties, including the Kelantan State Government, arguing that mining leases were granted without recognition of their customary land rights. However, as land matters fall under state jurisdiction in Malaysia, no formal protection can be guaranteed without designation by the state. In 2022, the Federal Court of Malaysia dismissed a request from the Orang Asli community to appeal an earlier decision permitting mining activities on their land ¹⁰⁴. This outcome highlights the legal and procedural limitations Indigenous communities face in defending their land and environmental heritage, particularly in the absence of clear federal recognition of customary rights.

Box 5: Case Study - Mining and Environmental Health in Kampung Kelaik, Kelantan

2.43 Emerging Climate Infrastructure and Governance Risks

Malaysia's low-carbon development strategy increasingly includes infrastructure-led mitigation pathways such as Carbon Capture, Utilisation and Storage (CCUS), Voluntary Carbon Markets (VCMs), and large-scale data centre expansion. While each of these is framed as enabling climate ambition and economic competitiveness, they share a concerning feature: the absence of gender-sensitive, rights-based, and participatory governance frameworks. These approaches risk reinforcing extractive models, reallocating land, energy, and water away from vulnerable communities, and deepening existing social and gender inequalities.

Carbon Capture, Utilisation and Storage (CCUS)

The passed 2025 CCUS Bill establishes the legal foundation for underground carbon storage hubs in Sarawak and Peninsular Malaysia¹⁰⁵. These projects are promoted as decarbonisation solutions, but are closely linked to Enhanced Oil Recovery (EOR), which prolongs fossil fuel extraction ¹⁰⁶. Internationally, CCUS has faced challenges including cost overruns, underperformance, and environmental risks such as CO₂ leakage and groundwater contamination¹⁰⁷.

Malaysia's CCUS regulatory framework lacks gender considerations, Indigenous land safeguards, or inclusive governance. There are no requirements for FPIC, gender-disaggregated risk assessments, or community-led decision-making processes. This gap contradicts Malaysia's obligations under CEDAW GR 34, which emphasises rural women's rights to participate in environmental governance⁹⁹.

Voluntary Carbon Markets and Forest-Based Carbon Offsets

Understanding the emerging gendered impacts of climate mitigation in Malaysia requires examining the development of its domestic carbon market. In line with its net-zero 2050 target, and responding to external frameworks such as the EU's Carbon Border Adjustment Mechanism, Malaysia has launched the Bursa Carbon Exchange (BCX) to support a Voluntary Carbon Market (VCM)¹⁰⁸. A central strategy involves generating carbon credits from forest conservation and peatland restoration projects. However, this market-driven approach faces two fundamental challenges: economic viability¹⁰⁹ and social justice¹¹⁰.

On the economic front, conservation as a development pathway remains financially fragile. Existing incentive schemes, including Ecological Fiscal Transfers (EFTs) and Payments for Ecosystem Services (PES), have proven insufficient to replace the income states derive from extractive activities such as logging, mining, or plantations¹⁰⁹. While carbon markets introduce a new funding stream, they are constrained by a critical distinction between a forest's total carbon stock and its "investible carbon", which refers to the portion that can be reliably measured, verified, and sold as credits. After accounting for project costs, risks like leakage, and volatile market pricing, the actual revenue from investible carbon often falls short of the high, immediate profits from land development.

These limitations are compounded by state-level variation and fiscal opacity. States differ significantly in forest cover and economic reliance on resource extraction, meaning the financial opportunity cost of preserving forests is much higher for some than for others. Moreover, in sectors like oil palm, the proportion of revenue that directly accrues to state governments is not publicly disclosed, making it difficult to calculate what level of compensation might incentivise conservation over extraction.

On the governance front, the implementation of carbon offset projects has revealed systemic failures to uphold community rights. The Pahang Peatland Restoration Project, led by Enggang (Pekan) Sdn Bhd, was formally opposed by the Centre for Orang Asli Concerns (COAC) for failing to meet the standards of FPIC¹¹⁰. COAC highlighted that affected Indigenous communities were treated as "stakeholders" rather than rightsholders, and that consultation processes were coercive and dismissive of native title. These procedural violations undermine trust in the carbon market and set a dangerous precedent.

The gendered implications are especially serious. Orang Asli women, who are often the primary managers of forest resources for their families' food, water security, and income, are disproportionately affected by reduced land access and environmental degradation. Their exclusion from project design and consultation processes compounds existing gender inequality, especially in contexts where decision-making is dominated by male community heads or state intermediaries.

When carbon offset initiatives fail on both economic and social fronts, they risk entrenching rural poverty and gender inequality under the guise of "green" development. Malaysia's carbon market strategy must therefore be critically reassessed. Without transparent revenue-sharing, gender-responsive safeguards, robust FPIC, and clear benefit-sharing mechanisms, the VCM may replicate the extractive and exclusionary logics that have long shaped environmental governance in Malaysia.

Data Centres and Resource Allocation

Malaysia is positioning itself as a regional digital infrastructure hub, with over RM76 billion committed to data centre investments as of 2024¹¹¹. These facilities are energy- and water-intensive: projections suggest the sector could consume up to 68 TWh of electricity per year by 2030, with significant implications for grid stress and emissions¹¹². Additionally, cooling systems may draw on local water supplies, compounding environmental pressures on rural and peri-urban communities.

Proponents argue that data centres catalyse renewable energy deployment, as some operators commit to on-site solar power or renewable energy certificates. However, Malaysia's grid remains dominated by fossil fuels, and the country lacks binding frameworks to ensure additionality or prevent greenwashing.

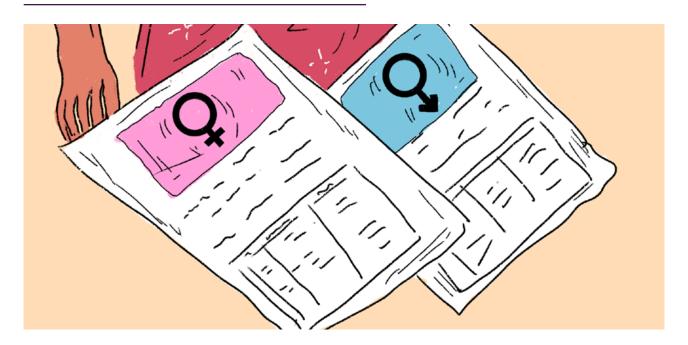
Crucially, there are no national mechanisms to assess the gendered or distributive impacts of data centres. Their rapid development can affect land use, water access, and electricity prices, but these effects are not systematically tracked, and women particularly from the rural or informal sector, are absent from infrastructure planning.



3

Systemic Issues

3.1 The Impact of Data Gaps on Women



3.11 Insufficient and Inadequate Data

Women's vulnerability to environmental degradation is shaped by structural inequalities that limit their access to land, finance, participation, and recovery support. However, Malaysia continues to lack comprehensive, disaggregated, and intersectional data that can identify, assess, and monitor the differentiated impacts of climate change on women, particularly those from marginalised, rural, and Indigenous communities. Despite the increasing relevance of climate policy across national development agendas, data on gender and environment remains fragmented and frequently treated as secondary¹¹³.

Existing datasets on gender and those on climate and environmental trends are often developed in silos, analysed independently, and rarely intersect in ways that can inform effective policy. Even when gender data is available, it tends to focus on broad indicators such as education or employment, omitting variables such as climate vulnerability, disaster resilience, access to clean energy, or informal and unpaid care burdens, issues that are central to climate justice. The failure to account for these dynamics limits the ability of the state to diagnose risks and implement targeted policy responses. The consequences are far-reaching: the absence of such data impairs not only policy design and monitoring but also financing, programmatic accountability, and public advocacy.

Globally, this data vacuum is reflected in international monitoring systems. Just ten of 90+ environment-related SDG indicators incorporate a gender perspective; only two have data¹¹⁴. The exclusion of gender dimensions in climate indicators is mirrored in national frameworks, where the lack of visibility translates into the erasure of women's lived experiences from both risk assessment and response mechanisms. This gap is particularly harmful in disaster contexts, where women's responsibilities as caregivers and resource managers are intensified, yet rarely documented or compensated.

This challenge becoming increasingly consequential given the rising importance of gender-environment data in international frameworks and funding mechanisms. Instruments such as the UNFCCC's Enhanced LWPG and its GAP, the Kunming-Montreal Global Biodiversity Framework, and CEDAW GR 37 and GR 39 all stress the need for sex-disaggregated, multidimensional data to guide policy, accountability, and resource distribution. Malaysia's limited capacity to produce such data undermines its readiness to access emerging climate finance mechanisms, including Loss and Damage funding, genderresponsive Just Energy Transition Partnerships (JETPs), and adaptation finance channels that prioritise inclusive metrics. As global donors move toward rights-based, results-driven funding models, the inability to demonstrate genderdifferentiated climate impacts and outcomes may restrict the country's eligibility and credibility.

This risk is further compounded by the absence of a National Adaptation Plan (NAP) in Malaysia. Despite the growing urgency of climate-related impacts, Malaysia has yet to adopt a national with adaptation framework aligned practices such as the Locally Led Adaptation (LLA) principles¹¹⁵. These principles, endorsed by major adaptation funders and development partners, emphasise devolved decision-making, accountability to affected communities, and equitable participation in the design, monitoring, and evaluation of adaptation actions. Without a NAP that explicitly institutionalises LLA principles and develops gender-responsive indicators at national and subnational levels, the state lacks the scaffolding needed to channel adaptation resources effectively or to empower frontline actors in shaping locally relevant responses. The continued absence of inclusive, disaggregated, and locally owned data systems exacerbates this gap, creating structural barriers to both decentralised governance and the meaningful participation of women and Indigenous Peoples in adaptation planning. In this context, the failure to address data justice not only limits visibility, but also undermines the legitimacy and effectiveness of future adaptation efforts.

In the absence of gender-environment data, Malaysia enters climate policy arenas, both domestically and internationally, without the evidence base needed to justify its positions, secure financing or defend the rights of affected communities. This limits the country's capacity to engage meaningfully in initiatives such as Just Transition frameworks, SDG localisation efforts, or biodiversity conservation financing. When gendered vulnerabilities are not captured in data systems, they are easily ignored in budget allocations, policy priorities, and institutional mandates. In effect, the failure to produce and use this data becomes a mechanism of procedural exclusion.

3.12 Data Accessibility, Control and Governance

The challenges related to data are not limited to gaps in content; they extend to questions of accessibility, governance, and ownership. In Malaysia, official data systems remain difficult to navigate. Mechanisms such as the Official Secrets Act 1972 (OSA 1972)¹¹⁶ restrict access, while delays in publication and poor integration as well as accessibility across ministries hinder timely and coordinated responses. Even where data systems exist, public-facing portals are often fragmented, under-maintained, or designed without transparency or long-term usability in mind.

The National Disaster Management Agency (NADMA) operates the National Disaster Command Centre, an online portal that consolidates disaster-related real-time information from multiple agencies including the Department of Irrigation and Drainage (JPS), Malaysian Meteorological Department (MET Malaysia), Department of Environment (Jabatan Alam Sekitar), Public Works Department (JKR), and the Department of Survey and Mapping (JUPEM)117. The platform provides access to a range of crucial data such as monsoon alerts, road closures, air quality indices, drought warnings, and flood notifications. These are essential for climate adaptation and disaster preparedness, yet the portal remains technically fragmented and lacks historical datasets, limiting its utility for longitudinal risk analysis or trend identification.

A more promising development is the recent improvement in gender-disaggregated collection by the Department of Social Welfare (Jabatan Kebajikan Masyarakat, JKM)¹¹⁸. The InfoBencana JKM system now includes detailed demographic breakdowns of individuals accounted for in temporary disaster relief centres (Figure 6) . These breakdowns include separate counts for adult men and women, boys and girls, infants by gender, as well as the number of families, elderly individuals, and persons with disabilities. The platform also displays the operational status and capacity of each disaster relief centre and is supported by an interactive map highlighting affected areas. This represents a substantial step forward in improving data transparency and inclusivity in disaster response systems.

However, the impact of this improvement remains constrained by the system's limited openness and lack of methodological clarity. The *InfoBencanaJKM* portal does not archive historical data or make its sources easily available

for verification. In practice, this restricts its use for trend analysis, gender-responsive budget planning, or policy monitoring. Furthermore, these improvements remain the exception rather than the norm across Malaysia's environmental and climate-related data infrastructure.

Among ASEAN countries, there are examples of initiatives aimed at improving data accessibility. The National Integrated Climate Change Database Information and Exchange System (NICCDIES), developed by the Climate Change Commission of the Government of the Philippines¹¹⁹, and the Singapore National Climate Change Secretariat's website¹²⁰ are both efforts to centralise data and enhance accessibility. These examples could serve as models for similar initiatives in other countries, including Malaysia.

Malaysia's data governance systems have yet to adapt to global trends favouring decentralised, community-driven approaches. While international standards recognise participatory research, citizen-generated data and Indigenous

knowledge as valid contributions to national datasets, these forms of knowledge in Malaysia remain undervalued, often dismissed as anecdotal, or excluded. This entrenches a data regime that privileges bureaucratic logic over experiential realities, reinforcing systemic inequities and exclusion.

The absence of voices from those most affected by the climate crisis does not reflect a lack of insight or analysis, but rather institutional systems that fail to recognise their knowledge as legitimate. This exclusion narrows the evidence base that informs policy processes, resulting in climate responses that are both technically limited and socially exclusionary. Without structural reforms to democratise data governance and broaden participation in consultation and monitoring frameworks, Malaysia's ability to design and adjust inclusive climate policies will remain constrained.

Nama	Deerah :	Mukim :	Buka	Kapasiti :	Mangsa :	Keluarga	Lelaki Dewasa =	Perempuan Dewasa =	Kanak-kanak Lelaki -	Kanak-kanak Perempuan =	Bayt Lelaki	Bayi Perempuar
DEWAN SEMAI BAKTI FELDA CHIXU Z	GUA MUSANG	RALDIN	16 Sep.	21.6%	216	50	28		37	41	4	2
DEWAN LOKAWI HEIGHT, KINARUT	PARAS	NZ RAMANIS	15 Sep	41%	41	14	10	14	3	10	4	3
BALAIRAYA KIS MOOK, KINARUT	FAFAIL.	N.30 BONGAWAN	15.5ep	22%	22	5	8	6	2	6	0	0
DEWAN MARAHANG	PARAT	NJD BONGAWAN	16 Ses	0%	0	0	0	0	0	0	0	0
DEWAN MASYARAKAT PAPAR	PARKE	NEZS PANTAL MANIS	16.5ep	0%	0	ò	o	0	0	0	0	0
PENAMPANG PARISH HALL	FINAMISING	N.al. Moyog	16.Sep	58.4%	146	43	50	50	21	23	2	0
DEWAN HUGUAN SIOU, KG, TUAYON PENAMPANG	FINANSING	H26 MOYOG	12 500	57%		41	37	44	19	- 11	19	2
DEWAN ICC INOBONG / PAROKI SACRED HEART	FENAMPING	N.20 MOVOG	15 Sep.	44.4%	111	39	32	37	18	20	2	2
DEWAN KOMPLEKS SUKAN RENANG	FENAMIONI	N2K MOYOG	15 Ses	109%	109	32	21	38	18	27	3	2
SRK ST. FAUL KOLOPIS PENAMPANG	PENAMPANG	NO MOVING	1) Seo	22.25%	89	30	22	31	15	18	2	1

Figure 6: Disasters in Malaysia Data Overview from Info Bencana Jabatan Kebajikan Masyarakat Website (as of 17 September 2025)

3.13 Institutional Memory Loss and Gender Blindness in the State

The fragility of institutional memory further weakens Malaysia's data systems. Frequent personnel turnover in government agencies, particularly those overseeing environmental and Indigenous affairs, results in the loss of accumulated knowledge, programmatic continuity, and long-term accountability. This loss

is especially detrimental in areas where gender sensitivity or community-specific understanding requires sustained engagement and trust-building.

Gender-disaggregated data is often treated as optional or peripheral within institutional workflows, with its collection and interpretation dependent on the presence of individual champions rather than embedded protocols. Where initiatives to collect such data are piloted, they are rarely scaled, institutionalised, or archived. This lack of consistency hampers policy coherence and undermines the long-term tracking of gendered outcomes, including in areas such as water security, land tenure, disaster relief, and energy access.

Among Indigenous communities, particularly the Orang Asli, the consequences of institutional memory loss are even more severe. Community representatives report repeated instances where new officials arrive without knowledge of past grievances, failed interventions, or ongoing environmental conflicts. This erodes trust and results in poor-quality interventions that do not respond to community needs. The absence of culturally and gender-relevant data deepens these issues, leading to missed opportunities for co-creating adaptive strategies and strengthening local resilience.

3.14 Reframing Data as a Matter of Justice, Not Just Measurement

If Malaysia is to deliver on its commitments towards a just and inclusive energy transition, gender equality, and climate resilience, the governance of data must be reframed not merely as a technical function but as a site of justice and political accountability. Current data systems in Malaysia risk reinforcing inequities by failing to count those who are most at risk, most affected, and most excluded. A feminist, decolonial approach to data justice requires the state to challenge long-standing assumptions about what constitutes valid data, who produces it, and how it is used.

This decolonial reframing entails a shift in practice as well as principle. Data collection must go beyond household surveys and administrative reporting to include qualitative, community-led, and participatory methodologies. National statistical systems should support integration between conventional and non-conventional data sources, while ensuring accessibility, multilingual dissemination, and cross-sectoral alignment. Crucially, data governance must include meaningful participation from women's rights organisations, Indigenous communities, and frontline groups not only as sources of data, but as co-owners in its interpretation, application, and safeguarding.

Global momentum is moving in this direction. The 2023 Global Conference on Gender and Environment Data has called for national governments to recognise Indigenous data sovereignty, protect the rights of communities in data collection processes, and institutionalise open-access and rights-based frameworks across climate and environmental data infrastructures¹²¹. Embedding these standards in Malaysia's climate planning is necessary if its policy ambitions are to be credible, inclusive and effective. The transition to a low-carbon, climate-resilient future depends on systems that can identify inequality, trace its structural causes and hold institutions accountable. Building such systems requires data that makes gender-environment realities visible, measurable and acknowledged.

3.15 Environmental Impact Assessment (EIA) and Social Impact Assessment (SIA)

EIAs and SIAs represent two of the most established regulatory tools for data collection in Malaysia's development planning processes. EIAs are mandated under the Environmental Quality Act 1974 (Act 127) and administered by the Department of Environment¹²², while SIAs fall under the Town and Country Planning Act 1976 (Act 172)123 and are increasingly used by local authorities and planning units to assess socioeconomic impacts. Although SIAs are compulsory under the Town and Country Planning Act (Amendment) 2017, they remain legally and procedurally subordinate to EIAs and are not grounded in a dedicated legislative framework. Both mechanisms are intended to generate evidence-based insights into the anticipated effects of major infrastructure, land use, and industrial projects. Despite their role as core instruments of environmental data generation, they remain structurally disconnected from Malaysia's broader commitments to gender equality, Indigenous rights, and climate resilience.

A key limitation of both EIAs and SIAs lies in the narrow scope and poor quality of social data collected. Gender-disaggregated, ethnicity-specific, and locally generated data is not systematically required, and there is no formal obligation to collect or analyse information on care burdens, land access, Indigenous customary use, or intergenerational livelihoods—all of which are essential to understanding the differentiated

impacts of development. Where data is collected, it is often designed through standardised templates that do not allow for context-sensitive indicators or community-led inputs. This limits the capacity of these assessments to capture lived realities or to inform policies that centre rights, justice, or long-term resilience.

In practice, the data produced through EIA and SIA processes is largely extractive, generated by private consultants with limited community involvement or transparency. The assessments are typically commissioned late in the project cycle and are often constrained by commercial timelines and non-disclosure agreements. Consultations, where they occur, are rarely documented in disaggregated form and seldom include women's perspectives. For Indigenous communities, especially the Orang Asli and Indigenous groups in Sabah and Sarawak, this has meant decades of development projects being approved without credible documentation of their socio-cultural, ecological, or gendered impacts. Data about these communities is routinely filtered through state-defined categories that flatten diversity and obscure structural vulnerabilities.

Even in cases where data is collected, access remains a major challenge. There is no centralised public repository of past EIA or SIA reports, no protocol for sharing raw social data with communities, and no transparency on how data informs project approvals. This undermines accountability and prevents both civil society and affected groups from engaging in informed advocacy or policy critique. It also results in missed opportunities to aggregate and analyse cross-project trends, such as repeated patterns of Indigenous displacement, loss of women's access to water, or the degradation of culturally significant ecosystems.

The failure to design EIAs and SIAs as robust, inclusive data systems reflects a broader issue in Malaysia's environmental governance: the treatment of data as a procedural requirement rather than a public good. Without institutional mechanisms that mandate intersectional indicators, enable community-led data collection, and ensure open access to findings, these tools cannot fulfil their potential as vehicles for social and environmental accountability. Reforming EIA and SIA processes to integrate rights-based,

gender-responsive, and decentralised data practices is essential not only for strengthening project-level decision-making, but also for building a credible and inclusive national knowledge base on the impacts of development.

3.16 Traditional and Indigenous Knowledge for Climate Adaptation and Resilience

Traditional and Indigenous knowledge systems are rooted in generations of lived experience, ecological understanding, and cultural practice. For Indigenous communities across Malaysia, this knowledge is not a static set of traditions but a dynamic system of adaptation, resource environmental management, and ethical stewardship. Women, in particular, are key custodians of such knowledge. As primary caregivers, cultivators, and resource managers, Indigenous and rural women often hold detailed environmental knowledge that is both practical and context-specific.

These knowledge systems contribute directly to biodiversity conservation, forest health, seed resilience, and local food security. For example, Indigenous women frequently engage in the preservation and distribution of heirloom seeds and sustain agroecological practices that conserve water, prevent soil erosion, and promote ecological balance. Their approaches to land and water stewardship are shaped by local cosmologies, sustainable harvesting practices, and intergenerational knowledge transfer. These practices are integral to nature-based solutions, yet are rarely acknowledged within formal climate policy frameworks, adaptation plans, or national development strategies.

Despite mounting evidence of their value, traditional knowledge remains systematically excluded from state-led decision-making and data systems. Climate change adaptation strategies in Malaysia continue to rely on top-down technical frameworks that overlook community-driven practices and fail to create space for Indigenous knowledge holders to shape policy. Efforts in seed sharing have also been seen by womenled communities in urban areas such as by the Consumers Association Penang and The Community Seed Reserve Inventory Initiative which frequently hosts seed fairs and agroecology conferences. As the climate crisis deepens, the failure to recognise and scale these practices represents a lost opportunity for more grounded, culturally appropriate, and cost-effective adaptation strategies.

Adaptation Strategies in Agriculture by Women Farmers

In Pahang, Indigenous women have demonstrated remarkable adaptability to extreme weather events by drawing on traditional forest knowledge and applying strategic agricultural practices to maintain food self-sufficiency. These practices include the deliberate cultivation of banana trees to enhance water retention and the relocation of overgrown weeds to improve soil quality and moisture levels. Such methods reflect a deep understanding of landscape dynamics and the enduring relevance of local knowledge in addressing modern climate challenges.

In Melaka, a woman farmer observed that climate variability had shifted planting seasons by nearly two weeks. Drawing on both traditional cues and modern tools, including weather forecasts from the Malaysian Meteorological Department and updates shared via news and social media, she adapted her planting calendar and diversified her crops. Her strategies included soil enrichment through pocket dressing, maintaining grass cover around guava trees to retain soil moisture, and using rice husks to minimise water evaporation. She also experimented with pest management as pesticide efficacy declined, adjusted fertiliser use, and monitored irrigation infrastructure in anticipation of drought or heavy rainfall.

These examples illustrate the agency and innovation of women farmers in the face of climate stress. Their practices are not only ecologically effective but grounded in a logic of sustainability, resilience, and generational responsibility. However, such efforts often remain invisible within official climate adaptation strategies, financing schemes, or agricultural extension systems.

The continued exclusion of these practices from national adaptation discourse underscores a structural problem: what is not counted, supported, or recognised cannot be protected or scaled. Malaysia's climate planning mechanisms must move beyond extractive data frameworks and create pathways for Indigenous and women-led knowledge systems to inform, shape, and co-lead adaptation strategies. Recognition alone is insufficient—what is needed is institutional support, resourcing, and legal protection for community knowledge holders as key actors in national and local climate governance.

Box 6: Case Study - Adaptation Strategies in Agriculture by Women Farmers

3.17 Recommendation for Data Gaps on Women

I. Quality and Accessibility of Data

Institutionalise intersectional and gender-disaggregated data (across climate, biodiversity, pollution, and disaster risk)

Line Ministries and Supporting Actors: DOSM, KPWKM, NRES, all line ministries Mandate sex-, gender-, age-, disability-, ethnicity-, and locality-disaggregated data across climate, biodiversity, pollution, and DRR agencies.

Establish cross-ministerial protocols and archiving standards to ensure continuity despite turnover.

Build capacity to analyse and apply data for climate finance eligibility (JETP, Loss & Damage, adaptation funds).

NAPBHR flags data gaps as a compliance issue. Expanding its scope to include biodiversity and pollution would ensure it fully addresses the triple planetary crisis: climate change, biodiversity loss, and pollution.

UN CEDAW GR 37 (40) calls for mechanisms to collect and use disaggregated data (sex, age, disability, ethnicity,

LWPG GAP D.7 and A.3

region).

stress capacity-building for sex-disaggregated and multidimensional data to better inform genderresponsive climate policies, plans, strategies and action.

DWN 2025-2030 also recognises gaps in gender–climate data

innovations, while data sovereignty ensures that their rights and consent

are upheld.

3.1 | The Impact of Data Gaps on Women

RECOMMENDATIONS	ACTIONS	GUIDING NOTES
		and the importance of gender-disaggregated data to form inclusive and gender-responsive policies.
Centralised and open data platform Line Ministries and Supporting Actors: DOSM, National Digital Department, Ministry of Communications, NRES, KPWKM, NADMA, JKM, MOSTI, BHEUU, Attorney General's Chambers, Parliament, SUHAKAM	from NADMA, JKM, MET, DOE, JPS, etc., with transparent methods and versioned archives. Ministries and porting Actors: M, National al Department, stry of munications, S, KPWKM, MA, JKM, TI, BHEUU, mey General's abers, ament, from NADMA, JKM, MET, DOE, JPS, etc., with transparent methods and versioned archives. Support community-generated and Indigenous data sovereignty; enable re-use and secondary analysis. Design platform to address digital divides, ensuring accessibility for women, rural communities, and persons with disabilities, with bilingual interfaces and offline-compatible formats.	
Mandatory gender assessments in EIA/ SIA and ESG Line Ministries and Supporting Actors: NRES, DOE, KPWKM, State Governments, local authorities	Mandate EIA/SIA and ESG to include gender-responsive indicators, Indigenous rights, and recognition of care burdens, and require all reports to be published in a central open repository. Anonymised social datasets must be made accessible to affected communities to enable monitoring, accountability, and gender-responsive decision-making.	UN CEDAW GR 37 stresses gender- disaggregated data. NAPBHR Action E1.10 recommends full public access to EIA reports, bilingual formats, and transparent consultation mechanisms GCF Environmental and Social Safeguards require gender-informed risk analysis.
II. Enhancing Data Colle	ction and Recognition	
Support Indigenous and local knowledge (rights-based) Line Ministries and Supporting Actors: NRES, JAKOA, SUHAKAM, KPWKM, KKDW	Legally recognise and adequately resource Indigenous women's ecological knowledge by funding community-led documentation, agroecology, and seed-saving initiatives, while upholding FPIC and safeguarding privacy in all community data processes.	UN CEDAW GR 39 (48 a iii) requires recognition and protection of a women's knowledge, including scientific and technological contributions. CBD Article 8(j) protects Indigenous innovations, while data

3.1 | The Impact of Data Gaps on Women

RECOMMENDATIONS ACTIONS **GUIDING NOTES** Create funding streams and scholarships for gender-UN CEDAW GR Invest in research, environment data research. 37 highlights experts, and grassroots data institutionalising (including nonwomen's knowledge. conventional sources) Train women in rural and Indigenous communities as data collectors and analysts. LLA principles stress accountability to Line Ministries and communities. **Supporting Actors:** MOHE, MOSTI, Recognise qualitative and community evidence LWPG GAP A.4 DOSM, MOF, alongside quantitative indicators. promotes building KPWKM, universities, evidence on how climate think tanks change affects women Adopt non-conventional sources including big data, geospatial, citizen-generated, and feminist and men differently, and participatory action research. highlights women as agents of change. Engage in international cooperation to co-DWN 2025-2030 develop methodologies and guidance for gender-(Strategy 11.1.10) promotes research on environment indicators, ensuring comparability and climate impacts on alignment with global standards.

III. Integrating Data into Policy and Accountability

Translate data into policy and finance decisions

Line Ministries and Supporting Actors: NRES, KPWKM, All Line Ministries, MOF Develop mechanisms linking gender-environment data collection to actionable policy and budget outcomes. Mandate gender-responsive recommendations in all research and government reports, and monitor whether data use leads to measurable gender outcomes, including access to climate finance.

NAPBHR notes data gaps undermine compliance.

women especially on physical and mental

health.

Integrating gender indicators improves eligibility for climate finance such as GCF and Adaptation Fund.

Strengthen accountability, governance and institutional memory

Line Ministries and Supporting Actors: NRES, KPWKM, All line ministries, Auditor-General, DOSM, BHEUU, SUHAKAM, CSOs, academia Establish archiving systems, continuity protocols, and annual public reporting on gender-responsive data. Form a national gender-environment data taskforce with representation from women's rights groups, youth, and Indigenous communities. Embed gender audits to ensure institutional memory and reduce champion dependency.

NAPBHR Action G1.15

calls for a Data Leakage Protection System with management and treatment guidelines to safeguard data on children, young people, marginalised groups, and gender- or communitysensitive information, while Action G1.14 emphasises assessing the implementation of the Personal Data Protection Act 2024, including compulsory breach notifications, portability rights, and the appointment of Data Protection Officers.

UN CEDAW GR 37 (81a) calls for

3.1 | The Impact of Data Gaps on Women

Apply intersectional vulnerability tools Line Ministries and Supporting Actors: NADMA, NRES, DOSM, MET Malaysia, Department of Irrigation and Drainage, MOSTI, universities Secure sustainable financing for genderenvironment data Line Ministries and Supporting Actors: NADMA, NRES, DOSM, MET Malaysia, Department of Irrigation and Drainage, MOSTI, universities Establish national budget lines, track financial flow and secure sustained donor financing for genderenvironment data Line Ministries and Supporting Actors: MOF, DOSM, KPWKM, MOSTI, JPM, development partners Establish national budget lines, track financial flow and secure sustained donor financing for gender-environment data collection, analysis, and dissemination. Establish national budget lines, track financial flow and secure sustained donor financing for gender-environment data collection, analysis, and dissemination. Mandate that gender-responsive data informs budget allocations, using Gender Responsive Budgeting (GRB) tools to track how data translates into financial commitments. Ring fenced budget to support women's rights groups, grassroots women, and Indigenous communities in generating and managing data.	RECOMMENDATIONS	ACTIONS	GUIDING NOTES
Index (ICVI) for disaster planning, early warning systems, and adaptation strategies. Ensure tools capture differentiated risks faced by Indigenous women, migrant women, older persons, and persons with disabilities, also by their geography. Secure sustainable financing for genderenvironment data Line Ministries and Supporting Actors: MOF, DOSM, KPWKM, MOSTI, JPM, development partners Establish national budget lines, track financial flow and secure sustained donor financing for gender-environment data collection, analysis, and dissemination. Establish national budget lines, track financial flow and secure sustained donor financing for gender-environment data collection, analysis, and dissemination. Mandate that gender-responsive data informs budget allocations, using Gender Responsive Budgeting (GRB) tools to track how data translates into financial commitments. Ring fenced budget to support women's rights groups, grassroots women, and Indigenous communities in generating and managing data.			to monitor, analyse, and share gender- disaggregated data on disaster risk, climate change, and gender
financing for gender- environment data Line Ministries and Supporting Actors: MOF, DOSM, KPWKM, MOSTI, JPM, development partners Ministries and Supporting Actors: Moff, Dosh, KPWKM, Mosti, JPM, development gender-environment data collection, analysis, and dissemination. Mandate that gender-responsive data informs budget allocations, using Gender Responsive Budgeting (GRB) tools to track how data translates into financial commitments. Ring fenced budget to support women's rights groups, grassroots women, and Indigenous communities in generating and managing data.	vulnerability tools Line Ministries and Supporting Actors: NADMA, NRES, DOSM, MET Malaysia, Department of Irrigation and Drainage, MOSTI,	Index (ICVI) for disaster planning, early warning systems, and adaptation strategies. Ensure tools capture differentiated risks faced by Indigenous women, migrant women, older persons, and persons	
Ring fenced budget to support women's rights groups, grassroots women, and Indigenous communities in generating and managing data.	financing for gender- environment data Line Ministries and Supporting Actors: MOF, DOSM,	flow and secure sustained donor financing for gender-environment data collection, analysis, and dissemination. Mandate that gender-responsive data informs budget allocations, using Gender Responsive Budgeting	
IV. Recommendations for Civil Society Organisations	JPM, development	(GRB) tools to track how data translates into financial commitments. Ring fenced budget to support women's rights groups, grassroots women, and Indigenous	
	IV. Recommendations for	r Civil Society Organisations	

Building Data and Knowledge, and Advancing Accountability for Gender-Responsive Climate and Human Rights Policies Advocate for open, centralised, and transparent data systems, including reforms to the OSA, to ensure sex-disaggregated and intersectional data is accessible for gender-responsive climate and human rights policymaking.

Generate and validate qualitative and community-based evidence that highlights Indigenous women's ecological knowledge and lived experiences, ensuring FPIC and women's equal participation in all stages of knowledge production.

Monitor government delivery on NAPBHR commitments by demanding transparency in financing, data reporting, and follow-up mechanisms, with accountability frameworks that assess gender impacts on women, girls, and marginalised communities.

3.2 Policy Instruments and Legal Framework



3.21 Gender Mainstreaming National Policies

The United Nations Economic and Social Council (ECOSOC) defined gender mainstreaming in 1997 as:

"...the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in all areas and at all levels. It is a strategy for making women's as well as men's concerns and experiences an integral dimension of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres so that women and men benefit equally and inequality is not perpetuated. The ultimate goal is to achieve gender equality." 124

In practice, gender mainstreaming means that women's and men's priorities, experiences, and contributions, together with those of gender-diverse groups, are built into the design, implementation, and monitoring of all policies.

The goal is not symbolic inclusion but equal influence and benefit.

Four principles define this approach 125:

- It is a strategy directed at achieving gender equality, not a substitute for it.
- It must cut across all sectors and policy areas, including environment and climate.
- It requires explicit attention to how women, men, and gender-diverse people participate in, influence, and benefit from development processes.
- It depends on integrating their concerns, capacities, and knowledge into every stage of policymaking and planning.

When applied systematically, gender mainstreaming strengthens development outcomes. It helps expose how existing norms and institutions may reproduce inequality, and it ensures that policies are judged not only by efficiency or growth, but by their ability to redistribute power and opportunity. However, effective use of the strategy depends on more than intent. It requires practical tools such as gender

impact assessments, disaggregated data, and inclusive consultation processes, as well as active participation in leadership and decision-making.

Within climate governance, these ideas are reinforced by the Guide to Gender Equality under the UNFCCC¹²⁶, which outlines the need for gender-responsive policies. Such policies do more than integrate gender perspectives: they include targeted measures to close gender gaps in plans, budgets, and implementation. Gender-transformative approaches go further still, aiming to shift the underlying power relations and social norms that sustain inequality, so that climate action contributes to structural change.

The International Narrative and National Perspective

Over the past decade, significant progress has been made globally in recognising the intersection of gender and climate policy. Foundational rights instruments such as the CEDAW, the Paris Agreement, and the UNFCCC's Enhanced LWPG and its GAP have set the stage for greater accountability. These frameworks stress the need for inclusive policy design, gender-responsive financing, disaggregated data, participatory governance, and capacity building. International institutions such as UN Women, UNEP, and the Women and Gender Constituency (WGC) have played a key role in advancing this agenda at national and community levels.

Yet, despite these frameworks, implementation at the national level has not kept pace. The lack of gender-disaggregated data remains a major barrier in climate policy design, planning and reporting. Without intersectional data, governments are unable to design equitable policies or monitor differential gendered impacts across marginalised groups, and reduce gender-differentiated vulnerabilities while recognising women as critical agents of climate resilience and sustainable development.

Regional Momentum

At the regional level, ASEAN has made commendable progress in setting gender equality targets, including through the ASEAN Declaration on the Gender-Responsive Implementation of the ASEAN Community Vision 2025¹⁹ and the ASEAN Gender Mainstreaming Strategic Framework

2021–2025¹⁸. The ASEAN Gender Outlook 2024 further underscores the disproportionate impacts of climate change on women and girls in Southeast Asia and highlights the role of gender equality in achieving sustainable development and resilience²⁰.

Although institutional frameworks at the ASEAN are expanding, national implementation is uneven. Indonesia and the Philippines have made stronger progress integrating gender into climate policy, bolstered by public discourse and civil society. Conversely, Malaysia's advancement is slower due to fragmented mandates, weak political will, and limited accountability. This highlights ASEAN's soft mechanisms as symbolically strong but lacking enforcement for meaningful national gender integration.

National Integration and Gaps

Malaysia's climate governance and reporting framework deploys core instruments such as the Nationally Determined Contributions (NDCs), National Communications (NCs), and Biennial Transparency Reports (BTRs) to operationalise global commitments. These mechanisms hold significant potential to advance accountability, data-driven assessment, gender impact assessment and gender-responsive planning and monitoring. Nevertheless, institutionalised gender integration remains nascent and inconsistent across reporting cycles.

The Fourth National Communication (NC4) marks procedural progress through its dedicated "Gender Participation" section; Malaysia's first formal acknowledgment of this dimension¹²⁷ (Ch. 6.6). It identifies broad challenges in women's representation and data collection but fails to mainstream gender across sectors (e.g., energy, agriculture, adaptation). Similarly, the First Biennial Transparency Report (BTR1) references gender in capacity-building yet lacks analytical depth or outcome tracking¹²⁸. Critically, while sex-disaggregated data appears incidentally (e.g., health statistics in NC4 Ch. 1), these fragments remain disconnected from climate vulnerability assessments.

This disconnect exemplifies a pervasive flaw: data exists but is not leveraged for gender analysis. For instance:

- NC4's drought risk assessments cite agricultural impacts but omit gendered vulnerabilities of women smallholders, who constitute 35% of Malaysia's agricultural labor force.
- Urban heat island analyses overlook disproportionate impacts on women in informal sectors, despite sex-disaggregated urban poverty data being available.

The second NDC (2021) mirrors this limitation. "gender-responsive Its token reference to engagement" lacks methodological rigour, ignoring how gendered social roles, such as women's responsibility for water management and household electricity, amplify climate risks. The recently released third NDC (2025) signals gender responsive progress by committing to develop a gender action plan within the NDC process itself. While this represents an important recognition of the GAP, the extent to which it will be backed by resources, institutional mandates and measurable indicators remains uncertain. Unless operationalised through concrete methodologies and accountability frameworks, the gender action plan risks repeating the limitations of earlier commitments.

Critically, no central agency coordinates gender integration across ministries or subnational entities. Consequently, national strategies overlook the differentiated vulnerabilities and contributions of women, Indigenous communities, and other marginalised groups, constraining both policy efficacy and equitable resilience outcomes. This institutional void perpetuates a cycle of invisibility: without robust metrics or mandated reporting, climate interventions risk exacerbating existing inequalities.

Towards Malaysia's Gender Action Plan on Climate Change Reporting to the UNFCCC

Malaysia's development of a Gender Action Plan (GAP) on Climate Change Reporting to the UNFCCC¹²⁹ marks a critical step toward aligning with global climate-gender mandates. Anchored in UNFCCC's Enhanced LWPG and its GAP and domestically synchronised with the NCCP 2.0 and DWN 2025-2030, this framework targets gaps in Malaysia's climate governance, notably fragmented data systems, limited cross-ministerial coordination, and institutional capacity barriers. Its core innovations include appointing Gender and

Climate Change Focal Points, institutionalising sex-disaggregated data protocols and embedding gender analysis in technical working groups. These measures are intended to strengthen gender responsiveness in Malaysia's BTRs and NCs.

However, the GAP lacks concrete provisions for Gender Responsive Budgeting (GRB); a critical omission given that climate finance remains gender-blind in practice. Without dedicated fiscal mechanisms (e.g., gender-tagged allocations in adaptation funds or women-targeted green finance), women's grassroots initiatives such as drought-resistant farming, community models of disaster resilience and energy will continue to be under-resourced. This gap must be urgently addressed to ensure the GAP drives tangible change.

Yet this UNFCCC-specific GAP is not an endpoint. Rather, it serves as a strategic prototype for a comprehensive National Gender Action Plan on Climate Change beyond reporting obligations. By piloting methodologies for gender-inclusive adaptation planning and creating infrastructure for stakeholder engagement, the GAP lays operational groundwork. Success hinges on integrating GRB at scale, using sex-disaggregated data to direct climate funds toward women's priorities and mandating gender audits in national climate expenditures. If Malaysia leverages this momentum, the GAP could catalyse a systemic shift from gender-aware to gender-transformative climate governance and ensure women's leadership not only in reporting but in shaping Malaysia's low-carbon future.

3.22 Gender Analysis of Malaysia's Key Climate Related Policies

To establish a clear baseline and guide future policy direction, it is essential to assess the current level of gender integration within Malaysia's key climate-related policies. This analysis applies a consistent set of parameters, as outlined in the Methodology section, to evaluate the extent to which gender considerations are embedded in each policy. These parameters draw from established international frameworks and reporting obligations, providing a structured lens to identify gaps, strengths, and opportunities for improvement across key national policies.

3.2 | Policy Instruments and Legal Framework

This subsection applies the six-parameter framework to key climate-related and gender-related policies to identify integration gaps, assess institutional coherence, and propose areas for reform. The policies analysed include: the National Women's Policy (Dasar Wanita Negara, DWN 2025–2030), the National Climate Change Policy 2.0 (NCCP 2.0), the National Energy Transition Roadmap (NETR), and the National Action Plan on Business and Human Rights (NAPBHR).

Table 6: Summary of Gender Analysis of Malaysia's Key Climate Related Policies; the National Women's Policy (Dasar Wanita Negara, DWN 2025–2030), the National Climate Change Policy 2.0 (NCCP2.0), the National Energy Transition Roadmap (NETR) and the National Action Plan on Business and Human Rights (NAPBHR)

PARAMETER	DWN 2025-2030	NCCP 2.0	NETR	NAPBHR
Participation & Leadership	Sensitive: Commits to 30% representation and highlights rural and Indigenous women as climate actors. Civil society and women's organisations are referenced, but leadership is framed in terms of participation rather than powersharing. No quotas or legally binding pathways are established to guarantee women's authority in climate governance structures.	Sensitive: Identifies women, youth, and Indigenous groups as stakeholders, but their role is limited to consultation and input. The framework lacks structural mechanisms, such as leadership pipelines or mandated representation, to institutionalise women's decision-making power. Women are invited to consultations without power to shape outcomes.	Blind: Consultations were dominated by state and corporate actors, with little evidence of engagement with women's groups, CSOs, or Indigenous organisations. Participation is not designed to address gender power imbalances, leading to exclusion of diverse voices in energy transition planning.	Sensitive: Recognises Indigenous women, EHRD, and women's role in corporate boards. However, these measures are framed as voluntary practices without enforcement, monitoring, or clear requirements that would shift representation into decision-making authority.
Institutional & Policy Coherence	Sensitive: Connects women's empowerment to DRR and the Paris Agreement. However, the DWN 2025-2030 does not align itself directly with NCCP 2.0 or legal climate frameworks. Gender equality goals remain siloed rather than mainstreamed across climate institutions, creating gaps in cross-sectoral governance.	Blind: Mentions equity in principle, but institutional coordination with gender or finance ministries is absent. Gender is not operationalised across climate governance, resulting in fragmented accountability and weak policy coherence.	Blind: Oriented around economic diversification and industrial energy planning, the NETR does not reference Malaysia's gender equality laws or frameworks. This entrenches a technocratic model where gender is invisible in transition policy design.	Sensitive: Anchored in human rights frameworks such as CEDAW, CRC, and CRPD. However, the NAPBHR fails to reference the DWN 2025-2030 or other national gender frameworks, leaving implementation vulnerable to fragmentation and inconsistency.
Capacity Building	Sensitive: Provides training for disaster agencies, promotes skills development for rural and Indigenous women, and references participation in agriculture and renewable energy. However, there is no systemic pathway for women into emerging green	Sensitive: Refers to gender perspectives in preparedness and recovery, but without mandates for training or institutional strengthening. No systematic investment in gender-disaggregated data or inclusion of women's knowledge systems is evident.	Blind: Focuses on reskilling workers for industrial energy transition but does not address gender-specific barriers. Women in informal and care sectors are excluded, perpetuating existing inequalities in access to skills and opportunities.	Sensitive: Commits to capacity building for businesses and rights holders, with inclusive language on marginalised groups. However, it lacks systematic collection of sex-disaggregated data and structured training modules to embed gender knowledge into practice.

3.2 | Policy Instruments and Legal Framework

PARAMETER	DWN 2025-2030	NCCP 2.0	NETR	NAPBHR
	jobs, and capacity building remains piecemeal rather than institutionalised.			
Finance	Sensitive: Introduces Gender Responsive Budgeting (GRB) as a principle, but lacks operational mechanisms, Ministry of Finance coordination, or clear integration with climate finance streams. Without institutionalisation, GRB remains aspirational.	Blind: Acknowledges the need for climate finance, but provides no gender-responsive safeguards, criteria, or dedicated allocations for women and marginalised groups. Finance remains treated as genderneutral.	Blind: Details instruments such as green bonds and blended finance, but omits gender access and accountability mechanisms. Financial flows risk reinforcing inequities as women's needs and barriers are not considered.	Sensitive: Introduces gender budget tagging across ministries, signalling a step toward gender-responsive financing. However, this is not applied to climate and environmental finance, limiting its impact on just transition funding.
Implementation	Responsive: Provides an action plan with strategies, targets, and timelines. Recognises women as climate actors in multiple sectors and incorporates measurable commitments. However, empowerment is sometimes framed through vulnerability, and inter-agency mechanisms remain underdeveloped.	Sensitive: Uses inclusive language on women and marginalised groups, but lacks concrete gender-specific activities, indicators, or budgets. Gender commitments remain rhetorical without institutional anchors.	Blind: Catalyst projects and programmes under the NETR proceed without gender or social impact assessments. Gender is absent from implementation frameworks, perpetuating a narrow focus on technological and financial delivery.	Sensitive: Commits to gender-responsive and child-sensitive environmental policies, but lacks operational clarity, specific indicators, and measurable targets. Without these, commitments risk remaining aspirational.
Accountability (Monitoring & Reporting)	Sensitive: Provides indicators and targets, but lacks a robust MEL system. Sexdisaggregated data is not systematically integrated, and there is no independent mechanism for accountability. Monitoring relies heavily on voluntary reporting.	Blind: Contains no gender-specific monitoring or indicators. Reporting on gender is fragmented, leaving no consistent accountability mechanism in place.	Blind: No gender-disaggregated indicators, data collection, or gender-sensitive reporting frameworks. Accountability to women and marginalised groups is absent.	Responsive: Commits to disaggregated data collection and integrates grievance mechanisms, including gender-sensitive investigations. However, enforcement mechanisms and independent oversight are underdeveloped, leaving commitments partially released.

Legend:

- **Blind:** Interventions that ignore or work around gender inequalities, assuming that women, men, and diverse groups are affected equally.
- Sensitive: Interventions that acknowledge and consider gender differences and inequalities in analysis and planning.
- Responsive: Interventions that deliberately address gender inequalities and strengthen gender equality.

1. National Women's Policy (Dasar Wanita Negara, DWN 2025-2030)

The revised National Women's Policy (Dasar Wanita Negara, DWN 2025-2030) and its accompanying Action Plan signifies a strategic evolution in Malaysia's integration of gender and environmental governance²². Spearheaded by KPWKM, the policy elevates climate change from a standalone thematic area (as in the 2009 framework) to a cross-cutting priority under the Kesejahteraan (Well-being) pillar. This restructuring reflects a more cohesive approach to addressing gendered climate vulnerabilities. The policy explicitly acknowledges structural barriers, including critical gaps in gender-disaggregated data within environmental sectors and women's underrepresentation in climate decision-making bodies.

A central strength in twelve implementation strategies targeting climate adaptation, disaster response, capacity building, Gender Responsive Budgeting. Each strategy is operationalised through measurable designated lead agencies, indicators, timelines, representing Malaysia's most advanced effort to institutionalise gender considerations in environmental planning. Nevertheless, the policy's effectiveness is constrained by significant shortcomings in cross-sectoral coherence and accountability systems, such as a robust monitoring and reporting framework.

1. Participation & Leadership

The DWN 2025-2030 advances inclusion by explicitly targeting women from rural, Indigenous, and East Malaysian communities in climate-related processes. Notable strategies include empowering women's NGOs (Strategy 11.1.3) and documenting women's unpaid and informal disaster response roles through improved data systems (Strategy 11.1.9). The DWN 2025-2030 also upholds a national target of 30% female representation in decision-making roles, yet it fails to extend binding measures such as quotas or climate reserved seats to governance bodies. This omission risks confining women to symbolic participation rather than enabling substantive leadership, thereby limiting their potential to shape transformative climate policy.

2. Institutional & Policy Coherence

The DWN 2025-2030 reflects an intent to integrate with broader agendas, referencing NADMA's Disaster Risk Reduction Policy 2030 (Dasar Pengurangan Risiko Bencana Negara 2030), Malaysia's commitments under the Paris Agreement, and Gender Responsive Budgeting. However, framework does not establish substantive linkages with core climate policy instruments such as the NCCP 2.0 or adaptation and legal frameworks. This limited cross-referencing constrains the systematic mainstreaming gender across Malaysia's climate architecture and reduces opportunities for the DWN 2025-2030 to inform enforceable, climate-related outcomes.

3. Capacity Building

The DWN 2025-2030 outlines capacity-building several measures, including gendersensitivity training for disaster management agencies (Strategy 11.1.8), skills development for rural and Indigenous women as climate actors (Strategy 11.1.5), and measures to increase women's participation in energy and agriculture (Strategy 11.1.6). These are progressive steps, but they primarily frame women in terms of disaster preparedness vulnerability rather than as drivers of Malaysia's transition to a sustainable economy.

In particular, Strategy 11.1.6 seeks to integrate women into energy and agriculture but does not specify pathways into green roles within those sectors. Nor does it provide for reskilling programmes to enable women to move into

future-oriented jobs in renewable energy, the circular economy, or sustainable technology. Similarly, while the Economic Empowerment thrust (Thrust 1) pursues important goals such as increasing female participation, labour force gaps, addressing and pay supporting entrepreneurship, these objectives are not explicitly connected to the emerging green economy. The absence of this integration means the DWN 2025-2030 does not yet harness women's economic potential within a Just Transition framework.

Furthermore. the framework provides limited clarity on how training curricula will institutionalised, how quality and reach will be ensured, and how sustained funding will be secured. Without these structural guarantees, the long-term impact and scalability of the DWN 2025-2030's capacity-building measures remain uncertain.

4. Finance

The incorporation of Gender Responsive Budgeting (GRB) for climate programming in Strategy marks а notable advancement. Yet the DWN 2025-2030 provides little detail on how GRB will be operationalised. It defines no methodology, coordination establishes no mechanism with the Ministry of Finance, and does not link GRB to national climate finance streams. Without these elements, the remaining measure risks aspirational rather than actionable.

The framework does not connect its budgeting goals with the DWN 2025-2030's broader economic empowerment objectives. For example, strategies on improving women's access to financial and implementing services financial literacy training (Strategy 4.2.3) and supporting women entrepreneurs (Strategy 4) are not tied to climate adaptation or mitigation finance. This disconnect limits the potential for women to directly access climate-related funds, whether through microgrants, targeted subsidies, or for entrepreneurship, and constrains the policy's capacity to advance fiscal empowerment in practice. Malaysia is also engaging with international and domestic climate finance mechanisms such as green sukuk, adaptation funds, and climate multilateral finance instruments. Yet the DWN 2025-2030 does not connect these gender-responsive streams to initiatives, leaving opportunities to direct finance toward women-led or gender-inclusive climate action underutilised.

5. Implementation

The DWN 2025–2030 provides a structured action plan with responsibilities, timelines, and targets across its twelve strategies, enhancing operational coordination. Its expansion beyond acute disasters to include slow-onset impacts (e.g., droughts, sealevel rise) reflects a more comprehensive understanding of environmental threats to wellbeing.

Nevertheless. significant implementation gaps remain. The policy highlights the role of government agencies, the private sector, and civil society (Strategy 11.1.2 and 11.1.3), but inter-agency collaboration protocols and a mechanism for multi-stakeholder engagement underdeveloped. Similarly, while strategies recognise women's empowerment as climate actors and participants in green sectors (Strategies 11.1.5 and 11.1.6), persistent vulnerability-oriented framing (Strategy 11.1.7 and 11.1.8) risks reinforcing welfare-based approaches rather than consistently advancing empowerment-focused

6. Accountability (Monitoring & Reporting)

The DWN 2025–2030 establishes indicators and target years for initiatives, which represents a foundational step toward oversight. However, the framework lacks a robust Monitoring, Evaluation, and Learning (MEL) system. While the policy calls for strengthened roles across

government, the private sector, and civil society (Strategy 11.1.2 and 11.1.3), it does not introduce accountability tools such as independent verification, periodic progress reviews, or institutionalised reporting protocols to ensure that responsibilities are met.

Its approach to data is also limited. Although documenting women disaster volunteers through Department of Social Welfare improves (JKM) databases visibility in one area, this is not matched bv systemic a commitment to sex-disaggregated data across all climate-related activities. Without such data, it becomes difficult to measure progress toward empowerment goals, including women's participation in green sectors (Strategy 11.1.6) or support for women entrepreneurs (Strategy 4). Similarly, the absence of feedback loops prevents iterative adaptation. example, if training For programmes for rural women as climate agents (Strategy 11.1.5) prove ineffective, there is no formal process to review outcomes and adjust the approach.

More fundamentally, the DWN 2025-2030 does not chart a path toward the enactment of a comprehensive Gender Equality Act (GEA). While it includes strategies to align with CEDAW obligations, it stops short of identifying the legislative vehicle required to embed these commitments. A GEA would provide the legal basis to mandate Gender Responsive Budgeting, require gender impact assessments for climate projects, enforce quotas for women's participation in decision-making, and establish avenues for legal redress in cases of discrimination. In the absence of such legislation, the DWN 2025-2030's accountability framework rests on policy commitments alone, leaving implementation dependent on political will rather than enforceable rights.

2. National Climate Change Policy 2.0 (NCCP 2.0)

The NCCP 2.0 which comes in a year before DWN 2025–2030, represents a conceptual advance in Malaysia's climate governance by explicitly recognising disproportionate climate impacts on vulnerable groups, including women, Indigenous communities, and persons with disabilities, marks progress beyond the 2009 policy. Nevertheless, the framework remains predominantly descriptive rather than operational, offering minimal actionable pathways for gender mainstreaming. It fails to establish binding operational standards for

gender integration, delegating critical mandates to unspecified implementation instruments. This reduces its function to a declaratory framework rather than an actionable policy. While serving as an entry point for gender considerations in climate strategy, its value is constrained by the absence of implementation mechanisms, institutional mandates, and accountability systems.

1. Participation & Leadership

The NCCP 2.0 signals an intent broaden stakeholder engagement by identifying women, youth, Indigenous communities, and persons with disabilities as groups for inclusion. Strategy ST5S3KA1 establishes consultation platforms for these communities, indicating institutional recognition of inclusivity. However, the policy does not provide structural pathways to leadership. It omits quotas, reserved seats, mechanisms that would guarantee women and marginalised groups substantive decision-making power in climate governance institutions. As such, inclusion is limited to consultation rather than influence over planning and resource allocation, which falls short of CEDAW Article 7 women's public participation.

2. Institutional & Policy Coherence

The NCCP 2.0 positions itself as a central framework within Malaysia's climate governance architecture and gestures towards alignment with instruments such as the proposed RUUPIN and the forthcoming MyNAP. However, it establishes no coordination mechanisms with ministries critical to gender mainstreaming, such as KPWKM or the Ministry of Finance. This omission sidelines gender in three ways: climate governance bodies lack mandates to consult gender expertise; fiscal planning ignores gendered climate vulnerability; and implementation not embed gender mainstreaming provisions of its own. The result is a fragmented approach where gender remains siloed from climate policy and finance infrastructure, leaving the framework misaligned international standards such as the UNFCCC's Enhanced LWPG and its GAP, which calls for systemic integration of gender in climate governance.

3. Capacity Building

NCCP 2.0 acknowledges differentiated vulnerabilities by referencing gender perspectives in community preparedness and recovery (Strategy ST5S4KA3). This recognition is a step forward, but it remains rhetorical without accompanying implementation framework. The policy does not mandate skills training for women in climate-vulnerable sectors, the integration of gender modules in climate education, institutional genderstrengthening for planning, responsive resource-intensive gender sensitisation for government and civil society actors.

The absence of these mechanisms perpetuates asymmetries in knowledge, leadership, and influence. It sidelines women's ecological knowledge, limits rural and Indigenous women's access to technical competencies, and keeps community-led

adaptation marginal in formal planning. By framing women primarily as vulnerable populations to be included, rather than as active agents of change, the NCCP entrenches barriers transformative participation. This falls short of Malaysia's obligations under CEDAW Article 14, which guarantees rural women access to training, information, and technologies relevant to climate resilience.

4. Finance

The NCCP 2.0 acknowledges Malaysia's climate finance deficit, estimated at RM 400 billion over 50 years, and highlights the scale of losses already incurred from climate disasters. Yet the policy imposes no gender-responsive fiscal safeguards. It neglects require gender criteria in finance allocation, address barriers faced by women-led initiatives, or link spending to vulnerability reduction for groups. marginalised Bvtreating finance as genderneutral, the policy risks reinforcing inequities, excluding women from access to credit, recovery aid, and opportunities in green sectors. Without tools such as Gender Responsive Budgeting dedicated funds, the fiscal framework remains genderfalling short UNFCCC's Enhanced LWPG and its GAP and CEDAW obligations on equitable access to finance.

5. Implementation

As Malaysia's umbrella climate policy, the NCCP 2.0 sets the framework for downstream action. Yet because gender is not institutionalised within it, remains mainstreaming fragmented across the policy landscape. Some structural progress is visible: the draft MyNAP framework introduces gender indicators. and Malaysia's BTR1 and NC4 reference gender in reporting. However, other major instruments, such as the Voluntary Carbon Market guideline and sectoral policies like the NETR, remain genderblind.

Strategy 5.4, which prioritises just transition and community resilience, illustrates this gap. While it is gender-aware in principle, it is not a gender implementation strategy. It sets concrete mechanisms, no targets, or resources to advance gender equality. Without earmarked funding, quotas, or capacity-building, dedicated "community resilience" risks defaulting to the most powerful within communities, sidelining women and Indigenous groups. In this sense, inclusive language is not a substitute for action: a priority without a budget is a suggestion, not a strategy. This disconnect between principle and practice limits the NCCP 2.0's equity commitments.

6. Accountability (Monitoring & Reporting)

The NCCP 2.0 does not establish a monitoring or accountability framework specific to gender equality. It omits disaggregated indicators, timebound benchmarks. and evaluation tools to assess differential impacts gender and social groups. While gender is referenced in Malaysia's BTR1 and NC4, these mentions remain fragmented in the absence of an institutionalised framework within NCCP 2.0 itself.

This omission is critical given Malaysia's commitments under UNFCCC's Enhanced LWPG and its GAP and CEDAW GR 37, both of which call for systematic collection and reporting of genderdisaggregated data. Without such measures, climate interventions may be judged technical successful on grounds-such as emissions reduced or infrastructure built-while exacerbating inequities, for example by increasing women's unpaid care burdens or excluding them from new livelihood opportunities.

The absence of genderaccountability responsive structures also weakens policy effectiveness. With no clear indicators or reporting mandates, no institution can be held responsible for advancing inclusion, and successful approaches cannot be scaled. By failing to embed these mechanisms, the NCCP 2.0 limits its capacity for oversight and adaptive learning, reducing its equity commitments to symbolic rather than enforceable outcomes.

3. National Energy Transition Roadmap (NETR)

The National Energy Transition Roadmap (NETR)9, launched in 2023, builds upon key policy frameworks such as the Malaysia Renewable Energy Roadmap (MyRER), the Malaysia Energy Transition Outlook (METO), and others. Positioned as a pivotal strategy to steer Malaysia toward a low-carbon future, the NETR sets out ambitious economic and infrastructure goals, including the creation of 310,000 green jobs by 2050. However, the roadmap demonstrates a significant gap in integrating gender-responsive approaches. It lacks any substantive analysis of how the energy transition will affect different segments of society, particularly women and vulnerable groups. Developed as a flagship outcome under the Twelfth Malaysia Plan (RMK12), NETR sets the course for structural reforms in Malaysia's energy sector. Its relevance continues into the Thirteenth Malaysia Plan (RMK13)¹³⁰, which reaffirms Malaysia's commitment to inclusive growth and gender equality. Yet, neither RMK13 nor NETR operationalise these commitments within climate and energy transition frameworks-reflecting a persistent siloing of gender and environmental policy. This reflects a continuity of policy silos where gender and energy remain insufficiently integrated. Issues such as energy access, energy poverty, gendered labour impacts, and the unequal burden of care work are notably absent. Despite

commitments to inclusivity and social justice, NETR does not sufficiently engage with the lived realities of those most affected by energy transition projects.

Although the roadmap claims to have undergone over 100 consultations to refine its scope and priorities, these engagements primarily included institutional stakeholders such as financial regulators and sectoral ministries. As noted in NETR Volume 1, consultations were largely limited to industry players, regulators, and financiers, with no clear inclusion of civil society organisations (CSOs), grassroots actors, or directly impacted communities-especially women and Indigenous populations. This pattern reflects a broader policy landscape where participatory practices often lack structured mechanisms to include gender-diverse and community-based perspectives, as also seen in RMK13. As a result, the roadmap's implementation may risk reproducing existing inequalities rather than addressing them. This omission underscores the urgent need for integrating gender considerations and ensuring inclusive participation in the design, execution, and monitoring of energy transition initiatives in Malaysia.

1. Participation & Leadership

A notable limitation of the NETR is the absence of meaningful inclusion of civil society, grassroots organisations, or women-led groups in its consultation process. While it touts inclusivity, the actual engagement stakeholder appears skewed toward technocratic and institutional actors, excluding those who bear the brunt of transition impacts. This does not align with ASEAN Center for Energy's Guide to a Just and Inclusive Energy Transition in ASEAN (ACE'S ASEAN JIET Guide) Principle 690, which calls for inclusive participation in transition planning. RMK13 promotes the vision Masyarakat Madani through governance. inclusive underscoring the national importance of participatory frameworks. However, this framing remains generic and not institutionalise does gender-specific mechanisms for participation in energy or climate governance. reflects a broader national trend reproduced in the NETR, women-led grassroots actors are excluded structured decisionmaking spaces.

The roadmap also lacks a formal mechanism for social dialogue, a core element of just transitions highlighted in both ACE's ASEAN JIET Guide and the IEA's Blueprint for Action on Just and Inclusive Energy Transitions (IEA's Blueprint)131. Social dialogue goes beyond consultation; it entails sustained negotiation and co-governance with trade unions, women's groups, Indigenous Peoples, and other frontline communities. Without institutionalised platforms for these stakeholders to shape policy, NETR's participatory claims remain surface-level and disconnected from labour and community realities. omission also weakens the gender lens of participation: social dialogue is not only a labour rights imperative, but a gender equality mechanism. The exclusion of women-led groups and care economy stakeholders from formal dialogue processes risks sidelining gendered priorities in energy governance.

2. Institutional & Policy Coherence

While the NETR aligns with several national and sectoral policies, originating in RMK12 and extending into RMK13 alongside frameworks such as the MyRER, it lacks institutional coherence with Malaysia's gender equality and social protection commitments, including CEDAW and the DWN 2025-2030. Nor does it harmonise with broader rightsbased or social inclusion frameworks, or reflect the IEA's JIET Blueprint, which positions gender justice as a guiding principle. This policy disconnect contrasts with ACE's ASEAN IIET Guide, which emphasises importance of policy coherence to ensure that gender and climate justice are mutually reinforcing rather than treated in parallel.

3. Capacity Building

NETR references upskilling and reskilling as part of its transition strategies, particularly for workers displaced by shifts in the energy sector. However, genderthere is no disaggregated strategy to ensure women, especially those informal or low-wage sectors, are equally equipped to benefit from green job creation. Women in the informal economy, care roles community-based work remain invisible in reskilling narratives. This gap contrasts with the ACE's ASEAN JIET Guide, which identifies education, capacity development and skills as a priority sector and underscores that training must inclusive and genderresponsive, consistent with its guiding principle on gender equality (Principle 9). While RMK13 outlines targets for women's participation in STEM, TVET and digital skills, it does not extend these to green skills, illustrating a wider policy gap that NETR also reflects in its lack of gender-responsive workforce training.

4. Finance

The roadmap outlines public and private finance mechanisms for energy transition projects and acknowledges importance of initiatives with a social mandate. A review of NETR Volume 1 shows that instruments such as green bonds and blended finance are not supported by genderresponsive safeguards allocation criteria. There is no earmarked funding for genderjust initiatives, nor are there accessible mechanisms for women-led enterprises in the green sector. The absence of Gender Responsive Budgeting raises the risk that financial flows will bypass the very groups the NETR aims to support. ACE's ASEAN JIET Guide highlights equitable priority, financing as a emphasising that financial flows must reach marginalised groups and support gender equality, building on its guiding principles of inclusion and participation (Principle 6) and gender equality (Principle 9). Although RMK13 affirms national support for women's economic empowerment and entrepreneurship, commitment is not reflected in the design of NETR's financial architecture.

5. Implementation

Although the NETR outlines a range of catalyst projects and infrastructural priorities, it lacks a gender-sensitive implementation strategy. Projects are not assessed for their differential impacts on men, women and marginalised

groups. Without gender or social impact assessments at design stage, implementation risks reinforcing existing inequalities, particularly in regions already affected by poverty energy or land dispossession. IEA's JIET Blueprint, underscores that embedding human rights and gender safeguards in project planning is critical to avoid such outcomes. This omission also diverges from ACE's ASEAN JIET Guide, which identifies recognition and empowerment (Principle 7) and gender equality (Principle 9) as guiding principles, and prioritises gender, social inclusion and the protection of disadvantaged groups as a core sector for action. RMK13 similarly outlines large-scale climate adaptation and infrastructure goals without a gender or social impact lens, reinforcing the structural omission of social safeguards that is also evident in the NETR's project implementation.

6. Accountability (Monitoring & Reporting)

The NETR does not establish mechanisms for gendersensitive monitoring, such as disaggregated data collection and gender indicators. There are no performance measures to track how energy transition impacts are distributed across genders or vulnerable groups. This limits the roadmap's capacity to ensure equitable outcomes and undermines transparency and inclusivity in climate governance. ACE's ASEAN JIET Guide stresses that implementation must be guided by sectoral metrics and inclusive evaluation, yet the NETR provides no equivalent gender-sensitive monitoring framework, leaving implementation without accountability to equitable While outcomes. RMK13 includes gender-disaggregated labour targets for participation, such disaggregation is absent from climate and energy metrics, reflecting a broader accountability gap that the NETR similarly exhibits.

4. National Action Plan on Business and Human Rights (NAPBHR)

The National Action Plan on Business and Human Rights (NAPBHR) (2025–2030) translates the UN Guiding Principles on Business and Human Rights (UNGPs) into national policy. It aims to embed human rights considerations into business conduct, moving beyond voluntary CSR and ESG initiatives. The plan emphasises the need for enforceable measures, corporate accountability, and access to effective remedies in cases of harm.

The NAPBHR is organised around the three UNGP pillars: (i) the State duty to protect human rights, (ii) corporate responsibility to respect human rights, and (iii) access to remedy. Each pillar is accompanied by actions, indicators, and partnership frameworks intended to guide implementation. One thematic priority of the plan is the intersection of environment and human rights. It spans environmental governance and accountability, forest and biodiversity management, pollution and waste reduction,

plastic circularity, climate change governance, and safeguards against greenwashing. The plan recognises that climate change disproportionately affects women, Indigenous peoples, local communities, children, and other marginalised groups, while also flagging risks from extractive industries and unsustainable supply chains that may undermine rights and cause long-term social, health, and environmental harm.

By reaffirming Malaysia's commitments to international human rights instruments including the CEDAW, the CRC, and the CRPD, the NAPBHR situates gender-responsive environmental protection as a core component under Action E1.4.

1. Participation & Leadership

The NAPBHR incorporates gender considerations within its broader inclusion measures. On participation and leadership, it commits to the meaningful involvement of Environmental Human Rights Defenders in Just Transition policy development, including through formal platforms and disclosure of draft policies (E1.25). It also affirms the role of Indigenous representatives

in implementing the UNDRIP at federal and state levels (E1.20).Standards and community protocols on FPIC are introduced through the development of a national standard of conduct voluntary community-designed engagement plans (E1.22, E1.23), complemented by a call for participatory decisionmaking that pays particular attention to Indigenous women, youth, and children (E2.10). In addition, the plan advances gender equality in the private by strengthening sector

mechanisms to increase women's participation on corporate boards (G1.27) and expanding inclusive workplace policies such as childcare, flexible work arrangements, and leave provisions (G1.26).

These measures collectively demonstrate an awareness of inclusion, but they remain largely procedural. The NAPBHR relies on guidelines, voluntary protocols, and participatory platforms rather than binding measures. It does not establish structural

requirements such as quotas, reserved seats, or leadership pathways that would guarantee women's substantive influence in climate and environmental governance. This creates a risk that women's participation is recognised in principle but limited in practice, which does not fully align with the standard on women's public participation articulated in CEDAW Article 7.

2. Institutional & Policy Coherence

The NAPBHR commits to inclusive and collaborative approaches in operationalising the forthcoming Climate Change Act, including participation of civil society, Environmental Human Rights Defenders, and Indigenous Peoples (E1.17). It also reaffirms Malaysia's commitments to international instruments such as CEDAW, CRC, and CRPD, and calls for a review towards a Gender Equality or Anti-Discrimination Against Women Act to align national law with CEDAW obligations (G1.4). While these measures demonstrate attention international coherence, the plan does not reference or integrate the DWN 2025-2030, which already provides explicit strategies and indicators on participation women's climate and environmental action. This omission highlights a gap in aligning national gender policy with business and human rights frameworks. Without such institutional linkages, efforts to mainstream gender risk fragmentation across policy domains.

3. Capacity Building

The NAPBHR highlights training for public legal practitioners and mediators, including knowledge Indigenous customary rights (E1.24).It also places responsibility on companies to ensure communities have access to, understand, and can freely respond to EIA reports, promoting more participatory decision-making environmental compensation processes. In addition, the plan commits to state-level capacity building for agencies and businesses, explicitly covering women, children, youth, older persons, persons disabilities. with Indigenous Peoples, migrants, refugees, stateless communities, and other marginalised groups (G1.29).

While these actions provide a foundation, they do not require data sex-disaggregated collection, gender analysis in EIA processes, or targeted investment in women's technical expertise. This leaves gender responsiveness implied rather than institutionalised. CEDAW GR 37 (para. 64e) calls for climate and disaster policies recognise women's disproportionate care burden and capacities, and UNFCCC's Enhanced LWPG and its GAP (Activity A.3) calls for capacitybuilding on sex-disaggregated data and gender analysis. These standards are not fully reflected in the NAPBHR.

4. Finance

Action E1.11 calls for increased budgets to strengthen agencies such as the Department of Environment, while Action G1.25 introduces genderresponsive budget tagging across ministries and agencies, with MOF and KPWKM as leads. This provision establishes an indicator to track the percentage of the national budget allocated for gender responsiveness. These measures represent progress in mainstreaming gender into public finance. However, the plan does not establish mechanisms to apply Gender Responsive Budgeting climate or environmental financing, nor does it clarify whether dedicated budgets will be allocated to implement its gender-related actions. The absence of explicit linkages between finance environment provisions risks overlooking women's participation and access to resources in climate and environmental governance. This falls short of CEDAW GR37 (para. 46b), which obliges States to allocate adequate financial resources for genderresponsive disaster risk reduction and climate action.

5. Implementation

The NAPBHR acknowledges that environmental degradation poses specific risks to women, Indigenous communities, and other marginalised groups. Action E1.4 represents a significant commitment child-sensitive. developing gender-responsive, and disability-inclusive environmental policies. The main weakness would lie in implementation. The commitment is framed in general terms without operational detail or robust monitoring mechanisms. This limitation is compounded by the indicator, which records only whether policies are developed or enhanced, rather than assessing their quality, substantive impact, or effectiveness. This approach does not meet the standard set by CEDAW GR 37 (para. 40b) which calls for clear and measurable targets, indicators, robust and monitoring mechanisms women's for rights in climate and policies. environmental By relying on broad commitments without operational clarity, the NAPBHR risks acknowledging women's rights to a healthy environment in principle while failing to secure them in practice.

6. Accountability (Monitoring & Reporting)

The NAPBHR makes several commitments to improve accountability. It references accessibility for women, youth,

3.2 | Policy Instruments and Legal Framework

and children in environmental adjudication processes (E3.1), strengthens grievance mechanisms (E3.2-E3.4), and requires disaggregated data collection by gender, age, nationality, and employment status (L3.4).Grievance mechanisms are to be gendersensitive, supported by antidiscrimination and gender training sensitivity

grievance officers, independent gender-sensitive investigations (L3.7). These provisions are notable, but the framework does not specify how gender-specific indicators will be integrated monitoring or how state and corporate actors will be held accountable for reporting on gender impacts. Without such mechanisms, gender commitments risk being recognised procedurally but weakly enforced in practice. This contrasts with UNFCCC's Enhanced LWPG and its GAP (Activity D.7), which encourages the use of genderspecific indicators and reporting to track progress in climate-related action.

Synthesis: Cross-Policy Insights

The analysis highlights a clear pattern across Malaysia's climate-related policies: most sit at the Gender Sensitive level, with isolated steps toward Gender Responsive, and none advancing to Transformative. None of the policies analysed fell into the Gender Exploitative category, indicating that Malaysia has moved beyond overtly harmful gender framings. However, the absence of exploitative provisions should not obscure the deeper challenge: policies remain largely symbolic, with limited mechanisms to redistribute power, resources, or accountability.

Malaysia's climate-related policies demonstrate progress in moving away from harmful framings, yet remain clustered at a mid-level of symbolic sensitivity. Gender is acknowledged in principle, but rarely institutionalised in ways that shift power or resources. The gap is especially stark in climate finance and accountability, which emerge as the most fragile parameters across all frameworks. The challenge ahead is to move policies from acknowledging women as participants to embedding enforceable measures that secure equality of power, resources, and accountability.

Institutional and Policy Coherence: Structural Fragmentation

The most entrenched weakness in Malaysia's climate and gender governance is the absence of institutional and policy coherence. On paper, frameworks such as DWN 2025-2030, NCCP 2.0, NETR, and NAPBHR all reference gender or equity. In practice, they operate in silos that rarely intersect. Gender is largely assigned to KPWKM, climate to NRES or MOSTI, and finance to MOF, with no central mechanism to coordinate. This compartmentalisation produces policies that cite CEDAW, the Paris Agreement, or the SDGs, but without an enforcement mechanism, these references remain aspirational.

The cost of this fragmentation is significant. DWN 2025-2030's commitments to women's leadership does not embed NCCP 2.0 or NETR, so they are not realised in climate or energy governance. For example, DWN 2025-2030 could strengthen the social obligations of NETR beyond its technocratic transition. NAPBHR references human rights frameworks, but does not connect to DWN 2025-2030. Each policy is designed in isolation, leaving the overall picture incomplete and resources duplicated. This incoherence constitutes a structural barrier to systemic change. Without interministerial coordination, commitments on participation, finance, accountability, and most critically, data collection and analysis remain aspirational. Policies recycle the language of gender inclusion, but because they are not integrated into climate and energy governance, commitments dissolve at the implementation stage. This fragmentation undermines data collection and analysis in particular, which is especially damaging since reliable data is the cornerstone of evidence-based policy making.

Finance: The Deepest Blind Spot

Finance emerges as the most structurally absent parameter across all policies assessed. NCCP 2.0 and NETR are gender-blind, treating finance as neutral and failing to recognise women's differentiated access needs. DWN 2025-2030 introduces Gender Responsive Budgeting in principle, and NAPBHR makes a step forward with gender budget tagging, but neither embeds these tools into climate or energy finance. This creates a systemic blind spot where gender equality is detached from financial governance. Finance determines whose priorities are resourced and whose initiatives are scaled. Without gender criteria, climate finance instruments such as green bonds, blended finance, and adaptation funds flow primarily to corporate and state actors, bypassing women, Indigenous Peoples, and marginalised groups most affected by the climate crisis. By treating finance as technical and gender-neutral, policies risk reinforcing exclusion and widening inequalities.

Rhetorical Inclusion without Structural Change

Across all policies, women, youth, and Indigenous groups are mentioned, but usually in symbolic terms: as consultees, as "targets," or as groups to be "included." As environmental sociologist Dr Sharina Abdul Halim observed, "Climate change is not just climate change per se, it requires the effort of all disciplines to address its impacts, which undoubtedly necessitates the inclusion of people from diverse backgrounds." None of the frameworks create enforceable obligations, quotas, or structural leadership pathways. Gender appears in policy texts, but is not institutionalised within decision-making structures. This produces the appearance of progress while leaving power relations unchanged.

Silence in Transformative Spaces

No policy reached the Transformative level in the analysis. Even stronger cases, such as DWN 2025-2030 on implementation or NAPBHR on accountability, stop at Responsive, with measures focused on inclusion and safeguards. Structural reforms such as mandated power-sharing, redistribution of resources, or binding accountability are absent. Malaysia's policies remain at the level of procedural responsiveness without advancing to structural reform.

Technocratic and Market-Driven Approaches Reinforce Blind Spots

NETR illustrates a broader pattern: climate and energy planning dominated by technocratic and market-based tools such as green bonds, blended finance, and carbon markets. These are assumed to be neutral but in practice are gender-blind. Social inclusion tends to be addressed as an add-on rather than embedded in design. This approach risks reinforcing inequities by privileging corporate actors already positioned to benefit, while women and marginalised communities remain excluded. A technocratic transition without a social justice lens will reproduce existing inequalities.

The Accountability Deficit

With the partial exception of NAPBHR, none of the policies provide robust gender-disaggregated monitoring, evaluation, or independent enforcement. Reporting is fragmented, often voluntary, and largely absent in NCCP 2.0 and NETR. Without monitoring and evaluation systems, gender commitments remain aspirational. Accountability emerges as the weakest enforcement mechanism in Malaysia's climate and gender governance. Without it, progress cannot be measured or compelled.

Box 7: Synthesis: Cross-Policy Insights

3.23 Legal Mechanisms

Malaysia's legal landscape already contains underutilised avenues for embedding human rights into climate governance. It is important to recall that Article 160(2) of the Federal Constitution states that international law has no domestic effect unless incorporated through legislation. This limitation explains why ratified treaties such as CEDAW remain aspirational without enabling laws, and why domestic legal reform is critical. NAPBHR commits to developing a legal framework for constitutional recognition of the Right to a Clean, Healthy and Sustainable Environment (R2HE), signalling that environmental protection must evolve from policy aspiration to enforceable right. At the same time, international developments are shaping expectations. In a recent breakthrough in

international climate law, the International Court of Justice (ICJ) issued a landmark advisory opinion affirming that states have obligations under customary international law and human rights law to prevent significant climate-related harm¹³². While not legally binding, the opinion, backed by the UN General Assembly and 105 countries, carries high legitimacy and establishes that failure to act constitutes an internationally wrongful act, with consequences including cessation, non-repetition, and reparation¹³³. For Malaysia, this opinion sets a critical benchmark as it advances the RUUPIN and implements the NAPBHR. It signals that national frameworks must integrate gender, human rights, and environmental safeguards or risk judicial review under constitutional rights such as the right to life. As an oil and gas producer, Malaysia may face heightened scrutiny, making alignment

with this evolving global standard essential for both credibility and accountability in its climate governance¹³⁴.

Malaysia's climate-related legal landscape is underpinned by several federal and state-level instruments. The Environmental Quality Act 1974 (Act 127) remains the primary environmental law, regulating air and water quality, noise, soil pollution, and waste discharge¹²². It establishes a licensing system for prescribed premises and activities, as well as the Environmental Quality Council and the Director General's office to oversee enforcement.

Complementing these regulatory instruments is the Voluntary Carbon Market (VCM), operationalised through the Bursa Carbon Exchange (BCX), which facilitates the trading of verified emission reductions (VERs) or carbon offsets¹⁰⁸. Designed to align with ESG and Shariah principles, BCX follows international standards such as Verra and Gold Standard. However, as a voluntary mechanism, the VCM sits outside formal compliance markets, with no legal obligation for participation or reporting. While transparency and accountability are encouraged, these practices are not legally mandated. To date, neither the Environmental Quality Act nor the VCM framework incorporates gender considerations.

At the subnational level, states have begun legislating more directly on climate action. Sarawak has passed the Environment (Reduction of Greenhouse Gases Emission) Bill¹³⁵, while Sabah has introduced the Climate Change and Carbon Governance Enactment 2025¹³⁶. These are promising developments in decentralised climate governance, although they fall outside the scope of this paper, which centres on Peninsular Malaysia.

A notable recent development is the passed CCUS Bill, which proposes a legal framework for carbon capture in Peninsular Malaysia and Labuan, signaling Malaysia's strategy for emerging decarbonisation technologies¹⁰⁵. The Bill outlines technical requirements such as registration of carbon installations, regulation of CO₂ transport, and the creation of a Post-Closure Stewardship Fund, overseen by the newly established Malaysia CCUS Agency. However, it omits gender-sensitive provisions, baseline social data, and safeguards for vulnerable groups. Civil society organisations

have raised concerns regarding limited public consultation, insufficient environmental and social impact assessments, and the Bill's weak alignment with broader frameworks such as the NCCP 2.0. The lack of a unified legislative umbrella risks entrenching institutional silos. Without a mandate for cross-sectoral gender mainstreaming, gender-responsive governance remains unlikely.

The Missing Gender Equality Act

The lack of a unified legislative umbrella, as noted above, directly points to the absence of a Gender Equality Act (GEA). Equality provisions currently rely primarily on Article 8(2), which prohibits gender discrimination in limited areas but does not provide a comprehensive framework. The Federal Constitution does, however, empower both federal and state governments to legislate in this area. Schedule 9, List III, Item 1 authorises the enactment of laws on social welfare, social services, and the protection of women, children, and young persons. This provision remains underutilised¹³⁷. A GEA would allow Malaysia to operationalise this constitutional mandate and provide the statutory backbone for its gender and climate commitments.

As outlined by the Joint Action Group for Gender Equality (JAG), these elements provide the kind of legal architecture currently missing in Malaysia. They include the prohibition of gender discrimination across public and private sectors, the implementation of CEDAW obligations in domestic law, the mainstreaming of equality through duties on ministries to integrate gender into development plans and budgets, and the establishment of institutions such as a Gender Equality Commission, a Chief Conciliator for dispute resolution, and a Gender Equality Tribunal with powers to provide remedies¹³⁷. These mechanisms illustrate why a Gender Equality Act (GEA) is needed to supply enforceable tools that sectoral climate laws presently lack.

For climate governance, a GEA would be transformative. It would mandate Gender Responsive Budgeting in climate finance, require gender impact assessments (GIAs) for climate projects and legislation, enforce women's representation in climate-related bodies, and provide legal redress for discriminatory outcomes. In principle, the GEA should serve as the overarching framework to harmonise gender

equality obligations across all sectors, while climate-specific laws such as RUUPIN should include baseline provisions to operationalise these duties in their respective domains. However, given persistent political barriers to passing a GEA, RUUPIN and other sectoral laws become the immediate vehicles to embed minimum gender provisions. This underscores both the urgency of advancing a GEA and the necessity of ensuring that climate legislation does not proceed in a gender-blind manner.

3.24 Development of Key Upcoming Policies and Legal Frameworks

I. The Development of the National Adaptation Plan (MyNAP)

Malaysia's National Adaptation Plan (MyNAP) is expected to be finalised by 2026¹³⁸. Earlier groundwork, such as the GIZ readiness proposal to the Green Climate Fund¹³⁹, helped to establish processes for capacity building and introduced gender-sensitive entry points. Building on this, NRES released the draft MyNAP Framework in January 2025, Malaysia's clearest articulation so far of how adaptation planning will be institutionalised.

The draft framework situates gender equity as a foundational principle of adaptation planning. It commits to achieving at least 30% female representation in planning and decision-making processes, in line with the DWN 2025-2030, Malaysia's updated NDCs, and the UNFCCC Gender Action Plan. Beyond quotas, the draft framework emphasises women's leadership in adaptation projects and their economic empowerment, including through womenled microfinance initiatives in agriculture and fisheries.

Intersectionality is explicitly recognised. The framework highlights the compounded vulnerabilities faced by women, Indigenous communities (including the Orang Asli), rural farmers, and low-income urban dwellers. It calls for tailored capacity-building programmes, the creation of Community-based Resilience Frameworks at the state level, and targeted studies on differentiated impacts to inform sectoral and subnational adaptation plans.

On accountability, the framework embeds genderdisaggregated indicators into its monitoring, evaluation, and learning (MEL) system, with implementation tracked across national, state, and sectoral levels. Institutions such as NAHRIM and DOSM are tasked with providing critical data, and annual progress reports will feed into Malaysia's UNFCCC submissions, including NDC updates.

On financing, while the draft framework does not explicitly use the term "Gender Responsive Budgeting (GRB)", it advances measures aligned with this principle. These include promoting women-led microfinance models, reducing barriers to access, and building women's capacity to engage in climate finance. This omission nonetheless represents a gap, since GRB is the internationally recognised mechanism to ensure that adaptation financing systematically addresses gendered vulnerabilities. There are opportunities for MyNAP to align with Malaysia's DWN 2025-2030 and the NAPBHR, both of which explicitly reference GRB, though operationalisation has been uneven in practice. Without embedding GRB as a formal requirement, MyNAP risks relying on piecemeal financial initiatives rather than structural gender-responsive allocations.

Another gap concerns enforceability. The draft MyNAP framework articulates ambitious principles on gender equity, monitoring, and participation, but these remain policy commitments without legal force. Greater weight could be achieved if MyNAP were explicitly linked to the forthcoming Climate Change Bill (RUUPIN), which has the potential to provide mandates for gender-responsive statutory adaptation. Embedding MyNAP's provisions in primary legislation would not only strengthen accountability but also integrate adaptation into Malaysia's broader climate governance architecture. However, given ongoing delays and revisions to the Bill, the extent to which such linkages will materialise remains uncertain.

MyNAP Overall. the draft Framework demonstrates a stronger embedding of gender considerations than earlier preparatory documents. It signals a trajectory towards integrating gender equity, intersectionality, and accountability into adaptation governance. Yet, as a draft, its success will depend on whether these provisions are institutionalised, adequately resourced, and anchored in enforceable climate legislation.

II. The development of the Climate Change Bill (Rang Undang-Undang Perubahan Iklim Negara (RUUPIN))

Malaysia's proposed Climate Change Bill, or Rang Undang-Undang Perubahan Iklim Negara (RUUPIN), is expected to be tabled in 2025 following a year of public and stakeholder consultations. After years of delay, the Bill represents a critical opportunity to establish a legal framework for addressing the country's climate challenges. The consultation paper¹⁰ released by NRES outlines broad structural components, including national target-setting, the creation of a regulatory entity, a National Integrated Climate Data Repository (NICDR), carbon market regulation, and the establishment of a National Climate Fund.

A comprehensive National Gender Equality Act would provide the most coherent legal foundation for embedding equality across all sectors. However, with limited political will for its adoption, RUUPIN becomes the immediate vehicle to integrate minimum gender provisions into climate governance. Without such integration, Malaysia risks entrenching systemic inequalities in its emerging climate law.

The consultation paper makes general reference to participatory and inclusive processes but stops short of outlining concrete mechanisms to guarantee the representation and leadership of women, Indigenous peoples, and marginalised communities in climate decision-making. Institutional guarantees, such as quotas or reserved seats in climate governance bodies, could close this gap.

Similarly, while the NICDR could serve as a platform for integrating gender-sensitive data, the consultation paper does not commit to sex-disaggregated data or gender indicators. Embedding these requirements would allow Malaysia to track equity outcomes and assess whether climate policies and finance benefit women and vulnerable groups.

Notably, the consultation paper does not propose the appointment or institutionalisation of the UNFCCC National Gender and Climate Change Focal Point (NGCCFP), despite Malaysia's obligations under international agreements. Institutionalising this role would strengthen alignment with frameworks such as CEDAW, CRC, CRPD, and the UPR, as well as with national policies like the NCCP 2.0, which emphasises the

protection of vulnerable communities and social safeguards. Without these linkages, the Bill risks overlooking established principles that could anchor inclusive climate action.

The National Climate Fund is an important step toward dedicated financing, but without explicit provisions to address barriers faced by women and vulnerable groups, it risks reinforcing existing inequalities. Safeguards should include earmarked resources for women-led initiatives, support for green entrepreneurship, and transparent reporting on gender outcomes.

Submissions by civil society groups, including KAMY, have highlighted these gaps, particularly the need for institutional guarantees for women's participation and recognition of women's contributions¹⁴⁰. RUUPIN is an overdue and important step toward establishing a national climate law, but its current framing risks entrenching inequality unless gender responsiveness and social inclusion are embedded more explicitly.

Embedding these provisions would allow RUUPIN to act as an interim vehicle for gender-responsive climate governance. This would strengthen Malaysia's credibility in international climate processes, protect vulnerable communities, and ensure that future reforms, including the eventual adoption of a Gender Equality Act, can build on an already inclusive climate governance framework.

3.25 Institutional Challenges in Subnational Gender and Climate Governance

As the Malaysian government continues to introduce and reform climate-related policies, it is crucial that these frameworks are not only well-designed but also effectively communicated and implemented across all levels of governance. One of the most significant barriers lies in the implementation gap between federal and state governments.

Malaysia's constitutional framework divides power between the federal and state governments, each with its own judicial, legislative, and executive branches. This structural separation creates friction particularly when it comes to political will, availability of resources, and the capacity of individual states to adopt and implement federal policies. This disjointed governance architecture

not only delays climate action but also hampers the integration of gender-responsive strategies, which require coherent planning and resource alignment across multiple levels of government. There is clear evidence of uneven progress among states. Sarawak became the first state to enact climate legislation in 2023, signalling proactive state-level leadership on climate governance, followed by Sabah^{135,136}.

The Kuala Lumpur Climate Action Plan (CAP) 2021-2025141, developed by Dewan Bandaraya Kuala Lumpur (DBKL), stands as a flagship subnational climate policy, particularly significant given Kuala Lumpur's status as Malaysia's capital and most urbanised, densely populated city. While the plan acknowledges women within certain inclusive benefit frameworks such as improved urban mobility for low-income women and targeted disaster risk communication, references remain surface-level and framed through a vulnerability lens. Women are identified as disproportionately affected by climate impacts, and the plan includes one gender-disaggregated indicator related to public awareness campaigns. However, it does not apply a gender-mainstreaming approach, nor does it include mechanisms for women's leadership, participation, or access to climate finance. It also lacks alignment with global gender frameworks such as CEDAW or the UNFCCC Gender Action Plan. As the country's most visible city in climate governance, Kuala Lumpur's omissions reflect a missed opportunity. With greater political capital and capacity, it could have modelled rights-based, gender-responsive urban resilience and set a national benchmark for equitable climate action.

Penang through its Penang Nature-Based Climate Adaptation Programme (PNBCAP) is piloted in collaboration with Think City¹⁴². Funded by the Adaptation Fund, the programme began implementation in 2021. Designed as a model for potential nationwide replication, PNBCAP includes a dedicated pillar on Social Resilience, which aims to address gender vulnerability asymmetries and build community capacity, especially among women and marginalised groups, to engage in climate adaptation decision-making. Notably, the Penang Climate Board has adopted a minimum 40% gender representation quota, which is a progressive best practice for institutionalising gender equity in subnational

climate governance.

Another initiative demonstrating integrated, intersectional planning is the Sustainable and Gender-Responsive City Budgeting Programme, a collaboration between Urbanice Malaysia, the Ministry of Economy, and the Ministry of Housing and Local Government (KPKT)⁷³. This programme mandates participatory budgeting processes at the local government level (*Pihak Berkuasa Tempatan or PBT*) to ensure more equitable allocation of resources, addressing the specific needs of diverse gender and intersectional identities within local contexts. The pilot project spans five local councils:

- Dewan Bandaraya Kuching Utara, Sarawak
- Majlis Bandaraya Petaling Jaya, Selangor
- · Majlis Bandaraya Kuantan, Pahang
- Majlis Perbandaran Alor Gajah, Melaka
- Majlis Daerah Kuala Pilah, Negeri Sembilan

This pilot introduces a critical innovation by embedding Gender Responsive Budgeting at the local government level signifying a step toward institutionalising equitable climate financing mechanisms in Malaysia.

Selangor, meanwhile, has launched the Selangor Climate Adaptation Centre, envisioned as a central hub to bridge policy, technology, and partnerships for implementing future initiatives in adaptation, mitigation, and disaster risk reduction¹⁴³. This effort aligns with the state's 2024 Climate Change Policy, which is guided by five key principles: Sustainable Development, Environmental and Resource Natural Conservation, Integrated Implementation, Effective Engagement, Comprehensive Monitoring and Evaluation. However, explicit gender targets remain absent, creating uncertainty over whether inclusivity will be embedded from the outset. Taken together, these subnational efforts reveal a fragmented but evolving landscape of gender-responsive climate governance, where institutional innovation coexists with uneven integration of gender equity across states.

3.26 UNFCCC National Gender and Climate Change Focal Point

The UNFCCC has called upon its member states to appoint a National Gender and Climate Change

Focal Point (NGCCFP) under (Decision 3/CP.25)¹⁴⁴ to evaluate and monitor the gender mainstreaming of climate policies, facilitate climate negotiations, and support cross-ministerial coordination on gender integration. This directive has evolved through key gender-related decisions adopted at successive COPs¹⁴⁵, beginning with the Lima Work Programme on Gender (COP20), enhanced

at COP25 in 2019, and elaborated further through the Gender Action Plan (GAP) adopted at COP25 and reviewed at COP27 in 2022 (Figure 7).

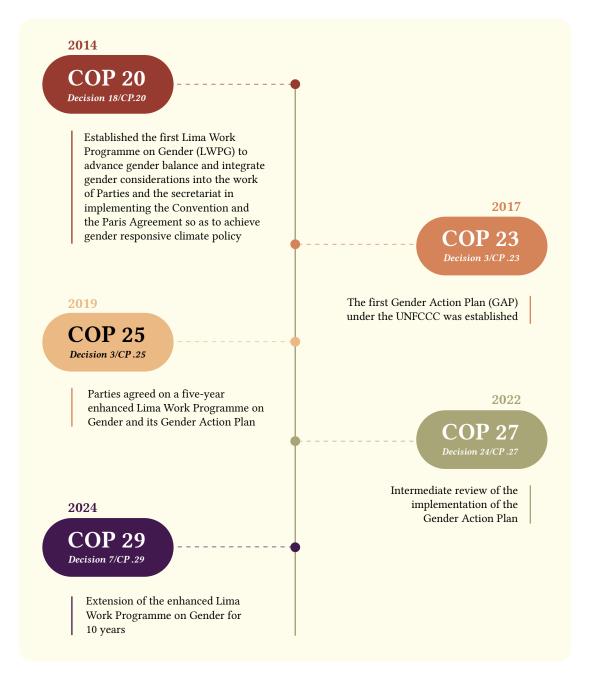


Figure 7: Key UNFCCC COP Decisions on Gender
Adapted from Chronology of Gender in the Intergovernmental Process

Malaysia has not yet appointed an NGCCFP. Among the ten ASEAN member states, only six have designated a NGCCFP, leaving Malaysia, Brunei, Laos, and Myanmar without representation as of July 2025 (**Figure 8**). The institutional placement of focal points varies significantly across countries, reflecting different national arrangements for climate governance and gender equality.

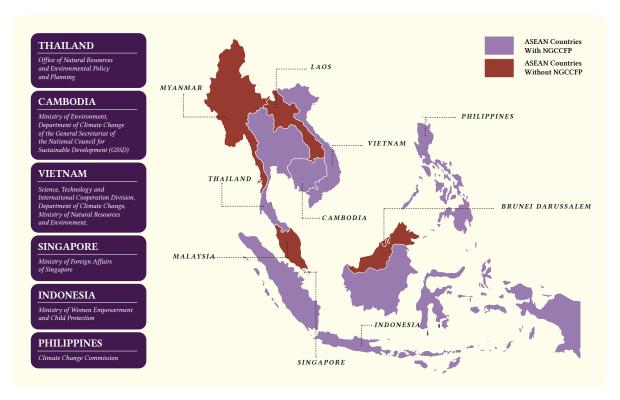


Figure 8: ASEAN countries with National Gender and Climate Change Focal Point under the UNFCCC

An analysis of global NGCCFP placements¹⁴⁶ under the UNFCCC reveals a predominant institutional approach: nearly 60% reside within ministries focused on environment, climate change, or sustainable development, indicating a primary framing of gender-climate intersections through an environmental governance lens. Roughly 13% are situated within foreign affairs or international cooperation bodies, reflecting a diplomatic orientation. Less than 10% are located within dedicated gender equality or women's affairs ministries, suggesting limited central prioritisation of gender expertise in climate governance structures globally. The remaining focal points exist within hybrid ministries (e.g., environment/tourism, agriculture) or specialised agencies (e.g., health, urban development). This distribution highlights both increasing recognition of climate change's cross-sectoral impacts and persistent fragmentation in gender integration strategies.

Malaysia's context is characterised by a persistent institutional gap: no designated NGCCFP, despite the role being identified as a key outcome in NC4¹²⁷ and BTR1¹²⁸. Civil society organisations, notably KAMY, have consistently advocated for this appointment through formal channels like

the CEDAW shadow report³³ and submissions on RUUPIN¹⁴⁰, grounding their calls in participatory research centring women and marginalised communities.

The missing focal point has tangible consequences Malaysia's gender-responsive climate governance. The country's consistent nonparticipation in key UNFCCC forums dedicated to the Gender Action Plan, including women-focused spaces such as the women's caucus, reflects limited international engagement on gender-climate issues. In parallel, Malaysia misses out on targeted institutional benefits linked to the NGCCFP mechanism, such as access to the UNFCCC's Global Network of Gender Focal Points, tailored training opportunities, and tools under the Gender Action Plan, as well as improved eligibility for technical support and readiness funding streams, including those under the GCF (e.g. for national adaptation planning like MyNAP).

Furthermore, the lack of a centralised focal point significantly weakens the collection and coordination of gender-disaggregated data on climate impacts. This impairs Malaysia's ability to develop effective Monitoring, Evaluation, and Learning (MEL) systems that reflect gendered

realities across adaptation, mitigation, and climate finance initiatives. Finally, the absence of a mandated entity to lead cross-ministerial coordination limits coherence in policy implementation. It also restricts the inclusion of diverse knowledge systems, particularly those from civil society and grassroots or Indigenous women's groups, thereby weakening the legitimacy and inclusivity of national climate action.

Appointing an NGCCFP would enable Malaysia to harness international resources, funding, and

knowledge more effectively via the UNFCCC system and align with the provisions and allocated support mechanisms of the Gender Action Plan (GAP) under the UNFCCC. The role requires incumbents with dual expertise in climate change and gender equality, grounded in human rights within the Malaysian context, and necessitates a cross-sectoral mandate to be effective. Currently, the unfilled position represents a significant institutional weakness in Malaysia's gender-responsive climate governance framework, particularly as the country advances its climate legislation and adaptation planning.

3.27 Recommendation for Policy Instruments and Legal Frameworks

I. Gender Mainstreaming Climate Policy Frameworks

Constitutional Amendment to Recognise the Right to a Healthy and Sustainable Environment (R2HE)

Line Ministries and Supporting Actors: NRES, BHEUU, Attorney General's Chambers, MOFA, KPWKM Table an amendment to the Federal Constitution to enshrine the right to a clean, healthy, and sustainable environment (R2HE) as a fundamental right, explicitly codifying gender equality, Indigenous rights, and protections for persons with disabilities.

Require all climate and environmental laws (RUUPIN, MyNAP, NCCP2.0, and carbon market regulation) to comply with R2HE, with mandatory gender impact assessments, disaggregated data, and intersectional indicators to track impacts on women, Indigenous Peoples, and marginalised groups.

Mandate courts and enforcement agencies to interpret R2HE in line with Malaysia's obligations under CEDAW GR37 and GR39, ensuring women and Indigenous women have access to justice and remedies for environmental harms.

NAPBHR Action E1.1 calls for a constitutional

calls for a constitutional amendment to recognise R2HE.

UN CEDAW GR 37 (40, 42a-c) requires disaggregated data and gender impact assessments.

UN CEDAW GR 39 affirms women's and

affirms women's and Indigenous women's rights to remedies for environmental harms.

Decentralising Climate Action Implementation and Participation Framework

Line Ministries and Supporting Actors: State Governments, NRES, KPWKM Create formal coordination mechanisms to align federal and state climate policies with gender-responsive frameworks.

Require state governments to adopt genderresponsive approaches in subnational climate planning, supported by targeted capacity building and funding, and institutionalise collaboration platforms between ministries, NGOs, and academia for cross-sector knowledge sharing (including gender and climate expertise).

All consultation processes must guarantee women's equal representation, particularly from Indigenous and marginalised groups, with outcomes UN CEDAW GR 37

(41, 42b) promotes gender integration and coordination in both national and subnational climate frameworks.

UN CEDAW GR 37 (36c) requires women's equal representation in climate and disaster-related forums.

RECOMMENDATIONS	ACTIONS	GUIDING NOTES		
	documented in a publicly accessible repository to ensure transparency and accountability. Support scaling of promising subnational practices (Penang's quota, Urbanice's participatory budgeting) with federal guidance and resources.	UN CEDAW Articles 7 and 8 guarantee women's right to participate in policymaking. LWPG GAP D.5 urges inclusion of women's groups and gender institutions in climate policymaking.		
II. International and Inst	itutional Alignment	l		
Alignment with International Obligations and Regional Practices Line Ministries and	Require new climate policy instruments (RUUPIN, MyNAP, NCCP2.0) to align with CEDAW, CRC, CRPD, UPR, and UNFCCC GAP. Encourage all subnational climate plans to integrate minimum international standards.	Escazú Agreement (Art. 7(1)) guarantees public participation. UN CEDAW GR 37 (42b) promoties cross-		
Supporting Actors: NRES, NADMA, MOFA, KPWKM	Adopt Aarhus and Escazú principles to guarantee public access to climate information and participation.	sectoral coordination. ASEAN Gender Mainstreaming Strategic Framework		
	Institutionalise ASEAN Gender Mainstreaming Framework in national climate planning.	(2021–2025) offers regional models for coherence.		
	Commission reviews to integrate gender-responsive DRR models from regional best practice (e.g., Indonesia, Japan).			
Appointment of UNFCCC Gender and Climate Change Focal Point (NGCCFP)	Appoint and adequately resource a National Gender and Climate Change Focal Point (NGCCFP) under NRES and KPWKM, with clear terms of reference and support from a cross-ministry team.	UNFCCC Decision 3/ CP.25 mandates the appointment of UNFCCC NGCGFPs (LWPG GAP A.2).		
Line Ministries and Supporting Actors: NRES, NADMA, MOFA, KPWKM	Establish institutional mechanisms (e.g., designated units, team-based approaches, standard operating procedures) to ensure continuity when NGCCFPs are reassigned, including systematic capacity building for successors.	DWN 2025-2030 (Strategy 11.1.2) calls for strengthening GFPs in climate issues, ensuring their work is aligned with the Paris Agreement.		
	Institutionalise NGCCFP participation in all COP delegations and preparatory meetings, and ensure they have authority to influence negotiation positions.	Malaysia's NC4 note UNFCCC NGCCFP appointment as a pending action.		
	Strengthen NGCCFP-led accountability and expertise by mandating monitoring of gender-responsiveness in climate finance allocation and establishing a Technical Working Group under MyCAC on gender–climate issues to support the National Focal Point and advance research on women's concerns.			

RECOMMENDATIONS	ACTIONS	GUIDING NOTES
Gender Sensitisation Programmes for Government Officials Line Ministries and Supporting Actors: KPWKM, NRES, INTAN, JPA	Develop and institutionalise mandatory gender-climate training modules across all ministries (finance, energy, transport, agriculture), embed them within INTAN curricula and civil service professional development, and establish monitoring frameworks to track not only knowledge retention but also behavioural change in policy design and implementation.	LWPG GAP A.1 urges capacity-buiding for governments. NAPBHR Action E2.11 calls for capacity-building in participatory decision-making. UN CEDAW GR 37 (42c) requires gender impact assessments in all phases of climate and disaster policy.
III. Legislative Reforms	<u> </u>	1
Climate Change Bill (RUUPIN) Line Ministries and Supporting Actors: NRES, Attorney General's Chambers, Parliament, KPWKM	Embed quotas for women, youth, Indigenous Peoples, and PWDs in climate governance bodies, and formalise the UNFCCC National Gender and Climate Change Focal Point (NGCCFP) within RUUPIN to institutionalise inclusive leadership. Mandate sex-disaggregated data and gender indicators in the National Integrated Climate Data Repository (NICDR), and require Gender Responsive Budgeting in the National Climate Fund with earmarked resources for women-led and community-based initiatives. Mandate gender impact assessments (GIAs) for all climate projects, and embed equity safeguards in carbon market regulations to protect women and Indigenous Peoples.	UN CEDAW GR 37 (42c - e) calls for gender impact assessments and to effectively integrate gender equality into legislation, policies and programmes relevant to climate and DRR. NAPBHR Action E1.17 requires inclusive regulations for the Climate Change Act, and also on GRB through Action G1.25. DWN 2025-2030 (Strategy 11.1.1) encourages the inclusion of Gender Responsive Budgeting in climate-related programmes and projects.
Gender Equality Legislation Line Ministries and Supporting Actors: KPWKM, Attorney General's Chambers, Parliament	Table the Gender Equality Act (Anti-Discrimination against Women Act) with explicit climate and environmental protections, including provisions to safeguard women and girls with disabilities from disproportionate climate risks. Ensure compliance across environment, labour, trade, and energy sectors so that protections are enforceable and systemic	UN CEDAW Articles 1–3 oblige states to legislate against discrimination. Malaysia's stalled Gender Equality Act should be revived with climate linkages. UN CEDAW GR 37 urges legislative reforms integrating gender into environmental protections.

RECOMMENDATIONS ACTIONS

Judicial Capacity Building

Line Ministries and Supporting Actors:

BHEUU, Chief Justice's Office, Judicial Department, Attorney General's Chambers, Malaysian Bar Council Integrate CEDAW, Paris Agreement, and UNDRIP into judicial curricula on environmental and human rights law.

Organise continuous training for judges, prosecutors, and enforcement agencies on gender, environment, and climate linkages.

Establish specialised judicial protocols to handle environmental cases with gender-sensitive remedies.

Partner with the Bar Council and universities to produce handbooks on gender-responsive climate jurisprudence.

GUIDING NOTES

NAPBHR Action E3.1

calls for an environmental adjudication body with accessible procedures for women, youth, and children.

UN CEDAW GR 39

(33g) urges legal aid and support for Indigenous women, including climate-related harms.

UN CEDAW GR 37

highlights institutional reforms to ensure women's access to justice in climate contexts.

IV. Legal Protections for Rights-Based Climate Governance

Anti-SLAPP Mechanisms

Line Ministries and Supporting Actors:

Attorney General's Chambers, Parliament, NRES, SUHAKAM Enact legislation to prohibit Strategic Lawsuits Against Public Participation (SLAPPs) targeting Women Environmental Human Rights Defenders (WEHRDs)

Establish fast-track judicial procedures to dismiss SLAPP suits, with explicit safeguards for women, Indigenous leaders, and young defenders, ensuring their right to free expression and participation in environmental and climate advocacy without fear of reprisal.

Provide legal safeguards for Indigenous and women leaders advocating for land, water, and climate justice.

Create gender-responsive public reporting and grievance mechanisms, such as through the Ombudsman Malaysia, that track and address harassment and intimidation against environmental and climate defenders, with specific provisions to protect women, Indigenous women, and marginalised activists from gender-based threats and violence.

UN CEDAW GR 39

stresses protection of Indigenous women human rights defenders.

NAPBHR Action

E1.20-E1.26 commits to advancing environmental justice by centering communities, reaffirming international standards on the rights of Indigenous Peoples and environmental human rights defenders, and ensuring protections against intimidation through anti-SLAPP strategies that safeguard the meaningful participation of EHRDs.

Comparative models: Thailand and Indonesia have introduced anti-SLAPP provisions to safeguard civic space.

RECOMMENDATIONS ACTIONS **GUIDING NOTES** NAPBHR Action Anti-Greenwashing Amend corporate reporting laws to explicitly prohibit misleading or false claims on climate and E2.12 - E2.14 explicitly and Climate-Washing flags greenwashing and Protections sustainability performance, with clear recognition that gender-blind reporting constitutes a form of climate-washing risks Line Ministries and misinformation by erasing differentiated impacts on as barriers to genuine accountability. **Supporting Actors:** women and marginalised groups. NRES, MOF, NSRF/ ISSB standards Securities Commission, Bursa Mandate independent third-party verification of (IFRS S1 and S2) Malaysia corporate climate disclosures (covering net-zero provide a baseline but pledges, carbon credits, and ESG claims), requiring lack gender-sensitive verifiers to apply gender-responsive criteria when provisions. assessing social and environmental claims. **UN CEDAW GR 37** emphasises accountability frameworks to prevent Require detailed gender-disaggregated and socialimpact reporting in sustainability disclosures, exploitation of marginalised groups including women's labour conditions in supply through market chains, gendered impacts of energy transition projects, and Indigenous women's roles in land mechanisms. stewardship, to prevent the erasure of community experiences. Establish penalties and remedies not only for companies found guilty of climate-washing, but also for gender-blind or exclusionary reporting. Remedies should include mandatory corrective disclosures, compensation for affected communities (with priority to women and Indigenous groups), and suspension of access to green finance incentives until compliance is achieved. **NAPBHR Actions** Institutionalising Legally mandate FPIC for all projects with **E1.20-E1.23** call for FPIC FPIC and Indigenous environmental or climate impacts, including guidelines, Indigenous Women's Leadership energy transition, carbon markets, and adaptation participation, and in Climate infrastructure. UNDRIP alignment. Governance **UN CEDAW GR 39** Line Ministries and Institutionalise Indigenous women's participation and leadership within FPIC processes, including highlights Indigenous **Supporting Actors:** women's right to NRES, JAKOA, quotas or reserved representation. access justice, land, and SUHAKAM, **KPWKM** environmental protection. Require Environmental and Social Impact Assessments (E/SIAs) to use sex-disaggregated and UN CEDAW GR community-level data when assessing impacts on 37 urges states to Indigenous territories. integrate Indigenous women's knowledge and participation into climate and DRR policies. Implement SUHAKAM's 18 recommendations from the National Inquiry into Indigenous Land Rights, focusing on land security for women and community SUHAKAM's **National Inquiry** resilience to climate risks. into Indigenous Land Rights provides a Align domestic law with UNDRIP and explore domestic mandate for ratification of ILO Convention 169 to strengthen reform. international accountability.

RECOMMENDATIONS ACTIONS **GUIDING NOTES NAPBHR Actions** Establish Gender-Create a national grievance mechanism for E3.1-E3.4 call Responsive Climate environmental and climate harms that is accessible for grievance and and Environmental to women, Indigenous Peoples, and marginalised groups, with clear pathways for both judicial and adjudication mechanisms Grievance Mechanisms that are inclusive and non-judicial redress. accessible. Line Ministries and **UN CEDAW GR 37 Supporting Actors:** Require grievance mechanisms under the Climate NRES, SUHAKAM, Change Bill (RUUPIN) and related laws to provide (26c and 51d) requires timely remedies, translation services, legal aid, and Attorney General's effective and timely remedies for women in Chambers, KPWKM, child- and gender-sensitive procedures. the contexts of climate JAKOA change, disasters, and Institutionalise community-level grievance processes the activities of nonstate actors, while co-designed with Indigenous women, informal UN CEDAW GR workers, and youth to ensure local accessibility. 39 underscores the importance of ensuring Mandate annual public reporting on the number, Indigenous women's type, and outcomes of climate-related grievances, access to justice. disaggregated by sex, age, and ethnicity.

Strengthen Legal Aid and Gender-Responsive Access to Justice for Environmental and Climate Harms

Line Ministries and Supporting Actors:

Legal Aid Department, Attorney General's Chambers, Malaysian Bar Council, KPWKM Review and expand the national legal aid framework to ensure accessibility for women, Indigenous Peoples, and marginalised communities facing environmental and climate-related harms.

Develop specialised legal aid schemes to address land rights violations, disaster-related harms, and environmental degradation, ensuring remedies are gender-transformative and include fair compensation.

Institutionalise partnerships with NGOs and community-based organisations to provide legal literacy, independent expert support, and local language services for women and Indigenous communities seeking redress.

Establish dedicated funds for legal aid in climate and environmental cases, prioritising Indigenous women and EHRDs.

UN CEDAW GR 39

(33g) calls on states to provide free legal aid for Indigenous women and girls, including in cases of gender-based violence, and to support NGOs offering such services.

NAPBHR Actions E3.1 and E3.2 call for the legal establishment of specialised environmental adjudication mechanisms with accessible procedures, legal aid, and alternative dispute resolution pathways, as well as strengthened legal aid for communities pursuing litigation and advocacy in environmental and climate cases.

Recommendations for Civil Society Organisations

Strengthening Legal Empowerment and Accountability through Advocacy and Monitoring Advocate for constitutional and legal reforms (including recognition of the Right to a Healthy and Sustainable Environment, gender equality legislation, and gender-responsive safeguards in the Climate Change Bill), while simultaneously strengthening community legal empowerment through paralegal training, legal literacy, and targeted support for Indigenous women, informal workers, and environmental defenders.

Civil society should also act as watchdogs by independently monitoring and exposing SLAPP suits and corporate greenwashing, documenting their gendered and community impacts, and pressing for regulatory enforcement and accountability.

3.3 Finance



3.31 Climate Financing

Gender-responsive climate finance is essential for equitable and inclusive climate action. This principle is explicitly recognised in UNFCCC's Enhanced LWPG and its GAP, which call on public and private financial institutions to enhance the gender-responsiveness of climate finance mechanisms, including through the operationalisation of the GAP. It is also reinforced by CEDAW Article 13 and CEDAW GR 37 (para 46(b)), which urge states to dedicate budgets for gender-specific needs in climate-related prevention, preparedness, mitigation, recovery, and adaptation, particularly in infrastructure and services.

Following COP29, the decision on the New Collective Quantified Goal (NCQG) for climate finance included language recognising the need for climate finance to engage and benefit women and other marginalised groups, and to respect, protect, promote, and fulfill human rights. The NCQG set a financing goal of USD 300 billion but lacked enforcement mechanisms, clear targets, or commitments for gender-responsive financing. This omission represents a critical gap in addressing gender disparities in access to finance¹⁴⁷. The NCQG pledge of USD 300 billion

averages just USD 1.9 billion per developing country, far below the USD 1.3 trillion requested collectively, of which USD 600 billion was sought for adaptation and mitigation. These pledges fall short of developing countries' NDCs and domestic needs¹⁴⁸; Malaysia alone requires RM 1.3 trillion in investments by 2050 under the NETR, underscoring the scale of the financing gap. The gap is compounded by the loan-based nature of most available finance, which increases debt burdens for fiscally constrained countries¹. Malaysia accesses external climate finance from UNDP, UNEP, UNIDO, and the GEF¹⁴⁹, but these streams do not explicitly require or mainstream gender in national climate policies.

Domestically, Malaysia lacks a dedicated national climate fund, and low-carbon investments are often considered high-risk, which deters both public and private sector participation¹. While financial institutions in Malaysia have adopted sustainable finance frameworks, they fall short on integrating gender perspectives. Notably, Bank Negara Malaysia's Climate Change and Principlebased Taxonomy (CCPT) provides a framework for classifying economic activities based on climate and environmental impacts, with a focus on risk management and green alignment¹⁵⁰. However, it makes no reference to gender, women, or vulnerable communities, overlooking the intersection between social vulnerability and climate risk.

Similarly, the Sustainable and Responsible Investment (SRI) Taxonomy, developed by the Securities Commission Malaysia for capital markets. enhance transparency seeks to in social investments and support broader social objectives¹⁵¹. While it includes a section encouraging the enhancement of social standards, it does not specify or mandate gender-inclusive economic activities. Nevertheless, the taxonomy's emphasis on social outcomes offers an entry point for integrating gender considerations into investment frameworks.

Another challenge is the dominant focus of international and national climate finance on mitigation, often at the expense of adaptation. This is evident in the delay of an adaptation plan at

national level and the prioritisation of corporateoriented mechanisms such as energy transition projects, carbon trading, and other market-based approaches. This is despite clear evidence of climate vulnerability and economic loss.

One opportunity to strengthen adaptation planning is through the Green Climate Fund (GCF), which provides up to USD 3 million for developing countries to prepare their NAPs¹⁵². The GCF also offers technical support, especially for mainstreaming gender in its operation and deployment of resources and requires a strict timeline for implementation, which could accelerate the country's shift from planning to action¹⁵³. Malaysia reportedly applied for GCF funding following the severe floods in late 2021 and early 2022, but the current status of this application remains unclear.

A comprehensive analysis is essential to ensure climate finance is effectively allocated between mitigation and adaptation priorities while embedding a gender perspective. Without such analysis, climate financing may be misaligned with national needs and international commitments, overlooking the most immediate and vulnerable sectors affected by the climate crisis.

One key tool for strengthening accountability and transparency in climate finance is Climate Budget Tagging (CBT), which enables governments to track, monitor, and assess climate-related expenditures. This was highlighted as a clear strategy (ST4S2KA7) in NCCP 2.0 to scale up domestic financing and investments¹.

This presents a critical opportunity to integrate gender-responsive budget tagging, ensuring that climate finance not only supports environmental goals but also advances gender equality. Gender budget tagging, when applied in the ex-ante phase of budgeting, helps identify how proposed measures affect gender equality outcomes. This initiative has the potential to enhance financial mechanisms and establish Gender Responsive Budgeting as a national priority, possibly mandated under the RUUPIN for all future investments.

A strong regional example comes from the Philippines, where Climate Change Expenditure Tagging (CCET) is mandated under the Climate Change Act¹⁵⁴. The CCET system is fully integrated

into their national planning and budgeting processes, illustrating how institutionalising such practices can effectively link climate finance with national development and gender equality goals.

Apart from the clarity in the designation of the funds, current financing mechanisms rarely assess social impacts on women. Women are often not consulted in the process, resulting in displacement from ancestral lands and being inadequately compensated for this loss - for example, being resettled in poorly equipped housing far from resources, cut off from traditional livelihoods, and often without subsidies for utilities or water supply. There is currently no legally binding mechanism to protect indigenous women from these threats and loss of ancestral land which homes their ancestral graves and resources, by right, should be held in invaluable regard with utmost respect, and not as a compensable commodity. Projects such as the Nenggiri Dam in Gua Musang and the Bakun Dam illustrate how climate financing can generate serious risks for women.

3.32 Gender Responsive Budgeting

Gender Responsive Budgeting (GRB) ensures that fiscal planning and resource distribution account for gender-differentiated impacts, responsibilities, and access to services. It is not about separate budgets for women, but about making sure that national allocations reflect the lived realities of diverse groups. In the context of climate change, where risks and adaptive capacities are deeply gendered, GRB is critical to equitable governance.

Malaysia has a two-decade history of gender budgeting advocacy. The earliest paper was published by KPWKM in 2005¹⁵⁵, and since then, the Gender Budget Group (GBG) — a coalition coordinated by Engender Consultancy and the Women's Aid Organisation — has built capacity, convened annual roundtable discussions, and annually submitted recommendations to the Ministry of Finance and KPWKM¹⁵⁶. Despite this continuity, the process remains largely civil society-driven, with limited institutional uptake by government agencies.

Recent developments signal change. In 2024, KAMY authored Theme 7: Gender Responsive Budgeting in Climate and Disaster Governance for the Gender Lens on Budget 2025 memorandum,

marking a structured attempt to link gender and climate finance within Malaysia's national budget discourse¹⁵⁷. Their analysis highlighted persistent gaps: the absence of gender-disaggregated indicators, gender tagging systems for traceability, and participatory processes in climate and disaster budgets. For example, the RM300 million earmarked for flood preparedness in Budget 2024 offered no safeguards to ensure women's needs, including safe shelter, sanitation, menstrual health, and privacy, were addressed.

Internationally recognised Gender Responsive and Participatory Budgeting (GRPB) frameworks provide diagnostic tools to ensure equity in fiscal governance. The Gender Responsive and Participatory Budgeting Manual¹⁵⁸ developed by PWDC lists Public Expenditure Tracking (PET), Beneficiary Impact Assessments (BIA), Beneficiary Incidence Analysis (BIncA), and Gender Audits as core instruments for assessing whether allocations meet gender-differentiated needs (**Table 7**).

Assessment Tools from PWDC GRPB Manual (2016)		Contextual Application in Malaysia's Climate Change Governance Budgeting Including		
Tool	Function	Disaster and Just Energy Transition Governance		
Public Expenditure Tracking (PET)	Traces resource flows from national to local levels; identifies bottlenecks, delays, and misallocations.	Would reveal whether NADMA's flood preparedness funds reach rural women, and if spent on safe shelters, menstrual kits, and women-only spaces.		
Beneficiary Impact Assessments (BIA)	Evaluates effects of programmes on different social groups, especially marginalised ones.	Could assess how JET relocation or low-carbon subsidies affect women, youth, and Indigenous Peoples differently, exposing gaps or harms.		
Beneficiary Incidence Analysis (BIncA)	Identifies which groups benefit most or least from spending/subsidies.	Could determine if rooftop solar or EV subsidies favour urban men over rural or low-income women.		
Gender Audits	Reviews extent to which gender is embedded in institutional policies and practices.	Could test whether ministries (Finance, Environment, Energy) integrate gender in climate policies, NDCs, NAPs, and renewable energy targets.		

Table 7: Assessment Tools for Gender-Responsive and Participatory Climate and Disaster Budgeting in Malaysia
Adapted from PWDC, The Gender Responsive and Participatory Budgeting Manual (2016)

None of these mechanisms is currently institutionalised in Malaysia's climate or disaster budgeting processes. The absence of PET means it is unclear whether allocations such as NADMA's flood preparedness fund reach rural women or cover essential needs like safe shelter and menstrual health. Without BIA, Just Energy Transition projects risk overlooking how relocation or technology subsidies impact Indigenous Peoples, women, and youth differently. The lack of BIncA prevents scrutiny of whether subsidies for rooftop solar or electric vehicles

disproportionately benefit urban men over rural or lower-income women. Similarly, the absence of Gender Audits makes it impossible to track whether ministries meaningfully embed gender objectives into climate instruments such as the NDCs, NAPs, or renewable energy targets.

These diagnostic tools are not entirely new to Malaysia. They were introduced in 2012 through the Penang State Government's adoption of GRPB, implemented in partnership with PWDC. While still confined to state and local programmes,

this experience demonstrates that Malaysia has begun experimenting with embedding gender analysis into budget processes. However, these instruments remain absent from national climate and disaster budgeting, leaving federal systems without comparable diagnostic or accountability mechanisms.

This federal gap is reinforced by the scarcity of gender- and climate-relevant data¹⁵⁹. Without sex-disaggregated and intersectional data, fiscal allocations risk reproducing inequalities rather than addressing them. Questions also persist about delivery, management, and transparency, with limited public accountability for whether climate-related funds reach marginalised groups.

Comparative evidence from the region highlights what Malaysia is missing. Since 2010, Indonesia's Fiscal Policy Agency has implemented a climate budget tagging system across five ministries¹⁶⁰. Early assessments showed that while climate finance was being tracked, it was not aligned with gender equality goals. This led to a progressive shift toward integrated gender-climate tagging, which enabled the government to identify overlaps, reduce inefficiencies, and align fiscal instruments simultaneously with climate goals and gender outcomes. Indonesia's integrated system is now widely cited as a global reference point for how climate and gender finance can be mainstreamed in tandem. This stands in contrast to Malaysia, where tagging remains absent despite the introduction of GRPB tools at subnational level.

International guidelines reinforce these lessons. Oxfam and UN Women¹⁶¹ stress that GRB must be institutionalised throughout the budget cycle, from planning and costing, to execution, to audit, and must include gendered impact assessments of past projects, integration of gender in revenue policies, and transparent participatory reporting. These standards provide a clear benchmark against which Malaysia's current approach falls short.

3.33 Gendered & Inequitable Disaster Aid

Malaysia's disaster financial aid framework operates on structurally exclusionary criteria. Current protocols designate male heads of household as default beneficiaries, systematically denying women direct access to resources and disadvantaging polygamous families, single mothers, and Indigenous communities. Single mothers face severe administrative hurdles, including requirements for marriage, divorce, or death certificates, documents that are often destroyed during disasters. These rules disregard women's demonstrated role in recovery management and their gender-specific needs, such as safe shelter and menstrual health provisions.

Available evidence points to entrenched disparities. KPWKM's 2016 data162, presented in Table 8, shows that men received 82% of total financial aid disbursed (RM 4.29 million), while women received only 18% (RM 0.95 million). Exclusion was especially stark during droughts, where no women were recorded as beneficiaries compared with 2,354 men. During floods, which produce widespread displacement, accounted for just 6% of recipients and received only RM 3,300, equivalent to 1.2% of allocated funds. The absence of continuous and publicly available gender-disaggregated data since 2016 demonstrates institutional indifference to tracking and addressing these inequities.

Aid allocation methodologies also lack evidence-based targeting. As illustrated in Box 8, respondents reported that resources were insufficient to restore household functionality, irrelevant to recovery priorities, or inaccessible due to bureaucratic and logistical barriers. Entire Indigenous settlements were excluded from distribution cycles, with Orang Asli communities experiencing particularly severe neglect. Uniform RM 200 payments ignored household size and livelihood damage. For families averaging eight members, this amount lasted less than half a week, while doing nothing to address the destruction of homes, agricultural land, and natural resourcebased livelihoods. Standard packages, such as a single 5-kilogram bag of rice per family, proved catastrophically inadequate for multigenerational households of up to fourteen people.

Intersectional impacts were also evident. Women with dependents, persons with disabilities, infants, and elderly family members were disproportionately excluded. In one Orang Asli household, only one of two disabled members received assistance despite explicit requests.

Authorities cited inaccessibility of affected areas as the reason for non-delivery, yet alternative measures, such as financial aid calibrated to community-submitted recovery budgets, were not provided.

Taken together, these findings highlight three systemic dysfunctions: the conflation of "household" with male authority, the absence of gender-disaggregated metrics in aid formulas, and the exclusion of civil society from the design of distribution systems. These structural flaws entrench inequities and weaken the effectiveness of Malaysia's disaster governance.

Systemic Inequities in Disaster Relief Distribution Among Orang Asli Communities

Evidence from flood-affected Indigenous communities in Peninsular Malaysia highlights significant gaps in the distribution and adequacy of disaster relief aid. A respondent from the Jakun community reported that her family, comprising 14 members, received only a single 5-kilogram bag of rice and a small packet of cooking oil as part of the official relief package. These provisions were insufficient to meet even the most basic subsistence needs and point to a broader failure to account for household size and context-specific vulnerabilities in aid planning.

The inadequacy of support extended beyond food. The same respondent noted a lack of targeted assistance for individuals requiring specialised care, such as the elderly, persons with disabilities, and infants—groups particularly at risk during and after climate-related disasters. Another community member reported that only one of her two disabled family members received aid, despite having previously informed authorities of the household's needs and proposed budget requirements. No financial assistance was received.

These accounts also indicate logistical and institutional breakdowns. Government agencies responsible for Orang Asli welfare were reportedly unable to access the most severely impacted areas, resulting in delayed or incomplete delivery of critical supplies. This case study illustrates not only the material inadequacies of disaster relief distribution, but also the structural barriers; logistical, bureaucratic, and representational—that continue to marginalise Indigenous communities in national disaster response mechanisms.

Box 8: Case Study - Systemic Inequities in Disaster Relief Distribution Among Orang Asli Communities

2016						
Jenis Bencana Type of Disaster	Lelaki		Perempuan		Jumlah	
	Bil. Penerima No. of Recipient	RM RM	Bil. Penerima No. of Recipient	RM RM	Bil. Penerima No. of Recipient	RM RM
Kebakaran	1,217	2,378,305	348	556,995	1,565	2,945,300
Ombak pantai	0	0	3	1,500	3	1,500
Kebakaran hutan	17	67,350	6	6,510	23	73,860
Kemarau	2,354	491,827	0	0	2,354	491,827
Banjir kilat	153	2,806	130	650	283	3,456
Tanah runtuh/ Mendap	14	17,370	19	7,650	33	25,020
Banjir	167	266,012	11	3,300	178	269,312
Ribut angin/ Petir	1,995	1,047,696	773	414,943	2,768	1,462,639
Lain-lain	475	478,144	412	319,208	887	797,352

Table 8 : Financial Aid Distribution According to Disaster and Gender in 2016.

Source: KPWKM¹⁶²

3.34 Systemic Gaps in Financial Inclusion for Rural and Indigenous Women

Respondents reveal persistent institutional gaps that perpetuate the financial exclusion of rural and Indigenous women during climate-related disasters in Malaysia. These exclusions are not incidental-they are systemic, mirroring global patterns whereby disaster finance mechanisms are designed without the participation of women or marginalised communities. The International Institute for Environment and Development (IIED) notes that top-down disaster financing models often disregard women's local knowledge, exacerbating barriers to access and undermining LLA efforts¹¹⁵. Community-submitted recovery budgets by Jakun women in Pahang were also reportedly disregarded by authorities, despite offering grounded assessments of needs and vulnerabilities.

Analysis reveals four gaps undermining women's financial resilience in Malaysian climate disasters. These stem from the absence of an overarching disaster financial inclusion framework, compounding to deepen inequalities.

Gap in Contextual Financial Capacity Development

Malaysia lacks a national programme that provides co-designed, multilingual financial literacy training tailored to disaster contexts. Essential knowledge, such as how to access emergency loans, safeguard household assets, or verify eligibility for aid, remains absent. Existing initiatives fail to integrate digital and analogue tools, crucial in areas with unreliable connectivity. Although the DWN 2025-2030 cites digital aid as a means of reducing socioeconomic disparities for rural women, it does not explicitly address post-disaster situations. Yet the reliance on digital platforms for aid distribution in Malaysia means that the same gaps identified by DWN 2025-2030 can have severe consequences after disasters. Rural women, already facing barriers in connectivity and literacy, risk being systematically excluded from recovery assistance when they cannot navigate digital systems designed to channel urgent support. Without targeted capacity building, women remain structurally disadvantaged, reducing financial service effectiveness when available.

Gap in Inclusive Financial Service Provision

Structural barriers persist even with financial knowledge. Formal institutions lack mandates for mobile or community-based services in remote areas, forcing reliance on inaccessible online portals. This contravenes global good practice recommending mobile units and women's collectives for last-mile access¹⁶³. Account processes lack simplified pathways for noncitizens, older women, persons with disabilities, and abuse survivors. Disregarding oral testimonies or community verification entrenches exclusion, preventing meaningful access despite literacy.

Gap in Intersectional Aid Accessibility Standards

Current disaster response protocols do not apply vulnerability metrics that reflect geographic remoteness, linguistic diversity, disability, age, or digital exclusion. Centralised frameworks often fail to use vernacular or community channels, reducing rural women's awareness and participation¹⁶⁴. Consequently, aid information rarely reaches grassroots networks like women's collectives or religious centres. Without these standards, inclusive financial services are underutilised, further excluding women marginalised by geography, language, or status.

Gap in Financial Abuse Safeguards

Disaster frameworks lack mechanisms preventing economic coercion, like male control of aid entitlements or forced dependency. Confidential reporting pathways and emergency financial shelters are absent. This oversight exposes economically dependent housewives, non-citizen women, and other vulnerable groups to abuse and disempowerment during recovery. Without safeguards, aid distribution risks reinforcing gendered power imbalances and undermining resilience.

These cumulative gaps reflect a fundamental misalignment between Malaysia's disaster finance delivery mechanisms and the principles of gender-responsive and locally led adaptation. Continued dependence on digital-first models without safeguards for inclusion risks contravening international commitments under the Sendai Framework, which calls for "people-centred early warning systems" and inclusive risk governance⁵.

$3.35\ Recommendation\ for\ Finance$

RECOMMENDATIONS	ACTIONS	GUIDING NOTES		
I. National Budgeting And Fiscal Frameworks				
Gender-Responsive Budgeting for Disaster Management Line Ministries and Supporting Actors: MOF, NADMA, KPWKM, EPU	Develop disaster budget allocation frameworks using sex- and gender-disaggregated data, with indicators such as proportion of funds reaching women-headed households, Indigenous women, and persons with disabilities. Frameworks must recognise women's unpaid care roles and geographic vulnerabilities. Ensure allocations cover essential services including safe shelters, lighting, sanitation, menstrual health supplies, and privacy facilities. Funding must be adaptable to rural and Indigenous contexts. Establish independent monitoring systems with CSO participation, requiring MOF and NADMA to publish post-disaster expenditure outcomes disaggregated by gender.	UN CEDAW GR 37 (46b) urges states to increase dedicated budget allocations at all levels to address gender- specific needs in disaster and climate change prevention, preparedness, mitigation, recovery, and adaptation LWPG GAP D.1 encourages building capacity and sharing knowledge on integrating gender budgeting into national climate policies, plans, strategies and actions.		
Climate Budget Tagging Implementation Line Ministries and Supporting Actors: NRES, MOF, Prime Minister's Office, KPWKM	Introduce a tagging system that links all climate expenditure to gender equality indicators (e.g., proportion of adaptation funds reaching women, Indigenous, rural groups). Require ministries to conduct ex-ante gender impact assessments for all tagged allocations, and publish findings in federal budget documents. Establish a public, real-time portal to track climate and gender-tagged budget allocations, complete with mandatory accountability lines for each ministry, and annually publish reports that disaggregate this data by gender, sector, and region to ensure transparency and enable oversight by Parliament and civil society.	NCCP 2.0 (Strategy ST4S2KA7) calls for strengthening mechanisms to track and increase climate-related expenditure, including exploring climate budget tagging in federal budgets. Adopt gender- and climate-tagged budgeting practices to track and allocate resources effectively such as Philippines' CCET & Indonesia's Joint Budget Tagging systems.		
Climate Change Bill (RUUPIN) Budgeting Mandate Line Ministries and Supporting Actors: NRES, Attorney General's Chambers, BHEUU, Parliament, MOF	Embed mandatory climate and gender budget tagging into the Climate Change Bill (RUUPIN), creating a legal obligation for all ministries. Establish enforcement through parliamentary oversight, requiring annual "Gender and Climate Finance Reports." Sanctions for non-compliance should be included. Mandate ex-ante and ex-post gender impact assessments for all climate programmes under the Bill, ensuring findings are made public.			

The Sendai Framework

strengthening of disaster

risk transfer, insurance,

for Disaster Risk

Reduction promotes

the development and

RECOMMENDATIONS **GUIDING NOTES ACTIONS** Comprehensive Establish a national GRB framework institutionalised Incorporate tools from Gender Budgeting across the budget cycle (planning, allocation, international financing mechanisms such as Framework execution, monitoring, audit), tied to measurable **OXFAM's Guide to** gender indicators. **Gender Budgeting** Line Ministries and and GCF's Guide to **Supporting Actors:** MOF, KPWKM, EPU, Mainstreaming Mandate and train the use of PET, BIA, BIncA, and DOSM Gender Audits, with Malaysia-specific indicators Gender in Green such as proportion of adaptation funds reaching Climate Fund Projects. rural women or proportion of mitigation subsidies accessed by low-income households. **UN CEDAW GR 37** (46b) urges states to Benchmark against best practices, embedding increase dedicated budget allocations at all levels accountability protocols requiring public disclosure to address genderof outcomes. specific needs in disaster and climate change prevention, preparedness, Integrate the framework into climate policies such as the NAPs, NDCs, and sectoral energy or mitigation, recovery, and adaptation. environment plans. This ensures fiscal planning aligns with both gender justice and climate action. Formalised Gender Institutionalise consultations with the Gender **Budget Group** Budget Group (GBG) and relevant CSOs as a Consultation permanent, mandatory step in Malaysia's annual budget cycle. These consultations must be explicitly Line Ministries and tied to government decision-making, ensuring **Supporting Actors:** evidence and recommendations substantively inform MOF, KPWKM allocations. All recommendations should be formally recorded as part of the official process, rather than being treated as merely advisory input. Establish a mechanism requiring ministries to provide formal written responses to GBG and CSO submissions. Each response must clearly indicate whether recommendations are accepted, rejected, or modified, with justifications provided. This ensures that community priorities, such as grassroots women's testimonies on disaster recovery costs, are systematically considered. Mandate transparency by publishing an annual section in the Budget Speech, Budget Document, or Economic Report. This section should disclose how GBG/CSO evidence shaped budget allocations and summarise recommendations with corresponding ministerial responses. Creating this public feedback loop strengthens accountability for the government's consideration of civil society input. II. Aid And Resource Distribution

Develop gender-sensitive insurance and

households.

compensation schemes, tracking coverage indicators

households and informal women workers. Flexibility

such as proportion of payouts to women-headed

should account for polygamous and single-parent

Enhanced Disaster

Risk Transfer

Mechanisms

RECOMMENDATIONS **ACTIONS GUIDING NOTES** Line Ministries and Ensure accessibility through simplified, multilingual risk-sharing, retention, **Supporting Actors:** analogue-digital systems, and set targets for rural/ and financial protection MŌF, NADMA, BNM Indigenous women's participation. mechanisms to reduce the financial impact of disasters. Publish annual reports on gender-disaggregated The UNEP State of uptake and payouts, audited independently by BNM **Finance for Nature** and CSOs. calls for green and inclusive financial Establish safeguards against financial abuse, such systems that support as confidential reporting systems, women-only vulnerable groups, financial shelters, and pathways for survivors of women, and Indigenous domestic violence. These prevent male control over peoples by expanding access to credit and women's entitlements. strengthening genderdisaggregated data on participation, resources, decision-making, and impacts to guide targeted interventions. NAPBHR underscores Mandate binding safeguards, including FPIC of Social and Gender the need for effective Safeguards in Climate Indigenous women, for all climate-financed projects. grievance mechanisms **Financing Projects** that ensure access to remedy, including Line Ministries and Guarantee fair compensation, ensuring equal value **Supporting Actors:** land, livelihood continuity, and access to basic proportional NRES, MOF, services for displaced women. compensation and **SUHAKAM** reparations for businessrelated environmental Require gender and social impact assessments with and human rights publicly available findings, and establish grievance violations. Refer to cases mechanisms with gender-sensitive reporting of Nenggiri and Bakun dams. channels. LWPG GAP D.2 promotes awareness and access to climate finance for grassroot-women organisations, Indigenous Peoples, and local communities, including technical and financial support. III. Grassroots and Community Funding **UN CEDAW GR 37** Accessible Funding Create simplified funding channels enabling (46f) calls for financing for Women in Crisis women's direct access, with indicators such as proportion of applications by women without male through participatory Line Ministries and intermediaries. and non-discriminatory **Supporting Actors:** processes. MOF, KPWKM, Provide multilingual applications and both digital NADMA, JKM and analogue pathways, training community facilitators to support rural women. Establish safeguards against financial abuse, such as confidential reporting systems and women-only

financial shelters, with audits measuring uptake.

RECOMMENDATIONS ACTIONS GUIDING NOTES

Dedicated Budget Allocation for Grassroots Women's Projects

Line Ministries and Supporting Actors: KPWKM, MOF, KKDW, EPU Allocate fixed percentages of national climate budgets to women-led adaptation and resilience projects, with indicators such as number of women's initiatives funded annually.

Support upskilling for women in renewable energy, sustainable agriculture, and disaster management, tracking employment outcomes.

Create grant windows within international and domestic climate funds specifically reserved for Indigenous and grassroots women's organisations, with simplified applications and public reporting of beneficiaries.

LWPG GAP D.2

promotes facilitating access to climate finance for grassroots women.

The LLA Principles (Principle 2) call for addressing structural inequalities faced by women, youth, children, persons with disabilities, displaced people, Indigenous Peoples, and marginalised groups by providing dedicated streams of finance for inclusive climate action.

IV. Institutional Capacity and Governance

Institutional Capacity for Gender-Responsive International Climate Finance

Line Ministries and Supporting Actors: NRES, MOFA, MOF, EPU

Appoint a National Gender and Climate Change Focal Point with a clear mandate to mainstream gender in all climate finance processes, including coordination with line ministries and international partners. This role should be accountable to Parliament through annual reports on Malaysia's gender integration in climate finance.

Build technical capacity across ministries (NRES, MOFA, MOF, EPU) to design and submit gender-responsive funding proposals, with indicators such as proportion of proposals integrating gender analysis and measurable gender outcomes, and funds accessed.

Leverage international funds, including GCF readiness support, to accelerate Malaysia's NAP, ensuring that adaptation planning integrates women's priorities and Indigenous perspectives.

Require annual "Gender and Climate Finance Reports" tracking performance indicators (e.g., number of gender-responsive proposals submitted, amount of funding accessed, gender-disaggregated beneficiaries). Oversight should be exercised by a parliamentary committee and audited by the Auditor-General.

Apply GCF Gender Guidance and require that all proposals include measurable gender indicators and safeguards, aligned with Malaysia's commitments under CEDAW GR37.

Decision 3/CP.25

urges Parties to designate National Gender and Climate Change Focal Points, while LWPG GAP A.2 calls for clarifying and strengthening their roles through capacitybuilding, resources, and knowledge exchange.

GCF's Gender Policy and Action Plan and GCF's Guide to Mainstreaming Gender in Green Climate Fund Projects mainstreams gender across all policies and investments, promoting equality through climate action while minimising related risks, as reflected in Malaysia's NAP Readiness Proposal.

SRI Taxonomy provides guidance for capital market participants to align investment portfolios with sustainable and socially responsible objectives.

Recommendations for Civil Society Organisations

Enhancing CSO Participation and Oversight in Budget Processes Expand the role of climate and environment NGOs in the Gender Budget Group, using qualitative data from women and Indigenous communities to strengthen evidence-based budgeting.

Integrate gender indicators in climate proposals to align with funders' gender-responsive criteria, enhancing competitiveness and access to grants such as those from the GCF.

Build CSO capacity across the budget cycle by applying GRB and climate finance tools (PET, BIA, BIncA, Gender Audits) to improve design, monitoring, and reporting.



4

Recognising Women as Agents of Change

4.1 Participatory Decision Making



Unlike other chapters of this policy paper, where women's participation is treated as a cross-cutting element within finance, data, or policy reform, Chapter 4 positions participation itself as the central concern. The focus here is on strengthening women's agency, voice, and leadership in climate governance, recognising that inclusion alone does not guarantee influence. Public participation in Malaysia is currently fragmented, with some processes mandated by law and others ad hoc, and no baseline guideline for climate governance. This chapter therefore emphasises that participation must go beyond numerical parity to address the quality of engagement: who speaks, who sets agendas, who negotiates, and who is protected when they do so. The recommendations that follow focus on ensuring meaningful, safe, and accountable participation that recognises women as agents of change, not simply attendees in decision-making spaces.

4.11 Lack of Participation of Women in Climate Decision Making Space

Recognising women as agents of change, rather than solely as victims or beneficiaries, is central to addressing the nexus of climate change and gender. This acknowledgement must be extended to Indigenous women, persons with disabilities, older women, girls, stateless individuals, women in informal sectors, criminalised or marginalised women, and survivors of climate disasters and other crises.

Achieving meaningful participation involves ensuring fair representation at all levels of decision-making, including regional mechanisms and international platforms such as the UNFCCC COP. At COP27, women accounted for 35% of Party delegates globally¹⁶⁵, despite the inclusion of a midterm review of the Gender Action Plan as a core agenda item. By comparison, NRES reported that Malaysia's COP27 delegation comprised nearly 50% women. This participation rate is notable and exceeds both global and regional averages. Nevertheless, at the national level, women hold only 13.5% of parliamentary seats in Malaysia, illustrating ongoing gender disparities in political leadership.

It is important to note that numerical gender parity does not necessarily equate to meaningful participation. WEDO's analysis indicates that women remain underrepresented in more politically influential and technical roles. For instance, although women made up 35% of COP27 delegates, they constituted just 20% of Heads of Delegation¹⁶⁵. Speaking time was also disproportionately dominated by men, particularly in finance, technology, and mitigation discussions and negotiations. These patterns demonstrate that visibility in numbers alone does not translate into women's leadership or influence in critical negotiations.

WEDO's data also reveals notable regional disparities. Women's participation in Asia was

among the lowest at COP27, standing at 31%, in contrast to 45% in Europe and 41% in Latin America and the Caribbean. These figures highlight structural inequalities and resource constraints that continue to hinder women's participation from the Global South. Within UNFCCC technical bodies, women's representation is also limited. For example, participation in the Technology Executive Committee has declined to just 10%. At the national level, the NC4 highlights that 56.4% of participants in consultations were women, and women hold 42% of technical positions in national climate change roles; however, as with global spaces, the extent to which these translate into meaningful participation and influence remains unclear¹²⁷. Without clarity on influence, consultation figures risk presenting visibility without policy impact, leaving gendered concerns unaddressed in final outcomes.

In Malaysia, structural barriers persist. Avenues for public participation in policymaking remain fragmented: some are mandated by law, others operate informally, and climate governance lacks a standard baseline guideline. This institutional gap leaves women's participation dependent on ad hoc processes rather than consistent national standards.

The Malaysia Climate Change Action Council (MyCAC), which is responsible for national climate oversight, includes multiple technical committees. However, none of these committees specifically address gender or women's issues, indicating a systemic oversight in mainstreaming gender considerations.

Symbolic inclusion further undermines substantive engagement. Women, including Indigenous women, are often invited under the banner of diversity but constrained by limited speaking time, narrow thematic focus, and restrictions on what they can share, or use of their images without consent. Young people, including girls and young women, face similar dynamics: their presence is recognised but their capacity to shape decisions remains curtailed by weak institutional support. CSOs remain critical in bridging fragmented participation structures, ensuring that grassroots experiences inform policy spaces. Mechanisms such as the COP Consultative Panel in Malaysia demonstrate this potential, yet even here gender representation is uneven and demands continued

scrutiny about whether these platforms can shift participation from symbolic to substantive. Overreliance on CSOs risks shifting responsibility for inclusivity away from the state.

4.12 Safety and Risk of Women in Participation

Participation in climate decision-making and environmental advocacy exposes to heightened risks, particularly those from marginalised communities. Women environmental defenders frequently report harassment, and gender-based discrimination that remain unaddressed by authorities. These risks manifest in both digital and physical forms. Women activists have been subjected to sexualised harassment, character attacks, and doxxing. In a documented 2021 case, a female activist received sexual threats, a death threat, and a replica of a severed hand¹⁶⁶. In another case, a woman human rights defender was physically assaulted by a state official during a protest and now faces criminal charges under Section 186 of the Penal Code 167.

Legal and institutional pressures further deter participation. Strategic Lawsuits Against Public Participation (SLAPPs) are increasingly used to silence women who challenge extractive industries or development projects. Two recent cases in Malaysia involved SLAPPs seeking RM 5 million¹⁶⁸ and RM 1 million¹⁶⁹ respectively from Indigenous and environmental defenders. Such cases impose financial and psychological strain, discouraging agency and participation, particularly in resource-limited communities. Sexual and Gender-Based Violence (SGBV) also intersects with environmental conflicts. Women defending land or resources may face coercion, assault, and harassment, with few safe or trusted pathways for reporting. The reliance on village elders or local councils instead of formal legal systems often delays or obstructs justice.

Women also face intimidation from institutions when seeking help and legal aid. Indigenous women such as the Orang Asli face acute threats when defending land rights, while urbanbased activists experience cyber harassment and moral policing. In one case, an Orang Asli woman attempting to lodge a police report was discouraged through procedural delays and verbal intimidation.

Land rights conflicts intensify these risks. The Aboriginal Peoples Act 1954 (Akta Orang Asli 134)³⁰ remains outdated, and although 17 out of 18 recommendations from the National Inquiry Into the Land Rights of Indigenous Peoples were endorsed, little progress has been made in over a decade³¹. The most pivotal recommendation — to establish an autonomous national commission for Indigenous Peoples — remains unimplemented. For Indigenous women, unresolved land rights compound their vulnerability as defenders.

Risks are not confined to frontline defenders. Malaysian women delegates at COP have reported feeling unsafe due to male encroachment in shared spaces, cost-related compromises on accommodation, and fear of being targeted during protests. Ordinary women in townhalls and consultations also report intimidation, moral policing, and safety concerns when travelling to unfamiliar venues. These conditions discourage open participation and further reduce substantive engagement. Fear also inhibits the documentation of climate harms. One academic researcher reported difficulty conducting scoping studies because women in affected communities were afraid to speak out. Such barriers weaken the evidence base for advocacy and policymaking. Regionally, ASEAN's human rights body (AICHR) is drafting an environmental rights framework, drawing on standards such as the Aarhus Convention and the Escazú Agreement. These initiatives aim to institutionalise protections for environmental defenders and civil society participation, underscoring the gap between Malaysia's current risks and emerging regional safeguards.

4.13 Meaningful Consultations

Inclusive and culturally sensitive consultations are foundational to equitable climate governance. Yet women's participation remains constrained by systemic barriers that are linguistic, logistical, economic, and cultural in nature. These include the dominance of technical language, consultation schedules that disregard caregiving responsibilities, the absence of financial support for travel or leave, and formats that present themselves as neutral while reproducing gendered power dynamics.

At the community level, these barriers are particularly evident. During a townhall on the proposed degazettement of the Kuala Langat North Forest Reserve (HSKLU), one respondent observed, most attendees were men due to distance and limited transport options. The women present were largely NGO representatives rather than directly affected community members. Such examples highlight a wider pattern of procedural participation, where women are formally invited but lack the enabling conditions required for meaningful engagement.

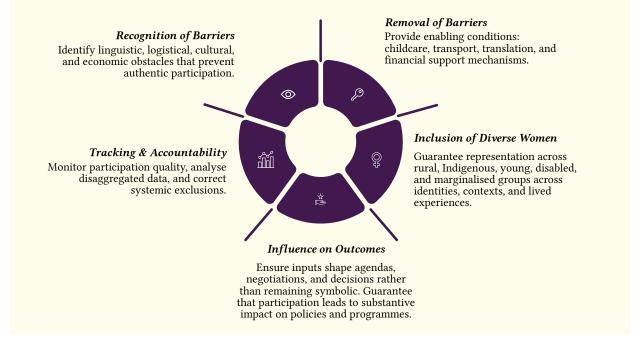


Figure 9: Meaningful participation from our analysis of Malaysia's practices and international standards

To clarify what constitutes meaningful participation, identifies this five report interdependent recognition dimensions: barriers, removal of barriers, inclusion of diverse women, influence on outcomes, and mechanisms for tracking and accountability (Figure 9). These dimensions provide a framework for assessing whether participation is merely procedural or whether it substantively shapes decision-making.

The absence of women's voices in consultation processes produces blind spots in policy. Gendered impacts such as displacement from land, loss of income linked to subsistence activities, and heightened exposure to environmental health risks frequently go unaddressed. Male-dominated local governance structures compound these exclusions, further restricting women's ability to influence outcomes. In rural and Indigenous contexts, fragmented communication pathways between community leaders, NGOs, and local authorities impede effective outreach. Informal networks and trusted intermediaries often play a critical role in facilitating dialogue, as seen in the Api-Api Declaration in Sabah¹⁷⁰, which established culturally relevant mechanisms for engagement. Yet intermediaries are undervalued and unsupported, and their effectiveness varies depending on their proximity to power and accountability to the communities they represent.

FPIC is inconsistently applied in Malaysia, leaving women particularly vulnerable to late notifications, inaccessible formats, or representation by intermediaries who do not reflect their concerns. As one academic respondent, working with coastal communities observed: "They want to participate. They just did not know how, especially in addressing the issues they had at hand." This gap between presence and influence underscores the distinction between procedural (being invited) and substantive participation (genuinely being heard).

Global frameworks such as the Aarhus Convention and the Escazú Agreement emphasise that meaningful participation goes beyond attendance. It requires early, informed, and continuous engagement, supported by enabling conditions such as compensation, recognition of caregiving responsibilities, childcare provision, translation, and diverse modalities of participation. Participation that is symbolic or perfunctory

— where communities are consulted only after key decisions are made, or where engagement is limited to passive information sharing — does not meet these standards. In Malaysia, consultation processes often fall short of these principles. Announcements are made late, formats are inaccessible, and participation is often confined to perfunctory exercises where inputs are not tracked or integrated into final outcomes.

Participation data, such as gender-disaggregated attendance, may be collected but is seldom analysed to improve women's engagement or connected to accountability mechanisms. Without such systems, there is little clarity on whether women's perspectives influence final decisions, and participation risks remaining symbolic rather than substantive. This absence of accountability loops reinforces the perception that consultations are perfunctory exercises rather than genuine opportunities for influence. Technical language and literacy barriers persist, with little accommodation for persons with disabilities, children, or the elderly. The digital divide further compounds exclusion, particularly for rural and low-income women.

Although Malaysia is not a party to either the Aarhus Convention or the Escazú Agreement, the shortcomings of its consultation processes align with the very practices these agreements seek to address. Consultations are typically announced late, delivered in inaccessible formats, and carried out without supportive conditions such as childcare or translation, disproportionately excluding rural and marginalised women. Emerging regional efforts, including the draft ASEAN framework on environmental rights¹⁷¹, echo these global standards by calling for institutional safeguards that ensure women, Indigenous Peoples, and other marginalised groups are not only present but empowered to shape decisions. Embedding these regional standards into Malaysia's climate governance would help move beyond fragmented, ad hoc participation and align national processes with ASEAN's collective vision for environmental democracy. The absence of procedural norms embedding gender responsiveness into Malaysia's consultation practices perpetuates engagement and undermines accountability in climate governance.

4.14 Recommendations for Participatory Decision Making

RECOMMENDATIONS	ACTIONS	GUIDING NOTES
Women's Participation	in Governance Spaces	
Quotas with accountability Line Ministries and Supporting Actors: NADMA, KPWKM, EPU	Introduce 50–50 gender quotas across climate governance bodies (NAP, NDCs, JET, renewable energy councils) with monitoring mechanisms to ensure women's roles go beyond numerical presence. Quotas must reflect diversity including Indigenous, young, disabled, and informal sector women as well as agenda-setting or leadership positions. This is to ensure participation moves beyond parity to substantive influence.	LWPG GAP B.1 calls for states to support training and leadership development for women, especially young, Indigenous, and local women, to strengthen their role in climate negotiations (e.g. UNFCCC processes). UN CEDAW GR 37 (36a) stresses the use of targeted policies like quotas to boost women's participation in decisionmaking for climate and disaster planning.
Strengthen Malaysia's Gender Leadership in UNFCCC Negotiations Line Ministries and Supporting Actors: MOFA, NRES, Prime Minister's Office, KPWKM, MOF	Leverage the Malaysian Pavilion to centre intersectional gender issues, co-designed with civil society to avoid tokenism. Ensure women, including Indigenous and grassroots leaders, have substantive space to speak and shape narratives. Institutionalise post-COP debriefs to evaluate participation quality, with findings benchmarked against agreed criteria for meaningful participation and publish gender participation summaries disaggregated by role, stream, and speaking time. Formalise civil society partnerships so grassroots and women's rights organisations can input before COP, support delegations, or be represented through proxy. Develop a pipeline of young women negotiators through training and mentorship, and nominate women to substantive roles such as thematic leads, technical negotiators, and plenary speakers, including in technical tracks on finance, technology, and mitigation. Active participation in Gender Day, WGC, and cross-regional platforms must be prioritised to strengthen Malaysia's influence. Establish a dedicated participation fund with fair compensation that recognises care burdens. Appoint a Gender and Climate Focal Point within Malaysia's delegation to integrate gender across negotiations and sustain accountability.	LWPG GAP B.1 & D.5 call for women's leadership development and inclusion of women's groups in climate governance and international negotiations. UN CEDAW GR 37 (36a and 36c) urges states to ensure women's equal participation in climate negotiations, inclsuding Indigenous and marginalised groups, with substantive influence in outcomes.

RECOMMENDATIONS ACTIONS GUIDING NOTES

II. Meaningful Consultations

National participation framework

Line Ministries and Supporting Actors: BHEUU, NRES, KPWKM

Establish a baseline standard for public participation in climate governance. Malaysia's current participation is fragmented with some processes mandated by law, others ad hoc, and no guideline exists for climate. The framework should guarantee:

- early and continuous engagement (before decisions are closed)
- accessible formats (translation, simplified language, disability-friendly)
- supportive conditions (transport, childcare, safe venues, digital access)
- safe and respectful environments for women's participation in community consultations and policy processes

UN CEDAW GR 37

(36c) calls for states to guarantee equal representation of women, including youth, Indigenous, and marginalised women, in all climate and disaster-related forums and mechanisms.

UN CEDAW Articles

7 & 8 calls for ensuring women's equal rights to participate in government, policymaking, and represent their countries in international spaces.

LWPG GAP D.5 urges inclusion of women's groups and gender institutions in climate policymaking.

Accountability in outcomes

Authorities must demonstrate how women's inputs shaped final policies and decisions. Public reports should track not only attendance but also influence of participation.

consultations and decision-making processes. GIAs

must go beyond attendance to assess the quality

be published with mandatory follow-up actions.

and influence of women's participation, including

whether women's knowledge, lived experiences, and

community-based solutions are formally recognised

in final reports and policy outcomes. Findings should

Institutionalise GIAs for all climate-related

UN CEDAW GR 37 (36c) and Aarhus Convention Art.

Convention Art. 6(8) emphasise that participation requires not only presence but that women's inputs are demonstrably reflected in outcomes.

Gender Impact Assessments (GIA) and recognition of women's knowledge

Line Ministries and Supporting Actors: NRES, KPWKM, SUHAKAM, State Governments

Enforceable FPIC

Line Ministries and Supporting Actors: NRES, JAKOA, SUHAKAM, BHEUU, KPWKM, State Governments Implement binding FPIC guidelines co-designed with Indigenous women, aligned with UNDRIP and ILO 169, with independent monitoring to prevent tokenistic consultations.

ILO Convention 169 and UNDRIP both emphasise the importance of Indigenous peoples' rights to participate in decisions affecting them, with UNDRIP explicitly asserting the right to FPIC as a key principle, while ILO 169 focuses on effective consultation aiming to obtain consent.

UN CEDAW GR 39 (46f and 57c) require FPIC from Indigenous women

RECOMMENDATIONS	ACTIONS	GUIDING NOTES
		before any economic, development, extractive and climate mitigation and adaptation project is approved on their lands.

III. Safety and Protection of Women Environmental Defenders

Protection and risk mechanisms

Establish comprehensive safety protocols covering:

- SGBV-specific reporting pathways in environmental conflicts
- psychosocial support for defenders under threat
- protection measures for women's participation in international platforms (COP safe housing protest safety)
- Enact Anti-SLAPP laws and strengthen grievance mechanisms to protect women and communities from legal intimidation by state or corporate actors

Recommendations for Civil Society Organisations

Strengthen Inclusive Gender Representation and Capacity in Climate Governance Partner with experienced CSOs to track implementation of quotas and ensure diversity is reflected in practice. Strengthen capacity-building initiatives to enable women to participate effectively in technical climate negotiations, particularly in finance, technology, and mitigation

Establish mechanisms to track whether the proposed gender quotas in climate governance bodies are actually implemented with meaningful diversity (Indigenous, young, disabled, informal sector women) and whether women secure leadership positions beyond mere numerical representation.

Develop targeted capacity-building initiatives for women to participate effectively in technical climate negotiations, particularly in complex areas

4.2 Just Transition: Why Is It Important



Chapter 4.2 reframes women as climate leaders and agents of change. It shifts the lens from

vulnerability to agency and adopts a forward-looking approach that centres participation,

leadership, and inclusion. The chapter concludes with a **practical entry point toolkit** to operationalise gender-transformative action in Malaysia's Just Energy Transition

4.21 From Vulnerability to Agency

Women and marginalised groups are often portrayed as passive victims of climate change and energy transition policies. However, global and regional experiences show that they are also innovators, organisers, and frontline leaders in advancing sustainable and just transitions. This chapter reframes women in JET as active agents of change rather than passive victims. Malaysia's existing commitments under:

- CEDAW and its General Recommendations on rural women, labour, and climate;
- National Women's Policy (Dasar Wanita Negara, DWN 2025-2030)
- Commitments under the SDGs, particularly SDG5 (Gender Equality) and SDG7 (Affordable and Clean Energy);
- Regional frameworks such as the ASEAN Gender Mainstreaming Strategic Framework.

already provide the legal and policy basis to embed this reframing into energy planning and budgeting. In practice, this means translating these commitments into gender targets, role definitions, and budget codes within JET councils and delivery agencies. Subsequent sections identify where implementation lags, and specify institutional levers that can be evaluated through indicators and public reporting.

Despite this, implementation remains fragmented and gender remains underrepresented in key transition strategies. This chapter presents a forward-looking agenda for women's empowerment in JET, grounded in rights-based approaches, institutional transformation, and systemic inclusion.

4.22 Gap Analysis: Where Are We Now?

A high-level scan of Malaysia's JET landscape reveals persistent gender gaps across governance, finance, participation, labour and skills, data, and international engagement. The table below summarises key issues:

Domain	Key Gaps
Governance	No gender targets or representatives in key energy and JET advisory councils (e.g. MyCAC); limited FPIC integration in affected communities
Finance	Lack of Gender Responsive Budgeting; no gender budget tagging in climate or energy tansition spending; poor access to green finance for women-led initiatives
Participation	Minimal involvement of women, youth, and IP in decision-making; informal workers excluded from JET dialogues
Labour & Skills	Women underrepresented in STEM and RE jobs; care work unrecognised in labour transition schemes
Data	Lack of sex-disaggregated data in energy access, labour, entrepreneurship, and subsidies; MEL systems not gender-sensitive
International Engagement	Malaysia has not visibly championed gender in UNFCCC JET processes; no designated gender focal point or submission on gender and JET at COP venues

Table 9: Key gender-related gaps in Malaysia's JET landscape

These gaps indicate the need for clear institutional ownership, time-bound targets, and budget tagging; without these, women risk being excluded from shaping and benefiting from the transition. While regional peers such as Indonesia have advanced with clear JET mandates, financing pathways,

and data systems, Malaysia remains anchored in the NETR with limited movement toward a comprehensive JET. This lack of institutionalised, gender-disaggregated data is itself a systemic gap, underscoring the urgency for Malaysia to invest in evidence-based planning. The benchmarks

cited here therefore serve as grounding advocacy tools, highlighting both what is possible and what is currently missing.

4.23 The Dual Opportunity Frame: Where Change Can Begin

Women's empowerment in JET must address two strategic domains simultaneously — energy access and economic participation. While energy access is analysed in Chapter 2, this section focuses on women's economic participation and leadership in the Just Energy Transition, where structural barriers are most acute and policy levers are immediately actionable.

Economic Participation and Leadership

Malaysia's green economy will require a new labour force in clean energy, transport, energy efficiency, and adaptation services. Yet women remain vastly underrepresented across these sectors due to systemic barriers, from gender stereotypes in STEM education and skilling, to limited access to finance, and the overwhelming burden of unpaid care responsibilities. Without gender-responsive strategies, the transition may replicate extractive economic models and exclude women from the green economy altogether. Figure 10 shows that Malaysia ranks the lowest among ASEAN neighbours in closing the gender gap in economic participation and opportunity¹⁷². This disparity reflects persistent structural and policy barriers that limit women's access to decent work, leadership roles, and enterprise support. Addressing these gaps must be central to JET implementation.

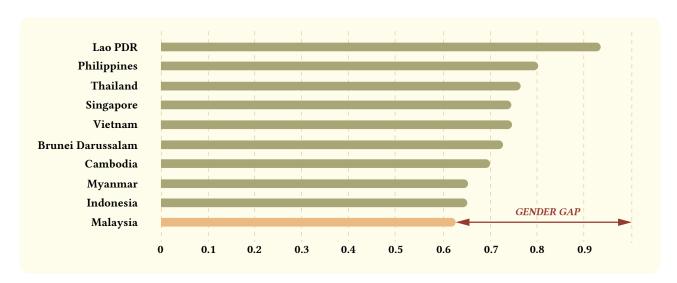


Figure 10: Gender Gap Index in ASEAN by Economic Participation and Opportunity

Adapted from ASEAN Renewable Energy and Gender Responsive Policy Roadmap¹⁷²

This is a critical inflection point: JET can become a transformative vehicle for redistributing opportunity and dismantling gendered labour hierarchies **if** institutional reforms on skills, procurement, enterprise support, and care infrastructure are adopted and budgeted.

A responsible and fair JET demands targeted reforms to dismantle structural exclusions and unlock women's full economic participation. Among the key interventions required are systemic changes in education, labour protection, procurement, enterprise support, and care infrastructure, each of which intersects with

broader questions of governance and financing.

Key Opportunities and Institutional Pathways

Gender-responsive TVET and green skills training remain a foundational pillar. This includes embedding inclusive enrolment targets, scholarships, mentorship initiatives, and childcare support into technical and vocational education and training. The effectiveness of such training depends on cross-sector collaboration with women's NGOs, teacher unions, and Indigenous educators to localise curricula. Institutional incentives, such as diversity quotas and

performance-based grants, must be introduced to ensure that training institutions reflect Malaysia's demographic diversity in both access and content. Recent data from IRENA indicates that only 32 per cent of the global renewable energy (RE) workforce are women¹⁷³, with even fewer in STEM roles. In Malaysia, however, the challenge lies less in education and more in the transition to employment. Khazanah Research Institute finds that women formed 53.2% of local STEM graduates in 2021, yet male STEM graduates were hired at higher rates (72% versus 69%)174. This signals a conversion gap between graduation and first job placement that JET must close through targeted institution-level reforms. Providers should be assessed on gender-disaggregated placement outcomes at the national graduate tracer point, with conditional grants or performance bonuses where female-male gaps close. For clarity, the national graduate tracer point refers to the Ministry of Higher Education Graduate Tracer System measurement window 175.

Because the bottleneck is conversion to first jobs rather than producing female STEM talent, JET policy should shift from enrolment to placement, retention, and early-career progression. Approvals and procurement should be conditioned on genderfair hiring and early-career placement, supported by company-level gender audits, transparent diversity reporting, and entry programmes that include paid apprenticeships and basic care or transport stipends. For renewable-energy tenders above a defined threshold, require supplier diversity plans and annual gender hiring reports for entry-level and apprenticeship cohorts, with corrective action where female-male placement gaps persist.

Parallel to skilling, gender-sensitive Transition Assistance Schemes (TAS) are needed to cushion the impacts of fossil-fuel restructuring. These schemes must extend beyond formal employment to include informal women workers, offering retraining grants, entrepreneurship support, and stipends that recognise care burdens. Programmes should be co-designed with community participation, particularly in high-exposure transition zones. A defined share of JET public funds should be earmarked for transition assistance, with eligibility criteria that include informal workers and care support.

Reforms in public procurement can serve as a powerful lever for inclusion. At present, womenowned SMEs are systemically underrepresented due to procedural complexity and financing barriers ¹⁷⁶. Embedding gender-responsive public procurement (GRPP) across energy infrastructure projects alongside a national certification scheme for women-led green enterprises can correct this imbalance. Procurement reforms should also mandate supplier diversity reporting and prequalification training. The IRENA report highlights how company-level gender audits and diversity reporting can institutionalise change and accountability within the private sector ¹⁷³.

Another underutilised vehicle for empowerment lies in women's cooperatives and social enterprises. Existing models in agriculture, craft, and community energy initiatives (e.g., among Indigenous communities) can be expanded into clean energy sectors. These groups must have structured access to blended finance mechanisms, subsidised solar kits, technical mentoring, and infrastructure support. Special emphasis should be placed on enabling urban and rural, Indigenous, and youth-led cooperatives to participate in and shape energy value chains. Support women entrepreneurs in distributed energy markets, such as clean cooking or solar mini-grids, by providing concessional and blended finance lines linked to gender outcomes, coupled with technical mentoring for market access.

Lastly, the recognition of unpaid care work is essential to economic equity. Any green-jobs policy must be accompanied by investments in social infrastructure, including family-friendly policies, childcare, eldercare services, and flexible working arrangements. Local governments should be supported to incorporate these into JET implementation plans, and the national government should accelerate the rollout of GRB. Care work should be formally recognised in national accounting frameworks and integrated into Malaysia's green-economy projections. Introduce Gender Responsive Budget codes for care within JET programmes so that childcare and eldercare are funded as enabling green-jobs infrastructure.

Together, these institutional pathways shift the paradigm: women are no longer just participants in the labour market, but co-architects of a

4.2 | Just Transition: Why Is It Important

regenerative economy that values social reproduction, resilience, and rights alongside decarbonisation. Table 10 maps these institutional pathways to existing policy frameworks and standards, showing potential alignment with Malaysia's JET context.

Alignment Table: Women's Economic Participation in JET

Intervention Area	Policy and Framework Alignment	Line Ministries & Agencies
Gender-responsive TVET and green skills training	Aligned with DWN 2025-2030 Programme 1.3 and Initiative 11.1.6 and CEDAW GR37 para 51(b); Consistent with MOHE's annual Graduate Tracer Study and the Graduate Employability Strategic Plan 2021–2025, and with UNESCO's Strategy for TVET (2022–2029): Transforming TVET for successful and just transitions	KPWKM, MOHR, TVET Council, MOHE
Transition Assistance Schemes (TAS)	Anchored in the ILO Just Transition Guidelines (skills, social protection, inclusion of informal workers) and consistent with CEDAW GR37 on gender-responsive social protection and decent work in climate transitions; aligned with domestic labour restructuring policy directions	EPU, MOHR, State Govts
Gender-responsive Procurement Reform (GRPP)	Builds on Government Green Procurement 2022 (GGP) framework, but introduces missing gender lens. Consistent with ACE's just and inclusive transition guidance on gender-responsive and inclusive governance, and aligned with UN Women and OECD guidance on gender-responsive public procurement across the procurement cycle	MOF, MITI, NRES
Women's Cooperatives and Social Enterprises	Builds on the National Entrepreneurship Policy 2030 (DKN 2030) and rural development frameworks that support community and Indigenous enterprise; grounded in UNDRIP (participation, consultation/FPIC) and CEDAW GR37 para 51(b) on women's entrepreneurship in low-carbon sectors	Ministry of Entrepreneur Development and Cooperatives (KUSKOP), MARA
Recognition of Unpaid Care Work	Aligned with SDG 5.4 (recognise, reduce, redistribute unpaid care and domestic work) and CEDAW GR37 para 51(a) on state support for care services and infrastructure; consistent with Malaysia's Gender Responsive Budgeting practice and the emerging National Care Economy Framework	KPWKM, DOSM, MOF

Table 10: Alignment Table - Women's Economic Participation in JET

4.24 GEDSI as a Cross-Cutting Strategy in JET

Gender Equality, Disability, and Social Inclusion (GEDSI) is a comprehensive policy approach that centres the participation and rights of historically marginalised communities, including women, Indigenous Peoples, persons with disabilities (PWD), youth, and informal workers. In the

context of Malaysia's Just Energy Transition (JET), GEDSI serves as a guiding lens to ensure that energy reforms do not entrench existing inequalities but instead unlock structural justice, equity, and democratic participation.

Why GEDSI Matters in JET

Without an intentional GEDSI lens, Malaysia's JET risks reinforcing top-down, technocratic

models of transition. GEDSI ensures rights-based outcomes, grounded in community realities and lived experience. It creates space for power-sharing, safeguards human rights, and improves policy outcomes. Importantly, GEDSI also aligns JET with Malaysia's legal and international obligations:

- Gender equality commitments under CEDAW and the DWN 2025-2030;
- Disability rights under the Persons with Disabilities Act and the Convention on the Rights of Persons with Disabilities (CRPD);
- Indigenous sovereignty under Akta 134 (Aboriginal Peoples Act 1954) and the UN Declaration on the Rights of Indigenous Peoples (UNDRIP);
- Decent work frameworks under ILO Conventions and national labour law reforms;
- Transparency and remedy tools including the Freedom of Information Act, Whistleblower Protection Act, and proposed Ombudsman mechanisms.

Entry points are indicative and depend on consultation, adequate resourcing, and data readiness.

Key International Good Practices

- **Indonesia** has a National GEDSI Working Group within its JET Partnership process
- South Africa's Just Transition Framework mainstreams equity and community influence across sectors
- Publish What You Pay (PWYP) and other CSOs have developed participatory gender tools such as Gender Impact Assessments and community scorecards for energy governance
- **ILO** Guidelines for a Just Transition, **ILO** Gender & Inclusion for a Just Transition (2024)
- UNFCCC Enhanced LWPG & Gender Action Plan; ACE's Guide to a Just and Inclusive Energy Transition in ASEAN
- ADB / ENERGIA operational GESI guidance for energy, and CIF Gender Integration Guidance Note (2022)

Institutional Mechanisms to Operationalise GEDSI

To embed GEDSI across Malaysia's Just Energy Transition (JET), institutional architecture must be reimagined to enable inclusive decisionmaking, transparent evaluation, and accountable financing. One essential step is the establishment of a GEDSI Sub-Working Group under the national JET councils. This group must comprise civil society organisations, community leaders, women's rights groups, Indigenous and disability advocates, and relevant line ministries. It should serve both as an advisory and accountability body to ensure that marginalised voices are not merely consulted, but co-leading.

A core function of this body should be to codevelop a national GEDSI methodology, applicable across the transition's sectors and pillars. This methodology must include both quantitative and qualitative indicators, with particular attention to intersectionality (e.g. gender and indigeneity, gender and disability, age and class). These indicators should form the basis of a Monitoring, Evaluation, and Learning (MEL) framework, enabling course correction, lesson sharing, and alignment with national reporting commitments.

Public resources must reflect these commitments. Integrating GEDSI into national and local JET budgets is critical through tools such as Gender Responsive Budgeting (GRB), gender budget tagging, and designated budget lines for community-led inclusion initiatives. This should be complemented by mandatory gender impact assessments for large-scale energy infrastructure or climate projects.

To support implementation, comprehensive GEDSI capacity building must be institutionalised across ministries, government-linked companies, and agencies involved in the energy transition. This includes training on human rights standards, disability inclusion, FPIC, and rights-based budgeting. Partnerships with feminist organisations, Indigenous groups, and unions will be essential to localise these trainings.

Finally, to ensure transparency and accountability, the government should mandate annual GEDSI reviews and publish scorecards that track institutional performance. These publicly accessible scorecards must be linked to Malaysia's broader national frameworks including commitments under CEDAW, the Persons with Disabilities Act, Akta 134, and the SDGs.

4.25 Empowerment Toolkit for Women in $\Im ET$

Module 1: Inclusive Governance

Strategic Outcome	Suggested Actions	Indicators
Diverse women and marginalised groups influence JET decision- making	 Establish and resource GEDSI focal points within all JET governance structures, with clear mandates to influence decision-making Introduce and enforce representation quotas for women, Indigenous Peoples, and marginalised groups in JET bodies Institutionalise FPIC at every stage of JET design, implementation and monitoring 	 Proportion of women, Indigenous Peoples, and persons with disabilities represented in national and subnational Just Energy Transition (JET) bodies Number of decisions demonstrably shaped by GEDSI input Number of GEDSI focal points trained and adequately resourced
Subnational institutions implement GEDSI in JET planning	Localise JET governance and embed gender- responsive planning at state and municipal	 Number of local councils with GEDSI reps Number of state JET plans integrating gender Number of subnational JET consultations with women/IP/PWD groups
Gender Impact Assessments (GIA) are institutionalised	Require GIA for all major JET policies and projects alongside EIA/SIA	 Number of JET projects undergoing GIA Proportion of EIA/SIA that include gender sections Number of projects using gender audits or GEDSI tools

Module 2: Skills, Labour and Care

- Court	s, Labour and Care	
Strategic Outcome	Suggested Actions	Indicators
Equitable access to decent work and recognition of unpaid care roles	 Mainstream green TVET and women's apprenticeships Include care work in transition finance Expand support for informal women workers roles, with conditional grants or performance bonuses where female-male gaps close 	 Proportion of women trained in green skills Number of programmes supporting low-carbon care work Number of policies acknowledging unpaid care in labour planning
Education-to- employment conversion is strengthened	 Assess providers on gender-disaggregated placement rates at the national graduate tracer point (as defined by MOHE GTS), with conditional grants or performance bonuses where female—male gaps close For energy and renewable-energy tenders above a defined threshold, require supplier diversity plans and annual gender hiring reports at entry and apprenticeship level, with corrective action where placement gaps persist 	 Proportion of women securing entry-level STEM or renewable-energy employment at the national graduate tracer point Female-male differential in entry-level placement rates at the national graduate tracer point (percentage-point gap) Rate of conversion from apprenticeship or internship to permanent roles in STEM or renewable-energy sectors, disaggregated by gender Number of energy-sector firms publishing gender hiring, retention and audit reports

$4.2 \mid$ Just Transition: Why Is It Important

Strategic Outcome	Suggested Actions	Indicators
Transition protections for affected workers are inclusive	 Design gender-responsive TAS with tailored pathways for women, informal workers, and older workers Include care support (e.g. childcare stipends, transport subsidies) Provide retirement or bridging packages with access to social protection 	 Proportion of TAS beneficiaries who are women Number of TAS with flexible timelines or community-based options Number of TAS programmes offering care-related benefits
Transition Assistance Schemes (TAS) enable structural change	 Embed TAS in national just transition frameworks and budgets Localise TAS with community-led mapping of needs, particularly in fossil fuel and high-emission zones (e.g. Pengerang, Kapar) Establish dedicated funding for workerowned cooperatives, rural livelihoods, and regenerative economies 	 Number of regions with localised TAS plans Proportion of national JET budget allocated to TAS Number of women-led or community-owned enterprises supported by TAS funding

Module 3: Energy Access & Use

Strategic Outcome	Suggested Actions	Indicators
Women's energy needs and knowledge are institutionalised in household, transport, and community planning	 Support community-based energy audits Finance women-led adaptation and renewable energy initiatives 	 Number of community audits Number of women-led RE initiatives or adaptation plans adopted Number of transport or access policies integrating women's input

Module 4: Inclusive Finance

Strategic Outcome	Suggested Actions	Indicators
Gender- responsive financing prioritises women and frontline communities	Allocate budgets for community-managed funds and simplify access to green loans for women	 Proportion of JET budget targeting women/IP/PWD Number of women-led energy businesses funded
Gender Responsive Budgeting (GRB) is institutionalised at all levels	 Integrate participatory GRB into federal and local JET budgets and project assessments Introduce GRB tagging and dedicated budget lines for care within JET budgets 	 Number of JET-related budgets applying GRB tools; Percentage of JET allocations with care tags Number of participatory GRB consultations held
Gender budget tagging improves budget tracking	Apply gender tagging to all JET-related budget lines at national and subnational levels	 Proportion of JET allocations with gender tags Number of budget statements using gender codes

$4.2 \mid$ Just Transition: Why Is It Important

Strategic Outcome	Suggested Actions	Indicators
Gender- responsive public procurement (GRPP) expands equitable market access	 Apply GRPP to all JET tenders with gender criteria in selection and award (e.g. supplier diversity plans, gender-safe worksite clauses) Mandate sex-disaggregated workforce and leadership disclosure, with annual reporting on entry-level and apprenticeship hiring Set participation or minimum-spend targets for women-owned or women-led SMEs, and provide pre-qualification and certification support 	 Share of contract value (%) awarded to women-owned or women-led SMEs and cooperatives/social enterprises in RE/energy tenders, reported annually Proportion of JET tenders with explicit gender criteria and supplier-diversity reporting requirements Proportion of main contractors submitting annual gender data; compliance rate and number of corrective actions for non-compliance
Capacity building on inclusive finance is strengthened	Train finance officers and agencies on GRB and inclusive finance principles	 Number of trained personnel Number of ministries applying inclusive finance tools

Module 5: Accountability and Remedy

Strategic Outcome	Suggested Actions	Indicators
Rights-based accountability is enforced	Align with FoI, Whistleblower and Ombudsman mechanisms to ensure remedy and justice	Number of complaints addressed via FoI/Whistleblower/Ombudsman related to energy or JET
Community grievances are addressed equitably	Develop local-level grievance redress systems accessible to women and marginalised groups	 Number of community-level complaints resolved Proportion of complaints filed by women/IP/PWD
Information on JET projects and grievance processes is proactively disclosed	Require public disclosure of JET project risks, benefits, and community engagement plans Standardise grievance pathways in accessible formats and languages Include gender-sensitive disclosures (e.g. consultation with women's groups, expected care impacts)	 Number of JET projects disclosing information publicly Percentage of projects with gendersensitive risk disclosures Number of community members (disaggregated by gender/IP/PWD) who report understanding grievance mechanisms

Module 6: Inclusive Data System

Strategic Outcome	Suggested Actions	Indicators
Gender and social data informs JET implementation	Develop centralised, sex-disaggregated data systems integrated with national platforms	 Number of JET agencies publishing sex-disaggregated data Number of indicators aligned with SDG 5/7

$4.2 \mid$ Just Transition: Why Is It Important

Strategic Outcome	Suggested Actions	Indicators
Transparency through data accessibility	Make gender and energy data publicly available and machine-readable	 Number of datasets available in open formats Number of downloads/accesses of GEDSI energy dashboards

Module 7: Monitoring, Evaluation & Learning (MEL)

Strategic Outcome	Suggested Actions	Indicators
MEL systems guide inclusive learning and adaptation	 Develop JET MEL framework with GEDSI, human rights, and structural justice indicators Integrate learning cycles into national and project-level systems 	 Number of MEL systems codeveloped with stakeholders Number of JET programmes revised through MEL learning Proportion of MEL processes with gender-disaggregated outcomes
Participatory MEL improves accountability	Ensure the meaningful involvement of women, Indigenous Peoples, and other marginalised groups in the design, validation, and interpretation of MEL indicators, with dedicated budgets allocated for their participation	 Number of participatory MEL consultations Number of indicators co-created with communities Proportion of MEL reports validated through community processes
GEDSI scorecards are institutionalised	Develop national GEDSI scorecards to track progress on governance, finance, labour, and care; make results public (disclosure)	 Number of public GEDSI scorecards published annually Proportion of policy decisions influenced by scorecard data
Capacity for learning is strengthened	Train implementers and community monitors on MEL tools, gender-responsive evaluation, and learning loops	 Number of MEL training sessions conducted Number of feedback loops embedded in JET reporting and reviews

Table 11: Mini Toolkit: Empowerment Pathways for Women in ${\it JET}$

CONCLUSION

Conclusion

This paper has served as a medium to communicate the lived realities of women in Peninsular Malaysia and to urge policymakers and society at large to critically confront gender-based discrimination as well as the privileges that obscure it. Privilege does not mean a life without struggle; rather, it signifies freedom from specific obstacles that weigh disproportionately on women's lives and, in this context, on their capacities to be resilient in the face of the climate crisis, and equally, to be empowered as decision-makers who shape the pathways of response.

Acknowledging these disparities is not about blame but about recognition: recognition that women's experiences in navigating both climate disasters and the broader just transition are diverse, intersectional, and shaped by structures that too often erase their voices. To take seriously Malaysia's commitment as a CEDAW signatory is to see women's rights not as peripheral to climate governance but as central to its legitimacy and effectiveness.

As the climate emergency deepens, the challenge before us is not only technical or economic but also moral and political. Women must not only be resilient in the face of climate crises and the challenges of a just transition, but empowered to thrive and to lead. Their knowledge, leadership, and collective power are indispensable for building solutions that make Malaysia not just more climate-resilient, but more equitable and just. Piecemeal reforms or token gestures will not suffice; only structural, gender-transformative change can meet the scale of this crisis. A gender-transformative climate response is therefore not charity or compliance, but the only path to a future where all people can flourish.









































Reference

- NRES. (2024) National Climate Change Policy 2.0 (NCCP2.0)
- United Nations. (2015) Paris Agreement to the United Nations Framework Convention on Climate Change. Available from: https://unfccc.int/sites/default/files/english_paris_agreement.pdf
- Intergovernmental Panel on Climate Change (IPCC). (2018) Special Report: Global Warming of 1.5 oC - Summary for Policymakers. Available from: https://www.ipcc.ch/sr15/chapter/spm/
- United Nations Department of Economic and Social Affairs. (2015). The 2030 Agenda for Sustainable Development (A/RES/70/1). Available from: https://sustainabledevelopment.un.org/content/documents/21252030%20 Agenda%20for%20Sustainable%20 Development% 20 web.pdf
- United Nations Office for Disaster Risk Reduction. (2015) Sendai Framework for Disaster Risk Reduction 2015-2030. Available from: https://www.undrr.org/publication/sendai-frame-work-disaster-risk-reduction-2015-2030
- United Nations Framework Convention on Climate Change (UNFCCC). Nationally Determined Contributions (NDCs). Available from: https://unfccc.int/processand-meetings/the-paris-agreement/ nationally-determined-contributions-ndcs
- NRES. (2021). Malaysia's Update of Its First Nationally Determined Contribution. Available from: https://unfccc.int/sites/default/files/ NDC/2022-06/Malaysia%20NDC%20 Updated%20Submission%20to%20 UNFCCC%20July%202021%20final.pdf
- NRES. (2009). National
 Policy on Climate Change.
- Ministry of Economy Malaysia.
 (2023). National Energy Transition Roadmap (NETR).
- NRES. (2024). Consultation Paper Proposed Rang Undang-Undang Perubahan Iklim Negara ("RUUPIN").
 Available from: https://www.nres.gov.

- my/ms-my/pustakamedia/Penerbitan/ NRES%20Consultation%20Paper%20 Rang%20Undang%20Undang%20Perubahan%20Iklim%20(RUUPIN).pdf
- BHEUU. (2024). National Baseline Assessment on Business and Human Rights in Malaysia (NBABHR).
- BHEUU. (2025). National Action Plan on Business and Human Rights (NAPBHR).
- Ministry of Agriculture and Food Industries. (2021) National Agrofood Policy 2021-2030 (NAP 2.0).
- Ministry of Agriculture and Food Security. (2023) National Food Security Policy (DSMN Action Plan) 2021-2025
- UN General Assembly. (1979).
 Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW). Available from: https://www.ohchr.org/sites/default/files/Documents/ProfessionalInterest/cedaw.pdf
- 16. Office of the United Nations High Commissioner for Human Rights. (2018) General recommendation No.37 (2018) on Gender-related dimensions of disaster risk reduction in a changing climate. Available from: https://www.ohchr.org/en/docu-ments/general-comments-and-recommendations/general-recommen-dation-no37-2018-gender-related
- UN Women. (1995). Beijing Declaration and Platform for Action. Available from: https://www.unwomen.org/sites/default/files/Headquarters/Attachments/Sections/CSW/PFA_E_Final_WEB.pdf
- ASEAN. (2021). ASEAN Gender Mainstreaming Strategic Framework 2021–2025. Available from: <u>asean.</u> <u>org/wp-content/uploads/2022/01/</u> <u>ASEAN-Gender-Mainstreaming-Strategic-Framework-endorsed-by-AMMW.pdf</u>
- ASEAN. (2017). ASEAN Declaration on the Gender-Responsive Implementation of the ASEAN Community Vision 2025 and Sustainable Development Goals. Available from: <a href="https://asean.org/wp-content/uploads/2021/01/ASEAN-Declaration-on-the-Gender-Re-

- sponsive-Implementation-of-the-ASE-AN-Community-Vision-2025-and-Sustainable-Development-Goals.pdf
- 20. Tsz YC. et al. (2024) ASEAN Gender
 Outlook 2024. Available from: https://
 data.unwomen.org/sites/default/
 files/documents/Publications/2024/
 ASEAN-gender-outlook_2024.pdf
- 21. ASEAN Secretariat News. (2024).

 ASEAN Gender Outlook 2024 highlights climate change threats to women
 and girls in Southeast Asia, a warning
 sign for other regions. Available from:
 https://asean.org/asean-gender-outlook-2024-highlights-climate-changethreats-to-women-and-girls-in-southeastasia-a-warning-sign-for-other-regions/
- KPWKM. (2025). Dasar Wanita
 Negara dan Pelan Tindakan Pembangunan Wanita (2025-2030).
- United Nations Framework Convention on Climate Change. (2015). Lima Work Programme on Gender (LWPG) (Decision 18/CP.20). Available from: https://unfccc.int/documents/8613
- 24. UN Convention on Biological Diversity. (2022) Kunming-Montreal Global Biodiversity Framework (CBD/COP/15/L.25). Available from: https://www.cbd.int/doc/c/e6d3/cd1d/daf663719a03902a9b116c34/cop-15-l-25-en.pdf
- Green Climate Fund. (2019). Updated Gender Policy and Gender Action Plan 2020-2030 (GCF/B.24/15). Available from: https://www.greenclimate.fund/sites/ default/files/document/gcf-b24-15.pdf
- 26. Adaptation Fund Board. (2021). Gender Policy and Gender Action Plan. Available from: https://www.adaptation-fund.org/wp-content/uploads/2016/04/OPG-Annex-4_GP-and-GAP_approved-March2021pdf-1.pdf

- <u>Plan-2021-2025-Supporting-Green-Resilient-and-Inclusive-Development.pdf</u>
- United Nations General Assembly. United Nations Declaration on the Rights of Indigenous Peoples 61/295. (2007). Available from: https://docs.un.org/en/A/res/61/295
- The Office of the High Commissioner for Human Rights. (2002). General recommendation No.39 on the rights of Indigeneous women and Girls. Available from: https://www.ohchr.org/en/documents/general-comments-and-recommendations/general-recommendation-no39-2022-rights-indigeneous
- Laws Of Malaysia. (2006). Act
 134 Aboriginal Peoples Act 1954.
- Human Rights Commission Of Malaysia (SUHAKAM). (2013). Report Of The National Inquiry Into The Land Rights Of Indigenous Peoples.
- 32. Ministry Of Foreign Affairs Malaysia.
 (2024). Constructive Dialogue Of Malaysia's 6th Periodic Report At The 88th
 Session Of The Committee On The Elimination Of Discrimination Against Women
 (CEDAW). Available from: www.kln.
 gov.my/web/che_geneva/news-from-mission/-/blogs/constructive-dialogue-of-malaysia-s-6th-periodic-report-at-the-88th-session-of-the-committee-on-the-elimination-of-discrimination-against-women-cedaw#:~:text=Malaysia%20
 has%20successfully%20concluded%20
 the,session%20on%2022%20May%202044
- Klima Action Malaysia (KAMY).
 (2024). Women and Climate Crisis in Peninsula Malaysia - Submission to the 88th CEDAW Session. Available from: https://tbinternet.ohchr.org/layouts/15/treatybodyexternal/Download.aspx?symbolno=INT%2FCE-DAW%2FCSS%2FMYS%2F57993&Lang=en
- Pertubuhan Wanita Orang Asal Malaysia (PWOAM). (2024). CEDAW & Indigenous Women & Girls in Malaysia. Available from: https://tbinternet.ohchr.org/_layouts/15/treatybodyexternal/Download.aspx?symbolno=INT%2FCE-DAW%2FCSS%2FMYS%2F57983&Lang=en
- Committee on the Elimination of Discrimination against Women. (2024). Concluding Observations on the Sixth Periodic Report of Malaysia (CEDAW/C/MYS/CO/6)

Available from: https://tbinternet.ohchr. org/_layouts/15/treatybodyexternal/ Download.aspx?symbolno=CEDAW%2F-C%2FMYS%2FCO%2F6&Lang=en

- 36. The Coalition of Malaysian NGOs in the UPR Process (COMANGO). (2023). Joint Stakeholder Report On Human Rights In Malaysia For The 45th Session Of The Human Rights Council's Universal Periodic Review In 2023.
- United Nations Human Rights Council.
 (2024). Thematic List of Recommendations UPR of Malaysia (4th Cycle 45th Session). Available from: https://www.ohchr.org/en/hr-bodies/upr/my-index
- Kaijser A, Kronsell A. (2014). Climate change through the lens of intersectionality. Environmental Politics Vol. 23, No. 3. Available from: https://www.tandfonline.com/doi/epdf/10.1080/09644016.2013.835203?needAccess=true
- 39. World Health Organisation (WHO). (2022). Submission for UNFCCC SBSTA/ SBI 56 - Gender. Available from: https://cdn.who.int/media/docs/default-source/climate-change/who_submission_sb56_gender.pdf?sfvrsn=60cd1c5c_1
- Asian-Pacific Resource and Research
 Centre for Women (ARROW).
 (2017). Women's Health and
 Climate Change. Available from:
 https://arrow.org.my/publication/womens-health-climate-change/
- Asian-Pacific Resource and Research
 Centre for Women (ARROW), PENITA
 Initiative Malaysia. (2015). A Scoping
 Study: A Focus on Indigenous Communities Malaysia. Available from:
 https://arrow.org.my/wp-content/uploads/2016/05/Climate-Change-and-SRHR-Scoping-Study_Malaysia.pdf
- 42. IPCC. (2022). Health, Wellbeing, and the Changing Structure of Communities. In: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Available from: https:// www.ipcc.ch/report/ar6/wg2/downloads/ report/IPCC_AR6_WGII_Chapter07.pdf
- The Star. (2023). Health DG: 11-year-old boy died from heatstroke, toddler from dehydration. Available from: https://www.

- thestar.com.my/news/nation/2023/04/28/health-dg-11-year-old-boy-died-from-heatstroke-toddler-from-dehydration
- 44. Free Malaysia Today (FMT). (2024). 2
 deaths among 45 heatstroke cases reported
 this year, says health DG. Available
 from: https://www.freemalaysiatoday.
 com/category/nation/2024/04/14/2deaths-among-45-heat-stroke-cases-reported-this-year-says-health-dg
- 45. Khazanah Research Institute (KRI).

 (2024). Rising Temperatures due to Climate Change Pose Increasing Risks to Malaysia's Public Health. Available from: https://www.krinstitute.org/assets/contentMS/img/template/editor/Media%20Release%20-%20Navigating%20Public%20Health%20in%20a%20Hotter%20Malaysia.pdf
- 46. Jegasothy R. et al. (2021). Climate change and declining fertility rate in Malaysia: the possible connexions. Journal of Basic and Clinical Physiology and Pharmacology, 32(5), 911-924. Available from: https://www.degruyterbrill.com/document/doi/10.1515/jbcpp-2020-0236/html
- 47. Free Malaysia Today (FMT). (2025).

 Child marriages on the decline, says

 Nancy. Available from: https://www.freemalaysiatoday.com/category/nation/2025/02/20/child-marriag-es-on-the-decline-says-nancy
- 48. Malay Mail. (2024). Ending child marriage: Crucial step to curb teenage pregnancies and safeguard Malaysia's future — Sisters in Islam. Available from: www.malaymail. com/news/what-you-think/2024/11/12/ ending-child-marriage-crucial-step-tocurb-teenage-pregnancies-and-safeguardmalaysias-future-sisters-in-islam/156633
- 49. Nasir R. et al. (2012). Psychological Effects on Victims of the Johor Flood 2006/2007. Asian Social Science Vol. 8, No. 8. Available from: https://www.researchgate.net/publication/271339635_Psychological_Effects_on_Victims_of_the_Johor_Flood_20062007#:~:-text=Results%20showed%20that%20_victims%20suffered,three%20psychological%20dimensions%20under%20study.
- 50. Thurston A. et al. (2021). Natural hazards, disasters and violence against women and girls: a global mixedmethods systematic review. BMJ Global

- Health. Available from: https://pmc.ncbi.nlm.nih.gov/articles/PMC8112410/#R68
- 51. Nor Hafizah S. et al. (2017). Gender Issues and Women Vulnerabilities During Flood Disaster in Kelantan, Malaysia. Middle-East Journal of Scientific Research 25 (9): 1838-1845. Available from: https:// www.idosi.org/mejsr/mejsr25(9)17/5.pdf
- 52. Ng. MY. (2021). Flood disaster in Malaysia: Gender sensitive humanitarian aid?. Available from: https://researchportal.hw.ac.uk/en/publi-cations/flood-disaster-in-malay-sia-gender-sensitive-humanitarian-aid
- 53. UNDP Malaysia. (2023). Interconnections between Climate Change and Population Aging: Implications for a More Inclusive and Sustainable Development in Malaysia. Available from: https://www.undp.org/malaysia/blog/interconnections-between-climate-change-and-population-aging-im-plications-more-inclusive-and-sustainable-development-malaysia
- 54. Zhu Y. et al. (2023). Association of ambient temperature with the prevalence of intimate partner violence among partnered women in Low- and Middle-Income South Asian countries. JAMA Psychiatry Vol80, No9. Available from: https://jamanetwork.com/journals/ jamapsychiatry/fullarticle/2806604
- 55. UNICEF, Universiti Kebangsaan Malaysia, Universiti Malaysia Sabah (2021). Impact of Climate Change on Children: A Malaysian Perspective. Available from: https://www.unicef.org/malaysia/reports/impact-climate-change-children
- 56. ILO. (2018). Care Work And Care Jobs For The Future Of Decent Work. Available from: https://www.ilo.org/sites/ default/files/wcmsp5/groups/public/@ dgreports/@dcomm/@publ/documents/publication/wcms_633135.pdf
- MacGregor S. et al. (2022). Caring in a changing climate: Centering care work in climate action. Available from: policy-practice.oxfam.org/resources/ caring-in-a-changing-climate-centering-care-work-in-climate-action-621353/
- Khazanah Research Institute (KRI).
 (2019). Time to Care: Gender Inequality,
 Unpaid Care Work and Time Use

- Survey. Available from: www.krin-stitute.org/assets/contentMS/img/template/editor/Publications_Time%20to%20Care_Full%20report.pdf
- Institute of Strategic & International Studies (ISIS) Malaysia. (2024). Building a cradle-to-grave care economy for Malaysia. Available from: https://www.isis.org.my/wp-content/uploads/2024/06/
 Policy-brief-ISIS 230524 PDF-HR.pdf
- Nexus: Addressing the Linkages
 Between Climate Change and Women's
 and Girls' Unpaid Care, Domestic and
 Communal Work. Available from:
 https://www.unwomen.org/sites/default/files/2023-11/working-pa-per-the-climate-care-nexus-en.pdf
- Siew MC. et al. (2023). Risk Perception and Emergency Preparedness Against Flood Affected Participants From the Primary Health Care Centre, Malaysia: A Comparison Between Genders. Malaysian Journal of Medicine and Health Sciences. Available from: https://medic.upm.edu.my/upload/dokumen/2023072010410702
 M. J. M. H. S. O. 4. 6. 0. p. d. f.
- 62. ASEAN. (2024). ASEAN Declaration on Strengthening the Care Economy and Fostering Resilience Towards the Post-2025 ASEAN Community. Available from: https://asean.org/asean-declaration-on-strengthening-the-care-economy-and-fostering-resilience-to-wards-the-post-2025-asean-community/
- Lee MH, Yohan D. (2024). Does Budget 2025 Address the Needs of Caregivers? BFM Podcast. Available from: https://www.bfm.my/content/podcast/ budget-2025-and-the-care-economy
- 64. BERNAMA. (2024). Care Industry Action Plan Draft to be Refined Before Seeking Cabinet Nod. Available from: https://bernama.com/en/news.php?id=2308012
- 65. The Edge Malaysia. (2023). The State of the Nation: Significance of raising female labour participation rate.; Available from: https://theedgemalaysia.com/node/677834
- 66. Department of Statistics Malaysia (DOSM). (2024). Quarterly Skills-Related Underemployment by Sex. OpenDOSM. Available from: https://open.dosm.gov.

- my/data-catalogue/lfs_qtr_sru_sex?sex=female&variable=persons&visual=sru
- 67. Klima Action Malaysia (KAMY).

 (2025). JET-BHR in Peninsular

 Malaysia. Available from: https://www.klimaactionmalaysia.org/jetbhr
- 68. ILO. (2024). Ensuring safety and health at work in a changing climate. Available from: www.ilo.org/sites/default/files/2024-07/ ILO_SafeDay24_Report_r11.pdf
- ILO. (2018). The Employment Impact
 of Climate Change Adaptation Input
 Document for the G20 Climate Sustainability Working Group. Available from:
 https://www.ilo.org/sites/default/files/
 wcmsp5/groups/public/@ed_emp/documents/publication/wcms_645572.pdf
- Economic Planning Unit (EPU). (2022).
 National Energy Policy 2022-2040.
- Ministry of Housing and Local Government (KPKT). (2018).
 Malaysia Smart City Framework.
- 72. Olabayonle O. et al. (2023). An Assessment of Gender Disparity that Exists in the Transit Service Provision: A Case Study of MRT Feeder Bus Service in Klang Valley, Malaysia. Planning Malaysia: Journal of the Malaysian Institute of Planners VOLUME 21 ISSUE 2. Available from: http://www.planningmalaysia.org/index.php/pmj/article/view/1278
- URBANICE Malaysia. (2024). URBANICE
 Malaysia Laksanakan Kajian Bajet
 Bandar Mampan dan Responsif Gender.
 Available from: https://www.urbanice-malaysia.com.my/events/urbanice-malaysia-laksanakan-kajian-bajet-bandar-mampan-dan-responsif-gender
- 74. Berita Harian. (2021). Lebih 7,000 Pelajar Sekolah Jadi Mangsa Banjir. Available from: https://www.bharian.com.my/berita/ nasional/2021/12/904239/lebih-7000-pelajar-sekolah-jadi-mangsa-banji
- 75. New Straits Times. (2023). Dropout rate for girls in secondary schools increased over last 3 years. Available from: https://api.nst.com.my/news/nation/2023/10/965742/dropout-rate-girls-secondary-schools-increased-over-last-3-years
- UNESCO. (2021). Getting every school climate-ready: how countries are inte-

- $\begin{array}{lll} \mbox{grating climate change issues in education.} \\ \mbox{Available} & \mbox{from:} & \mbox{$https://unesdoc.} \\ \mbox{unesco.org/ark:} \mbox{$/48223/pf0000379591} \\ \end{array}$
- 77. UNESCO. (2021). UNESCO declares environmental education must be a core curriculum component by 2025. Available from: www.unesco.org/en/articles/unesco-declares-environmental-education-must-be-core-curriculum-component-2025-0
- Ministry of Education Malaysia. Cadangan Pelan Pendidikan Masa Depan Malaysia 2026-2036. Available from: https://www.moe.gov.my/pelanpendidikan2026/public/
- UNESCO. (2024). Greening curriculum guidance: teaching and learning for climate action. Available from: https://unesdoc.unesco.org/ark:/48223/pf0000390022
- 80. Klima Action Malaysia (KAMY). (2023).
 Orang Jakun & The Climate Crisis: Past,
 Present and Future. Available from:
 https://www.weavinghopes.com/report
- Boyle R. (2024). Emission Index Website.
 Greenhouse Gas Emissions in Malaysia.
 Available from: https://www.emission-index.com/countries/malaysia
- Economic Planning Unit. (2021). Twelfth
 Malaysian Plan 2021-2025 (RMK12).
- 83. Suara Rakyat Malaysia (SUARAM). (2023). SUARAM Malaysia Human Rights Report 2022. Available from: https://www.suaram.net/humanrights-reports?pgid=kvex92wbf2436c47-2d06-4aaa-95ec-68f47ae77031
- 84. IPCC. (2023). Summary for Policymakers.
 In: Climate Change 2023: Synthesis
 Report.Contribution of Working Groups
 I, II and III to the Sixth Assessment
 Report of the Intergovernmental Panel on
 Climate Change. Available from: https://
 www.ipcc.ch/report/ar6/syr/down-loads/report/IPCC_AR6_SYR_SPM.pdf
- 85. Fair Finance Asia. (2024). Towards a Gender-Transformative Energy Transition in Asia. Available from: https://fair-finance-asia-launches-re-port-urging-for-a-gender-transformative-energy-transition-in-asia/
- Asia Feminist Coalition (AFC). (2023).
 Policy Brief: Towards a feminist just

- energy transition in Asia. Available from: https://www.asiafemcoalition.com/publication#:~:text=This%20 policy%20brief%20has%20been,a%20 feminist%20transition%20in%20Asia
- 87. Nadia A. (2023). Will solar power shine a light on Orang Asli villages left behind? MalaysiaKini. Available from: https://newslab.malaysiakini.com/orang-asli-solar/en/
- 88. Chin WL. et al. (2024). Energy Poverty Impact on Social Economics in Malaysia. International Journal of Integrated Engineering. 16(3). Available from: https://publisher.uthm.edu.my/ojs/index.php/ijie/article/view/18231
- 89. Women's Earth and Climate Action Network (WECAN) International. (2024). Gendered and Racial Impacts of the Fossil Fuel Industry in North America and Complicit Financial Institutions. Available from: https://www.wecanin-ternational.org/divestment-report
- OO. ASEAN Centre for Energy. (2025). A Guide to a Just and Inclusive Energy Transition in ASEAN. Available from: aseanenergy.org/wp-content/uploads/2025/01/ A-Guide-to-a-Just-and-Inclusive-Energy-Transition-in-ASEAN.pdf
- 91. UNDP Indonesia. (2025). Gender
 Equality and Social Inclusion (GESI)
 Strategy UNDP Indonesia for 20212025. Available from: www.undp.org/
 indonesia/publications/gender-equality-and-social-inclusion-strategy-undp-indonesia-2021-2025-0
- Ho P. et al. (2020). Limits of the Environmental Impact Assessment (EIA) in Malaysia: Dam Politics, Rent-Seeking, and Conflict. Available from: https://www.mdpi.com/2071-1050/12/24/10467
- Mongabay. (2024). Malaysian court shuts down hydroelectric dam project on Indigenous land. Available from: https://news.mongabay.com/2024/09/ malaysian-court-shuts-down-hydroelectric-dam-project-on-indigenous-land/

from-gender-impact-assessments-of-hydropower-projects-in-laos-an-620369/

- 95. Oxfam Asia Regional Water Governance Program. (2019). Balancing the Scales: Using Gender Impact Assessment in Hydropower Development -Gender Impact Assessment (GIA) Manual. Available from: https:// asia.oxfam.org/latest/publications/ balancing-scales-using-gender-impactassessment-hydropower-development
- 96. Klima Action Malaysia (KAMY).

 (2023). Heartbeat Voices from Indigenous Youth of Peninsula Malaysia.

 Available from: https://www.klimaactionmalaysia.org/sekolahiklim
- 97. International Energy Agency (IEA).
 (2021). The Role of Critical Minerals in Clean Energy Transitions. Available from: https://www.iea.org/reports/the-role-of-critical-minerals-in-clean-energy-transitions/executive-summary
- 98. The Edge Malaysia. (2024). NRES:
 Rare earth mining SOP ready since
 Dec 2023, no current plans for export
 guidelines. Available from: https://
 theedgemalaysia.com/node/732068
- CEDAW. (2016). General Recommendation
 No. 34 (2016) on the rights of rural women.
- 100. Ministry of Investment, Trade and Industry (MITI). (2023). New Industrial Master Plan 2030 Mineral Industry
- 101. Intergovernmental Forum on Mining,
 Minerals, Metals and Sustainable
 Development. (2021). Gender and
 Mining Governance. Available from:
 https://www.unsdglearn.org/courses/
 gender-and-mining-governance/
- 102. Economic Research Institute for ASEAN and East Asia (ERIA). (2025). Cooperate, Not Compete: ASEAN's Critical Mineral Strategy for Energy Transition. Available from: https://www.eria.org/news-and-views/cooperate--not-compete--asean-s-critical-mineral-strategy-for-energy-transition
- 103. MalaysiaKini. (2024). Heavy metals found in Kelantan Orang Asli blood, community fear poisoned by mining. Available from: https://newslab.malaysiakini.com/kelantan-red-rivers/en/

- 104. Malay Mail. (2022). Federal Court dismiss Gua Musang Orang Asli villagers' bid to get leave to appeal. Available from: https://www.malaymail.com/news/ malaysia/2022/09/26/federal-court-dismiss-gua-musang-orang-asli-villagers-bid-to-get-leave-to-appeal/30215
- Carbon Capture, Utilisation
 and Storage Bill 2025.(2025).
- 106. RimbaWatch. (2025). Environmental Impact of CCUS Initiatives in Malaysia: Assessing Carbon Lock-In and Credible Alternatives. Available from: https://9b2d2d75-7adf-4ea5-8c47-1b96d3a7eaf6.filesusr.com/ugd/a4715ad89ff44ff1bd4255a47a91dbfc9ba699.pdf
- 107. Sahabat Alam Malaysia (SAM). (2025). Memorandum Carbon Capture, Utilisation and Storage (CCUS) A False Solution That Is Ineffective, Unproven and Expensive. Available from: https://foe-malaysia.org/wp-content/uploads/2025/03/250305 Memorandum-CCUS-A-False-Solution-That-Is-Ineffective-Unproven-and-Expensive F.pdf
- 108. Bursa Malaysia Berhad. (2025). Voluntary
 Carbon Market Handbook. Available
 from: https://www.bursamalaysia.com/sites/5d809dcf39fba22790cad230/assets/685cfcc9cd34aaa86530631d/
 VCM Handbook Final V1.2.1.pdf
- 109. The Asia Foundation. (2023). Carbon Pricing And The Business Case For Emissions Reductions And Nature Conservation In Malaysia. Available from: asiafoundation.org/wp-content/uploads/2023/02/ Malaysia_Carbon-Pricing-and-the-Business-Case-for-Emissions-Reductions-and-Nature-Conservation-in-Malaysia_EN.pdf
- Center for Orang Asli Concerns (COAC).
 (2025). COAC Opposes Enggang (Pekan)
 Sdn Bhd's Carbon Credit Scheme.
- 111. Malaysian Investment Development Authority (MIDA). (2024). Data Centres: All eyes on Asia's future 'Digital Tiger.'. Available from: https://www.mida.gov.my/mida-news/data-centres-all-eyes-on-asias-future-digital-tiger/
- 112. Ember. (2025). From AI to emissions: Aligning ASEAN's digital growth with energy transition goals.

 Available from: https://ember-energy.org/app/uploads/2025/05/Report-

- From-AI-to-emissions-ASEAN.pdf
- 113. International Institute for Environment and Development (IIED).

 Bridging the gender data gap: challenges and opportunities. Available from:

 https://www.iied.org/bridging-gender-data-gap-challenges-opportunities
- 114. UN WOMEN. (2023). Why we need gender and environment data on the agenda at COP28. Available from: https://data.unwomen.org/features/why-we-need-gender-and-environment-data-agenda-cop28
- 115. International Institute for Environment and Development (IIED). (2021). Principles for Locally Led Adaptation (LLA). Available from: https://www.iied.org/sites/ default/files/pdfs/2021-01/10211IIED.pdf
- 116. Laws Of Malaysia. (2006). Act88 Official Secrets Act 1972
- 117. National Disaster Management Agency (NADMA). National Disaster Command Centre (NDCC). Available from: https://portalbencana.nadma.gov.my/ms/
- 118. Jabatan Kebajikan Masyarakat Malaysia.

 Info Bencana JKM. Available from: https://infobencanajkmv2.jkm.gov.my/landing/
- 119. Climate Change Commission Philippines. National Integrated Climate Change Database Information and Exchange System (NICCDIES). Available from: https://niccdies.climate.gov.ph/
- 120. National Climate Change Secretariat (NCCS) Singapore. Available from: https://www.nccs.gov.sg/
- 121. Gender + Environment Data Alliance (GEDA). (2023). Global Conference on Gender and Environment Data Call to Action: Counting on a sustainable future for all through gender and environment data. Available from: https://genderenvironmentdata.org/global-conference-on-gender-and-environment-data/
- 122. Laws of Malaysia. (1974). Act 127 Environmental Quality Act 1974
- 123. Laws of Malaysia. (2021). Act 172Town and Country Planning Act 1976
- ECOSOC. (1997). Agreed Conclusions of the United Nations Economic

- and Social Council (ECOSOC) Excerpt from A/52/3. Available from:
 https://www.un.org/womenwatch/osagi/pdf/ECOSOCAC1997.2.PDF
- 125. UN WOMEN. (2022). Handbook on gender mainstreaming for gender equality results. Available from: https://www.unwomen.org/en/digital-library/publications/2022/02/handbook-on-gender-main-streaming-for-gender-equality-results
- 126. Oxford Climate Policy. (2020).

 Pocket Guide to Gender Equality
 under the UNFCCC. Available
 from: https://wedo.org/wp-content/uploads/2020/11/2020-Guide-to-Gender-Equality-under-the-UNFCCC.pdf
- NRES.(2023). Malaysia's Fourth National Communications Report (NC4).
- 128. NRES. (2024). Biennial Transparency Report (BTR1).
- 129. Wong YM. (2025). Draft Gender Action Plan on Climate Change Reporting to the UNFCCC: Malaysia (v0.3).
- Ministry of Economy. (2025). Thirteenth
 Malaysian Plan 2026-2030 (RMK 13).
- 131. International Energy Agency (IEA). (2025).

 Blueprint for Action on Just and Inclusive
 Energy Transitions Global Commission
 on People-Centred Clean Energy Transitions: Designing for Fairness. Available
 from: https://www.iea.org/reports/
 blueprint-for-action-on-just-and-inclusive-energy-transitions
- 132. International Court of Justice (ICJ). (2025). Advisory Opinion - Obligations of States in respect of Climate Change. Available from: https://www.icj-cij.org/sites/default/files/case-related/187/187-20250723-adv-01-00-en.pdf
- 133. Climate Governance Malaysia (CGM). (2025). The ICJ's Climate Opinion: What it means for business. Available from: https:// www.cgmalaysia.com/post/the-icj-s-climate-opinion-what-it-means-for-business
- 134. The Edge. (2025). Regulations: What the ICJ's opinion on climate change means to Malaysia. Available from: https://theedgemalaysia.com/node/766662
- Laws of Sarawak. (2023). Chapter 85 Environments (Reduction of Greenhouse Gases

- Emission) Ordinance. Available from:
 https://lawnet.sarawak.gov.my/lawnet
 file/Ordinance/ORD_ENVIRONMENT%20
 (REDUCTION%20OF%20GREEN-HOUSE%20GASES%20EMISSION)%20
 ORD%202023%20LawNet%202024.pdf
- 136. Borneo Post Online. (2025). Sabah passes landmark Climate Change and Carbon Governance Enactment 2025. Available from: https://www.theborneopost.com/2025/07/08/sabah-passes-landmark-climate-change-and-carbon-governance-enactment-2025/
- 137. Joint Action Group for Gender Equality (JAG). (2017). A Policy Brief by the Joint Action Group for Gender Equality (JAG): Main elements of JAG's proposed Gender Equality Act for Malaysia. Available from: https://wao.org.my/wp-content/uploads/2018/11/JAG-Policy-Brief-May-2017-Main-Elements-of-GEA.pdf
- 138. The Edge Malaysia. (2025). National Adaptation Plan to be completed next year, says Nik Nazmi. Available from: https://theedgemalaysia.com/node/750466
- 139. Deutsche Gesellschaft fuer Internationale Zusammenarbeit (GIZ) GmbH. (2024). Strengthening capacities to increase resilience with the formulation of an inclusive National Adaptation Plan (MyNAP) for Malaysia. Available from: https://www.greenclimate.fund/document/strengthening-capacities-increase-resilience-formulation-inclusive-national-adaptation-plan
- 140. Klima Action Malaysia (KAMY). (2024). Rang Undang-Undang Perubahan Iklim Negara (RUUPIN) Feedback Submission. Available from: https://www.klimaactionmalaysia.org/ruupin
- 141. Kuala Lumpur City Hall (DBKL). (2021). Kuala Lumpur Climate Action Plan 2050. Available from: https://aipalync.org/storage/documents/main/kuala-lumpur-climate-action-plan-2025_1713867229.pdf
- 142. ThinkCity. The Penang Nature-Based Climate Adaptation Programme (PNBCAP). Available from: https://thinkcity.com.my/our-work/penang-nature-based-climate-adaptation-programme
- Selangor State Government. (2024).
 Selangor State Climate Change
 Policy. Available from: https://

- lestariselangor.com/wp-content/ uploads/2024/11/DASAR-PERUBAH-AN-IKLIM-NEGERI-SELANGOR.pdf
- 144. United Nations Framework Convention on Climate Change (UNFCCC). (2019). Enhanced Lima work programme on gender and its gender action plan (Decision 3/CP.25). Available from: <u>unfccc.int/sites/default/files/resource/cp2019_L03E.pdf</u>
- 145. UNFCCC. Chronology of Gender in the Intergovernmental Process. Available from: https://unfccc.int/topics/gender/workstreams/chronology-of-gender-in-the-intergovernmental-process
- 146. UNFCCC. National Gender & Climate ChangeFocalPoints. Available from: https:// unfccc.int/topics/gender/resources/listof-gender-focal-points-under-the-unfccc
- 147. UNWOMEN. (2024). COP29 decisions deliver gains for gender equality in climate action, but more remains to be done. Available from: https://www.unwomen.org/en/news-stories/news/2024/11/cop29-decisions-deliver-gains-for-gender-equality-in-climate-action-but-more-remains-to-be-done
- 148. Khazanah Research Institute (KRI).

 (2024). Climate Finance Controversy: No deal better than a bad deal?

 Available from: https://krinstitute.org/assets/contentMS/img/template/editor/20241212 KRI%20Views%2047

 Climate%20Finance%20Controversy.pdf
- 149. Mahadi A, Joshi D.(2023). 'Malaysia', in Fauziah Zen and Usha Iyer-Raniga (eds.), Financing Infrastructure for Climate-Change Adaptation in Developing East Asia. Available from: https://www.eria.org/ uploads/media/Research-Project-Report/ RPR-2023-05/08_Chapter-4-Malaysia.pdf
- 150. Bank Negara Malaysia, Joint Committee on Climate Change (JC3). (2021). Climate Change and Principle-based Taxonomy. Available from: https://www.bnm.gov.my/documents/20124/938039/Climate+Change+and+Principle-based+Taxonomy.pdf
- 151. Securities Commission Malaysia. (2022).

 Principles-based Sustainable and Responsible Investment Taxonomy for the Malaysian Capital Market. Available from: <a href="https://www.sc.com.my/api/documentms/download.ashx?id=a0ab5b0d-mentms/download.ashx.id=a0ab5b0d-mentms/download.ashx.id=a0ab5b0d-mentms/download.ashx.id=a0ab5b0d-mentms/download.ashx.id=a0ab5b0d-mentms/download.ashx.id=a0ab5b0d-mentms/download.ashx.id=a0ab5b0

<u>5 d 7 d - 4 c 6 6 - 8 6 3 8 - c a e c 9 2 c 2 0 9 c 1</u>

- 152. Green Climate Fund (GCF). Adaptation.

 Available from: https://www.green-climate.fund/theme/adaptation#:~:tex-t=The%20Readiness%20Programme%20provides%20each.and%20other%20adaptation%20planning%20processes
- 153. Green Climate Fund (GCF). (2017).

 Mainstreaming Gender in Green
 Climate Fund Projects. Available from:
 https://www.greenclimate.fund/sites/
 default/files/document/guidelines-gcftoolkit-mainstreaming-gender 0.pdf
- 154. Philippines Climate Change Commission.

 National Integrated Climate Change
 Database and Information Exchange
 System. Climate Change Expenditure
 Tagging. Available from: https://niccdies.
 climate.gov.ph/climate-finance/ccet
- 155. KPWKM. (2005). Gender
 Budgeting in Malaysia. .
- 156. Aliran Malaysia. (2022). Ministry of Finance, Gender Budget Group launch gender-responsive budgeting training programme. Available from: https://m.aliran.com/civil-society-voices/ministry-of-finance-gender-budget-group-launch-gender-responsive-budgeting-training-programme
- 157. Gender Budget Group. (2024). Gender Lens on Budget 2025: Memorandum to Ministry of Finance. Available from: https://hub.klimaactionmalaysia.org/
- 158. Penang Women's Development Corporation (PWDC). (2016). Gender
 Responsive and Participatory Budgeting
 Manual. Available from: https://pwdc.
 org.my/wp-content/uploads/2019/08/
 English-GRPB-Manual.pdf
- 159. The Star. (2023). A national gender responsive budget: Still a work in progress. Available from: https://www.thestar.com.my/lifestyle/family/2023/10/20/a-national-gender-responsive-budget-still-a-work-in-progress
- 160. Ministry of Finance Republic of Indonesia, Ministry of Women Empowerment and Child Protection of Republic of Indonesia, UNDP Indonesia. (2021). Gender Responsive Climate Budgeting in Indonesia Handbook.
 Available from: https://www.undp.

- org/indonesia/publications/gender-responsive-climate-budgeting-handbook
- 161. OXFAM International. (2018). A Guide to Gender-Responsive Budgeting. Available from: https://policy-practice.oxfam.org/resources/rough-guide-to-gender-responsive-budgeting-620429/
- 162. KPWKM. (2016). Maklumat Bantuan Bencana Alam - Bantuan Bencana Mengikut Jenis [Dataset]. Available from: https://archive.data.gov.my/data/en_US/dataset/maklumat-bantuan-bencana-alam
- 163. UNEP. (2023). State of Finance for Nature. Available from: https://www.unep.org/resources/state-finance-nature-2023
- 164. Asian Development Bank Institute. (2024). Gendered Impacts of Climate Change and Policy Levers to Address Them. Available from: www.adb.org/publications/gendered-impacts-of-climate-change-and-policy-levers-to-address-them
- 165. Women's Environment & Development Organization (WEDO). (2023).

 Who Decides: Women's Participation in the UN Climate Change Convention.

 Available from: https://wedo.org/wp-content/uploads/2023/06/WEDO-WomensParticipation_2023_EN.pdf
- 166. Heinrich Böll Stiftung Southeast Asia. (2021). Women's Public Testimonies in Malaysia Reveal Persisting Gaps in Gender Equality. Available from: https://th.boell.org/en/2021/12/15/ womens-testimonies-malaysia
- 167. Free Malaysia Today (FMT). (2023).
 PSM member faces charges over eviction of farmers near Ipoh. Available

- from: https://www.freemalaysiatoday.com/category/nation/2023/12/22/psm-member-faces-charges-over-eviction-of-farmers-near-ipoh
- 168. Mongabay. (2023). Sarawak Indigenous NGO squeezed by defamation case, silenced from reporting alleged logging. Available from: https://news.mongabay.com/2023/05/sarawak-indigenous-org-squeezed-by-defamation-case-silenced-from-reporting-alleged-logging/
- 169. The Vibes. (2022) Anti-logging activist faces RM1 mil suit for defaming Pahang govt. Available from: https://www.thevibes.com/articles/news/53946/anti-logging-activist-faces-rm1-mil-suit-for-defaming-pahang-govt
- 170. Api-Api Declaration at the Asia Parks Congress. (2022). Available from: https://portals.iucn.org/library/sites/library/files/resrecrepattach/Api-Api%20Declaration.pdf
- 171. Draft ASEAN Declaration on Environmental rights AER WG/3M/03/
 Add.1 (2024). ASEAN Environmental
 Rights Working Group. Available from:
 https://www.unescap.org/projects/
 asia-pacific-environmental-rights-observatory/sub-regions/southeast-asia
- 172. ASEAN Centre for Energy.(2022). ASEAN
 RE-Gender Roadmap: Roadmap on Accelerating ASEAN Renewable Energy
 Deployment through Gender-Responsive
 Energy Policy. Available from: https://asiapacific.unwomen.org/en/digital-library/publications/2022/08/asean-re-gender-roadmap
- 173. International Renewable Energy Agency (IRENA). (2019). Renewable Energy:A Gender Perspective. Available from:

- https://energiewende-global.com/ wp-content/uploads/2023/05/Renewable_ Energy_A_gender_perspective.pdf
- 174. Khazanah Research Institute (2023). Malaysia's Gender Gap in STEM Education and Employment. Available from: https://www.krinstitute.org/assets/contentMS/img/template/editor/2303%20
- 175. Ministry of Higher Education. (2025).

 Graduate Tracer Study System 2025.

 Available from: https://www.mohe.gov.my/en?view=category&id=29
- 176. Asia Foundation (2024). Striving Digitaly Understanding the Challenges of Malaysian
 Women Entrepreneurs. Available from:
 https://asiafoundation.org/wp-content/
 uploads/2024/08/Striving-Digitally_
 Understanding-the-Challenges-of-Malaysian-Women-Entrepreneurs_EN-1.pdf

Disclaimer:

The information provided in this report is general and has been prepared for information purposes only. The information contained herein is prepared from data and persons believed to be correct and reliable at the time of the issuance of this report. While every effort is made to ensure the information is accurate and upto-date, Klima Action Malaysia (KAMY) does not make any guarantee, representation or warranty, express or implied, as to the adequacy, accuracy, reliability, completeness or fairness of any such information contained in the report. Accordingly, neither KAMY nor any of its affiliates nor its related persons shall have any liability in any manner whatsoever for any consequences (including but not limited to any direct, indirect or consequential losses, loss of profits and damages) arising from reliance and usage of the information in the report. Any organisations and persons quoted or referenced in the report were not meant to represent nor endorse the said entities. Through the digital version of the report, you can link to other websites that are not under the control of KAMY. KAMY has no control over those sites' nature, content and availability. The inclusion of any links is for references for readers and does not necessarily imply a recommendation or endorsement of the views expressed within them.

About Klima Action Malaysia (KAMY)

Klima Action Malaysia (KAMY) is a women-led climate justice and feminist organisation addressing climate and environmental justice through PACED: Policy research and Advocacy, Coalition building, Empowerment, and Diplomacy. Guided by principles of intersectionality, eco-feminism, inclusivity, partnership, and human rights, we work across communities, movements, institutions, and decision-making spaces at national, regional, and international levels to drive systemic change towards just, inclusive, and rights-based climate governance. We envision a world where climate governance is rooted in justice, equity, and human rights, ensuring the well-being and thriving of all communities, particularly those disproportionately affected by environmental degradation and climate change. By decolonising knowledge creation and dismantling systemic oppression that perpetuates the climate crisis, we foster resilience and address the root causes of environmental injustice. Registered in 2020, KAMY collaborates with marginalised communities—including women, Indigenous Peoples, youth, informal workers, persons with disabilities, and labour groups—to actively participate in climate governance and decision-making processes. We advocate for policy and legal reform, including constitutional recognition of environmental rights. Our work concentrates on six synergistic key areas within our human rights-based approach: Indigenous Peoples, Gender and Women Empowerment, Business and Human Rights, Climate Communication, Just Energy Transition, and Legal Empowerment.

https://www.klimaactionmalaysia.org/



