Post-COP30 Report: COP30 Through A Youth Lens

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Malaysian Youth Delegation

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Disclaimer

The views and opinions expressed in this report are attributed to the authors of the Post-COP30 Report and may not necessarily reflect the official views of MYD and any other organisations mentioned. Any and all written errors are the authors' own.

Production of the Post-COP30 Report was a deeply collaborative effort among MYD members. Below is a breakdown of the people involved in this process:

- Part A and B of Negotiation Track I: Adaptation were prepared by *Jinghann Hong*.
- Part A and B of Negotiation Track II: Just Transition were prepared by *Firzanah Fadzlan*.
- Part C of both tracks reflects the outcomes of the focus group discussions (FGD), with input contributed by FGD participants. This was consolidated by *Jinghann Hong, Firzanah Fadzlan, Hanis Alwani,* and *Amelia Tan*.
- Report Editors are *Jinghann Hong* and *Hanis Alwani*.
- MYD's Post-COP30 Forum Project Manager: *Aisya Batrisyia Azley*.

We welcome any and all constructive feedback on this report. Kindly reach out to us at focalpoint@mydclimate.org for inquiries.

Glossary

Abbreviation/Acronym	Definition
AGN	African Group of Negotiators
AILAC	Alliance of Latin America and the Caribbean
IPCC AR6	Intergovernmental Panel on Climate Change Sixth Assessment Report
Solar ATAP	Solar Accelerated Transition Action Programme
BAM	Belém Action Mechanism
BTRs	Biennial Transparency Reports
CBAM	Carbon Border Adjustment Mechanism
CBDR-RC	Common but differentiated responsibilities and respective capabilities
CEED	Center for Energy, Ecology, and Development Philippines
CMA	Conference of the Parties serving as the meeting of the Parties to the Paris Agreement
COP	Conference of Parties
EFT	Ecological fiscal transfer
EU	European Union
FiT	Feed-in Tariffs
G77/China	Group of 77 and China
GGA	Global Goal on Adaptation
GHG	Greenhouse gas
GST	Global Stocktake
ILO	International Labour Organization
ITISUNDU	Pertubuhan Tradisi Kesusasteraan Kg Bundu Tuhan Ranau
JPS	Jabatan Pengairan dan Saliran (The Department of Irrigation and Drainage)
MEL	Monitoring, Evaluation and Learning
MOI	Means of Implementation
MyBIS	Malaysia Biodiversity Centre's Malaysia Biodiversity Information System

MYD	Malaysian Youth Delegation
NAPBHR	National Action Plan on Business and Human Rights
NAPs	National Adaptation Plans
NAWABS	National Water Balance System
NDCs	Nationally Determined Contributions
NEM	Net Energy Metering
NETR	National Energy Transition Roadmap
NRES	Ministry of Natural Resources and Environmental Sustainability Malaysia
PETRA	Ministry of Energy Transition and Water Transformation
SB	Subsidiary Bodies (June Climate Meetings)
SBTN	Science-Based Targets for Nature
TNFD	Taskforce on Nature-related Financial Disclosures
UAE-FGCR	United Arab Emirates Framework for Global Climate Resilience
UAE-JTWP	United Arab Emirate Just Transition Work Programme
UNFCCC	United Nations Framework Convention on Climate Change
UTMs	Unilateral trade measures
WWF-Malaysia	World Wide Fund Malaysia
YCC	Youth Climate Collaborative

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Introduction

About MYD

The Malaysian Youth Delegation (MYD), established in 2015, is a volunteer-based civil society organisation made up of young passionate Malaysians. MYD plays a dual role in representing Malaysia's youth climate movement and raising awareness of climate policies as an advocacy lever among Malaysians.

MYD Involvement at COP30

MYD has a record of following negotiations at multiple United Nations Framework Convention on Climate Change (UNFCCC) international conferences since MYD's establishment. As part of MYD's commitment to Malaysian youth representation in climate policy discussions, MYD successfully sent two representatives to the UNFCCC's 30th Conference of Parties (COP30), which took place from 10-21 November 2025 in Belém, state of Para, Brazil.

Below are the details of the delegates, together with what was tracked at COP30:

Delegate	**MYD Working Group**	**Past Contributions (to MYD)**	**Negotiation tracked at COP30**
Jinghann Hong	Adaptation	• Adaptation Working Group Coordinator 2024 and 2025 • June Climate Meetings (SB62) delegate	Adaptation (Primary focus on the Global Goal on Adaptation, secondary focus on National Adaptation Plans)
Firzanah Fadzlan	Adaptation	• Adaptation Working Group Member 2025 • Deputy Project Manager, Local Conferences of Youth Malaysia 2025	Just Transition (United Arab Emirates Just Transition Work Program)

Note: MYD outlined these tracks as priority areas through alignment with global discourse during COP30, as well as linkages to Malaysia's own climate agendas.

Complementary negotiation tracks attended by MYD representatives over the two weeks include but are not limited to Presidential Consultations (on Article 9.1 of the Paris Agreement on provision of finance, climate change related trade-restrictive unilateral measures, 1.5 °C ambition and implementation gap, Article 13 of the Paris Agreement on biennial transparency reports), and loss and damage. Delegates also attended the Group of 77 and China (G77/China) bloc coordination meetings to further understand Global North-South dynamics and priorities within the negotiations.

Aside from this, MYD had the privilege of formally participating in a Blue Zone side event during the penultimate days of the conference. MYD representatives participated in a panel session, 'Beyond Belém: Insights & implications for Malaysia's climate pathway' which was hosted at the Malaysia Pavilion on 20th November 2026. The session featured MYD delegate, Firzanah Fadzlan, alongside Puan Suhana Shamsudin from Ministry of Natural Resources and Environmental Sustainability (NRES) and Avril De Torres from Center for Energy, Ecology, and Development Philippines (CEED Philippines). The session reflected on the key outcomes from COP30 and sparked conversations on how international outcomes can be translated into national and regional priorities.

MYD was also honoured to take part in the YCC Creative Learning Trip, a day of connecting with global changemakers aboard a cruise along the Amazon River, while exploring Belém's indigenous lands and its heritage through arts. As a youth organization, MYD is privileged to have participated in this event with the support of the #CommitToOcean Scholarship, a content creation scholarship aimed at raising the need for ambitious ocean-climate action.

Apart from formal engagements, MYD also networked with other youth groups across Southeast Asia, the Global South and broader climate advocacy scene to gain wide-ranging perspectives on international youth climate advocacy, discussing potential areas of collaboration to strengthen MYD's ongoing work.

With that, MYD's Post-COP30 Report is split into two components:

- **Part A** of the report introduces the track that was followed by the delegates, which includes the general concept of the track and significant milestones from the previous conferences before COP30.

- **Part B** documents the progress of key negotiations tracked by the delegates at COP30 while observing views from different nations and blocs and thereafter providing their recommendations with relevance to Malaysia's climate policies.

- **Part C** of the report compiles the subsequent discussions hosted at MYD's Post-COP30 Forum, held on 7 February 2026, which brought together representatives from ministries, private sector, civil society and other public interest stakeholders to discuss recommendations for Malaysia's direction in the wake of COP30's outcomes.

The discussions were hosted according to the negotiation tracks MYD's delegates followed during the conference, namely adaptation and just transition. The forum's programme is included in the Appendix II of the report.

Ultimately, the report aims to highlight the role of international cooperation across all levels of stakeholders in shaping local action, and presents policy recommendations from a Malaysian youth perspective. By capturing these insights, MYD aims to strengthen local youth involvement in climate advocacy, negotiations, and policymaking.

Negotiation Track I: Adaptation

Part A: Introduction to adaptation

Understanding Adaptation

Adaptation has notably emerged as the second pillar of climate action, aimed at addressing and managing existing and future climate impacts; while mitigation action is undertaken to reduce greenhouse gas (GHG) emissions. According to the UNFCCC, adaptation is defined as "adjustments in ecological, social, or economic systems in response to actual or expected climatic stimuli and their effects". It refers to changes in processes, practices, and structures to moderate potential damages or benefits from climate change opportunities.[1] There is no 'one-size-fits-all-solution' for adaptation and it can take on many forms, depending on the unique context of a community, business, organization, country or region.

The IPCC AR6 (Intergovernmental Panel on Climate Change Sixth Assessment Report) Summary for Policymakers finds that adaptation planning and implementation have advanced across all regions and sectors.[2] Though delivering documented benefits, its effectiveness varies by context. Evidence shows that adaptation can reduce climate risks in specific sectors and locations, with effective options including improved crop cultivars, on-farm water management and storage, soil moisture conservation, irrigation, agroforestry, diversified farming systems, community-based adaptation, and sustainable land management approaches that work with natural processes (high confidence). Ecosystem-based adaptation measures—such as urban greening and the restoration of wetlands and upstream forests—have reduced flood risk and urban heat (high confidence). In addition, combined structural and non-structural measures, including levees and early warning systems, have reduced loss of life from inland flooding (medium confidence), while disaster risk management, climate services, early warning systems, and social safety nets offer broad, cross-sectoral adaptation benefits (high confidence).

Adaptation is deeply shaped by considerations of equity and the principle of common but differentiated responsibilities and respective capabilities (CBDR-RC), reflecting the unequal distribution of climate impacts and adaptive capacity across countries and communities. Those who have historically contributed the least to climate change—particularly developing countries and vulnerable populations—are also the ones who face the greatest adaptation needs and constraints. At the same time, the costs of adaptation are rising rapidly as climate impacts intensify, with adaptation finance needs in developing countries projected to reach with adaptation finance needs in developing countries projected to reach USD 215–387 billion

[1] UNFCCC: Adaptation and Resilience.
[2] The IPCC AR6 Summary for Policymakers.

annually by 2030.[3] This widening gap underscores the urgent need to scale up and accelerate adaptation finance to match the growing severity of climate impacts.

The Rio Earth Summit marked the first formal recognition of adaptation within global climate policy through the establishment of the UNFCCC, which acknowledged the need to adapt to the adverse effects of climate change alongside mitigation efforts. Subsequent decisions further operationalised adaptation, notably through the Marrakech Accords at COP7, which initiated funding mechanisms through the Adaptation Fund; the Bali Action Plan at COP13, which elevated adaptation to a central pillar of international climate cooperation; and the Cancun Adaptation Framework at COP16, which established the Adaptation Committee and set up the National Adaptation Plans process. Significantly, the Paris Agreement, adopted at COP21 in 2015, marked a milestone by placing adaptation on equal footing with mitigation through Article 7 establishing a global goal on adaptation.[4]

At COP30, MYD focused on two key adaptation-related agendas: (1) the Global Goal on Adaptation (GGA) and (2) National Adaptation Plans (NAPs). Under the Global Goal on Adaptation negotiation track, there were 3 mandates: first, to conclude the indicator work under the UAE-Belém Work Programme, second, to further the work on the Baku Adaptation Roadmap, and third, to continue consideration of transformational adaptation. This report will focus solely on the UAE-Belém Work Programme indicator work, later adopted as the Belém Adaptation Indicators. Related to both GGA and NAPs agenda items are the means of implementation, notably adaptation finance; this will be briefly covered within the National Adaptation Plans sub-section of this report.

[3] United Nations Environment Programme Adaptation Gap Report 2025.
[4] For a history of adaptation in the context of climate change, together with an overview of organisations and stakeholders advancing adaptation, see the Adaptation Committee's 2024 report '30 Years of Adaptation'.

Global Goal on Adaptation (GGA)

Article 7.1 of the Paris Agreement establishes the Global Goal on Adaptation (GGA), stating 'Parties hereby establish the global goal on adaptation of enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change, with a view to contributing to sustainable development and ensuring an adequate adaptation response in the context of the temperature goal referred to in Article 2.'[5]

At COP28, the United Arab Emirates Framework for Global Climate Resilience (UAE-FGCR) was adopted.[6] The framework establishes 11 targets for the GGA, comprising of 7 globally relevant thematic targets covering key systems and sectors for building resilience (water; food; health; ecosystems; infrastructure; poverty and livelihoods; and culture), and 4 dimensional targets (impact, vulnerability, and risk assessment; planning; implementation; and monitoring, evaluation, and learning), which together reflect the iterative nature of the adaptation cycle. This framework was finalised after extensive ministerial consultations, as negotiators avoided direct engagement over the co-facilitators' text due to political disagreements.

Parties then launched the UAE–Belém Work Programme on Indicators to support the GGA, with the mandate to identify and develop relevant indicators and potentially quantified elements for measuring progress towards the 11 GGA targets, as set out in paragraph 39 of the decision text.[7] The work programme was established as a two-year process, beginning with an initial compilation of 5,304 proposed indicators. After much technical scoping by experts, this list was substantially narrowed to 499 indicators which was then presented to Parties at a workshop at SB62 in June 2025. Building on this, the 3rd and 4th technical workshops later in the year produced a proposed shortlist of approximately 100 indicators.[8] The expectation at COP30 was then to adopt this list.

Throughout the two-year process, this author—who observed the SB62 negotiations in-person, and followed the third and fourth technical workshops online—observed that divergences among Parties emerged primarily around several interrelated issues. These included, but are not limited to:

- How the indicator work should be structured, and the appropriate balance between aggregated and disaggregated indicators;
- Whether and how to incorporate existing indicator-type work from frameworks such as the Sustainable Development Goals, the Sendai Framework for Disaster Risk Reduction, and the Convention on Biological Diversity;

[5] Article 7, Paris Agreement 2015.
[6] Paragraph 6, Decision 2/CMA.5.
[7] Paragraph 39, Decision 2/CMA.5.
[8] Potential indicators for the targets of the GGA framework proposed by experts.

- The total number of indicators, given concerns that an extensive set would impose disproportionate reporting burdens on resource-constrained countries;
- The potential inclusion of mitigation and loss and damage indicators;
- The availability of metadata and established methodologies for certain indicators;
- The treatment of transboundary and ecosystem-based indicators;
- The inclusion and framing of means of implementation (MOI) indicators, particularly finance, capacity-building, and technology transfer, which developing country Parties emphasised as essential to reflect their ability to effectively monitor, report on, and implement adaptation actions;
- (Particularly at SB62) The timeline of the technical work submission, as developing country Parties at SB62 advocated for an earlier timeline to allow national experts to test and trial indicators domestically.

Several of these issues, notably those related to MOI indicators, indicator burden, and methodological readiness, carried forward into negotiations leading up to and at COP30.

Part B: Adaptation at COP30

At COP30, negotiations under the agenda item on the GGA focused primarily on finalising and adopting a set of indicators intended to operationalise the UAE-FGCR. The central objective in the GGA negotiating room was to reach agreement on a list of indicators, which had been developed through prior technical work. Negotiations proceeded through a series of informal consultations, interspersed with smaller informal-informal consultations convened by the co-facilitators to address more technical or politically sensitive issues.

During the first week, discussions focused largely on whether the indicators should be adopted at COP30, if at all, given the limited time available for Parties to review them. As mentioned above, the list of 100 potential indicators had been circulated only shortly before COP30, leaving many delegations with insufficient time to consult national experts or relevant ministries. Several Parties therefore questioned the feasibility of immediate adoption. The African Group of Negotiators (AGN), in particular, suggested postponing formal adoption and instead establishing a further two-year period to refine and test the indicators. Other Parties and/or negotiating blocs disagreed, stating that adoption is one of the only ways to allow for robust methodological development and better alignment with national adaptation systems.

Towards the end of the first week—during what was described as the concluding phase of technical discussions—negotiations began to focus more directly on the indicators themselves. These discussions took place largely in informal-informal settings. Based on information shared through other channels, discussions in the informal-informal settings focused on clusters of indicators and particularly contentious proposals. By the end of the first week, sources indicated that while there were still divergences among Parties, negotiators reportedly came close to reaching agreement on a compromise text. The co-facilitators subsequently recommended that the SB Chairs request that the COP Presidency allow negotiations to continue into the second week of the conference, which traditionally focuses on ministerial-level political negotiations.

(Informal-informal consultations are restricted negotiating formats used within the UNFCCC process to facilitate frank exchanges among delegations. Participation is typically limited to negotiators from Party groups, and observers are generally not permitted. As a result, the author was not present for these exchanges and relied on third party insider sources.)

During the second week, further negotiations took place primarily in informal-informal consultation, which ultimately resulted in the circulation of a Presidency text on the GGA. This served as the basis for the final decision, and largely reflected compromises reached during these closed consultations.

However, when presented to Parties as the decision text for adoption during the closing plenary on 22 November, statements expressing concern were delivered by Colombia on

behalf of the Independent Alliance of Latin America and the Caribbean (AILAC), as well as by Panama, Uruguay, Paraguay, Argentina, the European Union (EU), and Canada, among others.[9] These delegations highlighted reservations regarding both the content of the indicators and the process through which they had been finalized. Despite these objections, the decision had already been formally gavelled through and adopted, and therefore remained in force.

The final decision adopted a consolidated list of 59 indicators, organised under thematic dimensions aligned with the targets of the UAE-FGCR.[10] These correspond to the thematic areas identified in *paragraph 9* of the annex to the decision:

- 9(a): Climate-induced water scarcity and resilience to water-related hazards
- 9(b): Climate-resilient food and agricultural production, and food supply and distribution systems
- 9(c): Climate-related health impacts
- 9(d): Climate impacts on ecosystems and biodiversity
- 9(e): Resilience of infrastructure and human settlements to climate change impacts
- 9(f): Reducing the adverse effects of climate change on poverty eradication and livelihoods
- 9(g): Protection of cultural heritage from climate-related risks

The decision also includes several safeguards intended to address concerns raised by Parties regarding the potential implications of the indicators. *Paragraph 7* of the decision text specifies that the indicators:

- are voluntary, non-prescriptive, non-punitive and facilitative;
- are global in nature and respect national sovereignty and national circumstances;
- are country-driven;
- should not create additional reporting burdens, particularly for developing country Parties;
- are not intended to serve as a basis for comparison among Parties; and

[9] If you are interested in watching the interventions, it is publicly available on YouTube. Fast forward to 1:18:50 for Panama's intervention. The rest will follow.
[10] Paragraph 6, Decision 12/CMA.7.

- must not be used as a condition for developing country Parties to access climate finance under the Convention or the Paris Agreement.

Paragraph 8 further clarifies that the Belém Adaptation Indicators do not create new financial obligations, commitments, liability, or compensation.

The decision also outlines several intended uses for the Belém Adaptation Indicators. *Paragraph 9* affirms that the indicators are intended to inform national approaches to tracking adaptation action. Paragraph 11 encourages Parties, as appropriate and at their discretion, to test the indicators, including through consultation with practitioners and other stakeholders.

Paragraph 12 invites Parties to integrate the GGA targets and the Belém Adaptation Indicators into relevant planning and reporting processes, including:

- Biennial Transparency Reports (BTRs)
- Adaptation Communications
- National Adaptation Plans (NAPs)
- Nationally Determined Contributions (NDCs)
- National Communications

Paragraph 13 further recalls that the indicators will serve as inputs to the Global Stocktake (GST), including through Party reporting.

The decision also establishes a substantial programme of follow-up work for the Subsidiary Bodies. *Paragraph 16* requests the UNFCCC secretariat to prepare a technical paper by 30 September 2026 addressing:

1. the use of the Belém Adaptation Indicators;
2. a mapping of existing synthesis processes related to adaptation information relevant to the GGA;
3. potential synergies and gaps across these processes; and
4. possible methodologies and tools for aggregating the indicators under the UAE-FGCR.

Paragraph 21 establishes the Belém–Addis Vision on Adaptation, a two-year policy alignment process aimed at developing guidance for operationalising the indicators. This process will draw on Party experiences with testing the indicators as well as the technical work mandated in the decision. *Paragraph 22* specifies that this work will be carried out jointly by the SB).

Paragraph 23 mandates further technical work on improving the metadata and methodologies associated with the indicators. This work will be considered at CMA.9 in November 2027 and may involve the establishment of a technical taskforce.

Paragraph 33 further mandates the development and agreement of terms of reference for the review of the UAE-FGCR during 2026–2027. Finally, *paragraph 32* establishes that the review of the framework will take place after the 2029 GST.

Part C: Post-COP30 Forum

The adaptation focus group discussion (FGD) at MYD's Post-COP30 Forum aimed to discuss the relevance of the GGA indicators to Malaysian adaptation context, while also reflecting on the current state in the country. The focus group discussion was structured in alignment with the GGA framework, where out of the the seven (7) thematic areas outlined in the GGA, three (3) thematic areas were selected based on their relevance to Malaysia's national adaptation priorities, as well as the current level of public awareness and communication surrounding the issues. The thematic discussions were also accompanied by three (3) dimensional targets of the GGA to bridge the gap between the thematic indicators and on-the-ground operationalisation.

Thematic areas discussed	Dimensional targets discussed
• Water & Infrastructure Resilience or Indicator 9(a) • Climate & Health or Indicator 9(c) • Ecosystem & Biodiversity or Indicator 9(d)	• Vulnerability, Impact, and Risk Assessment: Focused on understanding climate risks, vulnerability assessments, and establishing early warning systems. • Planning: Involves the formulation and implementation of NAPs, policy instruments, and mainstreaming adaptation into national strategies. • Implementation: Focused on executing adaptation actions, implementing policies, and reducing risk across sectors.

Water & Infrastructure Resilience - Translating Indicator 9(a) into the Malaysian context

3. The indicators for assessing progress under target 9(a), significantly reducing climate-induced water scarcity and enhancing climate resilience to water-related hazards towards a climate-resilient water supply, climate-resilient sanitation and access to safe and affordable potable water for all, are as follows:

(a) Level of water stress, including as an outcome of adaptation actions where applicable, accounting for relevant climate hazard intensity and/or frequency;

(b) Level of water use efficiency, including as an outcome of adaptation actions where applicable;

(c) Proportion of critical water and sanitation infrastructure systems that are resilient to climate-related hazards under different warming scenarios, as appropriate for regions and contexts, including as an outcome of adaptation actions where applicable;

(d) Proportion of the total area of basins and cryosphere for which a climate adaptation plan has been developed and implemented on the basis of different warming scenarios, as appropriate for regions and contexts where applicable;

(e) Proportion of the population using safe and affordable potable water services that are climate-resilient, including as an outcome of adaptation actions where applicable;

(f) Proportion of the population using sanitation services that are safely managed and climate-resilient, including as an outcome of adaptation actions where applicable;

(g) Extent of measures taken to improve and extend water, sanitation and hygiene services to populations disproportionately affected by climate change and to vulnerable groups relative to needs;

(h) Proportion of bodies of water with good ambient water quality for drinking water supply, including as an outcome of adaptation actions where applicable;

(i) Number of people per 100,000 supported in planned relocation processes in response to water-related hazards, where adaptation measures were taken to ensure safety of populations.

Decision 12/CMA.7

Current State of Infrastructure-Related Adaptation in Malaysia

Several structural and practical challenges were identified in translating *Indicator 9(a): Climate-induced water scarcity and resilience to water-related hazards* into effective planning and implementation in Malaysia. The discussion first examined the current landscape of water-related infrastructure and risk monitoring systems in Malaysia.

Government agencies, including the Ministry of Energy Transition and Water Transformation (PETRA), have invested significantly in flood mitigation measures and climate-related infrastructure. Efforts are also being made to involve private sector actors in adaptation initiatives, including the development of multi-functional infrastructure systems, such as reservoirs that support both water supply management and flood control.

Malaysia has also developed several monitoring and forecasting systems that contribute to improved climate risk assessments. The Department of Irrigation and Drainage (JPS) operates a live flood monitoring system that provides real-time alerts on flood risk levels. In addition, the National Water Balance System (NAWABS) supports drought forecasting and water resource management. Together, these systems generate valuable data that could support the implementation and tracking of GGA indicators.

Infrastructure-Related Challenges

However, participants noted several limitations in the current infrastructure approach. Infrastructure systems in Malaysia are typically designed based on historical climate data and protection standards reflecting conditions at the time of construction. Climate change, however, introduces progressive and long-term shifts in climate patterns. Given that major infrastructure systems often operate on life cycles of 30–50 years, participants highlighted the need to incorporate forward-looking climate projections into engineering design and infrastructure planning.

Another key challenge concerns the long-term maintenance of adaptation infrastructure. Climate resilience depends not only on constructing protective systems but also on ensuring that these systems are properly maintained over time. In practice, maintenance budgets may be constrained, particularly for infrastructure such as pumps, drainage systems, or flood barriers that are only activated during extreme events. Government procurement processes may also incentivise contractors to minimise costs, which can lead to limited allocations for long-term maintenance and repair.

Participants also discussed the trade-offs between grey and green infrastructure. Adaptation planning often requires balancing conventional grey infrastructure—such as drainage systems and flood barriers—with green or nature-based solutions. Grey infrastructure may involve higher upfront capital costs but can offer more predictable levels of protection. Green infrastructure, while sometimes requiring lower initial investment, often entails higher long-term

maintenance and stewardship requirements. Determining the most appropriate approach depends on several factors, including geographic conditions, existing infrastructure systems, and the likelihood and severity of climate hazards.

Other challenges

Beyond infrastructure considerations, participants also highlighted several broader challenges related to risk assessment and governance.

First, there remains an incomplete assessment of cascading climate impacts. Current risk assessments often focus primarily on areas directly affected by hazards, such as locations physically inundated during floods. However, disruptions to critical infrastructure—such as water treatment plants or power generation facilities—can produce cascading impacts that affect communities far beyond the immediate disaster zone. These systemic risks are not always captured within existing planning frameworks.

Second, participants noted that certain climate hazards remain insufficiently recognised in current risk assessments. In particular, high humidity combined with elevated temperatures can create dangerous wet-bulb temperature conditions, in which the human body loses its ability to cool itself effectively. Although these conditions are often associated with coastal environments, they may occur in various parts of the country. Despite this, humidity is not widely incorporated as a key risk factor in climate vulnerability assessments or infrastructure planning.

Governance and jurisdictional issues also present challenges. Adaptation measures frequently involve overlapping responsibilities across federal, state, and local authorities. For example, flood management in urban areas such as Kuala Lumpur and surrounding parts of Selangor may involve multiple administrative jurisdictions. Land ownership considerations may further complicate the implementation of adaptation measures. While formal jurisdictional boundaries may be clearly defined, participants noted that practical challenges often arise from questions of institutional capacity, authority, and resource allocation.

Finally, participants highlighted limited community engagement with environmental systems, particularly river ecosystems. Urbanisation and reduced exposure to natural environments may contribute to weaker community stewardship of environmental resources, including river systems that play an important role in flood management and ecosystem resilience.

Potential solutions and opportunities

Despite these challenges, participants also identified several opportunities and existing initiatives that could support the operationalisation of GGA indicators in Malaysia, as well as resilience to water-related vulnerabilities as a whole.

One priority is strengthening forward-looking infrastructure planning. Participants emphasised the importance of incorporating long-term climate projections into infrastructure design standards. Greater collaboration between climate scientists, engineers, and policymakers could help ensure that infrastructure systems are designed to withstand projected climate conditions over their operational lifetimes.

Related to this is the need to encourage integrated infrastructure strategies. Rather than viewing grey and green infrastructure as mutually exclusive options, participants suggested adopting approaches that combine both types of solutions where appropriate. Such integrated strategies could improve overall resilience while balancing capital costs and long-term maintenance requirements.

Another priority is enhancing governance coordination. Strengthening coordination between federal, state, and local authorities could help address institutional challenges associated with adaptation implementation. Clearer allocation of responsibilities, together with adequate funding and institutional capacity, would improve the ability of agencies to implement adaptation measures effectively.

Participants also emphasised the importance of strengthening community stewardship of rivers and ecosystems. Rivers have historically played a central role in human settlement and cultural identity. Encouraging community participation in river stewardship through environmental education programmes, volunteer initiatives, and partnerships with local organisations could support both environmental management and climate resilience.

Finally, participants highlighted the need to promote shared responsibility for environmental protection. Encouraging individuals and communities to take greater ownership of environmental stewardship could complement government-led adaptation initiatives and contribute to broader societal resilience to climate change.

5. The indicators for assessing progress under target 9(c), attaining resilience against climate change related health impacts, promoting climate-resilient health services and significantly reducing climate-related morbidity and mortality, particularly in the most vulnerable communities, are as follows:

(a) Rate of mortality associated with climate impacts compared with counterfactual rates, including as an outcome of adaptation actions or coverage of early warning systems where applicable;

(b) Level of incidence of climate-sensitive infectious diseases, including as an outcome of adaptation actions where applicable;

(c) Rate of morbidity associated with climate impacts compared with counterfactual rates, including as an outcome of adaptation actions where applicable;

(d) Proportion of the population vulnerable to climate change with access to mental health and psychosocial support;

(e) Extent to which climate health services have remained at full capacity during and following climate-related events relative to pre-event service capacity;

(f) Percentage of health facilities that are resilient to climate-related hazards under different warming scenarios, as appropriate for regions and contexts, including as an outcome of adaptation actions where applicable;

(g) Coverage of essential health services that are supported by adaptation measures to ensure continuity during and following climate-related events;

(h) Proportion of health practitioners who have received capacity-building support pertaining to climate change adaptation and health.

Decision 12/CMA.7

Data-related challenges

As for the current state of play on health-related data, government agencies have invested significantly in collecting and maintaining data within government systems. However, participants who have interacted with the system note that it is siloed across agencies, restricting cross-sectoral analysis and reducing its practical utility. Non-state actors have also been proactive in undertaking independent data collection. Given challenges in data sharing and interoperability across both state and non-state actors, combined with the absence of integrated platforms and clear protocols for data exchange, this fragmentation makes it difficult to capture intersecting and cascading risks, where climate impacts interact with broader social and economic factors.

Another key issue is the limited availability and accessibility of relevant datasets, particularly in relation to climate–health linkages such as heat-related morbidities and mental health hospitalisation. (For instance, evidence from other contexts, such as India, suggests a correlation between rising temperatures and increased incidences of violence—an emerging risk that could also manifest in Malaysia but remains underexplored due to data gaps.) This reflects a broader epistemological gap in determining what data should be monitored and prioritised. Effective adaptation requires multi-dimensional datasets encompassing environmental, health, and socio-economic variables; however, there is currently no unified framework guiding these efforts.

The discussion also highlighted challenges in the translation of global climate metrics into locally meaningful data. Concepts such as the 1.5°C threshold are often communicated in technical terms, with limited contextualisation for local stakeholders. This creates barriers not only in understanding and applying global indicators within national and subnational decision-making processes, but also in determining, standardising, and operationalising what data should be consistently collected, monitored, and reported across contexts.

Other challenges

Beyond data constraints, a range of structural, institutional, and socio-cultural challenges continue to hinder the effective translation and implementation of GGA indicators in Malaysia.

A key issue lies in the limited capacity to assess and address diverse vulnerabilities across populations. Malaysia's demographic landscape is highly heterogeneous, yet existing tools and frameworks are not sufficiently equipped to capture differences across socio-economic groups and marginalised communities. While some attention has been given to gender considerations, broader equity issues such as access to resources, representation, and differentiated impacts are not consistently embedded in decision-making processes. Additionally, at the implementation level, communication barriers present an additional challenge where conveying

climate risks and adaptation strategies across multiple languages, cultural contexts, and levels of understanding remains difficult. This creates gaps in preparedness and risks leaving the most vulnerable groups inadequately supported.

Participants also highlighted that institutional responses are not evolving at the pace required to match the increasing intensity and frequency of climate impacts. In some cases, repeated exposure to climate events has led to normalisation and complacency, reducing the urgency to adopt adaptive measures. (For example, in Kelantan, recurring flood events may have shaped public perception in ways that may discourage proactive adaptation.) This is further compounded by a broader perception that Malaysia is less severely affected by climate change compared to other countries, contributing to psychological distancing from the issue.

Regulatory and governance gaps further constrain effective action. There is a lack of evidence-based regulations that translate climate risks into enforceable standards, such as the use of wet-bulb temperature thresholds for heat stress or stronger occupational health protections for outdoor workers. At the same time, cross-sector integration remains limited, particularly between climate, health, and urban planning sectors, resulting in fragmented and less effective responses. A critical gap also exists in the linkage between top-down and bottom-up approaches: while national policies and local governance structures are both important, there is insufficient alignment between high-level decision-making and community-level realities.

Potential solutions and opportunities

Despite these challenges, participants identified several opportunities and existing initiatives that could support the operationalisation of GGA indicators in Malaysia, as well as strengthen resilience to climate-related health vulnerabilities more broadly. These solutions cut across all phases of the adaptation cycle, from assessment to planning and implementation.

On the data front, there is a need to establish clear protocols and platforms for data sharing and governance across both state and non-state actors to reduce fragmentation and enable more effective cross-sectoral analysis. In parallel, improving data categorisation and standardisation (including the development of common frameworks for what data should be collected, how it is measured, and how it is reported) would support more consistent monitoring and facilitate alignment with GGA indicators. Participants also emphasised the importance of humanising data, whereby technical climate information is translated into locally relevant narratives, case studies, and actionable insights to improve understanding among policymakers, practitioners, and communities.

A central theme across the discussion was the importance of end-to-end and systems-based approaches to adaptation. Participants underscored the need to analyse issues holistically by

working backwards from desired outcomes to identify root causes, align stakeholders, and design coherent interventions. This is particularly important given that different sectors and agencies often perceive and frame climate risks differently, resulting in inconsistencies in responses. Addressing this requires efforts to identify, align, and standardise how climate risks are defined and prioritised across sectors and agencies. Structured, evidence-based tools (such as risk registers and vulnerability assessment frameworks) can support the establishment of shared understandings and more coordinated approaches to planning.

Participants also emphasised co-creation, a central principle of effective adaptation which ensures that communities are actively involved in shaping interventions. In this context, participants emphasised that solutions should not be driven primarily by funders' priorities or top-down agendas, but instead grounded in community needs and lived experiences. Non-state actors have a critical role to play in facilitating this shift towards more inclusive and participatory processes: researchers acting as neutral intermediaries to bridge knowledge gaps and reconcile differing perspectives across stakeholders; civil society organisations and non-governmental organisations that are on the ground to facilitate knowledge transfer and help scale effective practices; and youth, women, and Indigenous Peoples engaging through structured platforms such as advisory and decision-making mechanisms to co-design interventions, and ensure that adaptation measures reflect communities' priorities and lived experiences.

Ecosystem and Biodiversity - Translating Indicator 9(d) into the Malaysian context

6. The indicators for assessing progress under target 9(d), reducing *climate impacts on ecosystems and biodiversity*, and accelerating the use of ecosystem-based adaptation and nature-based solutions, including through their management, enhancement, restoration and conservation and the protection of terrestrial, inland water, mountain, marine and coastal ecosystems, are as follows:

(a) Proportion of climate-resilient ecosystems that are providing services to populations that depend on them;

(b) Proportion of ecosystem areas with adaptation actions implemented towards enhanced resilience and services;

(c) Level of resilience of ecosystems, including as an outcome of adaptation actions where applicable;

(d) Level of threat status of ecosystems, including as an outcome of adaptation actions where applicable;

(e) Level of threat status of species, including as an outcome of adaptation actions where applicable;

(f) Level of adaptive capacity, resilience and vulnerability to climate impacts resulting from the implementation of ecosystem-based adaptation actions and nature-based solutions according to information reported by Parties, as appropriate.

Decision 12/CMA.7

Challenges identified

Participants highlighted a significant gap in data availability and analytical tools to assess biodiversity and ecosystem-related risks, which presents a major challenge in operationalising Indicator 9(d)(a): *the proportion of climate-resilient ecosystems that continue to provide services to dependent populations*. In Malaysia, this challenge is particularly pronounced due to its status as a megadiverse country with a wide range of ecosystems, including forests, marine areas, coral reefs, and peatlands. Each ecosystem requires distinct indicators, methodologies, and monitoring systems, resulting in a highly complex and resource-intensive data landscape that must be continuously managed and maintained. At a systemic level, the failure to address these foundational data gaps could trigger cascading challenges across other adaptation indicators.

The lack of standardised definitions for certain ecosystems further exacerbates the issue. For instance, in Malaysia, the legal classification and naming of gazetted forests and conservation areas in the country are bound by the different laws in force in the Peninsular states, Sabah and Sarawak. Federal classification of forested and conservation areas therefore are only administrative and not legal terms. As a result, different parties may end up utilising different terms in referring to the same unit of information.[11] Differing definitions of forest cover, combined with multiple custodians across agencies, can lead to overlapping efforts and inefficient resource mobilisation. The group also highlighted a concern on the lack of attention to address the threat of invasive species, which may pose a challenge for indicator 9(d)(e): *level of threat status of species, including as an outcome of adaptation actions where applicable*.

Clashing with economic priorities between state and federal government also posed challenges in the planning and implementation of adaptation for ecosystem and biodiversity. Malaysia's rainforest faced many threats such as mineral extraction, population pressure, logging, energy development, commercial farming and road-building. In many cases, local communities and experts are not adequately consulted in the development of projects, which are often granted to developers by the government. While Environmental Impact Assessments (EIA) are mandated for scheduled projects, the current processes are perceived as outdated and difficult to challenge effectively. Furthermore, the legal process may be more complicated once areas are gazetted. This can also further exacerbate the gap of terminology understanding between the ancestral and modern language of species identification which might risk the gradual loss of ancestral and indigenous knowledge over time.

Potential solutions and opportunities

Despite these challenges, participants identified several opportunities and ongoing initiatives that could support the operationalisation of indicators under the Global Goal on Adaptation (GGA) in Malaysia, while also strengthening resilience to ecosystem-related vulnerabilities more broadly.

One recommendation was to strengthen national data platforms on ecosystems and biodiversity by systematically integrating climate risk information. Existing platforms such as the Malaysia Biodiversity Centre's Malaysia Biodiversity Information System (MyBIS) provide an important foundation, offering publicly accessible data on species distribution, protected areas, and ecosystem types.[12] However, these datasets remain largely static and are not sufficiently linked to climate variables or forward-looking risk assessments. Given that climate risks vary significantly across geographical and ecological contexts, there is currently limited insight into how specific ecosystems are being impacted by changing climate conditions. This limits the

[11] Legal classes of forests and conservation areas in Malaysia, Sahabat Alam Malaysia.
[12] MyBIS.

ability of policymakers and practitioners to assess ecosystem resilience and prioritise adaptation actions effectively.

Participants also emphasised that improving the accessibility of existing data could significantly enhance the comprehensiveness of biodiversity and ecosystem monitoring. Effective mapping of ecosystem health requires not only species-level monitoring, but also the integration of complementary datasets, particularly meteorological and climate data that reflect the broader environmental conditions in which these ecosystems exist. While Malaysia may not necessarily lack such data, access remains uneven across stakeholders. Promising approaches already exist. For instance, Reef Check Malaysia has developed an interactive mapping platform that tracks the health status of live coral cover across Malaysia, providing near-real-time, spatially explicit insights into ecosystem conditions. Such models demonstrate the value of integrating ecological monitoring with geospatial and climate data.[13]

Another recommendation raised from the discussion was to also scale up public and private financing instruments to support projects that prioritise both environmental and social integrity. Financial institutions (FIs) can play a pivotal role by offering more attractive rates and tailored financing options for initiatives that adhere to robust environmental, social, and governance criteria. To ensure credibility and impact, projects should be evaluated against certified frameworks or standards, such as Taskforce on Nature-related Financial Disclosures (TNFD), which builds on principles from the Science-Based Targets for Nature (SBTN) or standards such as Verra or Gold Standard, which integrate social impact considerations for communities affected by the projects. Financial mechanisms such as the ecological fiscal transfer (EFT) should also be strengthened to ensure integrity and accountability. By linking finance to certified frameworks and standards, developers are incentivised to mainstream environmental and social indicators into their operations. This approach strengthens accountability, promotes sustainable project design, and enhances the resilience of ecosystems and communities alike.

To ensure lasting and sustainable impact, projects and interventions should prioritise meaningful engagement with affected stakeholders from the planning stage, supported by a robust Monitoring, Evaluation and Learning (MEL) framework to track effectiveness over time. The participants also suggested that leveraging on traditional, ancestral and indigenous knowledge can also be useful to ensure knowledge transfer about species and ecosystem conservation. Support for organisations that are focusing on such work should be strengthen, For example, Pertubuhan Tradisi Kesusasteraan Kg Bundu Tuhan Ranau (ITISUNDU) addresses the urgent need to restore linguistic and ecological continuity by creating inclusive, community-led spaces for knowledge sharing between elders, women, youth, and children ensuring the long-term sustainability of both culture and environment.[14]

[13] Interactive map, Reef Check.
[14] For example, the Pertubuhan Tradisi Kesusasteraan Kg Bundu Tuhan Ranau (ITISUNDU).

Lastly, mainstreaming biodiversity into the national education system can foster environmental literacy and cultivate a culture of stewardship from an early age. The syllabus may highlight ecosystem services, local case studies, and the role of ecosystems in climate resilience. The complexity of the topic should vary according to different levels of education, especially for higher level education, the introduction of different career pathways in biodiversity and conservation fields must be given priority to instill interests in the younger generations. While educational institutions may fill the theoretical knowledge gap, collaboration with industries or any conservation organisations could give a practical exposure for those interested in exploring their interests and how they can best contribute to the conservation efforts in Malaysia.

Negotiation Track II: Just Transition

Part A: Introduction to Just Transition

Understanding Just Transition

The warming of the earth caused by GHG emissions comes at the cost of environmental degradation, economic instability, and the livelihoods of communities worldwide. Under the UNFCCC processes, the Paris Agreement recognises that climate change poses an urgent and potentially irreversible threat to human societies and the planet,[15] thereby calling for a limitation to global temperature rise to avoid severe impacts on food security, ecosystems, and sustainable development. The goal is to limit the increase in average temperature to well below 2°C above pre-industrial levels, while pursuing efforts to limit it to 1.5°C. To achieve this ambitious goal, a shift towards a low-carbon economy is needed to reduce GHG and slow down global warming. In setting out this objective, the Agreement is also followed by an acknowledgement that climate action must take place by taking into account social equity and development needs in transitioning towards a low-carbon economy. A Just Transition is thus a shift that ensures the burdens and benefits of decarbonisation are distributed fairly.

To understand the concept of Just Transition, it is necessary to first understand the broader context of climate *in*justice. Historically, the economic development of many industrialised countries (mainly the Global North) was built upon the extensive use of fossil fuels, generating the majority of current global emissions. However, the costs (i.e., impacts) associated with climate change are not necessarily borne equally. In economic terms, this reflects the problem of climate externalities, whereby the environmental and social costs of fossil fuel consumption are not paid by the polluters themselves but are instead imposed on others. In many cases, the communities and countries most affected by climate impacts are those that contributed the least to the problem. In other words, the price of fossil fuel-driven development is now being experienced disproportionately by vulnerable populations.[16] As such, developing countries are oftentimes bearing the brunt of climate impacts despite having historically emitted far fewer GHG. At the same time, developed countries generally possess greater financial means and technological capacity to adapt to climate change better. This imbalance creates both a moral and economic foundation for the principle of Just Transition.

One expression of fairness within the international climate regime is the principle of CBDR-RC, first articulated in Article 3, Paragraph 1 of the United Nations Framework on Climate Change.[17] Historically, this principle has been guiding mitigation efforts, acknowledging that developed countries, who are primarily responsible for historical emissions, are expected to take lead in

[15] Paris Agreement 2015.
[16] Stern Review: The Economics of Climate Change.
[17] United Nations Framework Convention on Climate Change 1992.

reducing emissions, while developing countries may contribute according to their own capacities. Applying the CBDR-RC to just transition, decarbonisation efforts should encompass those that reduce inequalities *within* (e.g., impacts on workers and communities) and *between* (e.g., access to finance and technology) countries, while acknowledging their differing capacities and responsibilities to act.[18]

Evolution within the UNFCCC

Since the establishment of the UNFCCC in 1992, it has primarily focused on addressing climate change through mitigation and adaptation, driven by the needs to respond to the anthropogenic GHG emissions that arise from global industrialisation. Under the Kyoto Protocol, climate action primarily prioritised cost-effective emissions reductions, with limited attention to the social consequences of mitigation policies.[19] In practice, the Paris Agreement operationalises climate ambition primarily through NDCs, which require all Parties to communicate and update their climate action plans every five years, reflecting their progress and highest possible ambition. While NDCs are traditionally mitigation-focused, they are seen to be increasingly incorporating social dimensions such as employment impacts, workforce reskilling, and social safeguards.[20] Complementary mechanisms, including Long-Term Low-Emission Development Strategies (LT-LEDS), climate finance, capacity-building initiatives, and technology transfer arrangements, further enable Parties to gradually integrate Just Transition principles into national development planning.

While early climate action was centred around emissions reduction targets and technological solutions, it became increasingly evident that climate policies are interrelated with social, economic, and labour-related impacts, particularly for workers, communities, and vulnerable groups dependent on high-emitting sectors. Growing advocacy from labour movements, civil society organisations, and developing countries increasingly highlighted the need for fairness and equity in climate policymaking.[21] These voices argued that climate action should not only reduce emissions but also ensure that the transition towards a low-carbon economy does not disproportionately harm workers, communities, or developing economies in the process. This recognition laid the foundation for the emergence of Just Transition principles within the UNFCCC regime.

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[18] 5 Essential Principles of the Just Transition Work Programme for Climate Action.
[19] Just Transition as an Evolving Concept in International Climate Law.
[20] Expanding avenues to promote decent work: New ILO report shows growing integration of just transition in environmental plans.
[21] What is just transition and why is it important?

While the concept first entered formal UNFCCC discussions during COP16 in Cancún in 2010, it was later recognised in the preamble of the Paris Agreement at COP21 in 2015, which recognises "the imperatives of a just transition of the workforce and the creation of decent work and quality jobs in accordance with nationally defined development priorities." This acknowledgment establishes Just Transition as a guiding principle rather than a legally binding obligation, positioning social justice alongside environmental integrity within the global response to climate change. The preamble also emphasises that mitigation efforts must consider social equity and development needs, reinforcing the idea that the costs and benefits of decarbonisation should be distributed fairly so that no one is left behind in the transition towards a greener economy.

More recently, at COP27 in Sharm el-Sheikh in 2022, Parties agreed to establish the Sharm el-Sheikh Implementation Plan, which established a work programme on just transition known as the Just Transition Work Programme (JTWP), which was subsequently operationalised and advanced under the United Arab Emirate Just Transition Work Programme (UAE-JTWP) adopted at COP28 in Dubai in 2023. The JTWP consists of two mandated annual global dialogues and one high level ministerial roundtable to be held annually, and is aimed at providing a structured platform for dialogue, knowledge-sharing, and policy guidance at both national and international level in order to best determine the pathways of reducing emission in an equitable manner.

The dialogues are conducted in a manner that is inclusive of Parties, Observers, and other non-Party stakeholders, allowing them to submit views on the work to be undertaken under this programme. In respect of the outputs, the Chairs of the Subsidiary Bodies then takes into consideration these submissions and decide on the topics to be discussed in each dialogues. This series of engagements enables insights from each session to accumulate and inform formal negotiations under the United Nations Framework Convention on Climate Change.

The dialogues under the JTWP that have since convened are as follows:

Dialogue	Date	Location	Topic
1	June 2024	Bonn, Germany	Just Transition pathways to achieving the goals of the Paris Agreement through NDCs, NAPs, and LT-LEDs
2	October 2024	Sharm el-Sheikh, Egypt	Ensuring support for people-centric and equitable just transition pathways, with a focus on whole-of-society approaches and the workforce
3	May 2025	Panama City, Panama	Approaches to enhancing adaptation and climate resilience in the context of just transitions

4	September 2025	Addis Ababa, Ethiopia	Just energy transition pathways and holistic approaches, including socioeconomic, workforce, and social protection dimensions based on nationally defined development priorities.
5	April 2026	Yeosu, Republic of Korea	Just transition pathways for holistic approaches to food security, including with a focus on agriculture and oceans

Persistent gaps and risks

Despite these developments, international assessments highlight persistent gaps in the integration of Just Transition into climate action. Reports from the International Labour Organization (ILO) and UNFCCC synthesis analyses indicate that while many countries reference social considerations in climate plans, concrete implementation measures such as worker protection frameworks, institutionalised social dialogue, and dedicated financing mechanisms remain limited, particularly in developing countries.[22]

IPCC AR6 states that current climate commitments fall short not only in terms of emissions reductions but also in preparing communities for the socio-economic disruptions associated with a 1.5°C-aligned transition[23]. Rapid decarbonisation policies can lead to stranded assets, economic disruption, and financial instability, particularly if policy shifts occur abruptly. This may result in sudden job losses, regional economic decline, and widening socio-economic inequalities. These risks highlight the importance of integrating social considerations into climate policies in order to maintain both climate ambition and social stability.

These gaps also carry important policy and equity implications within the international climate regime. Developed countries, having contributed disproportionately to historical emissions, are expected to lead in providing financial resources, technology transfer, and capacity-building support to enable Just Transition pathways in developing countries.

Within this global context, the next section examines Malaysia's approach to Just Transition in relation to its national development priorities, labour market structure, and energy transition strategies. While global climate targets require countries to limit warming to 1.5°C, the current trajectories suggest that we are not on track to achieve this goal. For Malaysia, this creates a looming pressure to accelerate decarbonisation efforts. However, Malaysia's economy remains significantly linked to fossil fuels, with important contributions towards its GDP, employment,

[22] JUST TRANSITIONS in national climate frameworks and climate policies.
[23] Chapter 17, AR6, WG3, IPCC.

and public revenue. As a result, rapid decarbonisation without appropriate safeguards could lead to job losses, reduced revenues, and significant skills mismatches within the labour market. Addressing these challenges requires carefully designed Just Transition policies that balance climate ambition with economic stability and social protection.

Part B: Just Transition at COP30

During the negotiations leading up to COP30, many Parties expressed concerns that the JTWP remained practically dialogue-based, with limited mechanisms for translating discussions into practical support for countries implementing just transition policies. At COP29, negotiations failed to produce a substantive outcome due to disagreements over how "just transition" should be defined and operationalised within the UNFCCC framework. Given that the work programme had only been established approximately one and a half years earlier, its operational modalities remained relatively basic, consisting primarily of knowledge-sharing dialogues and voluntary submissions. As a result, many developing countries argued that the programme lacked the institutional architecture necessary to deliver meaningful support for just transition implementation. This debate became a central issue at COP30, where Parties sought to strengthen the institutional framework of the work programme.

Calls for a Just Transition Mechanism

A key proposal during the negotiations came from the G77/China, a coalition representing more than 130 developing countries across Asia, Africa, and Latin America. The group called for the establishment of a Just Transition Mechanism, intended to provide more structured and comprehensive support for countries pursuing equitable transition pathways. The proposed mechanism aimed to strengthen coordination and facilitate the delivery of MOI including climate finance, capacity-building, and technology transfer. Developing countries argued that without these elements, the JTWP risked becoming a platform for dialogue without tangible outcomes. In their view, effective implementation requires institutional support structures capable of addressing the economic and social disruptions associated with decarbonisation.

However, several developed countries, including but not limited to the EU, Australia, United Kingdom and others questioned the added value of establishing a new mechanism. Their position was that creating a new institutional body would require additional financing and could take years to operationalise. Instead, many emphasised strengthening, utilising, or avoiding duplication with existing arrangements and processes under the UNFCCC and the Paris Agreement, while also drawing on broader international cooperation frameworks. This point of divergence reflects the broader structural tensions within the climate negotiations. Developing countries, representing more than one hundred Parties with diverse economic circumstances and capacities, emphasised the need for stronger institutional support to ensure that transition policies do not exacerbate existing inequalities. For many of these countries, a

formal mechanism was viewed as essential for enabling equitable transitions that account for differing national contexts and development challenges.

Expanding the Scope of Just Transition

Beyond institutional arrangements, negotiations at COP30 also sought to expand and strengthen the scope of the Just Transition agenda. Several areas received stronger emphasis compared to earlier discussions, including:

- Human rights protections within climate policies
- Social dialogue and worker participation in transition planning
- Worker protection frameworks and labour safeguards
- Gender equality and youth inclusion
- Stronger linkages between just transition, adaptation, and climate resilience

In addition, the sectoral scope of the work programme was expanded beyond its initial focus on energy and workforce considerations to include industrial transformation, land-use transitions, and ecosystem protection, reflecting a broader understanding of the structural changes required for low-carbon development.

Contentious Issues: Trade Measures and Equity Concerns

Negotiations also revealed growing tensions around international trade measures related to climate policy. Several developing countries criticised the EU's Carbon Border Adjustment Mechanism (CBAM) and other unilateral trade measures (UTMs), arguing that such policies impose additional economic burdens on developing economies.

These measures effectively introduce carbon tariffs on imports, which many developing countries argue could hinder economic development and shift the financial burden of climate mitigation onto the Global South. Critics contend that such policies may conflict with the principle of CBDR-RC, which recognises that countries with higher historical emissions should take the lead in addressing climate change.

Concerns were further raised regarding the allocation of CBAM revenues. Studies indicate that approximately 75% of the revenues generated are directed towards the EU's internal budget, rather than being used to support climate finance or green transition efforts in developing

countries. This has intensified debates about fairness and the need for stronger international cooperation mechanisms to support equitable climate transitions.[24]

COP30 Outcome: The Belém Action Mechanism (BAM)

Despite these challenges, COP30 concluded with a significant development for the just transition agenda: the adoption of the BAM. This represents an important step toward strengthening the institutional framework of the JTWP by creating a platform for enhanced cooperation, technical assistance, and policy coordination on just transition implementation. This mechanism offers somewhat an upgraded framework compared to the existing mechanism, ensuring better institutional support and policy coherence for Just Transition implementation.

However, the final outcome also revealed significant limitations. While the establishment of the mechanism was widely viewed as a political achievement, the decision text contained limited references to financing schemes and did not explicitly address fossil fuel phase-out pathways. Arguably, the effectiveness of this mechanism hinges on a clear roadmap for transitioning away from fossil fuels. As a result, key questions remain unresolved regarding the scale of financial resources required to support just transitions and the broader direction of the global energy transition. Nevertheless, the adoption of the BAM marks an important shift from purely dialogue-based engagement toward a more structured approach to supporting just transition policies.

Implications for Malaysia

Within the Malaysian context, the growing prominence of the just transition agenda carries important policy implications. Notably, Malaysia has begun incorporating just transition considerations into multiple national policy frameworks, including through the National Energy Transition Roadmap (NETR) amongst many others, those of which acknowledges the need to ensure that decarbonisation efforts remain socially inclusive and economically sustainable.

In addition, the National Action Plan on Business and Human Rights (NAPBHR) also contains several references to just transition principles, particularly in relation to environmental governance, corporate accountability, and stakeholder engagement. However, these frameworks tend to focus more on governance mechanisms and policy guidelines rather than detailed workforce reskilling programmes or comprehensive transition strategies.

[24] Russia's Ukrainian War Could Impact EU Carbon Proposal Too.

As a result, while Malaysia has made progress in integrating Just Transition principles at the policy level, implementation on the ground remains uneven. This gap is largely driven by the current framing of Just Transition, which focuses primarily on economic aspects such as affordability and green job opportunities. However, there are no concrete action plans that explicitly address compensation schemes, targeted reskilling funds, or social safety nets for workers and communities facing job losses in high-risk sectors, such as oil and gas and others. Though these losses are acknowledged, they are not budgeted for action to be taken.[25]

While mechanisms such as the BAM could therefore provide valuable support for countries like Malaysia by offering technical guidance, knowledge sharing, and potential avenues for capacity-building, the effectiveness of such mechanisms will ultimately depend on the availability of financing and clear implementation pathways. Without a dedicated roadmap for delivering finance, technology transfer, and workforce transition programmes, the global just transition agenda risks remaining aspirational rather than transformative.

For Malaysia, this raises a critical question moving forward: how can we move beyond integrating just transition principles in policy frameworks toward developing concrete, financially viable strategies that ensure workers, industries, and communities are supported throughout the energy transition?

[25] Policy Brief Pathways to a Just Energy Transition in Malaysia.

Part C: Post-COP30 Forum

The MYD Post-COP30 Forum invites participants to advance discussions on two key dimensions of a Just Transition in Malaysia. First, as the country accelerates its energy transition, this shift shapes our labour force and thereby talks about skilling pathways. Second, given Malaysia's melting pot of culture, the transition must take into consideration and prioritise recognitional justice by ensuring that the voices, rights of all communities are meaningfully acknowledged thereby the conversation on the "Rights & Equity" dimension was crucial and included in the move towards new energy systems.

Skills and Labour Pathways for a Just Transition

The focus group on Skills and Labour Pathways explored how Malaysia's education system, labour market institutions, and industry practices can support the national Just Transition efforts, ensuring that the labour force and communities are prepared for the economic shifts associated with decarbonisation. Participants highlighted several challenges related to workforce preparedness, sustainability literacy, and the alignment between education, industry, and emerging green job markets.

Problems Identified

One key challenge discussed was the lack of integration of holistic sustainability integration within the tertiary education system. While sustainability talks and concepts are increasingly included in university curriculum, discussions often remain narrow and discipline-specific (eg; event management course). This limits students' ability to understand the broader socio-economic dimensions of sustainability and the labour market implications of decarbonisation as a whole. As a result, graduates may not be adequately equipped with the interdisciplinary thinking required to participate in emerging green sectors.

Another concern raised was that sustainability is often perceived as costly, particularly for companies operating in carbon-intensive industries. This perception can discourage businesses from investing in workforce retraining and green job creation. In many cases, sustainability commitments remain reflected in high-level strategy documents but are not integrated into operational SOP or workforce development plan, including structured training, reskilling, and upskilling initiatives for employees, in line with the Just Transition principles.

Participants also observed that universities tend to be overly focused on course titles and short-term employability metrics, rather than equipping students with transferable skills such as systems thinking, sustainability literacy, and problem-solving capabilities. In the context of a Just Transition, these broader competencies are essential for enabling workers to adapt, upskill, and reskill as labour markets evolve in response to decarbonisation policies.

Participants further noted that Malaysia's tertiary education system still faces capacity constraints in absorbing school-leavers, which may affect the development of a skilled workforce to sufficiently support the country's energy transition. While the Thirteenth Malaysia Plan (RMK13) outlines ambitions for systemic reforms in education and skills development, it remains important to ensure that these reforms translate into actual tangible improvements in the labour market, workforce training programmes, and the development of a sustainable first workforce.

Existing Opportunities

Despite these challenges, several opportunities were identified by the participants to strengthen skills development and labour empowerment within Malaysia's Just Transition pathway.

First, green skills do not necessarily require highly specialised qualifications and can often be integrated across a wide range of professions and industries. With appropriate training and awareness, individuals and organisations can incorporate sustainable practices into existing roles, enabling a broader segment of the workforce to participate in the transition to a low-carbon economy.

Second, participants duly expressed that Malaysia possesses strong institutional capabilities for labour market analysis. The Department of Statistics Malaysia (DOSM) has developed extensive labour datasets which could support the development of detailed transition roadmaps, including indicators such as sustainability-related employment trends, workforce vulnerability assessments, or even multidimensional poverty metrics that may help track the social impacts of decarbonisation.

Universities across Malaysia play a crucial role in preparing future workers with the interdisciplinary knowledge and practical skills needed to support a just and low-carbon energy transition. Initiatives such as the University of Malaya Climate Change Advisory and the UM Sustainable Living Hub demonstrate how student-led sustainability activities can provide early exposure to climate action and environmental governance. These experiences can strengthen students' employability by equipping them with practical knowledge and leadership experience relevant to emerging sustainability-focused careers. If scaled across institutions, such similar initiatives could contribute to building a pipeline of sustainability-literate graduates entering the workforce.

In addition, international frameworks such as the United Nations Sustainable Development Goals (SDGs), alongside national regulatory guidance from institutions such as Bursa Malaysia, the Securities Commission, and Bank Negara Malaysia may be able to provide important policy direction to encourage businesses to adopt sustainability practices that support just transition. These frameworks can incentivise companies to integrate long-term strategic planning that

takes into consideration sustainable labour markets into their operations, which in turn may create new green employment opportunities and drive demand for sustainability-related skills.

Actions and Recommendations to strengthen skills & labour pathways

Participants emphasised that advancing Just Transition pathways for workers requires stronger collaboration between industry, academia, and policymakers.

First, universities should prioritise teaching adaptable skillsets and critical thought processes, rather than focusing solely on specialised technical knowledge. Developing competencies such as systems thinking, sustainability literacy, and interdisciplinary problem-solving will enable graduates to continuously reskill throughout their careers, an essential capability in a rapidly evolving green economy.

Second, stronger partnerships between universities and industry could help bridge the gap between education and labour market needs. One potential initiative may involve national collaborative programmes with companies to introduce practical green-knowledge/ skills training at the university level, such as carbon accounting, emissions monitoring, and sustainability reporting. Such programmes would equip students with industry-relevant skills that support the implementation of climate policies and corporate decarbonisation strategies.

Third, participants highlighted the need for economic incentives that encourage businesses to invest in workforce transition. Policy frameworks such as carbon pricing mechanisms, financial incentives, or sustainability financing could help offset the additional costs associated with adopting sustainable practices, while simultaneously encouraging companies to invest in workforce training and green job creation.

Finally, environmental responsibility should be embedded not only within corporate strategy but also within organisational culture and change management processes. By incorporating green practices into workforce training, leadership development, and operational decision-making, companies can better prepare their employees to participate in the transition toward a low-carbon economy while ensuring that the transition remains inclusive and socially equitable.

Rights & Equity

The following section summarises the key points raised during the Focus Group Discussion (FGD) on Just Transition – Rights & Equity. The discussion brought together five participants from Suruhanjaya Tenaga, WWF-Malaysia, and MYD. The session examined how Malaysia's energy transition can be implemented in a manner that safeguards human rights, protects vulnerable communities, and ensures equitable distribution of transition benefits.

Problems Raised by Delegates

Participants highlighted a gap between national policy design and on-the-ground realities experienced by communities. While energy transition policies and programmes have evolved over time, delegates noted that policy development often relies on aggregated or incomplete data.[26] In particular, there are gaps in localised data regarding rural electrification and the socio-economic conditions of communities affected by energy infrastructure projects.[27]

Delegates also discussed the challenges faced by indigenous communities in the context of large infrastructure projects.[28] Examples were raised regarding hydroelectric dam development around the Tasik Temenggor area, where Orang Asli communities were relocated and experienced disruptions to livelihoods, schooling, and access to services. Participants noted that insufficient communication and consultation processes contributed to long-term social impacts.[29]

Another issue discussed was the uneven distribution of benefits from solar energy policies. Delegates noted that policy instruments have evolved from Feed-in Tariffs (FiT)[30] to Net Energy Metering (NEM)[31] and subsequently the Solar Accelerated Transition Action Programme (Solar ATAP).[32] However, participants observed that the financial benefits available under newer schemes may be less attractive or accessible for certain households compared with earlier mechanisms.

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[26] Government of Malaysia. (2021). Twelfth Malaysia Plan 2021–2025. Economic Planning Unit. https://rmke12.epu.gov.my
[27] Ministry of Economy Malaysia. (2023). National Energy Transition Roadmap (NETR). Government of Malaysia. https://www.netr.gov.my
[28] United Nations. (2007). United Nations Declaration on the Rights of Indigenous Peoples. https://www.un.org/development/desa/indigenouspeoples
[29] Karim & Mansor. (2013). Impacts Of Temenggor Dam On The Socio-Economic Conditions Of Orang Asli Of The Temenggor Lake Area. https://www.researchgate.net/publication/285371053_IMPACTS_OF_TEMENGGOR_DAM_ON_THE_SOCIO-ECONOMIC_CONDITIONS_OF_ORANG_ASLI_OF_THE_TEMENGGOR_LAKE_AREA
[30] Sustainable Energy Development Authority Malaysia. (2023). Feed-in tariff (FiT) mechanism for renewable energy in Malaysia. https://www.seda.gov.my
[31] Energy Commission Malaysia. (2023). Net energy metering (NEM) programme for Malaysia: Guidelines and implementation framework. https://www.st.gov.my
[32] Sustainable Energy Development Authority Malaysia. (2024). Solar Accelerated Transition Action Programme (Solar ATAP). https://www.seda.gov.my

Participants also raised concerns about regulatory barriers that limit participation in renewable energy opportunities. For example, certain certification requirements for solar installation work require formal education credentials that indigenous workers may not possess despite having relevant hands-on experience.

In addition, delegates highlighted emerging energy demand pressures linked to the growth of digital infrastructure, particularly data centres. Such developments require significant electricity and water resources, and participants expressed concern that unchecked expansion may strain national energy infrastructure.

Solutions Discussed

Participants emphasised the importance of improving localised data collection and engagement with communities. Strengthening collaboration between government agencies, civil society organisations, and local communities was identified as a way to improve understanding of rural electrification gaps and socio-economic conditions.[33]

Delegates also discussed the need to review regulatory frameworks to ensure that they do not unintentionally exclude vulnerable groups. This includes exploring alternative pathways for certification and training so that communities with practical experience can participate in renewable energy industries.

Opportunities for digitalisation and technology adoption were also highlighted. Participants suggested that improving regulatory platforms, communication channels, and digital systems could enhance transparency and facilitate engagement between regulators, developers, and communities.

Finally, participants emphasised the need for stronger coordination across stakeholders. Achieving a just transition requires collaboration between policymakers, regulators, industry players, community organisations, and training institutions to ensure that economic, social, and environmental considerations are integrated into transition planning.

Actions and Recommendations

Delegates recommended strengthening community consultation processes for energy projects, particularly for indigenous communities and rural populations. Early engagement and clear communication were considered essential to ensure that community perspectives are incorporated into project planning and implementation.

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[33] Food and Agriculture Organization. (2016). Free, prior and informed consent: An indigenous peoples' right and a good practice for local communities. https://openknowledge.fao.org/handle/20.500.14283/i6190e

Participants also recommended improving data systems related to rural electrification and socio-economic vulnerability to support more evidence-based policymaking.

To support inclusive participation in the energy transition, delegates proposed expanding reskilling and training programmes that enable workers from diverse backgrounds to enter renewable energy sectors.[34]

Participants also highlighted the importance of ensuring that energy transition policies continue to protect vulnerable households. Mechanisms such as Time-of-Use electricity pricing schemes and other affordability measures should be periodically evaluated.[35]

Finally, stronger monitoring mechanisms were recommended to ensure that high-energy-consumption sectors such as data centres do not disproportionately strain national energy resources.

[34] International Labour Organization. (2015). Guidelines for a just transition towards environmentally sustainable economies and societies for all. https://www.ilo.org
[35] Ministry of Economy Malaysia. (2023). National Energy Transition Roadmap (NETR). Government of Malaysia. https://www.netr.gov.my

Appendix

About MYD Post-COP30 Forum

As part of MYD's effort to bridge the knowledge gap between international climate negotiations and local understanding, MYD hosted the Post-COP30 Forum on 7th February 2026, which was supported by Yayasan Hasanah and WWF-Malaysia. Aside from keeping the audience informed of the negotiations outcomes, the forum also gathered stakeholders from diverse backgrounds to together dissect the outcomes and analyse its impact towards Malaysia's climate priorities. In summary, the event has impacted about 70 beneficiaries (including partners, participants and committee members), featuring 3 sharing sessions and 5 focus group discussions under the two main tracks.

Starting off the day with an opening remark, Pn Siti Kamariah, the Managing Director of Yayasan Hasanah, highlighted the importance of on-the-ground actions and nurturing an environment that enables youth empowerment and involvement as the custodians of the future generations. Eqram Mustaqeem from Climate Conscious was invited to share his insights on the Global Mutirão Text, which is one of the pivotal outcomes from COP30. Though coined as one of the key outcomes, the decision was criticised due to the absence of a clear roadmap and mitigation language.

Next was a presentation by Jinghann Hong about the key negotiation outcomes of adaptation track at COP30, especially about the GGA indicators, which are highly significant to Malaysia as we are currently formulating our NAPs. To further connect the high level framework to local context, a panel discussion, featuring Dr. Fitri Yakub from DPCC UTM, Lavanya Rama Iyer from WWF-Malaysia and Dr. Peter Gan Kim Soon from the Ministry of Health Malaysia and Mercy Malaysia was conducted.

The following session featured Firzanah Fadzlan, who shared her experience following the Just Transition Work Programme at COP30. This was then followed by a panel discussion on the rights and equity, as well as skills and labour, with Nazliyah Mohd Ali from TalentCorp Group of Companies and Nur Syaeista Khanum from SOLS Foundation.

Following the negotiation sessions, participants convened in multiple focus group discussions to examine the local realities of climate action in Malaysia, with a particular emphasis on adaptation and just transition. The adaptation track was divided into three subtopics: water and infrastructure, climate and health, and ecosystems and biodiversity. Meanwhile, the just transition track focused on two subtopics: rights and equity, and skills and labour.

Participants represented diverse backgrounds, including the public and private sectors, industry, civil society organisations, and independent individuals. This broad representation fostered a rich exchange of ideas and experiences, enabling participants to identify best practices, challenges, and limitations across different sectors. The discussions also served as an important platform for stakeholders to engage in meaningful dialogue, with the potential to strengthen collaboration and amplify the overall impact of climate action in Malaysia. The

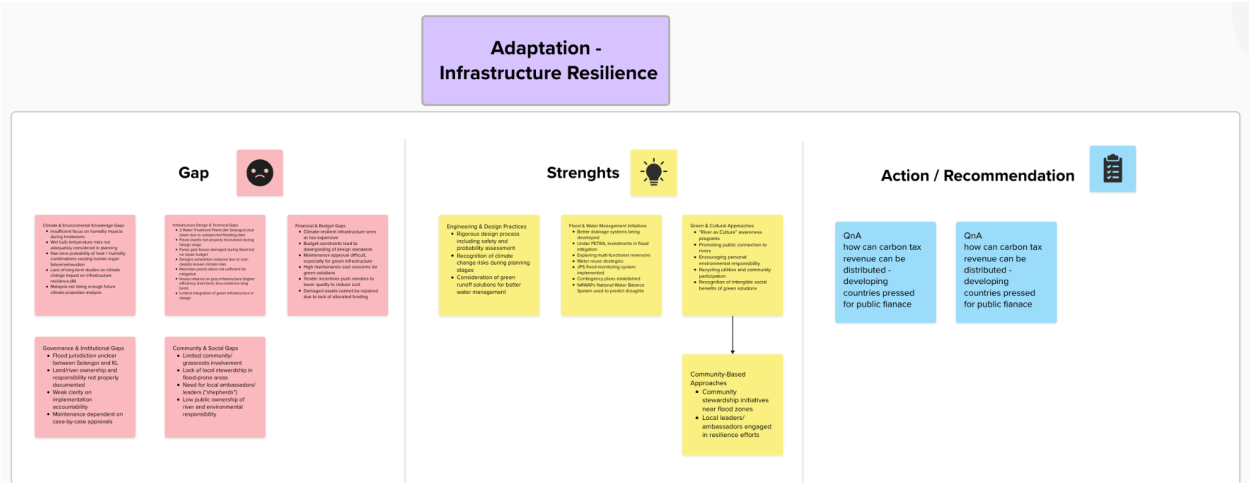
insights and recommendations contributed by participants were consolidated in Part C of this report. The Mural Board screenshots in the following Appendix reflects the points consolidated from the discussions.

Mural Board from Focus Group Discussion

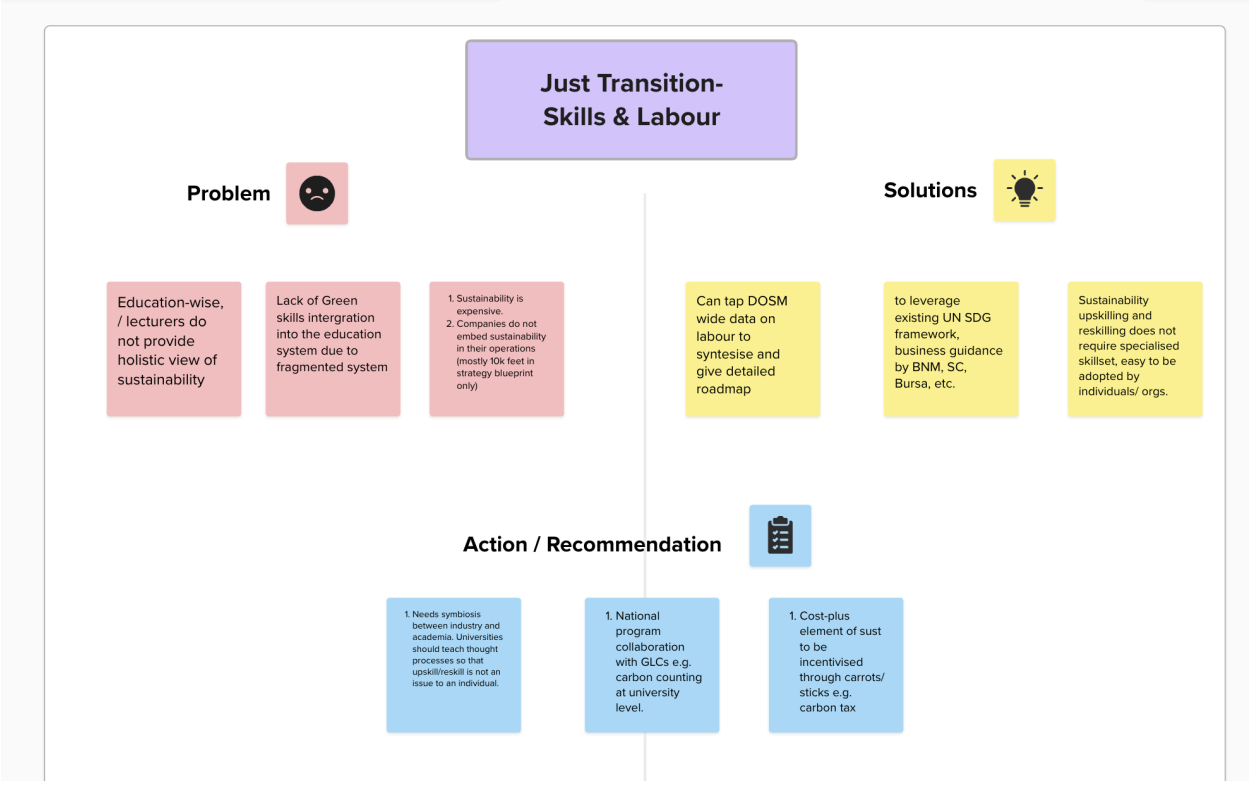
Please note that the Health FGD team entered their notes directly into a Google Docs file (bypassing the Mural).

Topic: Ecosystem & Biodiversity

Topic: Water & Infrastructure Resilience



Topic: Skills & Labour



Topic: Rights & Equity