



Towards a Sustainable Future: Recommendations for a Just Transition in Waste Management and Circular Economy in the ASEAN Region

July 2024

Acknowledgements:

Published by:

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

Registered offices

Bonn and Eschborn, Germany GIZ Country Office Jakarta Jakarta, Indonesia

T +62 21 2358 7111 ext. 252 F +62 21 2358 7110

E info@giz.de

I www.giz.de/en

Programme/project description:

Reduce, Reuse, Recycle to Protect the Marine Environment and Coral Reefs (3RproMar)

<https://www.giz.de/en/worldwide/129342.html>

Author:

Julie Chryslar, Christina Jäger, Tam Phan (Yunus Environment Hub)

Reviewer and Editor (in alphabetical order):

Andy Panjaitan, Anindhitya, Bonang T. Rahardjo, Juergen Staeudel, Ngoc Nguyen Thi Minh,

Paul Johannes, Phong Giang, Piyush Dhawan, Revina Putri, Riska Hasan (GIZ)

Design/layout:

IMPRO

Photo credits/sources:

Photo and design visual credits of GIZ and Yunus Environment Hub unless otherwise stated

This report was developed as part of The ASEAN-German project "Reduce, Reuse and Recycle to Protect the Marine Environment and Coral Reefs" (3RproMar) implemented by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH on behalf of the German Federal Ministry for Economic Cooperation and Development (BMZ) in cooperation with the ASEAN Secretariat to support ASEAN Member States (AMS) in the improvement of implementation capacities for reducing land-based waste leakage to protect the marine environment. This study was conducted in 2024, by Yunus Environment Hub, with guidance and direction from the GIZ 3RproMar team.

Suggested citation: GIZ regional Project, Reduce, Reuse, Recycle to Protect the Marine Environment and Coral Reefs' (3RproMar) – Towards a Sustainable Future: Recommendations for a Just Transition in Waste Management and Circular Economy in the ASEAN Region.

Contact:

GIZ 3RproMar: Protecting the marine environment and coral reefs –

giz.de giz-indonesien@giz.de, 3rpromar@giz.de

Yunus Environment Hub: www.yunusenvironmenthub.com | info@yunuseh.com Jakarta 2024



Towards a Sustainable Future: Recommendations for a Just Transition in Waste Management and Circular Economy in the ASEAN Region

July 2024

List of Abbreviations and Acronyms

| | |
|----------|--|
| ALMP | Active Labor Market Policies |
| AMS | ASEAN Member States |
| ASEAN | Association of Southeast Asian Nations |
| BMZ | Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung |
| CE | Circular Economy |
| COP | Conference of Parties |
| EPR | Extended Producer Responsibility |
| ESG | Environmental, Social and Governance |
| GIZ | Deutsche Gesellschaft für Internationale Zusammenarbeit GmbH |
| GHG | Greenhouse gas |
| ILBI | International Legally Binding Instrument (to end plastic pollution) |
| ILO | International Labour Organization |
| INC | Intergovernmental Negotiating Committee (on Plastic Pollution) |
| IPPC | Intergovernmental Panel on Climate Change |
| ISO | International Organization for Standardization |
| KPI | Key Performance Indicator |
| MSME | Micro, Small, and Medium Enterprise |
| MSWM | Municipal Solid Waste Management |
| NDC | Nationally Determined Contribution |
| NGO | Non- governmental organization |
| PAGE | The Partnership for Action on Green Economy |
| PRO | Producer Responsibility Organization |
| R&D | Research and Development |
| SDG | Sustainable Development Goal |
| TVET | Technical and Vocational Education and Training |
| UNFCCC | United Nations Framework Convention on Climate Change |
| 3RProMar | Reduce, Reuse, Recycle to Protect the Marine Environment and Coral Reefs |
| 3Rs | Reduce, Reuse, Recycle |

Key Definitions

Just Transition

"Greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind".¹

A just transition: towards low-carbon economies and lifestyles. Humankind faces an existential challenge: in order to keep the impacts of climate change within manageable limits, we need to ensure that lifestyles and economies worldwide

become climate neutral by mid-century. This transition will only be successful if it includes emerging economies and developing countries – and it must be designed in a way that is socially just (Just Transition). No one should be left behind on the path towards a social and economic system characterized by climate neutrality, climate resilience and climate justice.²

Circular Economy

A systemic approach to economic development designed to benefit businesses, society, and the environment. In contrast to the 'take-make-waste' linear

model, a circular economy is regenerative by design and aims to gradually decouple growth from the consumption of finite resources.³

Just Transition for an Inclusive Circular Economy

A just transition to a circular economy aims to support the shift to regenerative business in an inclusive way. It seeks to maximize the impact of climate action and on society, and create improved conditions for workers (both formal and informal), marginalized and vulnerable

groups (including women and youth) and their communities by engaging stakeholders in social dialogue to define and implement holistic policies to close material loops while ensuring decent work and equality for all.⁴

Informal Sector

The informal sector refers to "all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements".⁵

Vulnerable Groups

Vulnerable groups are those who "experience a higher risk of poverty and social exclusion than the general population. Ethnic minorities, migrants, disabled people, the homeless, those struggling with substance abuse, isolated elderly people and children all often face difficulties that can lead to further social exclusion".⁶

Examples of Vulnerable Groups include: workers in the informal economy, women, indigenous peoples, rural communities, people with disabilities, younger and older people, people from lower socio-economic backgrounds, migrants and refugees, and ethnic minorities.⁷

1 (International Labour Organization, 2021)

2 (Federal Ministry for Economic Cooperation and Development, n.d.)

3 (Ellen MacArthur Foundation, n.d.)

4 Yunus Environment Hub

5 (International Labour Organization, 2024)

6 (Nardo, Cortese, & McAnaney, 2010)

7 (International Labour Office, 2021)

Key Definitions

Marginalized Group

Marginalized groups are those who are "excluded from mainstream social, economic, educational, and/or cultural life. Examples of marginalized populations include, but are not limited

to, groups excluded due to race, gender identity, sexual orientation, age, physical ability, language, and/or immigration status".⁸

Reskilling

Reskilling involves learning new skills outside of the worker's existing skillset. These skills are often closely adjacent to

their current function, but may sometimes be geared toward a different path entirely.⁹

Social Business

A social business is a business created and designed to address a social problem. It is a non-loss, non-dividend company, that reinvests profits back in the business itself with the aim of increasing social impact.

Unlike a profit-maximizing business, the prime aim of a social business is not to maximize profits, although generating profits is desired.¹⁰

Social Inclusion

Social inclusion is the process of improving the terms for individuals and groups to take part in society. Social inclusion aims to empower poor and

marginalized people to take advantage of burgeoning global opportunities.¹¹

Social Justice

Social justice may be understood as the aspiration, "through which every working man and woman can claim freely and on

the basis of equality of opportunity their fair share of the wealth that they have helped to generate".¹²

Social Protection

Social protection is a set of policies and programmes designed to reduce and prevent poverty and vulnerability during our lives. Social protection ensures you have access to child and family benefits, maternity protection, unemployment

benefits, employment injury benefits, sickness benefits, health protection, old-age pensions, disability pensions, survivors' pensions, and green skills.¹³

Upskilling

When an employee undertakes learning to expand their existing skill set, that learning is known as upskilling. These additional skills enhance the worker's

performance in their current role, potentially advancing them along their career path.¹⁴

8 (Sevelius, et al., 2020)

9 Difference Between Upskilling and Reskilling | LinkedIn Learning

10 (Yunus Centre, 20020)

11 (World Bank, n.d.)

12 (International Labour Organization, 2022)

13 (International Labour Organization, 2024)

14 Difference Between Upskilling and Reskilling | LinkedIn Learning

Contents

| | |
|--|----|
| Executive Summary | 7 |
| Key Findings | 8 |
| 1. Introduction | 9 |
| Background on Waste Management Issues and Circular Economy in ASEAN | 10 |
| The Importance of Just Transition | 10 |
| 2. Methodology | 12 |
| 3. Just Transition in ASEAN's Waste Management and Circular Economy | 14 |
| Current State | 15 |
| Key Challenges | 16 |
| Key Opportunities | 17 |
| 4. Stakeholder Engagement and Evaluation | 20 |
| 4.1. Key Findings: Stakeholder Perspectives on Just Transition | 21 |
| 4.2. Data Analysis | 22 |
| 4.2.1. Key Consensus among Interviewed Stakeholders | 23 |
| 4.2.2. Cross-cutting Themes and Considerations | 28 |
| 5. Case Studies and Best Practices | 33 |
| Case Study 1: Just Energy Transition at the National Level | 34 |
| Case Study 2: Just Transition at the Local Community Level | 35 |
| Case Study 3: Just Transition Initiatives by Youth Leadership | 36 |
| Case Study 4: Just Transition Initiatives by Private Sector | 37 |
| Case Study 5: Just Transition Approach for Inclusivity | 38 |
| 6. Guidelines and Recommendations for Just Transition | 40 |
| 6.1. Just Transition Framework and Principles | 42 |
| 6.2. Recommendations for Key Stakeholders | 45 |
| For Government/ Policymakers/ Labor associations | 45 |
| For Waste Management Companies/ NGOs/ Communities | 46 |
| For Businesses/ Multinationals | 47 |
| 6.3. Proposal of Effective Mitigation Strategies to Facilitate Just Transition | 49 |
| 7. Recommendations for the ILBI Negotiations | 51 |
| 8. Recommendations for implementation agencies | 55 |
| 9. Conclusion | 58 |
| Bibliography | 60 |
| Annex | 64 |
| Annex 1. List of Interview Stakeholders | 64 |

Executive Summary

With rapid economic growth and urbanization, ASEAN countries are facing significant challenges related to increasing waste generation, job displacement, and the related environmental and social impacts. The issue of plastic waste pollution, in particular, has garnered widespread attention due to its detrimental effects on marine ecosystems and human health. While environmental impacts from plastic pollution are profound, the potential for a circular economy—an economic system aimed at eliminating waste and the continual use of resources—remains largely untapped. The Economic Research Institute for ASEAN and East Asia (ERIA) estimates that shifting to a circular economy could lead to economic growth of \$324 billion and create 1.5 million jobs across Asia by 2025.¹⁵ In parallel, the World Economic Forum has delineated the top 10 skills vital for future employment, underscoring the evolving demands of the workforce.¹⁶ While the circular economy brings huge opportunities, it is crucial to ensure that just transition principles are embedded in new circular business models to create holistic impact for society and the environment and to mitigate negative impacts that a circular transition can bring. Focusing on the plastic waste value chain is especially critical given its environmental significance and potential for innovation in waste management and circular practices.

Research in 2023 from Bain & Company indicates that ASEAN countries are increasingly recognizing the intertwined nature of economic growth and environmental sustainability.¹⁷ As part of the GIZ regional project 'Reduce, Reuse, Recycle to Protect the Marine Environment and Coral Reefs' (3RproMar), which operates across ASEAN countries with a focus on curbing plastic pollution, the research report 'Towards a Sustainable Future: Recommendations for a Just Transition in Waste Management and Circular Economy in the ASEAN Region' assesses the inclusivity of waste management practices and circular economy principles within the ASEAN region. The focus lies in integrating just transition principles along the plastic value chain, fostering a more equitable and sustainable framework, and provides key recommendations for stakeholders for implementation. It shall guide implementing agencies and projects like 3RproMar to adapt the projects towards a more inclusive approach and serve as a basis for advising project partners, including ASEAN Member States engaged in the negotiations towards an International Legally Binding Instrument (ILBI), national partner ministries, local pilot municipalities, government officials, policymakers, labour associations, waste management companies, NGOs, communities, waste management companies, NGOs, communities, private sector companies and GIZ.

¹⁵ <https://seads.adb.org/solutions/why-asean-shifting-circular-economys> (EU-ASEAN Business Council, 2020)

¹⁶ (World Economic Forum, 2023)

¹⁷ (Bain & Company, Temasek, GenZero, and Amazon Web Services, 2023)

Key Findings

Law, policies, regulations and institutional practices:

- Although the ILO's definition is broadly recognized, perceptions of just transition may vary across different countries and regions, reflecting their unique contexts and priorities.
- There is a lack of comprehensive frameworks and guidelines tailored to the ASEAN context to facilitate a just transition in waste management and circular economy that considers the rights, livelihoods and well-being of vulnerable and marginalized groups, such as indigenous peoples, women and children.
- The concept of just transition remains relatively novel and has not been fully integrated into ASEAN's waste management and circular economy strategies.
- There is a need for new frameworks to redesign the regional and national economic systems through new business models, for example social business, that focus on holistic impact for society and the environment.

Stakeholder Perspectives:

- Discussions tend to narrowly focus on informal waste workers, overlooking broader implications for the private sector, formal workers, vulnerable and marginalized groups, and affected communities.
- Gender perspectives are frequently overlooked in the design and implementation process despite women's significant roles as waste workers, entrepreneurs and community members.
- Capacity building and skills development are crucial aspects of just transition, ensuring that stakeholders are equipped to adapt to new roles and opportunities in both up-stream and down-stream activities in a circular economy. Skill building is not limited to workers, but also across other stakeholder groups to ensure the development of holistic policies and adoption of socially inclusive circular models.

Key Performance Indicators and Reporting:

- There is currently no standard to measure the impacts of implementing just transition principles.
- Key performance indicators on just transition are important for financial decision making, scenario modeling and success showcasing to mainstream just transition principles.

Research and Data:

- Limited research exists on implementing just transition principles across ASEAN's diverse socio-economic and cultural contexts.
- While there is existing research on the private sector, informal sector and plastic value chains, the data is most often limited in scope, lacking sufficient

Regional Coordination:

- Ongoing dialogue and discussions are crucial for each country to create a shared understanding of what a just transition entails for impacted workers, communities, and businesses.
- There is a lack of regional coordination and harmonized approaches among ASEAN countries to collectively address cross-border waste issues and engage regional/multinational companies.

Stakeholder Engagement:

- Decision-making processes lack meaningful participation from formal and informal workers, local communities, civil society, vulnerable and marginalized groups.
- Effective stakeholder engagement is crucial for developing inclusive waste management and circular business strategies reflecting all stakeholders' needs.



Introduction

Background on Waste Management Issues and Circular Economy in ASEAN

In the ASEAN region, waste management has become a significant challenge due to rapid urbanization, population growth, and economic development. The region generates approximately 150 million tons of municipal solid waste per year,¹⁸ a figure that is expected to increase due to population growth and rising consumption levels under the traditional linear economic model. The linear economy, grounded in a "take-make-waste" approach, is unsustainable and has culminated in several environmental and economic problems. It leads to the depletion of natural resources as it relies on extracting finite raw materials, resulting in resource scarcity and environmental degradation. Furthermore, production processes and waste disposal methods like incineration and landfilling contribute significantly to greenhouse gas emissions. Improper waste disposal contaminates air, water, and soil, posing risks to human health and ecosystems. Notably, the linear model fails to leverage the residual value in materials and products after their initial use, leading to economic inefficiencies and losses.

Contrary to a linear economy, a circular economy is an economic system aimed at eliminating waste and keeping resources in the loop longer.¹⁹ It employs reuse, sharing, repair, refurbishment, remanufacturing, and recycling to create a closed-loop system, minimizing the use of resource inputs and the creation of waste, pollution, and carbon emissions. The concept of circular economy is gaining traction as a viable solution to waste management and environmental challenges. By shifting from linear to circular models, the ASEAN region can

reduce waste, decrease pollution, and create sustainable economic growth.

Transitioning to a circular economy requires a systemic shift that cannot be achieved through isolated initiatives.²⁰ It requires cooperation and coordination between various stakeholders, including governments, businesses, and communities. Current circular models prioritize environmental sustainability; however often do not include social elements. As new circular strategies are developed and implemented, it is imperative that they also comprehensively assess and mitigate their effects on workers, communities, and broader societal structures. This holistic approach is encapsulated in the principles of just transition, which serves as a critical framework for ensuring a socio-ecological economy transformation.

The Importance of Just Transition

According to the ILO:

"A Just Transition means greening the economy in a way that is as fair and inclusive as possible to everyone concerned, creating decent work opportunities and leaving no one behind."²¹

Furthermore, the ILO emphasizes the role of social dialogue and the participation of workers and their representatives in shaping policies related to just transition:

"Social dialogue and tripartism are essential for good governance [...] and to achieve the SDGs. Social dialogue includes all types of negotiation, consultation and exchange of information between or among representatives of governments, employers and workers on issues of common interest relating to economic and social policy."²²

18 (United Nations Environment Programme, 2017)

19 (Ellen MacArthur Foundation, n.d.)

20 (World Economic Forum, 2023)

21 (International Labour Organization, 2021)

22 (International Labour Office, 2018)

The importance of just transition is increasingly recognized across sectors undergoing green transformations, including the energy sector's transition away from fossil fuels towards renewable sources. As countries phase out coal and fossil fuel industries, ensuring a just transition for affected workers and communities is crucial to achieve equitable and sustainable outcomes. This may involve reskilling programs for displaced workers, economic diversification in impacted regions, and social protection measures.

For instance, in Southeast Asia's energy transition, the ILO estimates that jobs lost in the coal sector to be less than half a million by 2050 under a sustainable development scenario. However, with the right policies up to 5 million new jobs in renewable energy and other green sectors could be created, highlighting the need for skilled workforce development and just transition planning.²³

Analyzing best practice from other regions, Chile's experience showcases the importance of capacity building for a just energy transition. The country established the National Green Hydrogen Strategy and launched initiatives like the Roadmap for a Circular Chile by 2040 to upskill workers and create new job opportunities aligned with its decarbonization goals. These capacity-building efforts are expected to have significant economic and social impacts. According to the International Energy Agency (IEA), Chile's green hydrogen strategy could create up to 100,000 new jobs by 2030, contributing to the country's economic growth and diversification.²⁴ Furthermore, upskilling workers in sustainable sectors can help to ensure a just transition by providing them with the necessary knowledge and skills to adapt to the changing job market and benefit from new employment opportunities in the green economy.²⁵

“ A just transition to a circular economy aims to support the shift to regenerative business in an inclusive way. It seeks to maximize the impact of climate action and on society, and create improved conditions for workers (both formal and informal), marginalized and vulnerable groups (including women and youth) and their communities by engaging stakeholders in social dialogue to define and implement holistic policies to close material loops while ensuring decent work and equality for all.”

A new definition was developed for the report that highlights the aim and ambition of a just transition for a circular economy:

In the context of the ASEAN region, a just transition for a circular economy would mean not only implementing sustainable waste management and circular strategies but doing so in a way that considers the diversity in social, economic, and cultural contexts of the different countries and local communities. It is about harnessing ASEAN's shared heritage and regional ingenuity to foster an environment where sustainability and equity are not just ideals but lived realities. It is important that the ASEAN region goes beyond generic solutions and builds a just transition strategy that acknowledges the complex interplay of cultural, economic, and environmental factors across the region. This means acknowledging the uneven landscapes across the member states, bridging the gap between the urban hubs and the rural heartlands, and promoting solutions, capacity trainings, and the deployment of solutions that align with local contexts.

A just transition is an opportunity, not an obligation.

²³ (International Labour Organization, 2022)

²⁴ (Ministry of Energy, Government of Chile, 2020)

²⁵ (International Labour Organization, 2022)



Methodology

2

Scope of Research

This report examines the transition towards sustainable waste management and a circular economy in ASEAN, focusing on six key countries including Cambodia, Laos, Indonesia, the Philippines, Thailand, and Vietnam. In addition, regional and international best practices were also explored for guidance and inspiration. The report explores current waste management practices, circular economy potential, challenges, and opportunities involved in transitioning to a socially inclusive circular economy in the region.

The key objectives are:

- (1) Examine existing practices: investigate established successful practices related to just transition in waste management within the ASEAN region.
- (2) Evaluate circular economy transition: analyze the impacts and implications of transitioning toward a circular economy in the waste management sector.
- (3) Identify barriers and solutions: identify obstacles and propose effective mitigation strategies to facilitate this transition.
- (4) Create a practical guide: develop a comprehensive guide offering actionable recommendations for stakeholders, policymakers, and waste management professionals, including provisions for International Legally Binding Instrument (ILBI) to end plastic pollution.

Methodology of Research

This report examines the transition towards sustainable waste management and a circular economy in ASEAN, focusing on six key countries including Cambodia, Laos, Indonesia, the Philippines, Thailand, and Vietnam. In addition, regional and international best

practices were also explored for guidance and inspiration. The report explores current waste management practices, circular economy potential, challenges, and opportunities involved in transitioning to a socially inclusive circular economy in the region.

The key objectives are:

This report examines the transition towards sustainable waste management and a circular economy in ASEAN, focusing on six key countries including Cambodia, Laos, Indonesia, the Philippines, Thailand, and Vietnam. In addition, regional and international best practices were also explored for guidance and inspiration. The report explores current waste management practices, circular economy potential, challenges, and opportunities involved in transitioning to a socially inclusive circular economy in the region.

The key objectives are:

Limitations of the Research

Despite efforts to ensure the comprehensiveness and accuracy of this research, there are several inherent limitations. Firstly, the availability and quality of data in an emerging topic like just transition in the ASEAN region, may still be limited. There are currently no recognized standards or indicators to derive data-driven insights for analysis. Secondly, while the study includes interviews with key stakeholders, it may not capture the perspectives of all relevant parties involved in waste management and circular economy. Lastly, despite attempts to regularly consult policymakers and ministries, changes in policy and regulations may occur unpredictably, potentially impacting the accuracy and applicability of the gathered information at the time this report is published.

18 (United Nations Environment Programme, 2017)

19 (Ellen MacArthur Foundation, n.d.)

20 (World Economic Forum, 2023)

21 (International Labour Organization, 2021)

22 (International Labour Office, 2018)



Just Transition in ASEAN's Waste Management and Circular Economy

Current State

The ASEAN region has made progress in recognizing the importance of transitioning towards a circular economy and sustainable waste management practices. Member States have developed policies and initiatives aimed at increasing recycling, reducing waste, and promoting concepts such as Integrated Solid Waste Management, Resource Efficiency, and the 3Rs (Reduce, Reuse, Recycle).²⁶ However, the implementation of these policies and the adoption of circular economy practices have been uneven across the region.

While some ASEAN countries have incorporated circular economy objectives and practices into their socio-economic development plans, there is a risk that governments may prioritize linear business models,²⁷ especially in efforts to revive economic activities impacted by the COVID-19 pandemic. This highlights the need for a more concerted effort to facilitate the transition to a socially inclusive circular economy and ensure that short-term economic goals do not undermine long-term sustainability objectives.

Inclusive, circular economy approaches can be a driver to achieve the 2030 Sustainable Development Goals (SDGs).²⁸ Just transition considerations are crucial to making the circular economy work for human development, and to align the circular economy with the SDGs.²⁹ Raising awareness around the contribution to SDGs could be beneficial to drive action for example, with governments to develop holistic policies that incorporate environmental and social aspects, and the private sector as they prepare their Environmental Social and Governance (ESG) reporting.

Transitioning from our current economic system is also critical to accelerate climate action. Encouraging a shift from a profit driven mentality, which drives overconsumption and resource depletion, to new business models such as social business that focus on scaling solutions for social and environmental issues.³⁰

Despite the growing awareness and adoption of circular economy principles, the concept of just transition remains relatively new in the ASEAN region, with the energy sector being more well-known for its



transition efforts. According to a United Nations Development Programme (UNDP) assessment as of October 31, 2022, it has been found that the Asia Pacific region is trailing behind in embracing Just Transition principles. Out of the 33 countries in the region, only four have incorporated these principles into their Nationally Determined Contributions (NDCs).³¹

Additionally, discussions on just transition often gravitate directly towards informal workers. However, it's crucial to broaden the perspective beyond this. While the current focus on the informal sector within just transition dialogues is important, it is essential to advocate for greater emphasis and visibility on other vital dimensions of the transition such as formal employees, vulnerable and marginalized groups, Micro, Small and Medium Enterprises (MSMEs), and affected communities.

As the ASEAN region progresses towards a circular economy, it is crucial to ensure that the transition is inclusive and equitable, addressing the needs and concerns of all stakeholders.

26 (Schröder & Bengtsson, Building back better in ASEAN countries: opportunities to advance a circular economy)

27 (Schröder & Bengtsson, Building back better in ASEAN countries: opportunities to advance a circular economy)

28 (Schröder & Raes, Financing an inclusive circular economy: De-risking investments for circular business models and the SDGs, 2021)

29 (Schröder, Promoting a Just Transition to an Inclusive Circular Economy, 2020)

30 (Manjon, Merino, & Cairns, 2022)

31 (Lee, Sangji, Baumgartner, Lisa, 2022)

Key Challenges

ASEAN countries face several challenges in fully implementing just transition principles in circular economy strategies, despite growing attention to the concept in the region.

One major challenge is the **lack of comprehensive data and information systems** to support decision-making and monitor progress on just transition in the circular economy. Many ASEAN countries have limited data on the social, economic, and environmental impacts of circular economy practices on workers, communities, and vulnerable groups. There are currently no existing standards or KPIs to measure just transition interventions, making it difficult to justify investments.³² The ASEAN Circular Economy Stakeholder Platform also highlights the need for enhanced data collection and reporting mechanisms to support circular economy transitions. The platform emphasizes the necessity for standardized data on circular products and services, which can help in harmonizing practices across the region and facilitate better integration of value chains.³³ The 5th ASEAN Policy Brief on the transition towards a circular economy also points out that current systems for knowledge sharing and capacity building are inadequate. This inadequacy limits the ability of policymakers and stakeholders to make informed decisions and monitor the impact of circular economy initiatives effectively.³⁴

Currently the region faces a **skills shortage** in repair, refurbishment, and other capacities required for jobs in a circular economy,³⁵ which further complicates the transition. Ensuring a just transition requires understanding and addressing the skills gaps, and providing workers, both formal and informal, with capacity building to acquire the skills required for new roles in the circular economy. Capacity building goes beyond the workforce as there is also a need to train and support governments around circular economy and just transition strategies to ensure the creation of holistic policies. Consumers also require awareness and capacity building to support the adoption of new,

circular solutions. Finally, the importance of social dialogue as a key means to improve the quality of policies on training provision and their relevance for the world of work is hard to overestimate effectively.³⁶

Another challenge is the **limited financial resources and technical capacity** of local governments and small businesses to adopt inclusive circular economy practices that incorporate just transition principles.³⁷ Transitioning to sustainable waste management and circular economy models often requires significant upfront investments in infrastructure, technology, and training, which can be a barrier for resource-constrained actors. The financial burden of implementing just transition is one of the main concerns of governments³⁸ and needs to be addressed to showcase the long-term economic, environmental, and social impact of inclusive, circular strategies.

The **prevalence of the informal sector** in waste management across ASEAN poses another challenge as they often lack legal recognition, social protection, and access to decent working conditions. Vulnerable and marginalized communities, including informal workers, are disproportionately impacted by climate change. For example, air pollution reduces short- and long-term productivity by decreasing working hours and by deteriorating the health of these workers.³⁹ It increases gender inequality, as women typically act as caregivers for dependent children who have been adversely affected. The ILO documents that “between 2000 and 2015, 23 million working-life years were lost annually as a result of different environmentally related hazards caused or exacerbated by human activity”.⁴⁰ There is a challenge to professionalise this group as often there is a lack of formal structure, processes and resources to ensure safe and decent work.

32 (Johansson, 2023)

33 (A Systems Approach for Transitioning Southeast Asia to a Circular Economy, 2022)

34 (ASEAN Secretariat, 2022)

35 (ASEAN Secretariat, 2023)

36 (International Labour Organization, 2019)

37 (Dey, et al., 2022)

38 (Robins, 2022)

39 (Nguyen, Virdis, & Winjikul, 2022)

40 (International Labour Organization, 2018)

Moreover, many ASEAN countries face challenges in breaking down silos and promoting **cross-ministerial and cross-pillar cooperation**.⁴¹ Different ministries often have their own mandates, budgets, and performance indicators, which can hinder their ability to work together effectively. Limited institutional capacity, resource constraints, and bureaucratic barriers can further impede collaboration and progress if ministries and pillars continue to operate in silos. This is particularly relevant in the context of just transition and circular economy, where issues span multiple sectors and demand a coordinated approach.

A **lack of incentives** to transition to circular models is a key challenge for ASEAN countries, making a just transition to a circular economy even more complex. Currently companies lack the financial motivation to transition to circular strategies as the cost for resources, for example virgin plastic, is cheaper than recycled inputs. To adopt circular practices, companies need to invest in Research and Development (R&D) and redesign products to be more durable, recyclable, and repairable, which can be costly and time-consuming.⁴² Additionally, embracing alternative business models requires changes in operations, marketing, and customer engagement. It could also require upskilling or reskilling of workers to meet new skills demands because of new offerings both within their organization and along the value chain to ensure a just transition. Furthermore, the regenerative use of natural resources, ensuring that materials are reused, refurbished, or recycled at the end of their life cycle, demands the development of new supply chains and infrastructure to support resource recovery and reuse.⁴³ This process can be complex and expensive, requiring significant investment and coordination among stakeholders.

Extended Producer Responsibility (EPR) can help drive change by making producers responsible for the entire lifecycle of their products, including take-back, recycling, and disposal. EPR incentivizes companies to design products that are easier to recycle and manage sustainably. However, additional support and incentives are required. Stakeholders in the region should collaborate on awareness raising campaigns for citizens to support the adoption of circular products and services and ensure capacity building programs

are built in a holistic way to cover skills gaps and enable a just transition that leaves no one behind.

To address these challenges, the ASEAN Circular Economy Stakeholder Platform has been established, inspired by similar initiatives in Europe.⁴⁴ This platform aims to facilitate knowledge exchange, identify gaps, and launch new regional initiatives to accelerate the transition to a circular economy. However, the effectiveness of such multilateral platforms and partnerships, like the Global Alliance on Resource Efficiency and Circular Economy (GACERE), in promoting circular economy solutions in the region remains to be seen. Many existing platforms and initiatives focus primarily on circular economy strategies, but often lack the integration of just transition which is essential to ensure economic, environmental and social impact. The success of these initiatives will depend on their ability to foster meaningful collaboration, provide targeted capacity-building support, and adapt to the specific needs and contexts of ASEAN countries.

Key Opportunities

Despite the challenges, there are also significant opportunities for advancing just transition in waste management and circular economy in ASEAN. One huge untapped opportunity is the **collaboration across ministries** to integrate just transition into their policies for holistic impact. For example, ensuring just transition principles are embedded in environmental policies, or collaborating with the Ministry of Education to identify skills gaps and adapt the national education curriculum to ensure a pipeline of talent with relevant skills from an early age.

ASEAN countries have a relatively **young population**, with a median age of 30.2 years.⁴⁵ This young demographic presents an opportunity for driving change and innovation in the transition to an inclusive and circular economy.

41 (Minilateralism, ASEAN Centrality and Indo-Pacific Institutional Flux Amid Strategic Competition, 2024)

42 (Kanzari, Rasmussen, Nehler, & Ingelsson, 2022)

43 (Transition to the Circular Economy from a Business Perspective, 2023)

44 (ASEAN Circular Economy Stakeholder Platform, 2023)

45 (Industries to Watch Out for Growth in Southeast Asia in 2023, 2023)

The youth are often more environmentally conscious and open to adopting sustainable practices.⁴⁶ Engaging and empowering young people through education, skills development, and entrepreneurship programs can create a new generation of leaders and changemakers who can drive a just transition to a circular economy.

" The role of youth in just transition goes beyond participation; it's about leveraging their unique insights to prevent the mistakes of the past from defining the possibilities of our future."

- John Leo Algo, Youth representative,
Aksyon Klima Pilipinas & Youth Advisory Group
(YAG) for Environmental and Climate Justice

Another opportunity is the **growing public awareness and support** for sustainable waste management and circular economy models that reduce waste. For example, initiatives such as plastic bag bans and zero-waste campaigns have gained significant traction in recent years, reflecting a shift towards more environmentally conscious consumer behavior. This increased awareness can be leveraged to build momentum for policy and behavioral changes towards more sustainable practices.

Supporting a shift towards **new economic models such as a social business**, that focus on societal and environmental impact instead of profit can also help drive positive change.⁴⁷ Increasingly, consumers, especially younger generations, want to buy from responsible brands.⁴⁸ Supporting social businesses in the region can contribute to addressing plastic pollution while creating social impact and raising awareness to societal challenges.

The COVID-19 pandemic has also highlighted the importance of **resilient and sustainable waste management systems**. The pandemic has disrupted traditional waste management practices and exposed the vulnerabilities of informal waste workers. This crisis presents an opportunity to build back better by investing in sustainable waste management infrastructure and supporting the livelihoods of informal workers.⁴⁹

The transition to a circular economy has the potential to create **new green jobs** across various sectors, such as waste management, recycling, repair, and remanufacturing.⁵⁰ ASEAN countries can capitalize on this opportunity while ensuring a just transition by investing in skills development and training programs to prepare their workforce for these emerging job opportunities. This requires a broad collaboration across the public and private sectors to identify the skills needed in a circular economy in different sectors and to build education programs that address the needs of the future workforce, ensuring that no one is left behind.

Moreover, the informal sector often faces challenges such as corruption and a lack of human rights protections. **The formal sector can play a critical role** in promoting a just transition both within their own organizations and along their value chains, thereby driving positive impact towards the informal sector. By building transparency through measures like implementing a supplier code of conduct and refusing to work with non-compliant suppliers, formal sector businesses can help ensure that just transition principles are upheld throughout the entire supply chain. This approach can foster ethical practices and improved working conditions in the informal sector.

46 (EY and JA Worldwide, 2023)

47 (Bansal, Garg, & Vasa, 2023)

48 (Reichheld, Peto, & Ritthaler, 2023)

49 (United Nations, 2024)

50 (International Labour Organization, 2018)

Developing just transition standards and Key Performance Indicators (KPIs) for implementation and impact measurement would provide clear guidelines to follow. This would enable to showcase just transition efforts and its impacts to decision makers. On a regional level, standardized KPIs would facilitate a better understanding of the impact of just transition efforts, allowing for the scaling of best practices based on data-driven evidence. Additionally, these standards and KPIs would promote consistency and comparability across different industries and countries within the region, fostering a collaborative approach to achieving sustainability goals.

Rapid technological advancements, such as digitalization, artificial intelligence, and blockchain, can support the implementation of circular economy practices in ASEAN.⁵¹ These technologies can enable better data collection, traceability, and resource optimization across value chains. ASEAN countries can leverage these technological opportunities to develop socially inclusive solutions for waste management, resource efficiency, and circular business models. For example, AI-powered waste sorting systems can revolutionize the recycling process by automatically separating different types of recyclable materials, such as plastics, metals, and paper, with high accuracy and speed. Sadako Technologies, a Spanish startup, has developed an AI-driven waste sorting robot called "Max-AI" that can perform 65 picks per minute.⁵² However, it is crucial to address the potential impact of these technologies on workers, particularly informal waste workers who may face displacement due to automation. The opportunity for a just transition lies in proactively identifying and mitigating these risks by ensuring that the shift to new technologies includes comprehensive support for affected workers. This support could involve reskilling and upskilling programs, integrating informal workers into formal waste management systems, and creating new job opportunities within the circular economy. By doing so, ASEAN countries can ensure that technological advancements contribute to sustainable development while promoting social equity and inclusiveness.

There is a growing **interest among investors and financial institutions** in supporting sustainable and circular economy projects.⁵³ ASEAN countries can tap

into this trend by developing enabling policies and frameworks to attract sustainable finance and impact investments. This can include creating green finance taxonomies, promoting green bonds and sustainability-linked loans, and establishing public-private partnerships for socially inclusive circular economy projects.

Another opportunity lies in the potential for **regional cooperation and knowledge** sharing among ASEAN member states. The ASEAN Secretariat has established platforms such as the ASEAN Circular Economy Stakeholder Platform and the ASEAN Circular Economy Forum to facilitate exchange of best practices and foster collaboration on circular economy initiatives. These platforms can be leveraged to promote Just Transition principles and support capacity building across the region.

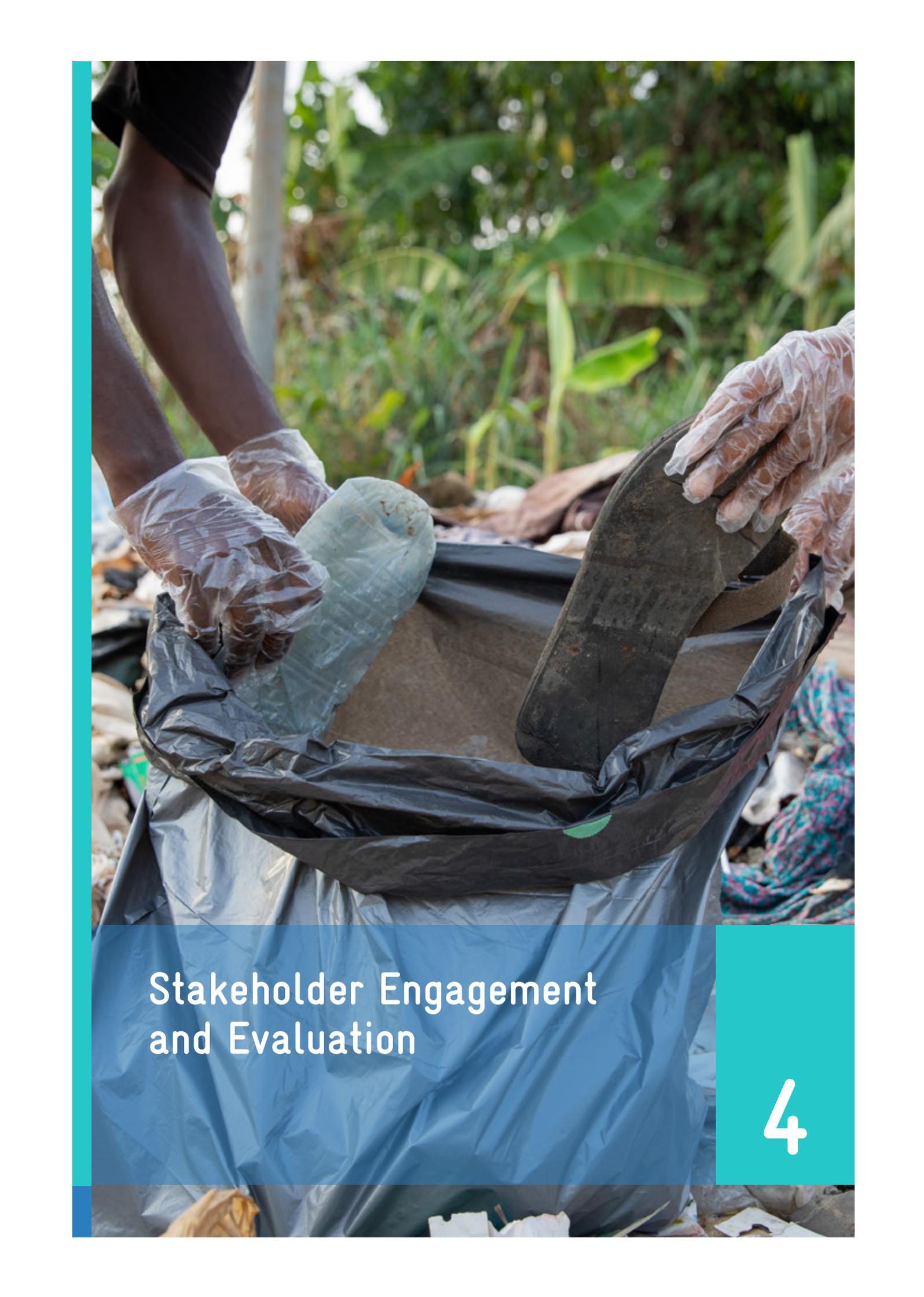
Furthermore, ASEAN countries can leverage **global partnerships and initiatives** to accelerate their transition to a circular economy. For example, the Platform for Accelerating the Circular Economy (PACE) provide opportunities for knowledge sharing, technical assistance, and collaboration with international partners.⁵⁴ Another example, is the working group on social inclusion and just transition of the PREVENT Waste Alliance, a global alliance initiated by the German government. By actively participating in these global platforms, ASEAN countries can learn from best practices, access resources, and foster international cooperation for a just transition.

51 (ASEAN Secretariat, 2021)

52 (AI for a Better World, n.d.)

53 (Robins, Muller, & Szwarc, From the grand to the granular: translating just transition ambitions into investor action, 2021)

54 (World Economic Forum, 2017)



Stakeholder Engagement and Evaluation

4

4.1. Key Findings: Stakeholder Perspectives on Just Transition

The following section presents the key findings and insights gathered from interviews with various stakeholder groups, including government officials, policymakers, labor unions and associations, private sector, NGOs, community representatives, academia, youth, and representatives from industries that have implemented a just transition. A complete list of interviewees can be found in Annex 1.

| Stakeholder Group | Stakeholder's Perspectives on Challenges / Concerns | Stakeholder's Perspectives on Opportunities / Suggestions |
|---|---|---|
| Government / Policymakers | <p>Existing prejudices and cognitive biases prioritizing economic development over sustainability</p> <p>Lack of data, information systems, and transparency</p> <p>Asynchronous development levels among ASEAN countries</p> | <p>Recognize and integrate informal waste workers into formal systems</p> <p>Implement social protection schemes for workers and communities affected by the transition</p> <p>Collaborate with tripartite partners (workers, employers, government) and across ministries for comprehensive solutions</p> <p>Develop national just transition plans identifying impacted sectors and outlining interventions</p> |
| Waste Management Sector | <p>Lack of transparency, e.g., in producer responsibility organizations (PROs)</p> <p>Prejudices and misconceptions about informal waste workers</p> <p>Insufficient data and monitoring systems for waste management</p> | <p>Ensure green transition opportunities are inclusive and not limited to a select few</p> <p>Integrate informal waste workers into business models and formal waste management systems</p> <p>Adopt hyper-localized approaches to waste management based on local contexts</p> |
| Private Sector (Multinational Businesses) | <p>Challenges with traceability and supply chain mapping</p> <p>Lack of trust leading to bypassing informal waste workers</p> <p>Varying consumer behavior and awareness across ASEAN countries</p> | <p>Support and empower women informal waste workers</p> <p>Commitment to social equity, inclusive practices, and responsible sourcing</p> <p>Community engagement initiatives for awareness and behavior change</p> <p>Integrate circular economy principles into education systems</p> |

4.1. Key Findings: Stakeholder Perspectives on Just Transition

| Stakeholder Group | Stakeholder’s Perspectives on Challenges / Concerns | Stakeholder’s Perspectives on Opportunities / Suggestions |
|---|---|--|
| Academia | <p>Resistance from sectors like chemicals and petrochemicals</p> <p>Need to address social issues like poverty and livelihood challenges</p> <p>Working upstream against powerful linear system interests</p> | <p>Highlight job creation potential of circular economy transition</p> <p>Address environmental justice concerns impacting marginalized communities and waste workers</p> <p>Conduct sector-specific impact studies, e.g., textile industry, to inform transition strategies</p> |
| Youth Representatives | <p>Enhancing advocacy and awareness campaigns</p> <p>Promoting youth engagement</p> <p>Driving innovation and future trends</p> | <p>Secure funding and investment for capacity building initiatives</p> <p>Develop effective narratives, e.g., addressing the sachet economy</p> <p>Explore and promote future trends like digitalization, waste-to-resources, and remanufacturing</p> |
| Sectors with just transition experience | <p>Ensuring decent work conditions and quality employment</p> <p>Access to funding, especially for small enterprises</p> <p>Changing behaviors towards waste management and sustainability</p> | <p>Encourage more enterprises to participate and interconnect circular economy initiatives within ASEAN</p> <p>Provide incentives, skills development, and capacity building for enterprises</p> <p>Mainstream just transition at policy framework and sectoral levels, leveraging existing best practices</p> |

4.2. Data Analysis

While there is a general acknowledgment of the importance of just transition and the circular economy among stakeholders, the analysis reveals diverse perspectives, challenges, and considerations that need to be addressed through collaborative and inclusive approaches. Effective stakeholder engagement, data-driven decision-making, capacity-building, and systemic strategies that address equity, inclusivity, and environmental justice are essential for a successful just transition in waste management and circular economy in ASEAN.

4.2.1. Key Consensus among Interviewed Stakeholders

The areas of consensus gathered from the interviews provide a strong foundation for collaboration and collective action towards a just transition in waste management and circular economy in ASEAN. It is important to note that these key consensus points reflect the perspectives and insights of the specific stakeholders who participated in the interviews and may not necessarily represent the views of all relevant actors in the region.

By building on these shared perspectives and agreements, it is possible to identify potential pathways and strategies for developing inclusive and sustainable solutions that benefit all members of society. However, it is crucial to acknowledge that consensus-building is an ongoing process that requires continuous dialogue, negotiation, and compromise to address emerging challenges and conflicting interests.

1. Importance of just transition in the Global Plastics Treaty:

There is a broad consensus among stakeholders on the importance of including just transition principles and considerations in the Global Plastics Treaty. Stakeholders from various sectors, including waste picker associations, labor organizations, government representatives, and youth advocates, agree

that just transition should be an integral part of the treaty to ensure a fair and equitable shift towards a circular economy. Yet, there is a major concern from governments on the financial burden of implementing a just transition that needs to be addressed.

"Opportunity distribution - wealth concentration, gap between rich and poor, need to be remediated with public policy. Socio-economic elements need to be in environmental policy."

- Taylor Cass Talbott, International Alliance of Waste Pickers

2. Protection of livelihoods and social inclusion:

Stakeholders agree on the need to protect the livelihoods of individuals and communities dependent on plastic and ensure their inclusion in the transition process. There is a shared understanding that the transition should not result in job loss, particularly for informal workers who prefer to retain their flexibility and not be bound by strict schedules or hours. However, there is a consensus that a just transition should aim to professionalize

their work, enabling them to access social and health benefits, and ensuring fair labor practices and working conditions, as provide opportunities to upskill and meet requirements for new job opportunities in a circular economy. Stakeholders emphasize the importance of finding solutions that balance environmental sustainability with social and economic considerations.

"A just transition mechanism is crucial to mitigate the impact on those dependent on the plastic economy, ensuring that the move towards sustainability leaves no one behind."

- Mr. Nguyen Thi, Legal Affairs, Vietnam MONRE

3. Development of circular business models and inclusive value chains:

There is a consensus among stakeholders on the need to develop sustainable solutions and circular business models. While some stakeholders mentioned the development of alternative materials to replace plastic, it is important to recognize that simply substituting plastic with other materials may not always be the most sustainable approach and could potentially lead to unintended consequences. Instead, the focus should be on promoting circular economy models that prioritize the longevity and reuse of resources, such as through repair, sharing, and refurbishment, that reduce the need for virgin resources and minimize waste generation, as well as regenerative business models.

Stakeholders acknowledge that investing in research, innovation, and technology is crucial to develop and scale up these sustainable solutions. There was also agreement on the need for businesses to genuinely adopt circularity principles throughout their value chains and not just selectively implement certain aspects. This requires a systemic shift in business models, product design, and supply chain management. The circular strategies must be designed in way that embrace just transition and circular principles together not only within their own organizations but also along their value chain.

4. Application of inclusive EPR and circular economy strategies:

Stakeholders agree on the importance of applying just transition principles in EPR and circular economy strategies to address plastic waste and promote sustainability. They recognize that well-designed EPR schemes can help manage plastic waste, incentivize sustainable design, and promote closed-loop systems while also supporting a just transition by improving data and finance transparency, ensuring fair opportunities and benefits for vulnerable groups such as the informal waste pickers. Stakeholders also emphasize the

importance of integrating circular economy strategies into EPR schemes. This integration should promote eco-design, encourage reuse and refurbishment, and support the development of waste collection and recycling infrastructure. There is a shared understanding that these combined approaches can incentivize sustainable design and encourage responsible production and consumption practices, driving significant environmental and social change.

5. Capacity building and knowledge sharing:

There is a consensus among stakeholders on the need for capacity building and knowledge sharing to support a just transition to a circular economy. Stakeholders, particularly youth representatives, emphasize the importance of developing the capacity of individuals, communities, and organizations to effectively participate in the transition process. This includes raising awareness, providing education and training, and facilitating the exchange of best practices and lessons learned. There is a need for collaboration across stakeholders to understand current and future skills gaps and

develop comprehensive training programs that develop a pipeline of skilled talent. According to the ILO, every dollar invested in worker training and upskilling generates a return of \$4 in increased productivity, reduced turnover, and higher employee morale. In addition, while workers need to be reskilled and upskilled to meet new job requirements in a circular economy, governments and private sector leaders also need to be trained on just transition principles to support the development of long-term, strategic policies and initiatives.

"The main challenge [in Laos] is the absence of data and best practice sharing; we must cultivate a culture of learning and sharing to strengthen our waste management strategies."

- Ms Souksaveuy Keotiamchanh, Zero Waste Laos (NGO)

6. Multi-stakeholder collaboration and inclusive decision-making:

Stakeholders agree on the importance of multi-stakeholder collaboration and inclusive decision-making processes in achieving a just transition. There is a recognition that the transition requires the involvement and participation of diverse stakeholders, including governments, businesses, civil

society organizations, waste pickers, youth, women, and frontline communities. Stakeholders emphasize the need for inclusive platforms and mechanisms that allow for meaningful social dialogue between all relevant parties.

"Justice in transition is more about principles than definitions—it's about procedural fairness, ensuring everyone has a seat at the table, and distributive equity, so that the costs of change are shared equitably across society, without overburdening marginalized communities."

- Dr Patrick Schröder, Chatham House

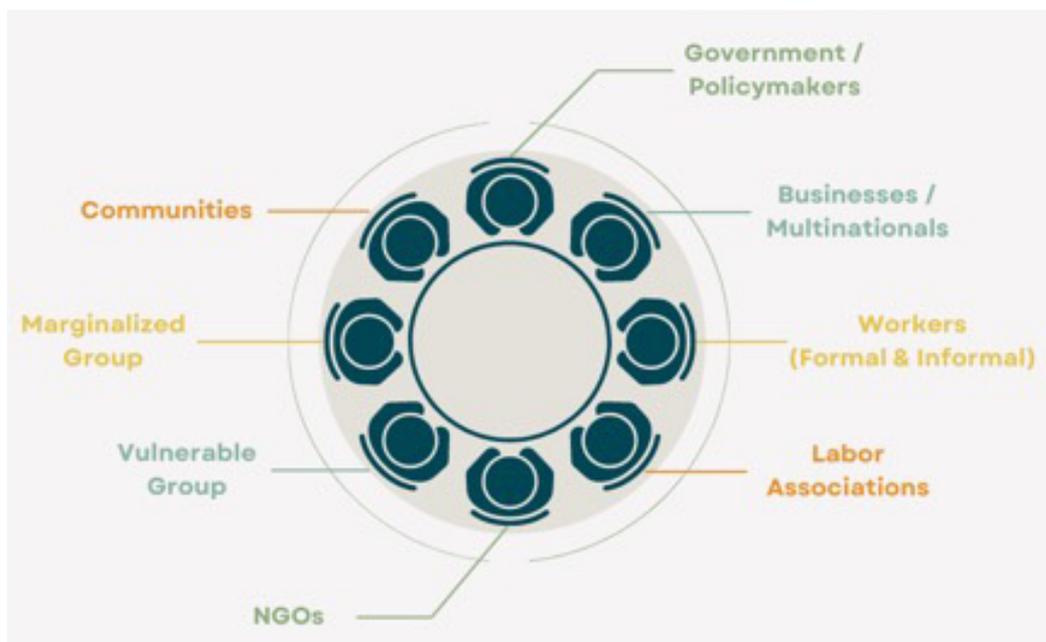


Figure 1: Engaging Diverse Stakeholders at Just Transition Decision-Making Table
Designed by Yunus Environment Hub

7. Addressing the root causes of plastic pollution:

There is a growing consensus among stakeholders on the need to address the root causes of plastic pollution, including marine plastic pollution, rather than solely focusing on end-of-pipe solutions. Stakeholders recognize that preventing plastic pollution requires upstream interventions that promote sustainable product design and reduce the use of single-use plastics. For example, the development of reusable and refillable

packaging systems can generate employment opportunities in the design, production, and distribution of these alternative solutions. These new systems should embrace just transition principles along the value chain as new skills are required. Stakeholders also emphasize the importance of changing consumption patterns and raising public awareness about the impacts of plastic pollution.

"Focusing solely on recycling does not address the root issue; target reductions in plastic use are essential, as recycling serves only as an interim solution."

- Mayang Azurin - Global Alliance for Incinerator Alternatives (GAIA)

8. Integration of waste pickers in the circular economy:

Stakeholders agree on the need to integrate waste pickers and informal workers into the circular economy, ensuring that they are provided with fair and decent work opportunities, and equipped with the new skills required for their roles. There is a recognition of the valuable role that waste pickers play in managing waste and recycling

materials. Stakeholders emphasize the importance of professionalizing and supporting the livelihoods of waste pickers, providing them with access to labour rights, social protection, healthcare, and ensuring their inclusion in new solutions and business models.

9. Long-term planning and sustainability:

There is a consensus among stakeholders on the need for long-term planning and sustainability in the transition to a circular economy. Stakeholders recognize that the transition is a gradual process that requires careful planning, adaptation, and cyclical

improvement. They agree on the importance of setting long-term goals, developing roadmaps, and ensuring the sustainability of initiatives beyond short-term interventions.

10. Shared responsibility and accountability:

Stakeholders agree on the principle of shared responsibility and accountability in achieving a just transition. There is a recognition that all stakeholders including governments and various industries have a role to play in the transition process and should be held

accountable for their actions and contributions. Stakeholders emphasize the importance of transparent and accountable decision-making, monitoring and evaluation, and the equitable sharing of costs and benefits.



4.2.2. Cross-cutting Themes and Considerations

Addressing the gaps, conflicts of interests, and disagreements for just transition requires ongoing multi-stakeholder dialogue, transparency, and a willingness to find common ground and compromises. It is essential to create platforms for inclusive participation, knowledge sharing, and collaborative problem-solving. These platforms should not only focus on addressing challenges but also on identifying and

capitalizing on opportunities for a just transition in waste management and circular economy. By acknowledging and constructively addressing these challenges while simultaneously exploring and harnessing the potential opportunities, ASEAN countries can work towards a more cohesive and effective just transition strategy in waste management and circular economy.

1. Cost implications and burden on small businesses:

There are conflicting interests between the government's push for uniform treatment of businesses in implementing circular economy practices and the reality faced by MSMEs. While larger companies may have the resources to adapt to new regulations and invest in sustainable practices, smaller

businesses may struggle with the cost implications and feasibility of transitioning to circular models. This could lead to a disproportionate burden on small businesses, potentially affecting their competitiveness and survival.

"The uniform application of laws overlooks the vast differences between micro and large enterprises, placing a disproportionate burden on smaller companies amid the transition."

- Mayang Azurin - Global Alliance for Incinerator Alternatives (GAIA)

2. Lack of regional best practices

Despite the growing recognition of the importance of just transition and circular economy principles, there is a lack of best practices that demonstrate the business case for adopting such strategies. This can be especially effective while standards, KPIs and datasets on the impacts of just transition and circular economy interventions are being developed.

Sharing successful regional best practices that highlight proven economic, environmental

and social impact could help the organizations build a business case for change. Best practices can showcase their contribution towards reaching the SDGs and how it impacts a company's ESG reporting. Inclusive, circular models, initially costlier due to upfront investments, need governmental support through comprehensive legislation covering circular economy and just transition. Showcasing best practices can bring concrete examples of impact to inspire change.

3. Unintended consequences of zero waste initiatives:

There are concerns that improper implementation of zero waste practices, such as banning single-use plastics without adequate alternatives or consumer awareness, may lead to unintended consequences. This could include the emergence of black markets for banned products or the proliferation of falsely labeled 'eco-friendly' alternatives that may not be truly sustainable. Moreover, it is crucial to recognize that single-use plastics often represent an economical choice for low-income households who may not have the financial means to purchase goods in larger quantities or afford more durable, reusable alternatives. Banning single-use plastics without considering the needs and constraints of these households could disproportionately burden them and exacerbate existing inequalities. For example, low-income consumers, who typically rely on free

single-use plastic bags for their affordability and convenience, may face increased shopping costs as they are forced to purchase more expensive reusable alternatives. This shift not only raises their expenditure but also introduces shopping inconveniences, especially when their buying patterns are sporadic and unplanned. Various drawbacks associated with such bans are discussed in a systematic literature review titled *"Considerations, Benefits and Unintended Consequences of Banning Plastic Shopping Bags for Environmental Sustainability: A Systematic Literature Review"*.⁵⁶ Stakeholders must address these potential gaps and ensure that zero waste initiatives are well-designed, properly communicated, and accompanied by supporting infrastructure and consumer education.

4. Balancing equity and equality:

There are differing perspectives on whether just transition should prioritize equity or equality. Some stakeholders argue that considering the unique needs, cultural contexts, and historical backgrounds of different ASEAN countries and communities is crucial for an equitable transition. Others may advocate for a more uniform approach to ensure equal treatment and opportunities across the region. Balancing these two aspects and finding a context-specific approach that promotes both equity and equality is a challenge that requires careful consideration and dialogue among stakeholders. When looking at gender, ensuring a just transition is critical for women both at upstream and downstream. For example, if the current occupational gender stereotypes

persist, women will be getting only a fraction of the jobs created. Measures are needed to be taken to train women in relevant skills so that they can benefit from potentially created jobs, particularly in high-skilled and middle-skilled occupations.⁵⁷ Women in the informal sector and lower-skilled jobs also need to be taken into consideration to achieve a just transition. "A gender responsive just transition includes the protection and promotion of all women's right to work and rights at work and ensures the equal access of women to decent work and quality jobs in all sectors, but especially for small-scale producers." Jemimah Njuki, Chief for Economic Empowerment at UN Women.⁵⁸

⁵⁶ (Muposhi, Mpinganjira, & Wait, 2022)

⁵⁷ (International Labour Organization, 2019)

⁵⁸ (International Labour Organisation and United Nations Environment Programme, 2023)

5. Top-down vs. bottom-up approaches:

There are disagreements on the most effective approach for driving just transition – whether it should be led by top-down government policies and regulations or driven by bottom-up, community-led initiatives. While top-down approaches can provide a clear direction and ensure compliance, they may not always consider the on-ground realities and challenges faced by local communities and businesses. On the other hand, bottom-up approaches can be more inclusive and

responsive to local needs but may lack the scale and resources to drive systemic change. To find the right balance and create synergies between top-down and bottom-up approaches, it is critical to ensure that the voices of a broad range of stakeholders are heard and considered in the decision-making process.

6. Job replacements and social security:

While there is a consensus on the importance of creating new jobs in the circular economy, there are concerns about the adequacy of job replacements and the design of social security measures for those affected by the transition, particularly in industries reliant on plastic. Stakeholders emphasize the need to ensure that new jobs offer decent working conditions, social protection, and opportunities for career growth. There are also concerns about the potential exclusion of elderly workers and the need for comprehensive social security regimes to support them during the transition. Stakeholders call for the proposed ILBI to consider these impacts and allocate

responsibilities accordingly. Business owners are expected to adapt, diversify, and plan for the transition, while governments are urged to provide support and facilitate the formalization of new business models and engagements. Labor unions should emphasize the importance of social dialogue and collective bargaining in shaping the terms of the transition and ensuring that workers' voices are heard in the decision-making process.

"A just transition requires new business models, addressing the gig economy and short-term employment lacking traditional contractual protections."

- Georgia Pascual, ILO

7. Data and assessment challenges:

It is impossible to accurately measure the impact of just transition interventions without reliable data sources. For this to happen, there is an urgent need to develop just transition standards and KPIs, which can be combined with circular economy impact measurement tools for a holistic understanding of the impact of just transition strategies in circular economy and waste management. Without credible data and robust impact assessment

models, it is difficult for stakeholders to make informed decisions, design effective policies and interventions and justify investments. This underscores the urgent need for investment to develop just transition standards and KPIs, data collection, research and ongoing analysis to guide effective evidence based just transition strategies.

8. Balancing economic interests with social and environmental sustainability:

There are potential conflicts of interest between stakeholders prioritizing economic growth and those advocating for strict environmental regulations and circularity principles. This highlights the need for a just transition that addresses both environmental sustainability and social equity, ensuring that workers and communities dependent on current practices are not left behind. Particularly, some stakeholders raise concerns about conflicts between the need to protect livelihoods dependent on plastic and the goal of reducing plastic waste and promoting sustainability. Stakeholders emphasize the

importance of finding careful solutions that address both aspects, such as developing alternative materials and applying EPR. Some industries may resist transitions that could affect their business models and profitability. Balancing these economic interests with the need for environmental sustainability within the context of just transition is a complex challenge that requires multi-stakeholder dialogue, innovative solutions, and a gradual approach to transition.

9. Informal sector integration and professionalization:

While there is a growing recognition of the importance of integrating informal waste workers into formal waste management systems and circular economy initiatives, there are challenges in achieving this in practice. Informal workers may be reluctant to formalize due to fears of losing autonomy, facing bureaucratic hurdles, or not receiving adequate support and benefits. It is essential to resolve these conflicts and discover ways to

inclusively support and integrate informal workers. This involves enhancing their work conditions, livelihoods, and reducing health risks, that help professionalize, not necessarily formalize informal workers. Such measures are vital for achieving a just transition. While job creation is a positive outcome, the real quest lies in ensuring that these jobs are indeed decent.

10. Financing and resource allocation:

There may be disagreements among stakeholders on the allocation of financial resources and investments for just transition initiatives. Investment is also the top concern for governments in implementing just transition strategies. Some may prioritize investments in infrastructure and technology, while others may advocate for greater resources for social protection, capacity

building, and supporting small businesses. Ensuring equitable and transparent allocation of resources, based on a comprehensive social impact assessment of needs and priorities, is essential to mitigate conflicts and ensure a balanced approach to just transition.

"Access to funding remains a formidable challenge for small companies, inhibiting their capacity to innovate and grow within the framework of a just transition."

- Lailly Prihatiningtyas, lead researcher "Green Jobs and Just Transition Policy Readiness Assessment in the Energy Sector in Indonesia"

11. Scope and focus of the Global Plastics Treaty:

The proposed ILBI on plastic pollution offers a critical opportunity to address a pressing environmental challenge through global cooperation. However, plastic pollution's impacts go beyond the environment, affecting livelihoods, health, and well-being of communities worldwide, especially vulnerable and marginalized groups who are

disproportionally affected by plastic pollution. Therefore, the global plastic treaty should elevate just transition from a secondary consideration to a core guiding framework for the plastics transition by integrating holistic, ethical solutions along the entire plastic life cycle benefiting people and planet.

"A critical question is: Will the treaty prevent pollution or reduce plastic production?"

- Taylor Cass Talbott, International Alliance of Waste Pickers



Case Studies and Best Practices

ASEAN countries are increasingly integrating the circular economy into their national plans, with rising interest in just transition principles. Although initiatives show promise with tangible impacts, comprehensive transitions in sectors and examples within waste management and the circular economy remain limited. Initial efforts by labour unions, NGOs, businesses, and governments to develop just transition plans are in place, but the scarcity of complete transitions hinders evaluating their long-term effects on employment, company performance, and socio-economic outcomes for vulnerable groups. A critical challenge is the absence of extensive data on detailed case studies and best practices.

To address the data gap, this study analyzed case studies identified through multi-stakeholder interviews, using a methodology that combines an evaluation criterion adhered to the Just Transition Framework and Principles detailed in Chapter 6, both developed by Yunus Environment Hub, stemming from extensive research and stakeholder interviews. The qualitative analysis focused on how well the case studies adhered to the ILO Guidelines for a just transition,⁵⁹ particularly in terms of stakeholder satisfaction and inclusion. Moreover, it placed these findings within the ASEAN context while also considering relevant global practices for a well-rounded perspective.

Case Study 1: Just Energy Transition at the National Level

Indonesia: The Importance of Public Policy in Just Transition ⁶⁰

Indonesia is working towards a just energy transition to address climate change impacts. Since ratifying the Paris Agreement in 2016, Indonesia has been integrating climate considerations into its development agenda and setting carbon reduction targets. The country aims to achieve net-zero emissions by 2060 or earlier with international support, focusing on energy efficiency measures, electrification of transport and buildings, fuel shift from coal to gas and renewables in industry, and promoting renewable energy in power generation.

Just Transition Practices

Several proven effective methods help facilitate a fair transition in Indonesia. These encompass:

- **Policy Alignment and Governance:** Indonesia has established a comprehensive green economy agenda and aligned it with national development

planning, macroeconomic policies, and climate objectives. This strategic policy alignment and strong governance framework are critical components of a just transition, ensuring that the shift to a green economy is equitable and inclusive. By setting ambitious net-zero emission targets and progressing well in policy development, Indonesia demonstrates its commitment to not only environmental sustainability but also to supporting workers, communities, and other stakeholders affected by this transition. This approach helps mitigate potential adverse impacts on employment and livelihoods, fostering a fair and inclusive transition to a sustainable future.

- **Economic Viability:** The transition to greener energy alternatives, such as renewable energy sources, has demonstrated economic viability. Indonesia recognizes the importance of creating demand for and a supply of green jobs, preventing "greenwashing," and promoting secure and decent work opportunities in line with the ILO's definition.

59 (International Labour Organization, 2015)
60 (PAGE, 2023)

- **Social Equity and Inclusivity:** Indonesia's approach to social equity and inclusivity ensures that the energy transition does not leave behind workers and communities dependent on the fossil fuel industry. The country has incorporated measures such as retraining programs and social safety nets to support these vulnerable groups during the transition.
- **Environmental Impact:** The transition to renewable energy sources and the phasing out of coal-fired power plants have significant environmental benefits, including reduced greenhouse gas emissions and improved air quality. These positive environmental impacts further validate the significance of Indonesia's energy sector transformation.
- **Workforce Transformation:** The shift towards renewable energy sources and the phase-out of coal-fired power plants will likely result in job losses and shifts within the energy sector. However, it also presents opportunities for job creation in emerging green industries, such as renewable energy technology, energy efficiency, and related services.
- **Regional Development:** The transition may have varying regional employment effects due to differences in the availability of natural resources and the placement of renewable energy projects. This could potentially lead to new prospects for development in areas suitable for renewable energy generation, recycling, and repair services aligned with a circular economy model.

Just Transition Impacts and Implications

- **Active Labor Market Policies (ALMPs):** Indonesia recognizes the central role of ALMPs in facilitating a just transition, as recommended by the ILO. These policies aim to provide support, training, and opportunities for workers affected by the transition, ensuring they can secure decent and sustainable employment in the green economy.
- **Supply Chain Disruptions:** The transition towards cleaner processes and renewable resources is expected to bring about significant transformations and disruptions within energy sector supply chains, requiring adaptation and restructuring to align with the new sustainability paradigm.

Case Study 2:

Just Transition at the Local Community Level

Philippines: Social Protection in Just Transition ⁶¹

The ILO implemented a joint program focused on climate change adaptation and risk transfer mechanisms for farming communities in Agusan del Norte, Philippines.⁶² The initiative aimed to enhance the resilience of these communities and support a just transition in the agriculture sector.

Just Transition Practices

The project demonstrated several successful practices aligned with just transition principles:

- **Social protection scheme:** It piloted an innovative climate risk insurance scheme to provide social protection and prevent negative impacts on farmers and agricultural workers due to climate change.

61 (DOLE)

62 (A Climate Change Adaptation Project of the INTERNATIONAL LABOUR ORGANIZATION (ILO))

Case Studies and Best Practices

- **Stakeholder engagement:** The project involved collaboration with government agencies, farmers' organizations, and local communities, ensuring their concerns and needs were addressed. The involvement of tripartite partners ensured diverse perspectives were considered in the transition process.
 - **Choice and reskilling:** Training programs were conducted to build the capacities of farmers and stakeholders in climate-resilient farming practices and risk management strategies. Farmers were provided with opportunities to acquire new skills and adapt to regenerative agricultural practices.
 - **Climate change:** The insurance scheme aimed to support the economic viability of farming communities and promote sustainable agricultural practices.
 - **Environmental sustainability:** The project promoted climate-resilient farming methods, contributing to environmental sustainability and resource efficiency in the agricultural sector.
 - **Social equity:** The insurance scheme and capacity-building efforts aimed to ensure a fair distribution of benefits and support for vulnerable farming communities affected by climate change.
 - **Scalability and replicability:** While the project demonstrated the feasibility of such risk transfer mechanisms, scaling up and securing long-term funding remained a challenge, limiting its broader impact.
- Just Transition Impacts and Implications**
- The project had the following implications for a just transition in the agriculture sector:

- **Economic viability:** By mitigating the risks of

Case Study 3:

Just Transition Initiatives by Youth Leadership

Philippines: The Power of People-Centered Approach in Just Transition ⁶³

The Mother Earth Foundation's waste reduction programs and the youth-led slow food community initiative on Baraki Island exemplify the Philippines' leadership in nurturing grassroots movements that embody just transition principles. These initiatives demonstrate the power of community involvement, integration of indigenous knowledge, youth leadership, and a holistic approach in driving sustainable practices in waste management and circular economy. As pioneers, they offer a blueprint for other nations in the ASEAN region to advance just transition goals through inclusive and locally-driven initiatives.

Just Transition Practices

- **Integration of Indigenous Knowledge:** The slow food community initiative on Baraki Island incorporates indigenous organic practices and local food sources, highlighting the value of traditional knowledge in achieving environmental sustainability. By integrating indigenous practices and traditional knowledge, these initiatives respect and uphold the rights of local communities and indigenous peoples.
- **Youth Leadership:** The youth-led initiatives foster inclusivity by actively engaging and empowering young advocates in shaping sustainable development efforts.

63 (Mother Earth Foundation, n.d.)

Case Studies and Best Practices

- **Community Involvement:** The Mother Earth Foundation's waste reduction programs and the youth-led slow food community initiative on Baraki Island demonstrate the importance of engaging local communities and empowering them to drive sustainable practices.
 - **Holistic Approach:** The Mother Earth Foundation's program supports local livelihoods while promoting waste reduction, reflecting a holistic approach to Just Transition that addresses environmental, economic, and social aspects.
 - **Local Food Sources:** Initiatives like the Mother Earth Foundation's program support local food sources, aligning with environmental sustainability goals.
 - **Community Empowerment:** By actively involving local communities and youth, these initiatives foster a sense of ownership and empower stakeholders to drive sustainable change.
 - **Economic Opportunities:** Initiatives like the Mother Earth Foundation's program support local livelihoods, demonstrating the potential for creating economic opportunities through sustainable practices.
 - **Scalability:** With adequate financial support, similar initiatives could be replicated across the ASEAN region, amplifying the impact of just transition efforts in waste management and circular economy.
- ### Just Transition Impacts and Implications
- **Environmental Sustainability:** The initiatives contribute to waste reduction, plastic waste minimization, and the promotion of organic and

Case Study 4:

Just Transition Initiatives by Private Sector

Vietnam: An Inclusive Business Approach for Just Transition ⁶⁴

VietCycle is one of the few business models in Vietnam cited in this study for demonstrating just transition principles in waste management and the circular economy. While the study does not examine controversial aspects or validate the success of VietCycle's efforts, it presents VietCycle as a case study highlighting local initiatives, multi-stakeholder collaboration, and awareness-raising in just transition.

VietCycle Corporation's inclusive and collaborative business approach showcase its leadership in driving circular economy practices and sustainable waste management in Vietnam. By empowering informal waste collectors and

fostering multi-stakeholder partnerships, VietCycle exemplifies the principles of a just transition.

Just Transition Practices

- **Circular and Inclusive Ecosystem:** VietCycle emphasizes creating a circular and socially inclusive waste management ecosystem in Vietnam, promoting EPR practices involving the informal waste sector and consulting on EPR policies for brands and producers.
- **Empowering Informal Waste Collectors:** VietCycle supports informal waste collectors, especially disadvantaged women, by providing health insurance, essential supplies, tools, labor protection, and better working conditions.

Case Studies and Best Practices

- **Multi-Stakeholder Collaboration:** VietCycle collaborates with private sector, international organizations and NGOs to improve the quality of life for informal waste collectors and promote sustainable consumption habits.

Just Transition Impacts and Implications

- **Economic Opportunities:** By advocating for the professionalism and integration of informal waste collectors into the circular economy value chain, VietCycle enhances economic opportunities and improves livelihoods.
- **Environmental Impact:** VietCycle advocates for recycling and converting plastic waste into new products, which can contribute to reducing environmental pollution, minimizing resource consumption, and lowering carbon emissions.
- **Social Equity and Inclusiveness:** VietCycle's programs contribute to improved income and

the social security and well-being of disadvantaged women waste collectors, promoting social equity and inclusiveness in the transition to a circular economy.

- **Capacity Building and Education:** VietCycle's initiatives, such as the "CyclePacking" solution, focus on educating and raising awareness about sustainable consumption habits and reducing plastic waste among communities and residential areas.
- **Multi-stakeholder Cooperation:** VietCycle fosters multi-stakeholder cooperation in the circular economy through extensive engagement with governments, businesses, and NGOs. Their model focuses on integrating informal waste collectors into the economy, promoting socio-economic and environmental benefits.

Case Study 5: Just Transition Approach for Inclusivity

Malaysia: The Importance of Inclusive Development Process ⁶⁵

The Malaysia Plastics Sustainability Roadmap 2021-2030 demonstrates a comprehensive and inclusive approach to promoting sustainable practices in the plastics industry. Its success lies in involving diverse stakeholders, conducting a thorough analysis, establishing clear objectives and governance structures, and emphasizing innovation and technology. By aligning with just transition principles, the Roadmap represents a significant step towards a sustainable and circular plastics industry in Malaysia.

Just Transition Practices

- **Inclusive Development Process:** The Roadmap involved various stakeholders, including government agencies, industry experts, civil society organizations, and academic institutions, ensuring diverse perspectives and expertise were incorporated.
- **Comprehensive Analysis:** The Roadmap began with a thorough analysis of challenges across the plastics value chain, providing a solid foundation for targeted interventions. The transparent and science-based approach to developing the

⁶⁵ (Ministry of Environment & Water (KASA), Malaysia, 2021)

Roadmap aligns with the principle of transparency and accountability, enhancing credibility and trust among stakeholders.

- **Clear Objectives and Principles:** The Roadmap sets clear objectives and principles aligned with circular economy principles, providing a strategic framework for sustainable practices. The Roadmap's focus on economic development, environmental protection, and capacity building aligns with the principle of developmental sustainability, promoting long-term sustainable growth in the plastics industry.
- **Governance and Implementation Framework:** The establishment of a National Steering Committee, Technical Committee, and Think Tank demonstrates a commitment to effective governance, oversight, and coordination during implementation.
- **Focus on Innovation and Technology:** Emphasizing innovation in materials, processes, and advanced technologies reflects a forward-thinking approach to enhancing plastic circularity and sustainability.

Just Transition Impacts and Implications

- **Economic Development:** The Roadmap aims to promote economic development by fostering a sustainable plastics industry and creating new business opportunities in the circular economy.
- **Environmental Protection:** By addressing plastic pollution and promoting sustainable practices, the Roadmap contributes to environmental protection and aligns with global sustainability goals.
- **Capacity Building and Knowledge Sharing:** The involvement of academic institutions and industry experts facilitates capacity building and knowledge sharing, enabling stakeholders to adopt sustainable practices effectively.
- **Policy and Regulatory Framework:** The Roadmap's development process and governance framework lay the groundwork for developing and implementing supportive policies and regulations to drive sustainable practices in the plastics industry.

A woman with dark hair, wearing a light-colored polo shirt with a logo that includes the word "ofra", is speaking into a black microphone. She is standing outdoors, possibly at a community event or meeting. In the background, there are blue structures, a wooden railing, and some greenery. To her left, another person in a red shirt is partially visible. The overall scene suggests a public engagement or consultation activity.

Guidelines and
Recommendations
for Just Transition

6



Drawing from the analysis and findings, the following section provides a comprehensive framework to guide stakeholders in ensuring a fair and equitable transition towards sustainability. Our best practices and actionable guidelines for just transition implementation are structured into three key components:

1. The just transition framework and principles

serve as the foundation for ensuring that the transition to a circular economy in the waste management sector is socially responsible, inclusive, and equitable. The framework covers key aspects such as social dialogue, stakeholder engagement, social protection, skills development, decent work, gender equality, regional cooperation, and cyclical improvement. By adhering to the framework and its principles, stakeholders can ensure that the transition process addresses the needs and concerns of all affected parties, particularly workers, communities, and vulnerable groups, and promotes sustainable development in the ASEAN region.

2. The practical recommendations

provide specific guidance and action points for different stakeholder groups, including governments, policymakers, labor associations, waste picker cooperatives, waste management companies, environmental NGOs, communities, and the private sector. These recommendations are tailored to the unique roles and responsibilities of each stakeholder group in advancing just transition in the waste management and circular economy sectors. They cover aspects such as policy development, social protection, skills training, community engagement, sustainable business practices, and alignment with international frameworks like the ILBI on plastic pollution.

3. The mitigation strategies

proposed aim to address the challenges and barriers to implementing just transition in waste management and circular economy. These strategies include establishing multi-stakeholder taskforces, conducting impact assessments, developing social protection frameworks, creating dedicated funding mechanisms, fostering regional knowledge sharing, and raising awareness among stakeholders.

6.1. Just Transition Framework and Principles

The Just Transition Framework is intended for stakeholders to use as a guide when implementing just transition activities in waste management and circular economy. It is critical that stakeholders embrace all 10 elements outlined in the framework to ensure a holistic approach when designing and implementing strategies. By embracing the entire framework, we ensure no one is left behind, and create a foundation for long-lasting impact that benefits both people and planet.

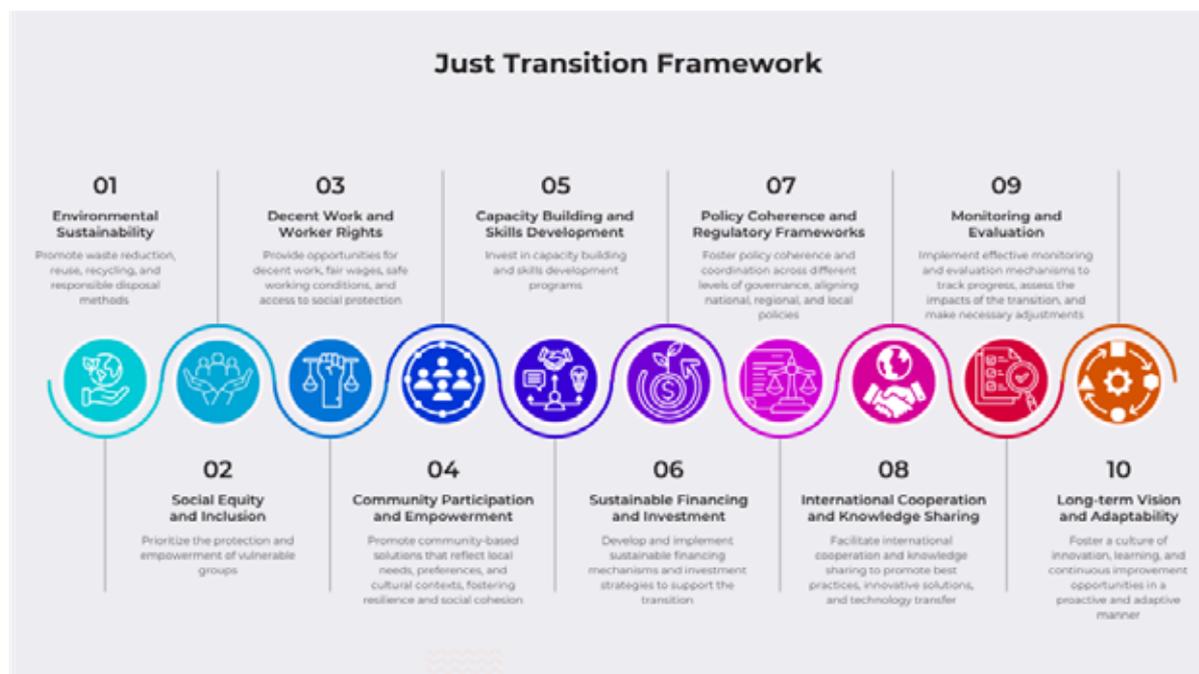


Figure 2: Just Transition Framework in Waste Management and Circular Economy, based on desk research and stakeholders' insights Designed by Yunus Environment Hub

The following table provides an overview of the 10 just transition principles and corresponding themes.

| Theme | Just Transition Principle |
|--|---|
| <p>Environmental Sustainability</p> | <p>1. The overarching principle should be to transition towards environmentally sustainable waste management practices that minimize negative impacts on the environment, human health, and climate change. This includes promoting waste reduction, reuse, recycling, and responsible disposal methods while fostering behavior change and a mindset shift towards socially inclusive circular economy models.</p> |

6.1. Just Transition Framework and Principles

| Theme | Just Transition Principle |
|--|--|
| <p>Social Equity and Inclusion</p> | <p>2. Ensure that the transition process is socially equitable and inclusive, addressing the needs and concerns of marginalized and vulnerable communities who are often disproportionately affected by poor waste management practices.</p> <p>Prioritize the protection and empowerment of vulnerable groups, including women, youth, disabled individuals, and indigenous communities, by integrating their perspectives and needs into decision-making processes and program implementation.</p> |
| <p>Decent Work and Worker Rights</p> | <p>3. Protect the rights and livelihoods of workers in the waste management sector and circular economy, both formal and informal. Provide opportunities for decent work, fair wages, safe working conditions, and access to social protection. Prioritize the professionalization and integration of informal waste workers into the waste management value chain, acknowledging their contributions and integrating them into a more structured and sustainable system.</p> |
| <p>Community Participation and Empowerment</p> | <p>4. Actively engage and empower local communities in the planning, implementation, and monitoring of waste management initiatives. Foster a sense of ownership and accountability through inclusive decision-making processes, participatory approaches, and community-led initiatives. Promote community-based solutions that reflect local needs, preferences, and cultural contexts, fostering resilience and social cohesion.</p> |
| <p>Capacity Building and Skills Development</p> | <p>5. Invest in capacity building and skills development programs to equip workers, communities, and stakeholders with the knowledge and expertise required to support a just transition towards sustainable waste management practices and new circular economy business models. Prioritize training on circular economy principles, waste reduction strategies, recycling technologies, and community-based waste management approaches, ensuring that stakeholders along the value chain are equipped to actively participate and contribute to the transition process.</p> |
| <p>Sustainable Financing and Investment</p> | <p>6. Develop and implement sustainable financing mechanisms and investment strategies to support a just transition, such as inclusive extended producer responsibility schemes, polluter-pays principles, and public-private partnerships. Ensure adequate funding and resources are allocated to support the implementation of just transition initiatives, leveraging public and private sector investments to drive social innovation, infrastructure development, and capacity building efforts.</p> |

6.1. Just Transition Framework and Principles

| Theme | Just Transition Principle |
|---|--|
| <p>Policy Coherence and Regulatory Frameworks</p> | <p>7. Ensure robust and coherent policy and regulatory frameworks that promote sustainable waste management practices, incentivize socially inclusive circular economy strategies and social business models, in accordance with NDCs. Foster policy coherence and coordination across different levels of governance, aligning national, regional, and local policies to support a just transition towards a circular economy and sustainable waste management system.</p> |
| <p>International Cooperation and Knowledge Sharing</p> | <p>8. Facilitate international cooperation and knowledge sharing to promote best practices, innovative solutions, and technology transfer, ensuring that the transition is inclusive and equitable across different regions and contexts. Foster collaboration among ASEAN countries and international partners to develop standards and KPIs for harmonization, fostering cross-border learning and capacity building efforts.</p> |
| <p>Monitoring and Evaluation</p> | <p>9. Implement effective monitoring and evaluation mechanisms to track progress, assess impacts, and make necessary adjustments to ensure that the principles of a just transition are upheld. Utilize data-driven decision-making processes to evaluate the social, economic, and environmental outcomes of waste management initiatives, engaging stakeholders in participatory monitoring and evaluation activities to enhance accountability and transparency.</p> |
| <p>Long-term Vision and Adaptability</p> | <p>10. Develop a long-term vision for sustainable waste management and a socially inclusive circular economy that considers future challenges and opportunities, while maintaining flexibility and adaptability to respond to changing circumstances and emerging technologies. Foster a culture of social innovation, learning, and cyclical improvement, enabling stakeholders to anticipate and address evolving waste management needs and opportunities in a proactive and adaptive manner. Ensure just transition principles are embedded along in process and along the entire value chain.</p> |

Table 1: Just Transition Principles for Waste Management and Circular Economy

6.2. Recommendations for Key Stakeholders

After carefully considering the various recommendations, the following actions have been identified as the most feasible and impactful for ASEAN countries to achieve a just transition. These recommendations prioritize cost-effective, socially inclusive interventions that leverage existing regional strengths while addressing pressing challenges associated with the transition to a circular economy.

For Government/ Policymakers/ Labor associations

1. Embed just transition principles into legislation and regulations.

Integrating just transition considerations into existing legal frameworks can be a high impact approach for ASEAN countries to ensure a socially inclusive circular economy transition. While there are concerns about the potential financial burden, it is essential to raise the question: what would be the cost of not having just transition? The Stern Review on the Economics of Climate Change estimated that the costs of inaction could amount to at least 5% of global GDP annually, indefinitely.⁶⁶ According to the IPCC Climate Change 2023 report,⁶⁷ implementing just transition strategies is crucial for achieving ambitious societal goals and resolving potential trade-offs with sustainable development objectives. Notably, a recent research analyzing just transition costs concluded that while social dialogue is necessary, it is not sufficient. A just transition requires a dedication to redistributive justice, thoroughly addressing the long-term social, political, and economic consequences of ‘leaving behind’ vulnerable populations.⁶⁸ By focusing on redistributive policies across sectors and regions, policymakers can ensure that the poor and vulnerable are protected during the transition to a more sustainable future. The integration can prove to be cost-effective in the long term, as investments in worker upskilling and social protections not only enhance economic resilience but also reduce costs. The benefits

of these investments often outweigh the initial expenses through job creation and health improvements.

2. Acknowledge workers' rights and actively involve them in policy development:

Recognizing and safeguarding workers' rights is crucial for a successful just transition. Involving workers and their representatives in social dialogue to shape policies ensures that their needs and perspectives are adequately addressed, fostering a fair and inclusive transition. Examples of such involvement include establishing worker representation in policy-making committees, conducting consultations with labor unions, and implementing worker-centered initiatives like job training programs and transition assistance funds.

3. Create multi-stakeholder advisory committees to guide just transition policy development and implementation.

Establishing multi-stakeholder advisory committees leverages ASEAN's strong tradition of stakeholder engagement and collaboration. These committees ensure policies are informed by diverse perspectives, build trust in the transition process, and can be formed without significant additional costs.

66 (Stern, 2006)

67 (IPCC, 2023)

68 (Weller, Beer, & Porter, 2024)

6.2. Recommendations for Key Stakeholders

4. Perform comprehensive impact assessments to identify vulnerable sectors and communities.

While conducting impact assessments may require upfront costs, they are essential for developing targeted, resource-efficient interventions, which ultimately save resources by ensuring that interventions are focused on the most vulnerable sectors and communities. ASEAN countries can minimize costs by leveraging existing data and research capacities.

5. Implement targeted support programs for MSMEs to adopt circular economy practices.

MSMEs are vital to ASEAN economies and the circular economy transition. Targeted support programs, such as training and upskilling initiatives, can help MSMEs adopt circular practices, create economic opportunities, and build public support for

a just transition. These programs should leverage existing MSMEs support infrastructure and networks to maximize their reach and impact.

6. Promote regional cooperation and knowledge sharing on best practices for achieving a just transition.

ASEAN's strong history of regional cooperation and knowledge sharing can be harnessed to accelerate progress towards a just transition. Collaboration minimizes duplication of efforts and costs while fostering a shared commitment to just transition principles across the region.

For Waste Management Companies/ NGOs/ Communities

1. Foster partnerships with local governments and communities to co-design contextualized just transition solutions.

Collaborating with local governments and communities leverages ASEAN's decentralized waste management responsibilities and strong tradition of community engagement. Pooling knowledge, resources, and capacities through partnerships enables the development of sustainable, equitable solutions tailored to local realities.

2. Implement inclusive business models that provide decent work opportunities for informal waste workers.

Creating decent work for informal waste workers is crucial for a just, equitable circular economy transition in ASEAN. The region's growing social entrepreneurship and impact investing ecosystem can be leveraged to support and scale inclusive business models. Moreover, there are already successful examples of inclusive business models in the region, such as waste picker cooperatives and social enterprises, which can be replicated and adapted to different contexts.

6.2. Recommendations for Key Stakeholders

3. Conduct awareness-raising campaigns to build public understanding and support for just transition measures.

Raising public awareness is essential to generate the social and political will needed for just transition measures in ASEAN. This action recognizes the important role that public opinion and behavior change play in the success of waste management and circular economy initiatives. The region's strong culture of community engagement and active environmental NGOs can be harnessed to drive impactful awareness campaigns using diverse, culturally appropriate communication channels.

4. Advocate for the inclusion of just transition principles in EPR schemes.

Incorporating just transition principles into EPR schemes ensures a fair distribution of the costs and benefits of the circular economy transition in ASEAN. Engaging in policy dialogues and

consultations, waste management companies, environmental NGOs, and communities can shape EPR schemes to prioritize the needs of informal waste workers and marginalized communities, drawing on international best practices.

5. Monitor and report on the social and environmental impacts of waste management practices on local communities.

Monitoring and reporting waste management impacts is critical for transparency, accountability, and cyclical improvement in ASEAN's just transition process. The region's growing participatory governance culture can be leveraged to support community-based monitoring systems, adapting existing tools and frameworks (such as the Global Reporting Initiative (GRI) and the ISO 26000 standard on social responsibility) to the ASEAN context. Regular impact monitoring enables evidence-based policymaking and advocacy for practices that benefit local communities.

For Businesses/ Multinationals

1. Integrate just transition principles into corporate sustainability strategies and policies.

Incorporating just transition principles into existing corporate sustainability frameworks in the long term is a cost-effective, impactful way for ASEAN businesses to demonstrate commitment to social responsibility and equitable growth. Aligning with global trends enhances

access to capital and competitiveness while contributing to a more inclusive, resilient regional economy. As businesses transition to circular economy models, they must consider the impacts on their workforce and value chains. Social businesses, with their inherent focus on addressing social and environmental challenges, can be a driver for a just transition.

6.2. Recommendations for Key Stakeholders

2. **Develop and implement supplier codes of conduct that incorporate just transition principles and requirements.**

Implementing supplier codes of conduct is a practical way for ASEAN businesses to promote just transition principles throughout their supply chains. Updating existing codes to include fair labor practices, social protection, and environmental sustainability leverages the purchasing power of large companies to drive positive change and create a more equitable business ecosystem.

3. **Partner with education and training institutions to develop curricula and programs for green skills and jobs.**

Collaborating with education and training institutions enables ASEAN businesses to build the skills and capacities needed for a just transition to a circular economy. Co-designing and co-delivering curricula focused on green skills and jobs, in partnership with the region's growing technical and vocational education and training (TVET) institutions and universities, creates a pipeline of skilled workers to drive the transition.

4. **Engage in multi-stakeholder partnerships and initiatives to scale up just transition efforts across industries and regions.**

Participating in multi-stakeholder partnerships and initiatives allows ASEAN businesses to leverage collective action and resources to scale up just transition efforts. The region's strong culture of cooperation, exemplified by the ASEAN Circular Economy

Stakeholder Platform and ASEAN Responsible Business Forum, provides opportunities to share best practices, develop joint projects, and advocate for policies supporting a just transition.

5. **Invest in the development and deployment of green technologies that create decent work opportunities in the circular economy.**

Investing in green technologies enables ASEAN businesses to drive innovation and create new employment opportunities aligned with circular economy principles. The region's growing innovation ecosystem, including increasing investment in research and development, start-ups, and technology transfer, provides a supportive environment for businesses to prioritize technologies that generate decent work opportunities and ensure a more equitable distribution of benefits.

6.3. Proposal of Effective Mitigation Strategies to Facilitate Just Transition

- **Establish a multi-stakeholder just transition taskforce or committee at the national or regional levels:**

Bring together representatives from government agencies, labor associations, waste management companies, environmental NGOs, and local communities to develop and oversee the implementation of comprehensive Just Transition strategies and action plans. This task force should be responsible for setting goals, defining roles and responsibilities, and monitoring progress towards a Just Transition in the waste management and circular economy sectors.

- **Launch a pilot project to demonstrate the impact of just transition:**

Design and implement a pilot project in a selected city or location to showcase the practical application of just transition principles in waste management and circular economy. This project should involve a diverse group of stakeholders, including government agencies, businesses, waste workers, and local communities to build an inclusive value chain. The pilot project should focus on demonstrating the social, economic, and environmental benefits of a Just Transition, such as job creation, improved livelihoods, enhanced social protection, and reduced environmental impact. The lessons learned and best practices from the pilot project can then be shared and replicated across other ASEAN countries to accelerate the adoption of Just Transition strategies in the region.

- **Develop standards and KPIs for just transition:**

Develop a set of standards and KPIs that measure the impact of just transition interventions. Provide a framework and support businesses to link the impact to ESG and other reporting requirements. Connect just transition impact with circular economy measurements for a holistic understanding of social and environmental impact. Share data across regions to scale best practices.

- **Conduct social impact assessments:**

Undertake comprehensive assessments to identify the potential effects of the transition on workers, communities, and vulnerable groups. These assessments should analyze the social, economic, and environmental impacts of proposed policies and programs, and inform the development of targeted measures to mitigate negative impacts and support affected stakeholders.

- **Develop and implement targeted social protection measures:**

Based on the findings of the social impact assessments, design and implement a range of social protection measures to support workers and communities affected by the transition. These measures may include income support schemes, retraining and upskilling programs, job placement assistance, and social insurance mechanisms. Ensure that these measures are accessible, adequate, and responsive to the needs of different stakeholder groups.

6.3. Proposal of Effective Mitigation Strategies to Facilitate Just Transition

- **Allocate adequate resources and establish dedicated funding mechanisms:**

Mobilize resources from public, private, and international sources to support the implementation of just transition programs and initiatives in the waste management and circular economy sectors. Ensure that these resources are distributed equitably and transparently, and that they are used effectively to support the most vulnerable stakeholders.

- **Develop and implement targeted communication and awareness-raising campaigns:**

Promote understanding of just transition principles and their relevance to waste management and circular economy among key stakeholders, including policymakers, businesses, workers, and communities.

- **Establish or enhance a regional knowledge-sharing platform or network:**

Facilitate the exchange of best practices, lessons learned, and innovative approaches to just transition among ASEAN member states, fostering collaboration and capacity building while leveraging established or existing thought-sharing mechanisms within ASEAN.

- **Collaborate with educational institutions and training providers:**

Partner with universities, vocational schools, and other training providers to develop and fund skills development programs that equip workers with the necessary skills for green jobs in the circular economy. These programs should be designed in consultation with industry stakeholders to ensure that they meet the evolving needs of the waste management and circular economy sectors. Collaborating with the Ministry of Education can help ensure that the skills development programs and curricula are aligned with national education policies and standards, increasing their effectiveness and reach.

- **Engage in social dialogue with labor associations and unions:**

Establish regular channels of communication and consultation with labor associations, unions, and other worker representatives to ensure that their views and concerns are taken into account in the development and implementation of just transition policies and programs. This social dialogue should be based on the principles of transparency, respect, and mutual trust, and should aim to find consensual solutions that benefit all stakeholders.



Recommendations for the ILBI Negotiations

Recommendations for the ILBI Negotiations

The proposed ILBI on plastic pollution offers a critical opportunity to address a pressing environmental challenge through global cooperation. However, plastic pollution's impacts go beyond the environment, affecting livelihoods, health, and well-being of communities worldwide, especially vulnerable and marginalized groups. The ILBI negotiations must adopt a human-centered approach, ensuring no one is left behind in the transition to a socially inclusive circular economy.

This requires meaningful participation from all stakeholders - governments, workers, civil society, industry, waste sector, indigenous groups, youth, and the private sector. An inclusive process that amplifies diverse perspectives is essential for equitable solutions that balance environmental protection, social equity, economic viability, and human rights throughout the plastics value chain. The following recommendations aim to help stakeholders effectively participate in the ILBI negotiations and ensure a just transition to a circular plastics economy.

ASEAN Member States:

- Jointly advocate for an ILBI that reflects the region's unique challenges and circumstances, including its high dependence on plastics, vulnerability to plastic pollution, and development needs.
- Call for robust and predictable funding, technology transfer and investment mechanisms in the ILBI to support ASEAN countries to implement commitments and benefit from circular economy opportunities. Agree to certain concessions in exchange.
- Use the negotiations to enhance regional cooperation and harmonized approaches on plastics, like ASEAN-wide EPR guidelines, plastics standards, and circular trade

frameworks. Offer to host regional mechanisms.

- Jointly push for ILBI provisions that enable engagement of the region's active youth, civil society, informal and vulnerable groups in plastics solutions. Build coalition with these groups to enhance negotiating power.

National Governments / Policymakers:

- Advocate for the inclusion of just transition principles in the ILBI to ensure the transition to a circular plastics economy is equitable and leaves no one behind.
- Push for concrete funding mechanisms and capacity building support in the ILBI to enable developing countries to effectively implement plastic pollution reduction measures.
- Seek alignment between the ILBI and existing national policies and initiatives on plastic waste management and circular economy. Look for synergies and avoid duplication of efforts.
- Be willing to compromise on aspects like implementation timelines in exchange for robust financial and technical assistance provisions in the ILBI.
- Conduct comprehensive impact assessments to identify sectors and communities most vulnerable to the plastics transition. Use this evidence to inform negotiating positions.
- Consult extensively with labor unions, informal waste worker associations, and industry to understand their concerns. Reflect these in negotiating positions as appropriate.

Civil Society Organizations:

- Strongly advocate for the ILBI to protect livelihoods of informal waste workers, one of the most vulnerable groups in the plastics value chain. Call for their integration into EPR and circular economy schemes.
- Conduct public advocacy and mobilization to build pressure on governments to agree to an ILBI with strong and legally binding environmental and social provisions.
- Provide research and evidence to inform the negotiations, especially on environmental, health and social impacts of plastic pollution and benefits of a just circular transition.
- Be willing to compromise on contentious issues like certain plastic bans/restrictions if the ILBI contains strong just transition and inclusivity measures.

Labor Associations:

- Negotiate for the ILBI to contain strong labor and social protection measures, including decent work guarantees and funding for reskilling/upskilling workers.
- Conduct research on job impacts of the plastics transition on union members. Use it to demand appropriate support and job transition assistance in the ILBI.
- Build alliances with environmental NGOs to show a united front and enhance influence. Align messaging to call for an ILBI that is both environmentally ambitious and socially just.
- Show openness to support demands like plastic production restrictions if the ILBI has robust worker support and livelihood protection provisions.

Waste Management Companies:

- Push for the ILBI to promote inclusive EPR schemes that provide new business opportunities and funding streams for sustainable waste management.
- Call for the ILBI to facilitate investment and technology transfer to upgrade waste management infrastructure and systems, especially in developing countries. Offer industry expertise to shape these provisions.
- Highlight the role the waste management sector can play in providing decent jobs and livelihoods in the transition to a circular plastics economy. Advocate for funding and incentives to maximize this potential.
- Show willingness to agree to certain ILBI plastic reduction and design standards in exchange for robust capacity building and infrastructure investment support for the sector.

Private Sector:

- Push for the ILBI to incentivize and de-risk private sector investment and innovation in circular plastics solutions, including through blended finance approaches, sustainable procurement, and public-private partnerships.
- Advocate for the ILBI to facilitate technology transfer and capacity building to help businesses, especially MSMEs, to adopt socially inclusive circular business models and comply with new requirements.
- Call for the ILBI to harmonize international plastics standards and EPR approaches to reduce compliance costs and fragmentation for companies operating across borders.
- Mobilize private sector funding and expertise to support ILBI implementation and commit to plastic production targets.

Vulnerable Groups:

- Strongly advocate for ILBI recognition of and support for initiatives led by vulnerable groups, including youth, indigenous communities, women, people with disabilities, and other vulnerable communities. Push for representation in ILBI decision-making and implementation.
- Argue for the ILBI to respect the rights and knowledge of vulnerable groups in the transition to a circular plastics economy. Ensure these are not undermined by top-down ILBI measures.
- Use moral authority and energy to mobilize public pressure on governments to agree on an ambitious ILBI that protects vulnerable groups and future generations. Engage in creative advocacy campaigns.
- Build alliances among different vulnerable groups to amplify voices and strengthen negotiating position. Develop a common platform of demands for inclusion, support, and benefits from ILBI implementation.
- Be prepared to support certain industry transition demands in exchange for meaningful inclusion of vulnerable groups and guarantees for protection and empowerment under the ILBI.



Recommendations
for implementation
agencies

Recommendations for implementation agencies

The Recommendations for a Just Transition in Waste Management and Circular Economy in the ASEAN Region report aims to support projects like 3RproMar regional project for in adapting a more inclusive and socially oriented approach, offering guidance to project partners in the implementation of just transition frameworks.

It would be valuable to test report recommendations through small scale pilots to showcase the practical application of just transition principles in waste management and circular economy and demonstrate the feasibility and benefits.

This would help identify barriers and opportunities, analyse data and insights in a cost-effective way. Having just transition standards and KPIs developed and adopted would support in the evaluation and goalsetting for pilots and initiatives, or could be a part of the pilot process if not yet defined.

This chapter provides specific recommendations that 3RProMar or similar projects could adopt to ensure both environmental and social impact.

Pilot testing of recommendations

- Implement small-scale pilot projects to demonstrate the practical application of just transition principles.
- Use these pilots to identify barriers, opportunities, and gather data in a cost-effective manner.
- Develop and adopt just transition standards and KPIs to evaluate and set goals for these pilots and initiatives.
- Integrate social indicators into pilot projects to track and analyze social impact alongside environmental impact.



Social impact assessments

- Conduct social impact assessments on selected initiatives to provide recommendations for just transition principles.
- Develop baseline studies and metrics to understand current states and support initiatives in addressing gaps.
- Analyze community involvement, impact on local communities, and job creation to improve future funding schemes and maximize social impact.
- Share insights and indicators across projects to create a common database for tracking social impact.

Partner with universities

- Partner for entrepreneurship training and innovation competitions to foster social business creation.
- Ensure minimum female participation to guarantee equal access to skills development.

Involve youth in sharing creative solutions on zero waste through events such as waste summits.

■ Strengthen social private sector engagement

- Enhance private sector EPR initiatives by developing inclusive EPR indicators and guidelines.
- Create toolkits with suggested actions for companies to improve their impact and link with ESG reporting.
- Integration of Social Indicators.

■ Build capacity development strategies and roadmaps

- Build strategies informed by international processes, such as the ILBI.
- Include just transition topics in multi-stakeholder dialogues to raise awareness and visibility.
- Creation of Taskforces and Knowledge Sharing Platforms.

■ Establish national and/or regional just transition taskforces

- Establish taskforce to help oversee the implementation of comprehensive just transition strategies and action plans
- Develop a regional knowledge-sharing platform to share best practices, avoid duplication and scale proven models. Build a database of case studies to inspire action and scale impact across regions.



Conclusion

Conclusion

The journey toward a just transition in waste management and circular economy highlights a complex interplay of aspirations and practical challenges. Recent discussions, notably from the INC4 in Ottawa, affirm widespread recognition of just transition's critical role for the plastics treaty by integrating holistic, ethical solutions benefiting people and the planet. However, some member states have concerns about the financial implications that just transition could bring if included in the treaty.

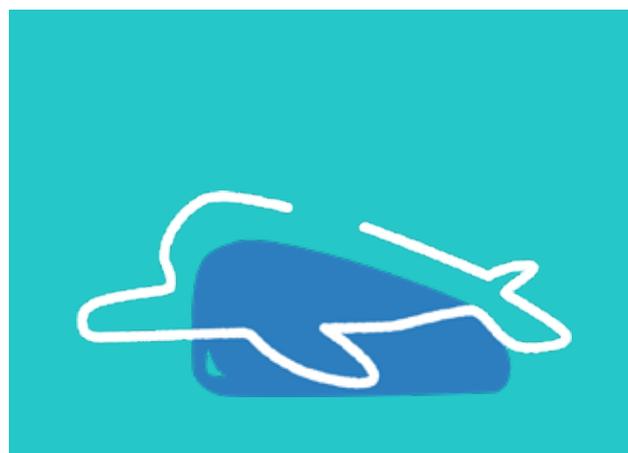
There is a clear need to more deeply embed just transition principles in the development of circular strategies to ensure that both the current and future workforce are empowered and equipped with the necessary skills. Specifically, linking just transition with Extended Producer Responsibility could enhance equitable environmental governance and ensure EPR schemes support social and economic equity.

Despite challenges outlined, there is a forward momentum, with many initiatives directly and indirectly embracing just transition principles, contributing to the Sustainable Development Goals and private sector ESG reporting. These initiatives are often only focused on one specific aspect of a just transition, while future efforts must have a stronger holistic approach. Ensuring the adoption of just transition principles in their entirety will be key for meaningful impact across all levels of society.

Looking forward, the transition from visionary ideals to practical actions is essential. Establishing clear terms and measurable impact indicators is crucial for tracking progress and ensuring accountability. Additionally, there is a pressing need to develop and implement standards that measure the impact and financial return of just transition strategies. Such standards would provide a

framework to justify investment in, and create financial scenarios for, just transition interventions. In the long term it would support to identify, scale and share data-driven best practices. A holistic just transition for circular economy pilot to implement these indicators would be beneficial to engage key stakeholders and test and adapt the standards in real-world contexts. Supporting pioneering efforts, documented in this report and beyond, is vital for advancing this agenda. Such pilots could test the approach to build inclusive value chains and bring best practices for capacity building on skills needed for new circular jobs.

Ongoing dialogue and best practice sharing combined with cyclical improvements will help drive holistic solutions that benefit both people and planet in the ASEAN region and beyond. We encourage readers to implement recommendations suggested in the report, share their learnings and areas for improvements based on experience. Through collective action and collaboration, the ASEAN region can build a sustainable future for a just transition in waste management and circular economy.



Bibliography

- [1] A Climate Change Adaptation Project of the INTERNATIONAL LABOUR ORGANIZATION (ILO). (n.d.). *Vulnerability and Adaptation Assessment Report, Municipality of Jabonga*. Retrieved from http://www.mdgfund.org/sites/default/files/ENV_CASE%20STUDY_Philippines_CC%20Vulnerability%20Assessment%20and%20Adaptation.pdf
- [2] *A Systems Approach for Transitioning Southeast Asia to a Circular Economy*. (2022, Aug 30). Retrieved from Development Asia: <https://development.asia/policy-brief/systems-approach-transitioning-southeast-asia-circular-economy>
- [3] *AI for a Better World*. (n.d.). Retrieved from Sadako Technologies: <https://sadako.es/>
- [4] *ASEAN Circular Economy Stakeholder Platform*. (2023, Jan 30). Retrieved from European Circular Economy Stakeholder Platform: <https://circulareconomy.europa.eu/platform/en/dialogue/existing-eu-platforms/asean-circular-economy-stakeholder-platform>
- [5] ASEAN Secretariat. (2021). *Consolidated Strategy on the Fourth Industrial Revolution for ASEAN*. Jakarta. Retrieved from <https://asean.org/wp-content/uploads/2021/10/6.-Consolidated-Strategy-on-the-4IR-for-ASEAN.pdf>
- [6] ASEAN Secretariat. (2022). *ASEAN Transition Towards Circular Economy. ASEAN Policy Brief*. Retrieved from https://asean.org/wp-content/uploads/2022/12/ASEAN-Policy-Brief-5_Dec2022.pdf
- [7] ASEAN Secretariat. (2023). *ASEAN Employment Outlook: The Quest for Decent Work in Platform Economy: Issues, Opportunities and Ways Forward*. Retrieved from https://asean.org/wp-content/uploads/2023/07/ASEAN_employment_outlook_WEB_FIN.pdf
- [8] Bain & Company, Temasek, GenZero, and Amazon Web Services. (2023). *Southeast Asia's Green Economy 2023 Report: Cracking the Code*. Retrieved from <https://www.bain.com/globalassets/noindex/2023/bain-temasek-southeast-asia-green-economy-2023-report.pdf>
- [9] Bansal, S., Garg, I., & Vasa, L. (2023). Can social enterprises aid sustainable development? Evidence from multi-stage investigations. *PloS one*, 18. doi:<https://doi.org/10.1371/journal.pone.0281273>
- [10] Dey, P., Malesios, C., Chowdhury, S., Saha, K., Budhwar, P., & De, D. (2022). Adoption of circular economy practices in small and medium-sized enterprises: Evidence from Europe. *International Journal of Production Economics*, 248. Retrieved from <https://doi.org/10.1016/j.ijpe.2022.108496>
- [11] DOLE. (n.d.). *An Applicability Assessment Report on the Social Amelioration Program*. Retrieved from https://www.sdgifund.org/sites/default/files/ENV_STUDY_Philippines_Resilient%20community%20farming.pdf
- [12] Ellen MacArthur Foundation. (n.d.). *Circular Economy Introduction*. Retrieved Mar 2024, from <https://www.ellenmacarthurfoundation.org/topics/circular-economy-introduction/overview>
- [13] Ellen MacArthur Foundation. (n.d.). *The Circular Economy in Detail*. Retrieved from <https://www.ellenmacarthurfoundation.org/the-circular-economy-in-detail-deep-dive>
- [14] EU-ASEAN Business Council. (2020). *Advancing ASEAN's Circular Economy Agenda Advocacy Paper. 2*. Retrieved from <https://www.eu-asean.eu/wp-content/uploads/2022/02/Advancing-ASEANs-Circular-Economy-Agenda-Advocacy-Paper-2020.pdf>
- [15] EY and JA Worldwide. (2023). *Generational Sustainability Survey 2023: How can we empower the next generations to build a more sustainable future?* Retrieved from https://assets.ey.com/content/dam/ey-sites/ey-com/en_gl/topics/corporate-responsibility/ey-ja-2023-sustainability-report-27-july-2023.pdf

Bibliography

- [16] Federal Ministry for Economic Cooperation and Development. (n.d.). *Just Transition*. Retrieved from <https://www.bmz.de/en/issues/climate-change-and-development/just-transition>
- [17] *Industries to Watch Out for Growth in Southeast Asia in 2023*. (2023, Jan 17). Retrieved from ASEAN Briefing: <https://www.aseanbriefing.com/news/industries-to-watch-out-for-growth-in-southeast-asia-in-2023/>
- [18] International Labour Office. (2018). *Social dialogue and tripartism*. Retrieved from <https://www.ilo.org/media/255746/download>
- [19] International Labour Office. (2021). *Inequalities and the world of work*. Retrieved from <https://www.ilo.org/media/231921/download>
- [20] International Labour Organisation and United Nations Environment Programme. (2023). *Just Transition Finance: Pathways for Banking and Insurance*. Geneva. Retrieved from https://www.unepfi.org/wordpress/wp-content/uploads/2023/11/Just-transition-finance_Pathway-for-Banking-and-Insurance.pdf
- [21] International Labour Organization. (2015). *Guidelines for a just transition towards environmentally sustainable economies and societies for all*. Retrieved from <https://www.ilo.org/media/435091/download>
- [22] International Labour Organization. (2018, May 14). *24 Million Jobs to Open up in the Green Economy*. Retrieved from <https://www.ilo.org/resource/news/24-million-jobs-open-green-economy-0>
- [23] International Labour Organization. (2018). *The employment impact of climate change adaptation: Input Document for the G20 Climate Sustainability Working Group*. Retrieved from https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_emp/documents/publication/wcms_645572.pdf
- [24] International Labour Organization. (2019). *Skills for a greener future: A global view based on 32 country studies*. Geneva. Retrieved from https://webapps.ilo.org/wcmsp5/groups/public/---ed_emp/documents/publication/wcms_732214.pdf
- [25] International Labour Organization. (2021, Oct 28). *Climate Change and Financing a Just Transition*. Retrieved Mar 2024, from <https://www.ilo.org/resource/other/climate-change-and-financing-just-transition>
- [26] International Labour Organization. (2022). *A just energy transition in Southeast Asia: The impacts of coal phase-out on jobs*. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/documents/publication/wcms_845700.pdf
- [27] International Labour Organization. (2022). *Adapting apprenticeships for reskilling and upskilling of adults*. Retrieved from https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_emp/@ifp_skills/documents/publication/wcms_861710.pdf
- [28] International Labour Organization. (2022, Nov 17). *International Labour Standards as Human Rights*. Retrieved from <https://www.ilo.org/resource/article/international-labour-standards-human-rights>
- [29] International Labour Organization. (2022). *Skills Development for a Just Transition. Just Transition Policy Brief*. Retrieved from <https://www.ilo.org/media/369551/download>
- [30] International Labour Organization. (2024, Jan 28). *Informal Economy*. Retrieved from <https://www.ilo.org/projects-and-partnerships/projects/partnership-improving-prospects-for-cbily-displaced-persons-and-host/themes/informal-economy>
- [31] International Labour Organization. (2024, Jan 28). *Social Protection*. Retrieved from <https://www.ilo.org/topics/social-protection>
- [32] IPCC. (2023). *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*. Geneva: IPCC. doi:10.59327/IPCC/AR6-9789291691647

Bibliography

- [33] Johansson, V. (2023). Just Transition as an Evolving Concept in International Climate Law. *Journal of Environmental Law*, 35(2), 229-249. doi:<https://doi.org/10.1093/jel/eqad017>
- [34] Kanzari, A., Rasmussen, J., Nehler, H., & Ingelsson, F. (2022). How financial performance is addressed in light of the transition to circular business models - A systematic literature review. *Journal of Cleaner Production*, 376. doi:<https://doi.org/10.1016/j.jclepro.2022.134134>
- [35] Lee, Sangji; Baumgartner, Lisa;. (2022). *How Just Transition Can Help Deliver the Paris Agreement*. UNDP. Retrieved from https://climatepromise.undp.org/sites/default/files/research_report_document/Just%20Transition%20Report%20Jan%202020.pdf
- [36] Manjon, M.-J., Merino, A., & Cairns, I. (2022). Business as not usual: A systematic literature review of social entrepreneurship, social innovation, and energy poverty to accelerate the just energy transition. *Energy Research & Social Science*, 90. doi:<https://doi.org/10.1016/j.erss.2022.102624>
- [37] *Minilateralism, ASEAN Centrality and Indo-Pacific Institutional Flux Amid Strategic Competition*. (2024, Apr 3). Retrieved from Wilson Center: <https://www.wilsoncenter.org/article/minilateralism-asean-centrality-and-indo-pacific-institutional-flux-amid-strategic>
- [38] Ministry of Energy, Government of Chile. (2020). *National Green Hydrogen Strategy: Chile, a clean energy provider for a carbon neutral planet*. Retrieved from https://energia.gob.cl/sites/default/files/national_green_hydrogen_strategy_-_chile.pdf
- [39] Ministry of Environment & Water (KASA), Malaysia. (2021). *Malaysia Plastics Sustainability Roadmap 2021-2030*. Retrieved from <https://faolex.fao.org/docs/pdf/mal220769E.pdf>
- [40] *Mother Earth Foundation*. (n.d.). Retrieved from <http://www.motherearthphil.org/>
- [41] Muposhi, A., Mpinganjira, M., & Wait, M. (2022). Considerations, benefits and unintended consequences of banning plastic shopping bags for environmental sustainability: A systematic literature review. *Waste management & research : the journal of the International Solid Wastes and Public Cleansing Association*. doi:<https://doi.org/10.1177/0734242X211003965>
- [42] Nardo, L., Cortese, V., & McAnaney, D. (2010). *The European Social Fund and social inclusion*. Retrieved from https://ec.europa.eu/employment_social/esf/docs/sf_social_inclusion_en.pdf
- [43] Nguyen, T., Viridis, S., & Winjikul, E. (2022). Inequality of Low Air Quality-Related Health Impacts among Socioeconomic Groups in the World of Work. *International journal of environmental research and public health*. doi:<https://doi.org/10.3390/ijerph191912980>
- [44] PAGE. (2023). *Green Jobs and Just Transition Policy Readiness Assessment in the Energy Sector in Indonesia*. Retrieved from <https://www.un-page.org/static/f5fe8fd6775c56d380ecad06748bf38b/green-jobs-and-just-transition-policy-readiness-assessment-in-the-energy-sector-in-indonesia.pdf>
- [45] Reichheld, A., Peto, J., & Ritthaler, C. (2023, Sep 18). *Research: Consumers' Sustainability Demands Are Rising*. Retrieved from Harvard Business Review: <https://hbr.org/2023/09/research-consumers-sustainability-demands-are-rising>
- [46] Robins, N. (2022). *The Just Transition: Shaping the delivery of the Inevitable Policy Response*. Retrieved from UNCTAD: <https://www.unpri.org/download?ac=16124>
- [47] Robins, N., Muller, S., & Szwarc, K. (2021). *From the grand to the granular: translating just transition ambitions into investor action*. London: Grantham Research Institute on Climate Change and the Environment and Centre for Climate Change Economics and Policy.
- [48] Schröder, P. (2020). *Promoting a Just Transition to an Inclusive Circular Economy*. Chatham House. Retrieved from <https://www.chathamhouse.org/sites/default/files/2020-04-01-inclusive-circular-economy-schroder.pdf>
- [49] Schröder, P., & Bengtsson, M. (n.d.). *Building back better in ASEAN countries: opportunities to advance a circular economy*. Retrieved from https://southeastasia.hss.de/download/publications/17_-_211202-Building_Back_Better_in_ASEAN_countries_-_Opportunities_to_Advance_Circular_Economy.pdf

Bibliography

- [50] Schröder, P., & Raes, J. (2021). *Financing an inclusive circular economy: De-risking investments for circular business models and the SDGs*. Chatham House. Retrieved from https://www.chathamhouse.org/sites/default/files/2021-07/2021-07-16-inclusive-circular-economy-schroder-raes_0.pdf
- [51] Sevelius, J., Gutierrez-Mock, L., Zamudio-Haas, S., McCree, B., Ngo, A., Jackson, A., ... Gamarel, K. (2020). Research with Marginalized Communities: Challenges to Continuity During the COVID-19 Pandemic. *AIDS and behavior*, 24(7). doi:<https://doi.org/10.1007/s10461-020-02920-3>
- [52] Stern, N. (2006). *The Economics of Climate Change: The Stern Review*. Retrieved from https://biotech.law.lsu.edu/blog/sternreview_report_complete.pdf
- [53] Techopedia. (n.d.). *Upskilling*. Retrieved from <https://www.techopedia.com/definition/upskilling>
- [54] *Transition to the Circular Economy from a Business Perspective*. (2023, July 24). Retrieved from European Student Think Tank: <https://esthinktank.com/2023/07/24/transition-to-the-circular-economy-from-a-business-perspective/>
- [55] United Nations. (2024). *Transforming the Informal Economy to Leave No One Behind. Policy Brief*. Retrieved from https://www.un.org/sites/un2.un.org/files/2024/04/unen_policy_brief_march_2024.pdf
- [56] United Nations Environment Programme. (2017). *Waste Management in ASEAN Countries: Summary Report*. Retrieved from https://wedocs.unep.org/bitstream/handle/20.500.11822/21134/waste_mgt_asean_summary.pdf?sequence=1&isAllowed=
- [57] VietCycle.vn. (n.d.). Retrieved from <https://vietcycle.vn/home-english/>
- [58] Weller, S., Beer, A., & Porter, J. (2024). *Place-based just transition: domains, components and costs*. *Contemporary Social Science*, 1-20. doi:<https://doi.org/10.1080/21582041.2024.2333272>
- [59] *When Do You Decide to Reskill or Upskill an Employee? Guide for SMEs*. (n.d.). Retrieved from Papershift: <https://www.papershift.com/en/lexicon/reskilling-of-employees>
- [60] World Bank. (n.d.). *Social Inclusion*. Retrieved from <https://www.worldbank.org/en/topic/social-inclusion>
- [61] World Economic Forum. (2017). *Platform for Accelerating the Circular Economy: A global public-private collaboration platform and project accelerator*. Retrieved from https://www3.weforum.org/docs/WEF_PACE_Platform_for_Accelerating_the_Circular_Economy.pdf
- [62] World Economic Forum. (2023). *Circular Transformation of Industries: Unlocking New Value in a Resource-Constrained World*. Retrieved from https://www3.weforum.org/docs/WEF_Circular_Transformation_of_Industries_2022.pdf
- [63] World Economic Forum. (2023). *The Future of Jobs Report 2023*. Retrieved from https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf
- [64] Yunus Centre. (2020, Jan 8). *Social Business*. Retrieved from <https://www.muhammadyunus.org/post/2113/social-business>

Annex

Annex 1. List of Inter view Stakeholders

(in alphabetical order)

| Country/Region | Name of Interviewee | Organization |
|----------------|--------------------------------|--|
| Global | Mayang Azurin | Global Alliance for Incinerator Alternatives (GAIA) |
| ASEAN | John Leo | Youth Action Group |
| Laos | Souksaveuy Keotiamchanh | Zero Waste Laos |
| Global | Omoyemen Lucia Odigie-Emmanuel | Centre for Human Rights and climate Change Research |
| ASEAN | Georginia Pascual | International Labour Organization (ILO) |
| Indonesia | Lailly Prihatiningtyas | Lead researcher "Green Jobs and Just Transition Policy Readiness Assessment in the Energy Sector in Indonesia" |
| Global | Patrick Schroeder | Chatham House |
| Indonesia | Elly Rosita Silaban | Confederation of All Indonesian Trade Union (KSBSI) |
| Global | Taylor Cass Talbott | International Alliance of Waste Pickers |
| Vietnam | Nguyen Thi | Ministry of Natural Resources and Environment (Legal Affairs, EPR Office) |
| Vietnam | Nguyen Thi Nhat Hoai | Viet Nam National Plastic Action Partnership (NPAP) United Nations Development Programme (UNDP) |
| Thailand | anonymous | multinational |
| Indonesia | anonymous | multinational |



Deutsche Gesellschaft für
Internationale Zusammenarbeit (GIZ) GmbH

Registered offices
Bonn and Eschborn, Germany
GIZ Country Office Jakarta
Jakarta, Indonesia

T +62 21 2358 7111 ext. 252 E info@giz.de
F +62 21 2358 7110 I www.giz.de/en

On behalf of



implemented by:
giz Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH

in cooperation with:

