



# **JUST TRANSITION AND SAFEGUARDS FRAMEWORK**

April 2024

# JUST TRANSITION AND SAFEGUARDS FRAMEWORK

## Acknowledgments

The authors, Mandy Rambharos and Julia Ilhardt (Environmental Defense Fund), gratefully acknowledge the many people whose input helped improve this report, specifically the Boston Consulting Group (BCG). We are also grateful to the Bezos Earth Fund for its generous support of this project. Conclusions or opinions expressed within remain exclusively with the authors.

## Environmental Defense Fund

Environmental Defense Fund (EDF) is one of the world's leading environmental nonprofit organizations. EDF's mission is to preserve the natural systems on which all life depends. Guided by science and economics, EDF finds practical and lasting solutions to the most serious environmental problems.



## ABOUT THIS REPORT

The just transition is fast becoming a central theme in global discussions on climate. The idea of a just transition framework has been incorporated into international climate discussions, including the Paris Agreement, as well as national and regional policies aimed at addressing climate change. Just transition is a complex subject necessitating a collaborative effort between governments, the private sector, trade unions, communities and civil society to balance the economic, social and environmental dimensions to fully understand it. Though complex, it is an important concept to understand and implement in an appropriate manner, being mindful of local and regional contexts and respectful of country-specific definitions of what is “just” in the global context of addressing climate change.

This document titled “Just Transition and Safeguards Framework” was produced by EDF to make a meaningful and mindful contribution to the body of knowledge on a just transition. This framework is structured to provide guidelines for developing strategies; plans; measures and metrics that will ensure a fair and equitable transition towards cleaner energy sources. Further, the Just Transition and Safeguards Framework is aimed at providing guidance on how to measure whether activities uphold decarbonization benefits, environmental rights and the interests of impacted stakeholders, including Indigenous Peoples and Local Communities.

The framework is built on four key principles: procedural justice, distributive justice, recognitional justice and restorative justice, emphasizing inclusivity, fairness and respect for diverse needs during the energy transition. It details safeguards, as well as unique elements and measures, to track progress towards just energy transition objectives. The document also outlines the operational and outcome indicators for each safeguard and element, aiming to facilitate countries in achieving a just transition while supporting development and climate goals. While the focus is on the energy sector, this framework can be adapted for application to a broad swath of sectors.

This Framework has been adapted from work conducted by EDF for the Energy Transition Accelerator (ETA), a partnership between the U.S. Department of State, The Rockefeller Foundation, and the Bezos Earth Fund. EDF’s work was supported by the Bezos Earth Fund. The ETA aims to catalyze financing to speed the just energy transition in emerging and developing countries.

# TABLE OF CONTENTS

---

I. Background & context	3
II. Just energy transition strategies	5
III. Just energy transition safeguards	8
IV. Just energy transition elements	14
V. Metrics	19
VI. Grouping the safeguards into dimensions	23
VII. Conclusion	27



## I. BACKGROUND & CONTEXT

The concept of "Just Transition" (JT) has evolved significantly over time, starting from its origins within the labor movement to encompass a broader framework aimed at ensuring equitable transitions towards sustainable economies. The International Labour Organization (ILO) defines a just transition as the process of greening the economy in a manner that is fair and inclusive to all concerned, focusing on creating decent work opportunities, and ensuring that no one is left behind. This concept has been integrated into international climate policy, including the Paris Agreement, emphasizing the need for socioeconomic considerations alongside environmental goals — the first time the term was acknowledged in the international climate change negotiations, thus making the connection between climate, social imperatives and justice. The concept has become so mainstreamed that the COP 28, held in Dubai in December 2023, called on governments and nongovernment actors to provide detailed submissions on what should be covered in the Just Transition work programme of the UN body going forward.

Historically, the thinking on a just transition can be traced back to the 1980s in the United States, when Tony Mazzocchi of the Oil, Chemical and Atomic Workers Union proposed a "Superfund for Workers" to support those moving away from environmentally harmful jobs. This idea laid the groundwork for what would later become known as just transition, aiming to parallel the U.S. Superfund Act, which taxed corporations to clean up hazardous waste sites.

### No matter the sector, key aspects of a just transition include:

- **Data-driven modeling for decision-making:** Decisions and plans to transition must be backed by modeling that is informed by true on-the-ground data.
- **Financial sustainability:** Ensuring that the costs of a transition are a true reflection by including the full costs of shutting down existing assets, building out new infrastructure and assets, and including those costs associated with the "just" elements.
- **Jobs and skills:** Strategies to support workers affected by the transition away from fossil fuels, such as retraining programs, job creation in new industries and financial assistance.
- **Socioeconomic inclusion:** Ensuring that vulnerable populations, including indigenous peoples, rural communities and those in economically disadvantaged regions, have access to the benefits of the transition and are not disproportionately impacted by the transition.

- **Environmental sustainability:** Encompassing a holistic approach to environmental benefits of the transition, such as improved local air quality, increased water availability, improved land usage and protection of biodiversity.
- **Public participation:** Engaging communities, workers and other stakeholders in the planning and decision-making processes to ensure that the transition is inclusive and equitable.
- **Policy integration and good governance:** Coordinating across different levels of government and sectors to ensure that policies are aligned and supportive of a just transition.

## Energy sector focus

Over the last few years, the focus of the just transition has been on the energy sector, largely since this sector remains the highest greenhouse gas emitting sector globally. A move towards decarbonizing the energy sector, and specifically the electricity sector, will have tremendous knock-on benefits to all other sectors where electricity is a significant process input. However, this sector is also a significantly high employer globally, and a shift from traditional methods of power generation will result in job losses leading to socioeconomic strife, unless managed carefully.

### The Just Energy Transition: a definition

A Just Energy Transition (JET) focuses on shifting from fossil fuels to renewable energy sources in a manner that ensures fairness and equity, particularly for communities most affected by climate change and those traditionally reliant on carbon-intensive industries. It is not about a glib, overnight, end to the era of fossil fuels but ensuring the process addresses socioeconomic justice. This approach includes reducing dependence on fossil fuels in a phased manner over time, prioritizing renewable energy, and ensuring that the transition does not replicate past injustices such as job losses without plans for compensation, whatever the form. It emphasizes the importance of including voices from all stakeholders in shaping and co-creating climate solutions.

The International Institute for Sustainable Development highlights that a just transition is about considering both the decision-makers and those affected by energy transitions, incorporating principles such as dialogue and shared agendas among workers, industry and governments. It is seen as a crucial component of climate change mitigation strategies, aligning with the Paris Agreement's goals and the International Labour Organization's guidelines for a just transition. This approach aims to minimize negative impacts and enhance positive opportunities, ensuring economic and social inclusivity.



## II. JUST ENERGY TRANSITION STRATEGIES

---

Several countries and companies have already committed to the principles of a just transition, by making a commitment to pursue a phased, systemic shift to a low-carbon, climate-resilient, sustainable economy that benefits all, and promotes socio-economic growth and development. However, they do not necessarily have practical tools to translate these commitments into strategy. Given the complexity and variation of energy systems and socio-economic contexts across different regions, a just energy transition (JET) strategy requires tailored approaches that consider local needs, resources and capacities.

Collaborative efforts at the international, national and local levels are essential to share best practices, mobilize resources and ensure that the transition to a sustainable energy future is inclusive and equitable for all. A robust, yet pragmatic JET strategy is key to achieving the just transition goals mentioned. We provide a set of safeguards and Just energy transition elements that can be used to develop such a strategy.

Any just transition strategy should be underpinned by the JT principles described as follows:

### **Procedural justice**

- **Inclusion:** Social consensus on goals and pathways to sustainability needs to be reached through ongoing consultation with relevant stakeholders.
- **Transparency:** Processes should be transparent, clearly defined and understood by all relevant stakeholders.
- **Participation and decision-making:** JT should create opportunities for broad participation and decision-making based on input from key stakeholders.

### **Distributive justice**

- **Equity and fairness:** Burdens and benefits of JT should be equitably distributed, taking gender equity and rights of Indigenous Peoples and Local Communities into account.

### **Recognitional justice**

- **Flexibility and adaptability:** Decisions and programs should consider the local context, including the level of development, economic sectors, and types and sizes of enterprises.
- **Cooperation and solidarity:** Sustainable development strategies should be built in a way that fosters local, regional and international cooperation and solidarity.

## **Restorative justice**

- **Human rights:** The transition should be enacted in a way that respects the stipulations under the UN's Universal Declaration of Human Rights.
- **Sustainability:** Just transitions must support sustainable development and mitigate climate change, while maintaining a focus on resilience and permanence

## **The key components of a JET strategy include:**

### **Energy modeling**



- **Data-driven modeling:** To inform the ideal energy mix going forward that can achieve the decarbonization goals, while respecting the system dynamics of the power needs of a country
- **Energy access and affordability:** Ensuring that the transition to renewable energy does not result in or exacerbate existing energy poverty.

### **Financial modeling**



- **Data-driven financial modeling:** Modeling will show the full costs related to decommissioning existing facilities, new replacement power generation infrastructure and the transmission grid infrastructure that will be required.
- **Just components:** The costs to ensure a just transition must also be part of the modeling work.

### **Socioeconomic and environmental impact assessment**



- **Repowering and repurposing initiatives:** Pulling together a plan to return economic value to the local economy where plants are being shut down. These facilities can be repowered with cleaner technologies, and the land can be repurposed for different activities based on community needs.
- **Staff skill, reskilling, training and support programs:** Providing education, training, and social support to workers who are displaced from traditional energy sectors, such as coal mining and oil extraction, to prepare them for jobs in renewable energy sectors, like wind, solar, battery storage and energy efficiency.
- **Community investment and development:** Investing in communities affected by the energy transition through repurposing activities, local community projects, and investing in value chains and small enterprises, infrastructure improvements and access to education.
- **Environmental rehabilitation:** Addressing the environmental damage caused by fossil fuel extraction and use, through initiatives such as land reclamation and pollution cleanup.

### **Stakeholder engagement and advocacy plans**



- **Inclusive policymaking:** Engaging a wide range of stakeholders, including affected workers, communities, industry and environmental groups, in the decision-making process to ensure that policies reflect the needs and interests of all parties.
- **Sustainable Development Goals (SDGs) alignment:** Ensuring that the energy transition contributes to broader sustainable development goals, such as reducing greenhouse gas emissions, promoting good health, and fostering innovation and infrastructure development.

This document does not attempt to unpack each of the areas listed above, given that JET strategies are unique to countries and should be developed, addressing each of these areas, in a bottom-up inclusive manner. We do provide guidance on the types of safeguards and elements that could be included in such a strategy to ensure that these areas are properly measured for the assurance of true JET strategy.

## EDF's Just Transition and Safeguards Framework

We provide set of safeguards and elements that are underpinned by the four key principles outlined on the previous page. The components within this Just Transition and Safeguards Framework are:





### III. JUST ENERGY TRANSITION SAFEGUARDS

**Safeguards ensure that climate action accomplishes three key goals:**

1. Stabilize the climate
2. Strengthen people and nature's ability to thrive
3. Support people's health

In our journey towards a sustainable future, it's crucial to ensure no one is left behind. These safeguards demonstrate commitments to protect the environment and support communities through the transition. Based on vast on-the-ground-experience, these safeguards are driven by:

- **Community consultation:** Imagine a town hall where every voice is heard. Before any project starts, local communities are consulted and listened to as they share their concerns and hopes.
- **Environmental protection:** The overall aim is the sustainability of the planet, and survival of humankind. We therefore prioritize practices that protect natural habitats and biodiversity.
- **Rights of Indigenous Peoples and Local Communities:** Our commitment runs deep, respecting the rights and cultures of Indigenous Peoples and Local Communities. By incorporating traditional knowledge into our environmental assessments, we can unlock innovative, sustainable practices that also preserve cultural heritage.
- **Inclusive participation:** Every stakeholder has a seat at our table. From planning to execution, we ensure diverse perspectives shape our projects. This inclusivity strengthens project design and fosters broader support, making our initiatives more resilient and impactful.

This section provides practical guidance to turn this vision into reality. These safeguards are requirements that need to be complied with and that will be monitored over time. The safeguards span across five key dimensions: social, environmental, cost, supply security and governance.

## SAFEGUARDS

# 1

### DESCRIPTION

## Alignment of transition/decarbonization efforts with existing socio-economic strategies and/or policies and/or plans

Decarbonization efforts are aligned with existing socioeconomic strategies and/or related policies, which include the national decarbonization and socio-economic development priorities.

### RATIONALE

Ensures the plans align with and contributes to the country meeting its socioeconomic imperatives and/or related policies.

### OPERATIONAL INDICATOR

The plan is derived from comprehensive assessments/studies of social, economic, and environmental factors, integrating insights from the national plans and Nationally Determined Contribution (NDC) and/or related policies. The plan is aligned with the objectives of pertinent international conventions and national commitments.

### OUTCOME INDICATOR

- Verification of facilities annual or cumulative reduction in CO<sub>2</sub> as a percentage of the national Just energy transition plan target or target in related policies. Facilities contribution to the fulfilment of the country's NDC.

# 2

### DESCRIPTION

## Decommissioning of coal and demolition of related infrastructure

Measures are in place to ensure that there is no new coal development or life extension of existing coal assets.

### RATIONALE

Ensures that no new coal plants are being developed and the lifespan of current coal plants are not being extended.

### OPERATIONAL INDICATOR

Plans have been finalized, approved and show a full and irrevocable commitment to phasing out coal assets and moving toward cleaner sources of energy, with no return to service or life extension of coal assets included. Decommissioning and demolition of coal plants are included as part of the plans, and the plans are timebound and publicly available/published.

### OUTCOME INDICATOR

- Minimum requirement: Decommissioning and demolition costs included and implemented where possible in the given timeframes.
- Number of coal units decommissioned.
- Evidence of structures demolished.
- Percent reduction in coal-related carbon emissions planned from the facilities.

## SAFEGUARDS

# 3

### DESCRIPTION

## **Disclosure of information and facilitation of stakeholder engagement**

Effective and inclusive engagement with relevant stakeholders is facilitated, ensuring that all concerned parties have access to essential information.

### RATIONALE

Ensures transparency and fosters trust and credibility, as well as helps relevant stakeholders make informed decisions.

### OPERATIONAL INDICATOR

Channels are accessible for information disclosure and stakeholder engagement. There is timely and accessible disclosure of environmental, social and cultural risks and impacts in a comprehensible format. Key stakeholders are aware of who to contact to communicate project interest.

- Minimum Requirement: >80% stakeholder satisfaction.

# 4

### DESCRIPTION

## **Implementation of anti-corruption measures**

Guidelines and standards are in place to promote transparency, ethical behavior and integrity and mitigate risks associated with corruption.

### RATIONALE

Promotes ethical behavior, integrity and openness, as well as mitigates risks associated with corruption and unethical behavior related to transition activities.

### OPERATIONAL INDICATOR

A documented transparency and anti-corruption policy, or code of conduct, is approved. Governing authorities undertake external audits to review facilities finances, procurement processes and contracts to ensure compliance with anti-corruption measures. Comprehensive information dissemination processes are in place to provide stakeholders with access to relevant and updated information.

### OUTCOME INDICATOR

- Minimum requirement: Results of external audits and investment cases for relevant facilities are published to show integrity.
- >70% stakeholder satisfaction with facilities transparency, fairness, accountability and availability of information regarding the facilities benefits and potential risks.

## SAFEGUARDS

# 5

### DESCRIPTION

## Management of land acquisition, restrictions on land use and involuntary resettlement

Disruptions to affected communities caused by decarbonization efforts are minimized and land tenure rights are protected.

### RATIONALE

Respects land rights, minimizes disruptions and supports affected communities to foster a more responsible, ethical and sustainable approach to development and resource management.

### OPERATIONAL INDICATOR

Involuntary resettlements are avoided. Where involuntary resettlements are unavoidable, it will be minimized, and appropriate measures to mitigate adverse impacts on displaced persons will be carefully planned and implemented, including expressed free, prior and informed consent (FPIC). Resettlement plans are developed where needed.

### OUTCOME INDICATOR

- Minimum Requirement: 100% of relocated stakeholders expressed FPIC.
- >80% of displaced persons have successfully improved or restored their livelihoods and standards of living following resettlement, as compared to the baseline period.

# 6

### DESCRIPTION

## Establishment of a grievance redress mechanism

Non-discriminatory and non-cost prohibitive mechanisms are implemented for stakeholders to declare grievances and facilitate the resolution of disputes at all relevant levels.

### RATIONALE

Provides a platform for individuals to voice their issues/concerns to ensure fairness and justice.

### OPERATIONAL INDICATOR

Multiple accessible channels are set up for reporting grievances, specific individuals are assigned to manage the grievance redress mechanism, fair and impartial investigations into reported grievances are conducted, and detailed records and documentations are kept throughout the process. The grievance redress mechanism is regularly reviewed and improved.

### OUTCOME INDICATOR

- Minimum requirement: >80% of grievances related to the transition actions effectively resolved or addressed in a timely manner.
- Average time taken to resolve grievances from the point of submission to resolution.

## SAFEGUARDS

# 7

### DESCRIPTION

Social impact assessments are completed and used to identify mitigation measures and actions to ensure the transition is socially sound and sustainable.

### RATIONALE

Minimizes the negative impacts on surrounding communities and ensures a more responsible and sustainable approach is taken.

### OPERATIONAL INDICATOR

Social risks are assessed and strategies for mitigation are identified, e.g., community engagement programs, establishing compensation plans, or offering alternative livelihoods. Mitigation strategies are implemented and monitored over time as well as adapted where necessary.

### OUTCOME INDICATOR

- Minimum Requirement: No drop in standard of safety (no. of accidents), health (air quality, water quality), labor (wages, number of jobs), and security (crime rate) after the facilities are closed vs. before the facilities are closed.
- No net job losses within surrounding communities.
- >80% of stakeholders are aware of who to communicate interest in the facilities to, if needed.

# 8

### DESCRIPTION

Environmental impact assessments are completed and used to identify mitigation measures and actions to ensure the transition is environmentally sound and sustainable. These assessments will consider threats to resource efficiency, air quality, biodiversity and natural resources.

### RATIONALE

Allows for a proactive approach in preserving and protecting vital environmental components.

### OPERATIONAL INDICATOR

Environmental impact assessments are done and highlight any potential impacts on resource efficiency, air quality, natural resources and biodiversity. Prevention and mitigation measures are outlined and implemented and there is regular monitoring and reporting on the effectiveness of the measures.

### OUTCOME INDICATOR

- Minimum requirement: Hectares of targeted land rehabilitated or reused and repurposed.
- Minimum requirement: >90% of activities within the facilities area that comply with biological preservation guidelines and regulations.
- Reduced water usage and emissions (SOx, NOx, PM emission levels).
- Percent of increase in energy efficiency.

## SAFEGUARDS

9

### DESCRIPTION

Impacts on cultural heritage is avoided by conducting assessments and identifying and implementing mitigation measures.

### RATIONALE

Protects cultural resources to support economic growth and promote creativity and social cohesion.

### OPERATIONAL INDICATOR

Assessments that consider the direct, indirect and cumulative risks and impacts on cultural heritage are conducted. These include considering archaeological, paleontological, historical and religious assets. Mitigation measures to address these impacts are identified and implemented. If impacts on cultural heritage are unavoidable then cultural heritage experts are engaged to assist in the identification, valuation assessment and protection of cultural heritage.

### OUTCOME INDICATOR

- Minimum requirement: All activities within the facilities area comply with cultural preservation guidelines and regulations.
- Cultural heritage impact assessment (CHIA) is done prior to commencement of activities of the facilities.

10

### DESCRIPTION

Energy transition plan ensures that neither national energy security nor energy access are compromised.

### RATIONALE

Enables economic stability, job creation, national security and innovation.

### OPERATIONAL INDICATOR

An energy transition plan is signed off to ensure the move away from coal assets does not jeopardize national energy security or energy access. If this is unavoidable, then measures will be implemented to mitigate and address any potential adverse impacts on energy security and/or access. Ways to improve electricity efficiency and reduce transmission losses are explored so that potential cost savings can be passed on to the customer.

### OUTCOME INDICATOR

- Minimum requirement: Net generation capacity > 0.
- Energy accessibility after the facilities are closed vs. before the facilities are closed.



## IV. JUST ENERGY TRANSITION ELEMENTS

Just energy transition elements are complementary to safeguards but may differ at national level, and even subnational levels. We provide a blueprint for a future where progress does not come at the expense of people or the planet. We provide guidance on what these could be and how they could be measured.

### ELEMENTS

# 1

#### DESCRIPTION

Skills development measures and strategies to train, retrain, skill and/or upskill workers affected by the transition are outlined to minimize job losses.

#### RATIONALE

Enables affected communities to leverage new employment opportunities presented by the transition, helps minimize job displacement and retain talent in the energy industry.

#### OPERATIONAL INDICATOR

Skills development measures, with detailed strategies to train, retrain, skill and upskill workers affected by the transition, are included as tangible in plans. Programs are set up in consultations with educational institutions and affected workers to facilitate skills development.

#### OUTCOME INDICATOR

- Minimum requirement: Amount of net job losses
- >80% of affected coal workers transitioned (retired, voluntary separation packages, job numbers and job types).
- >80% of affected workers in all the priority sectors reskilled, upskilled and/or retrained.
- >80% of affected youth positioned for the new energy economy (trained, job numbers, job types).

## ELEMENTS

# 2

### DESCRIPTION

Strategies to grow the clean energy economy and reduce dependence on energy imports are defined.

### RATIONALE

Improves energy security by ensuring a reliable and stable energy supply within the jurisdiction.

### OPERATIONAL INDICATOR

A strategy has been developed with key stakeholders to grow the clean energy economy and, where needed, diversify the economy to reduce dependence on energy imports. The strategy identifies and addresses barriers to growth in the clean energy economy to promote energy security. The implementation of the strategy is monitored through regular reporting.

### OUTCOME INDICATOR

- Minimum requirement: Percent of energy production from local sources.
- Speed of deployment of renewables, i.e., number of Gigawatts of renewable energy in the pipeline and/or installed a year.

# 3

### DESCRIPTION

Needs and priorities of the affected communities are understood and used to define measures for communities to increase revenue in the affected regions.

### RATIONALE

Promotes local economic growth/recovery and empowers local communities by enabling them to actively participate in their income generation.

### OPERATIONAL INDICATOR

There are plans for community facilities to increase revenue in the affected regions that address key stakeholder needs, and the measures to address these needs are monitored so corrective action or improvement levers can be implemented. Examples of these measures include repurposing activities, building factories or establishing community investment funds.

### OUTCOME INDICATOR

- Minimum requirement: Number of repurposing activities underway — farming on power station/station/my land.
- Number of factories built in affected region.
- Number of community investment funds established.

## ELEMENTS

# 4

### DESCRIPTION

Detailed, time-bound plans are in place to build clean energy infrastructure and invest in green technology.

### RATIONALE

Ensures national energy security by developing required clean energy infrastructure to support the transition effectively and reliably.

### OPERATIONAL INDICATOR

Detailed, time-bound plans are in place to build clean energy infrastructure and invest in green technology. Financial commitments are in place for the development of the infrastructure and roles; responsibilities and accountabilities are outlined.

### OUTCOME INDICATOR

- Minimum requirement: Number of grid-support infrastructure facilities developed, e.g., transformers and substations.
- Number of alternatives in development, e.g., microgrids.
- Increase in energy-efficiency measures (e.g., capacity factors, transmission, and distribution losses).

# 5

### DESCRIPTION

Equity measures that consider national priorities, including procedural, distributive, recognitional and restorative justice parameters, are in place.

### RATIONALE

Ensures a more equitable distribution of opportunities and resources and promotes fairness and inclusivity.

### OPERATIONAL INDICATOR

Needs-assessments and impact evaluations are conducted to identify groups or communities that might be disproportionately affected by the transition. Equity measures are included as tangibles in plan and considered national priority.

### OUTCOME INDICATOR

- Minimum requirement: Gender equity in training programs and employment.
- Minimum requirement: Racial equity in training programs and/or employment.
- >90% stakeholder satisfaction with gender and racial equity in training programs and employment.

## ELEMENTS

# 6

### DESCRIPTION

## Incorporation of social protection measures in just transition planning

### RATIONALE

Social protection measures are incorporated into just transition planning and are based on social dialogues with key stakeholders.

### OPERATIONAL INDICATOR

Aims to alleviate poverty and promote stability within communities.

Social protection measures are incorporated into the just transition planning, based on discussions with a diverse range of stakeholders (communities, workers, local government, trade unions) and the measures outlined are implemented through collaboration with government and NGOs. Measures are constantly monitored and evaluated for areas of improvement.

### OUTCOME INDICATOR

- Minimum requirement: Percent of employees protected by employment guarantee schemes.
- Evidence of reductions in overall poverty, energy poverty, food insecurity, etc.
- Percent of low-income households that have received energy subsidies or other compensation.

# 7

### DESCRIPTION

## Support for SDGs and co-benefits

Evaluations of Sustainable Development Goals (SDGs) and co-benefit impacts are included within just energy transition planning, and opportunities to improve adaptation are identified.

### RATIONALE

Ensures alignment with global goals and ensures a comprehensive approach is taken to environmental and climate change planning.

### OPERATIONAL INDICATOR

Relevant stakeholders are consulted to establish sustainable development priorities and assess co-benefits. When feasible, an assessment of SDG and co-benefit impacts are included in Just energy transition planning, including opportunities to enhance adaptation.

### OUTCOME INDICATOR

- Outcomes are reported against relevant SDGs or co-benefit activities.

## ELEMENTS

# 8

## Development of new employment opportunities

### DESCRIPTION

A strategy to scale new ventures that create sustainable employment opportunities is developed.

### RATIONALE

Minimizes increases in unemployment by enabling a smooth transition for coal workers to other sectors.

### OPERATIONAL INDICATOR

The jurisdiction has co-developed a strategy with key stakeholders and partners across sectors such as tourism and agriculture to enable employees from the coal industry to transfer to other sectors to avoid increases in unemployment. Career guidance is provided to employees to help them transition, and incentives, grants or subsidies are provided to businesses to hire workers from the coal industry, while investments are made in community development facilities that support the growth of sectors where employment opportunities are being created.

### OUTCOME INDICATOR

- Minimum requirement: Percent of employees in coal industry successfully transferred to other sectors.
- Reduction in unemployment in the affected area.

# 9

## Cultivation of competitive local supply chains

### DESCRIPTION

Local supply chains are cultivated to remain resilient by optimizing the ramp down of goods and services.

### RATIONALE

Minimizes disruptions to the supply chain and mitigates potential adverse impacts on business continuity.

### OPERATIONAL INDICATOR

Transition activity planning includes mapping affected business operations and supply chains, communicating with affected stakeholders, and determining ways to optimize the ramp down of goods and services being procured by the asset to minimize the shock to the local economy and reduce risk of business closure.

### OUTCOME INDICATOR

- Minimum requirement: Percent of affected businesses still in operation.
- Percent of affected businesses that have retained their workforce after the work done by the facilities.



## V. METRICS

Metrics are defined to measure the effectiveness of the strategy in achieving its just energy transition objectives.

### METRICS

# 1

#### RATIONALE

#### UNIT OF MEASUREMENT

### Absolute carbon emissions (built bottom-up with sector-specific emissions)

Determine the effectiveness of decarbonization efforts in the country by assessing the changes in absolute carbon emissions.

- Metric tons of carbon dioxide equivalent (Mt CO<sub>2</sub>e) per annum.

# 2

#### RATIONALE

#### UNIT OF MEASUREMENT

### Final energy carbon intensity

Track progress towards decarbonization goals, including electrification objectives.

- Grams of carbon dioxide equivalent per kilowatt-hour (gCO<sub>2</sub>e/kWh) of electricity generated.

## METRICS

**3**

### RATIONALE

#### Clean energy investment

Determine if financial investments are shifting towards clean energy and away from coal assets.

### UNIT OF MEASUREMENT

- Percent of investment allocated to clean energy.
- 

**4**

### RATIONALE

#### Sources of income created for affected employees

Ensure that individuals affected by the energy transition have access to sustained income through job creation or job retention.

### UNIT OF MEASUREMENT

- Number of jobs created in the renewable energy sector (disaggregated by gender, age and other relevant vulnerable factors).
  - Breakdown of jobs — direct vs. indirect, induced jobs and permanence of jobs (e.g., person-years).
  - Percent of employees of retired coal plants that have access to sustained income.
- 

**5**

### RATIONALE

#### Transparency and accountability

Prevent corruption and misuse of funds and to ensure public trust and support.

### UNIT OF MEASUREMENT

- Public access to key information.
- Evidence of transparency in decision-making processes.

## METRICS

6

### RATIONALE

#### Energy security

Ensure power distribution is reliable and stable and the country is not majorly dependent on energy imports.

### UNIT OF MEASUREMENT

- Number of hours of loadshedding (no electricity provided) per annum.
- Percent of power from imported sources.
- Energy availability factor.

7

### RATIONALE

#### Energy access rate

Track progress towards global energy goals and ensure the population has access to reliable energy.

### UNIT OF MEASUREMENT

- Percent of population that has access to reliable and affordable electricity.

8

### RATIONALE

#### Total power generated from renewable energy

Track progress against the decarbonization of the electricity sector and the shift towards clean energy.

### UNIT OF MEASUREMENT

- Terawatt hours (TWh).
- Percent of renewable energy of total generated power.
- Installed capacity of renewable energy megawatts (MW).

## METRICS

# 9

### RATIONALE

### UNIT OF MEASUREMENT

## Inclusion of previously marginalized groups

Ensure the energy transition is equitable and fair.

- Number of businesses owned by disadvantaged women/women and other marginalized groups, as defined by the national government.
  - Share of women and other marginalized groups participating in decision-making forums/platforms related to the just transition.
- 

# 10

### RATIONALE

### UNIT OF MEASUREMENT

## Funds ringfenced for just transition facilities

Track investment allocation to just transition facilities.

- USD 1 million
- 

# 11

### RATIONALE

### UNIT OF MEASUREMENT

## Energy policy stability (predictability and consistency of the country's energy policy)

Ensure government policies are in line with energy goals and are consistent over time to enable effective implementation and adequate return on investment of just transition facilities.

- Degree to which government's energy policy is aligned with its long-term energy goals.
- Degree to which government's energy policy is implemented in a consistent manner.



## VI. GROUPING THE SAFEGUARDS INTO DIMENSIONS

In developing this framework, we engaged the World Bank's Environmental, Social and Governance (ESG) framework and various articles and reports on the energy quadrilemma. The ESG framework assesses the quality of socially conscious investment options on three pillars, namely, social, environmental and governance measures. The energy quadrilemma assesses investment options on the following pillars, environmental and climate impact, socio-economic impact, cost and affordability, availability and reliability. The Safeguards, Elements and Metrics have been grouped according to these dimensions to ensure a holistic approach.

### Key Framework Dimensions within JET

Energy quadrilemma components

ESG components



#### Supply security

Energy transition must ensure a readily available and reliable supply of energy to end consumers



#### Cost

Energy transition must continue to deliver energy to end consumers at an affordable price



#### Environmental

Energy transitions must aim to minimize the negative environmental and climate impacts of energy production and consumption

*E.g. biodiversity protection, pollution prevention and land and resource preservation*



#### Social

Energy transitions must aim to be beneficial for all members of society

*E.g. minimizing the effect of the transition on livelihoods and communities while focusing on enhancing their overall well-being*



#### Governance

Energy transitions must be supported by good governance mechanisms that ensure all key stakeholders work together to achieve a successful and well-managed energy transition above all the above components

*E.g. Anti-corruption mechanisms, ownership and accountability*

TABLE 1

## Dimensions covered by the Safeguards

Safeguard	Description	Dimension
<b>Alignment of decarbonization plans with socioeconomic strategies and/or related policies</b>	Decarbonization efforts are aligned with the just energy transition plan and/or related policies, which include the national decarbonization and socio-economic development priorities.	Social
<b>Decommissioning of coal and demolition of infrastructure</b>	Measures are in place to ensure that there is no new coal development or life extension of existing coal assets.	Environmental
<b>Disclosure of information and facilitation of stakeholder engagement</b>	Effective and inclusive engagement with relevant stakeholders is facilitated, ensuring that all concerned parties have access to essential information.	Governance
<b>Implementation of anti-corruption measures</b>	Guidelines and standards are in place to promote transparency, ethical behavior and integrity and mitigate risks associated with corruption.	Governance
<b>Management of land acquisition, restrictions on land use and involuntary resettlement</b>	Disruptions to affected communities caused by decarbonization efforts are minimized and land tenure rights are protected.	Social
<b>Establishment of a grievance redress mechanism</b>	Non-discriminatory and non-cost prohibitive mechanisms are implemented for facilitating the resolution of disputes and establishing grievance mechanisms at all relevant levels.	Governance
<b>Assessment and management of social risks</b>	Social impact assessments are completed and used to identify mitigation measures and actions to ensure the transition is socially sound.	Social
<b>Evaluation and sustainable management of environmental risks, resource efficiency, pollution prevention, biodiversity, conservation and natural resources</b>	Environmental impact assessments are completed and used to identify mitigation measures and actions to ensure the transition is environmentally sound and sustainable. These assessments will consider threats to resource efficiency, air quality, biodiversity and natural resources	Environmental
<b>Preservation of cultural heritage</b>	Impacts on cultural heritage is avoided by conducting assessments and identifying and implementing mitigation measures.	Social
<b>Assurance of secure energy supply</b>	Energy transition plan ensures that neither national energy security nor energy access are compromised.	Security & cost

TABLE 2

## Dimensions covered by the Elements

Element	Description	Dimension
<b>Development of skills for individuals affected by the transition</b>	Skills-development measures and strategies to train, retrain, skill and/or upskill workers affected by the transition are outlined to minimize job losses.	Social
<b>Expansion of the clean energy economy</b>	Strategies to grow the clean energy economy and reduce dependence on energy imports are defined.	Security
<b>Promotion of local economic growth</b>	Needs and priorities of the affected communities are understood and used to define measures for communities to increase revenue in the affected regions.	Social
<b>Development of clean infrastructure</b>	Detailed, time-bound plans are in place to build clean energy infrastructure and invest in green technology.	Security
<b>Promotion of equity initiatives</b>	Equity measures that consider national priorities, including procedural, distributive, recognitional and restorative justice parameters, are in place.	Social
<b>Incorporation of social protection measures in just transition planning</b>	Social protection measures are incorporated into just transition planning and are based on social dialogues with key stakeholders.	Social
<b>Support for SDGs and co-benefits</b>	Evaluations of SDG and co-benefit impacts are included within Just energy transition planning, and opportunities to improve adaptation are identified.	Governance
<b>Development of new employment opportunities</b>	A strategy to scale new ventures that create sustainable employment opportunities is developed.	Social
<b>Cultivation of competitive local supply chains</b>	Local supply chains are cultivated to remain resilient by optimizing the ramp down of goods and services.	Social

TABLE 3

### Dimensions covered by the Metrics

Metric	Rationale	Dimension
<b>Absolute carbon emissions (built bottom-up with sector-specific emissions)</b>	Determine the effectiveness of decarbonization efforts in the country by assessing the changes in absolute carbon emissions.	Social
<b>Final energy carbon intensity</b>	Track progress towards decarbonization goals, including electrification objectives.	Security
<b>Clean energy investment</b>	Determine if financial investments are shifting towards clean energy and away from coal assets.	Social
<b>Sources of income created for affected employees</b>	Ensure that individuals affected by the energy transition have access to sustained income through job creation or job retention.	Security
<b>Transparency and accountability</b>	Prevent corruption and misuse of funds and to ensure public trust and support.	Social
<b>Energy security</b>	Ensure power distribution is reliable and stable and the country is not majorly dependent on energy imports.	Social
<b>Energy access rate</b>	Track progress towards global energy goals and ensure the population has access to reliable energy.	Governance
<b>Total power generated from renewable energy</b>	Track progress against the decarbonization of the electricity sector and the shift towards clean energy.	Social
<b>Inclusion of previously marginalized groups</b>	Ensure the energy transition is equitable and fair.	Social
<b>Funds ringfenced for just transition facilities</b>	Track investment allocation to Just Transition facilities.	Social
<b>Energy policy stability (predictability and consistency of the country's energy policy)</b>	Ensure government policies are in line with energy goals and are consistent over time to enable effective implementation and adequate return on investment of Just Transition facilities.	Governance



## VII. CONCLUSION

Through the publication of this document, Environmental Defense Fund reaffirms its commitment to advocating for a just transition towards cleaner energy, while solving simultaneously for energy access, socioeconomic upliftment, and environmental sustainability. By outlining the safeguards and just transition elements that are important to include in a JET strategy, we emphasize the critical importance of inclusivity, equitable practices, and the active involvement of all stakeholders to ensure that the shift to a low-carbon economy does not leave any one behind. Through this document we also call for ongoing innovation, collaboration and dialogue to address the challenges and opportunities that lie ahead, aiming to create a future where environmental sustainability and social justice are intertwined, **ensuring a healthier planet for current and future generations, essentially — a vital Earth for all.** To this end we welcome views on our thoughts on safeguards and just energy transition elements, as we strive for continuous improvement in our Just Transition work.



**EDF.org**  
A vital Earth. For everyone.