

How Just Transition Can Help Deliver the Paris Agreement

A woman in a blue and black work jacket stands on a concrete structure, holding a white hard hat. She is looking towards the right. In the background, there is a large green industrial structure, possibly a wind turbine or part of a power plant, under a clear blue sky. The overall scene suggests a focus on sustainable energy and infrastructure.

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Acronyms

AFOLU	Agriculture, Forestry and Other Land Use
CIF	Climate Investment Fund
CBO	Community-based organization
COP	Conference of the Parties
EBRD	European Bank for Reconstruction and Development
EU	European Union
EV	Electric vehicle
GHG	Greenhouse gases
IEA	International Energy Agency
ILO	International Labour Organization
IPCC	Intergovernmental Panel on Climate Change
IPPU	Industrial Processes and Product Use
IRENA	International Renewable Energy Agency
LTS	Long-Term (Mitigation) Strategies
LAC	Latin America and the Caribbean
LT-LEDS	Long-term Low Emissions and Development Strategies
NAMA	Nationally Appropriate Mitigation Actions
MDB	Multilateral development bank
MPI	Multi-dimensional Poverty Index
MSME	Micro, small and medium enterprises
NDC	Nationally Determined Contribution
NDP	National Development Plan
NECP	National energy and climate plans
NGO	Non-governmental organization
SDGs	Sustainable Development Goals
SIDS	Small Island Developing State
SME	Small and medium enterprises
SFWG	G20 Sustainable Finance Working Group
UNDP	United Nations Development Programme
UNFCCC	United Nations Framework Convention on Climate Change
UNSG	United Nations Secretary-General

Foreword

Since the industrial revolution, fossil fuels have powered extraordinary economic growth and development albeit with incalculable costs to people and planet. In 2022, our global community is now facing a climate emergency that is hitting much faster and harder than many expected, impacting some of the world's poorest and most vulnerable communities. At the same time, the war in Ukraine is demonstrating the precariousness of energy security policies which rely in any way on fossil fuels. There are signs that the world is moving in the right direction. An increasing number of countries are bending the curve of global greenhouse gas emissions downward – although the world is still off track to limit global warming to 1.5°C.¹ An increasing number of countries are now investing in and deploying renewable energies at scale in the face of a worldwide energy crunch. Indeed, the payback time for investment in projects like solar and wind has dropped to just 12 months in some cases.²

There is now a pressing need to set the conditions to ratchet up this momentum across the globe. It will require political will, economy-wide approaches, smart policies, and support to grassroots innovation. In particular, countries

must put a price on carbon, phase out fossil fuel subsidies, shift taxation from people to pollution, and incentivise investments in green energy and infrastructure that advance the Sustainable Development Goals. With the principle that only multilateral cooperation will suffice to reach the Paris Agreement's objectives, developing countries need tailored support to drive forward a just transition to a fair and inclusive net-zero future. For instance, that must involve new international efforts to extend debt relief measures to developing countries as well as much-needed liquidity and capital. Or look to the fact that communities that depend on fossil fuels need assistance to acquire new skills and access to social protection.

This timely report offers new insights into key trends, challenges, and examples of best practice by countries to build a solid evidence base – including socio-economic impact assessments – to help advance a just transition in countries such as Zimbabwe, Serbia, and Costa Rica, which have been supported by the United Nations Development Programme (UNDP). Or consider efforts by Antigua and Barbuda to ensure that all communities can have their say

in the just transition – such as workers currently employed in the fossil fuel industry – as the government commits to bold renewable energy targets by 2030. Notably, just 38% of countries have embedded just transition principles in their enhanced NDCs, a planning gap that UNDP's Climate Promise is helping countries to address as they move to the implementation phase.

The entire United Nations (UN) family, including UNDP and our partners, will continue to support countries and communities to co-invest in a just transition to a net-zero future. As our window to limit the worst effects of climate change closes rapidly, the UN Climate Change Conference (COP27) in Egypt must be a moment for countries to overcome differences, focus on shared interests, and ensure that we jump-start a brand-new era: that of the green revolution, centred on a just transition that truly leaves no-one behind.



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Executive summary

From unprecedented floods in Pakistan to Europe's record-breaking heatwaves, the impacts of the climate crisis are more evident than ever. The only solution to the looming climate catastrophe: we must completely decarbonize. And we must do it now.

History, however, has shown that with rapid transformation comes the risk of greater social inequality and civil unrest, as well as disrupted businesses, sectors and markets.

To meet the challenge, countries are rethinking development pathways to achieve the scale, scope, and speed of environmental and socio-economic transformation required. Increasingly, they are taking steps to ensure a just transition of their economies, with the aim of leaving no-one behind.

Promisingly, this report finds this growing commitment – and acknowledgement of the role of just transition in achieving the Paris Agreement

– reflected in an increasing number of national climate policies.

Just transition principles are now explicitly cited in 38 percent of Nationally Determined Contributions (NDCs) and 56 percent of Long-Term Strategies (LTS). Of these, only 17 percent of enhanced NDCs and 55 percent of LTS, however, have *dedicated* sections to the issue. Much more, then, remains to be done.

The benefits, however, of a just transition are many, from generating public support for a green jobs revolution to helping drive local solutions. Importantly, a just transition also holds the potential for deeper social change, by reforming existing systems that undermine climate equity and social equality.

This report finds progress is being made and there are some clear trends. LTS, for example, more consistently address just transition than

NDCs. Currently the energy sector is receiving the most attention for a just transition.

UNDP, however, firmly believes that a comprehensive whole-of-economy, whole-of-society approach – one that addresses all sectors and secures buy-in from all quarters – will bring the greatest development gains.

Further, UNDP believes that to unlock the full potential of decarbonization, opportunities and co-benefits must be pursued alongside investment in human and social capital.

Under the [Climate Promise initiative](#), UNDP is now supporting 34 countries and territories around the world to strengthen just transition principles, process, and practices through UNDP's [Framework for Incorporating Just Transition into NDCs and LTS](#).

By incorporating just transition approaches into NDCs and LTS, these 34 countries and territories are seeking to advance inclusive climate action with a consideration of all sectors and stakeholders, recognizing and listening to all groups, including those most vulnerable, but also, crucially, empowering them to act.

There are four areas of support to this work:



Assessment: qualitative and quantitative assessments and modelling to estimate the impacts of NDC and LTS measures;



Engagement: social dialogues and stakeholder consultation to build consensus for just transition objectives and strategies;



Institutional, policy and capacity building: strengthening of social and economic policies, and support for workers and enterprises for green jobs; and



Finance: public and private investment to operationalize just transition strategies.

This report unpacks what a just transition means to UNDP, highlights why it is key to achieving the Paris Agreement and Sustainable Development Goals (SDGs), and presents global and regional trends on just transition.

It also provides a deeper look into UNDP's Framework for Incorporating Just Transition into NDCs and LTS and highlights, through country case studies, how UNDP is supporting this work in Serbia, South Africa, Costa Rica, India, and Antigua and Barbuda.

1

Introduction

Unprecedented floods in Pakistan. Scorching heat and wildfires across Europe. Record-breaking rainfall on the east coast of Australia. International headlines in 2022 have continued to be dominated by extreme weather events across the continents, providing a confronting glimpse into the future should we fail to solve the climate crisis.

Science has also continued to deliver sobering news: global greenhouse gas (GHG) emissions are at a historical high and the most recent seven years, 2015 to 2021, were the warmest on record.

The impacts of a warming planet are clearer than ever. So too are the warnings, with the Intergovernmental Panel on Climate Change (IPCC) [Sixth Assessment Report](#) emphasizing that failure to slash GHG emissions will harm human health and biodiversity worldwide, and risk irreversible losses sooner than previously thought.

The only way forward: to immediately and dramatically cut our GHG emissions and to move to a clean energy economy.

Since 2015, the world has committed to a global framework for driving action on climate change. Under this historic agreement, the Paris Agreement, signed by 194 countries, Nationally Determined Contributions (NDCs) and Long-Term Strategies (LTS) are the key tools for countries to both cut emissions and adapt. As respective short-term (5-year) and long-term (20- to 30-year) roadmaps, these are essentially the blueprint for how nations will achieve the scale, scope, and speed of environmental and economic transformation required to limit global temperature rise to 1.5 degrees Celsius or below.

The challenges, and opportunities, however, lie not just in the race to cut GHG emissions. There are also profound social implications in how we do it – implications for social justice, human



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rights, gender equality, health, education, jobs, and livelihoods. Among the most vulnerable are the poor, particularly poor women, ethnic minorities, and people with disabilities.

We know that efforts to mitigate climate change can have unintended adverse consequences.

Reducing deforestation, for example, may yield emissions reductions and other co-benefits, but at the same time, if not managed well, may disempower Indigenous peoples and other local communities by denying them access to forest-based livelihoods.³ Similarly, in the case of renewable energy transition, poor households are likely to be disproportionately affected by spikes in energy and commodity prices.

The world of work faces specific challenges. According to the International Labour Organization (ILO), while keeping global warming below 2 degrees Celsius could create 18 mil-

lion net jobs worldwide, the transition away from fossil fuels could also result in the loss of 6 million gross jobs by 2030, overwhelmingly in the energy sector.⁴ These transitions will have to be carefully managed by governments.

In today's globalized world, transition challenges are not confined to single countries, with one government's climate policies potentially reverberating across borders. For example, countries that depend on tourism may be affected by another country's tax on aviation fuels inflating the cost of flights.

There are other challenges. For example, governments may hesitate to adopt emissions reduction policies, fearing increased domestic production costs may incentivize industries to move production abroad.

History has shown that issues of justice, inclusivity, and transparency must be at the heart of transformation.

Governments cannot address the climate crisis without addressing equity and fairness. The “yellow vest”, or *gilets jaunes*, [protest movement in France](#) in 2018 – triggered by a proposed green tax on diesel and gasoline – offers one example of what happens when workers feel marginalized, disenfranchised, and disadvantaged. Civil unrest in Chile in 2021 and in Ecuador in 2022 offer similar lessons.

A green transition to a net-zero future is key to unlocking the Paris Agreement’s global climate goals.

While the Paris Agreement sets a clear direction of travel, it is up to individual countries to decide which transition pathway they will take. If not managed well, the required socio-economic

transformation runs the risk of further increasing social inequality, exclusion, civil unrest, and less competitive businesses, sectors and markets.

Increasingly, countries are acknowledging these risks and in turn are taking action to support a just transition of their economies. That is, countries are choosing to strengthen transition pathways that reinforce equality and inclusivity, with the aim of leaving no-one behind.

As an agency that both combats climate change and tackles inequalities, UNDP, through its flagship initiative, the [Climate Promise](#), is supporting 34 countries and territories to incorporate the principles, process, and practice of just transition into their NDCs and LTS.

So what does this experience teach us about how countries are addressing just transition?

1.1. What is “just transition”?

The concept of just transition finds its origins in the 1980s, in a movement by US trade unions to protect workers affected by new water and air pollution regulations.

In recent years, however, the concept has gained traction with broadened scope. In 2012, the concept was incorporated in the outcome of the Rio+20 Earth Summit. In 2015, it was recognized in the preamble of the Paris Agreement.

Increasingly, the issue has become prominent in the discussion of energy transition, focused largely on ensuring that the rapid deployment of low-carbon technologies and systemic shifts towards decarbonization are inclusive and integrated with development priorities at all levels.

The ILO has defined just transition as “*greening the economy in a way that is as fair and inclu-*

sive as possible to everyone concerned, creating decent work opportunities and leaving no one behind.” Meanwhile, the IPCC has defined common elements of a just transition (Box 1).

Yet, while the concept is now widely used to advocate for social justice and equity in climate action, there is no universally accepted definition. Thus, perception varies between countries and regions.

For UNDP, just transition is fundamentally about principle, process, and practice.

Implicit is the recognition that transitions can be disruptive and deliberate effort is needed to make them smooth. UNDP’s framework of support therefore involves increasing country awareness of the **principles** of a just transition, strengthening their ability to engage in just transition **processes**, and developing capacity to implement just transition **practices**.

Box 1

IPCC’s 11 elements of a just transition

The IPCC defined 11 elements of a just transition in its latest Global Assessment Report:

1. Investments in establishing low-emission and labour-intensive technologies and sectors;
2. Research and early assessment of the social and employment impacts of climate policies;
3. Social dialogue and democratic consultation of social partners and stakeholders;
4. Creation of decent jobs; active labour markets policies; and rights at work;
5. Fairness in energy access and use;
6. Economic diversification based on low-carbon investments;
7. Realistic training/retraining programs that lead to decent work;
8. Gender-specific politics that promote equitable outcomes;
9. Fostering of international cooperation and coordinated multilateral actions;
10. Redressing of past harms and perceived injustices; and
11. Consideration of inter-generational justice concerns, such as the impacts of policy decisions on future generations.



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1.2 Five ways that a just transition can help achieve the Paris Agreement

1. Brings the public along

Applying just transition principles through collective and participatory decision-making processes is critical to securing broad public support and enabling greater climate ambition. According to the results of [UNDP's People's Climate Vote](#), investing in green business and jobs is one of the most supported climate policies globally – highlighting the demand for a multidimensional approach that not only cuts GHG emissions, but also raises Gross Domestic Product (GDP), creates jobs, and ensures a just and equitable future for all.

2. Supports a green jobs revolution

According to a study conducted by ILO, if we implement all the necessary measures towards achieving the Paris Agreement and invest in a [circular economy](#), there could be a net job gain of 24 million jobs by 2030.⁵ Applying just transition approaches will help ensure those jobs are decent⁶ – with guaranteed living wages, proper workplace safety protections, and health benefits – and that they contribute to poverty eradication and social inclusion.

3. Lays the groundwork for a resilient net-zero economy

Just transition is a necessary condition to attain the political economy of a net-zero future. Without strategies to manage the process and impact of change, socio-political backlash could slow the pace of decarbonization. Conversely, transparent planning processes with the active participation of a broad range of stakeholders can help minimize fear, opposition, and inter-community and generational conflict. Integrating just transition into implementation of the Paris Agreement also helps highlight the human and social capital required to achieve net zero.

4. Drives contextualized local solutions

There is a need to develop a local vision for just transition. Poorly defined or ill-contextualized transition concepts may lead to false solutions. Definitions that are too broad or general may render the concept unactionable. To unlock the benefits of a just transition, countries must understand the socio-economic impacts through assessments and broad-based stakeholder consultations.

5. Reinforces the urgency for concerted efforts

To avoid climate catastrophe, the world must pivot at an unprecedented scale to a cleaner, greener, more resilient future. To ensure this transition happens swiftly, but also reduces inequality, poverty, and social exclusion, leaders need to stay focused on whole-of-economy NDCs and LTS that incorporate whole-of-society approaches.

②

Just transition and climate action: Key trends



The importance of just transition is now recognized, with the principles reflected in 38% of NDCs, 56% of long-term strategies, and a growing number of high-profile global initiatives

Many countries have recognized the socio-economic challenges that accompany the shift away from fossil fuels and are taking measures to protect the most exposed communities and workers. Promisingly, many are formally recognizing just transition principles in their NDCs and LTS under the Paris Agreement.

→ **Of the 170 countries that have submitted updated NDCs as of 31 October 2022, 65 (38 percent) reference just transition**⁷ (Figure 1, overleaf). There is an almost even split between developed and developing countries taking this step (51 percent vs 49 percent respectively), with Central and Eastern Europe leading, followed by the Americas and the Caribbean, and Africa, while Asia Pacific and the Arab States lag behind.

→ **Of the 52 LTS submitted as of 31 October 2022, 29 (56 percent) reference just transition.** Of these 29 countries, a greater number of developed countries (19) have submitted

LTS than developing (10), with Central and Eastern Europe leading with 17 submissions. This is followed by Asia Pacific and Americas and the Caribbean, while Africa and Arab States lag behind.

→ **More than 19 countries have established national transition commissions, task forces, dialogues, and/or related policies.**⁸ Meanwhile, global and regional initiatives that are advancing just transition are gathering pace (Box 2).

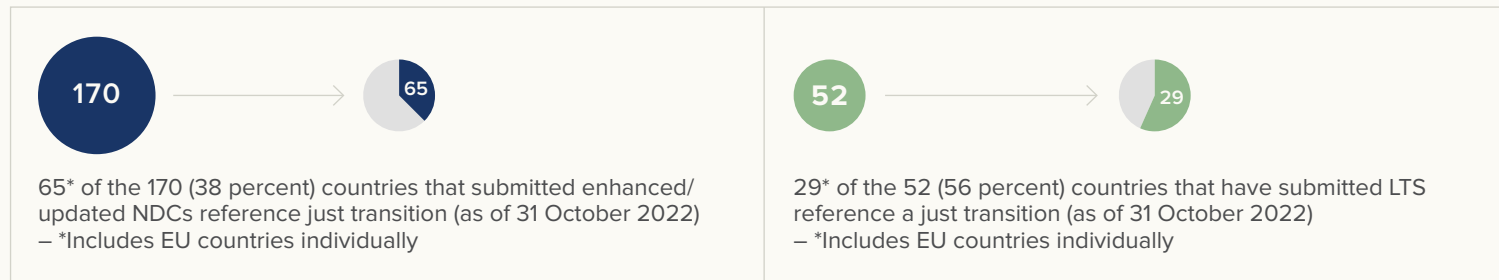
For more information on UNDP's analytical approach, refer to the [Methodological Note](#).

Box 2

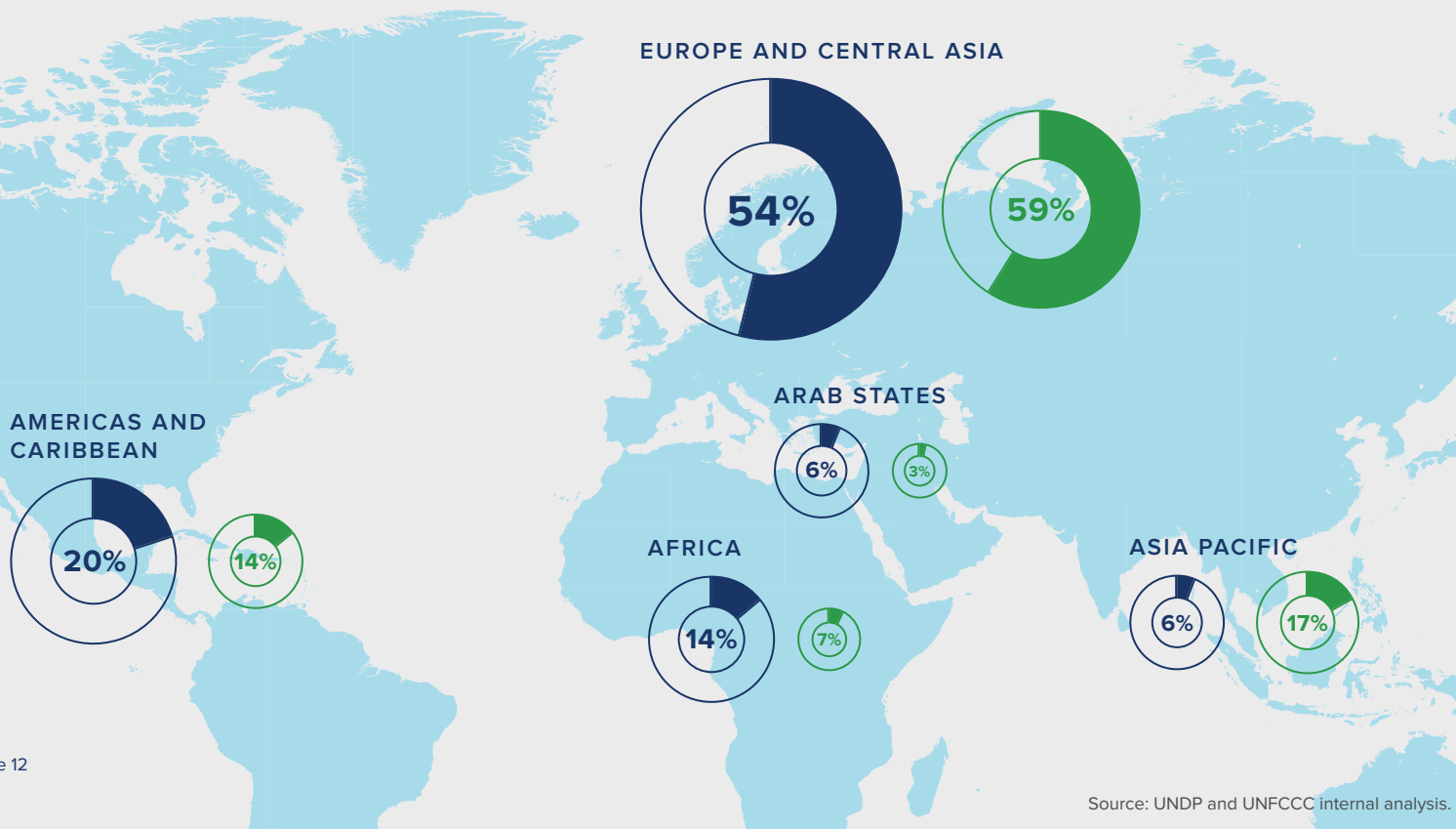
Growth in just transition initiatives

<p>2018</p>	<p>Just Transition Declaration (Silesia Declaration) adopted at COP24 – 53 signatories</p>
<p>2019</p>	<p>Climate Action for Jobs Initiative launched at UNSG's Climate Action Summit – 49 signatories</p>
<p>2021</p> <p>Major initiatives announced at COP26</p>	<p>Just Transition Declaration promises funding for climate action and decarbonization in developing countries</p> <p>MDB Paris Alignment Working Group on Just Transition: Commit to advance 5 high-level principles that guide support for a gender-responsive just transition in a consistent, credible, and transparent manner</p> <p>Climate Investment Fund's (CIF) Accelerating Coal Transition (ACT) investment program aims to advance a just transition from coal power to clean energy in emerging economies</p> <p>EU Just Transition Mechanism aims to support national just transition efforts</p> <p>Just Energy Transition Partnership for South Africa aims to accelerate the decarbonization of South Africa's economy, with a focus on the electricity system</p>
<p>2022</p>	<p>G20 Sustainable Finance Working Group sets out to define a Just Transition Framework</p>

Figure 1
Just transition in short-term and long-term climate planning



● NDCs referencing a just transition, by region
 ● LTS referencing a just transition, by region



% of region referencing just transition in NDCs (as % of total NDCs submitted by region)

Europe and Central Asia	73%
Asia Pacific	12%
Americas and Caribbean	42%
Africa	21%
Arab States	25%

% of region referencing just transition in LTS (as % of total LTS submitted by region)

Europe and Central Asia	65%
Asia Pacific	38%
Americas and Caribbean	50%
Africa	50%
Arab States	100%

More, however, can be done to anchor just transition in climate plans – only 17% of NDCs and 55% of LTS have dedicated sections on this key issue

Of the 65 NDCs that reference just transition, only 11 (17 percent) include a dedicated chapter or section on the issue, while only eight (12 percent) recognize just transition as cross-cutting (Figure 2). This indicates more can be done to strengthen the narrative and to signal policy intent, thus more fully anchoring the principles in climate planning and implementation.

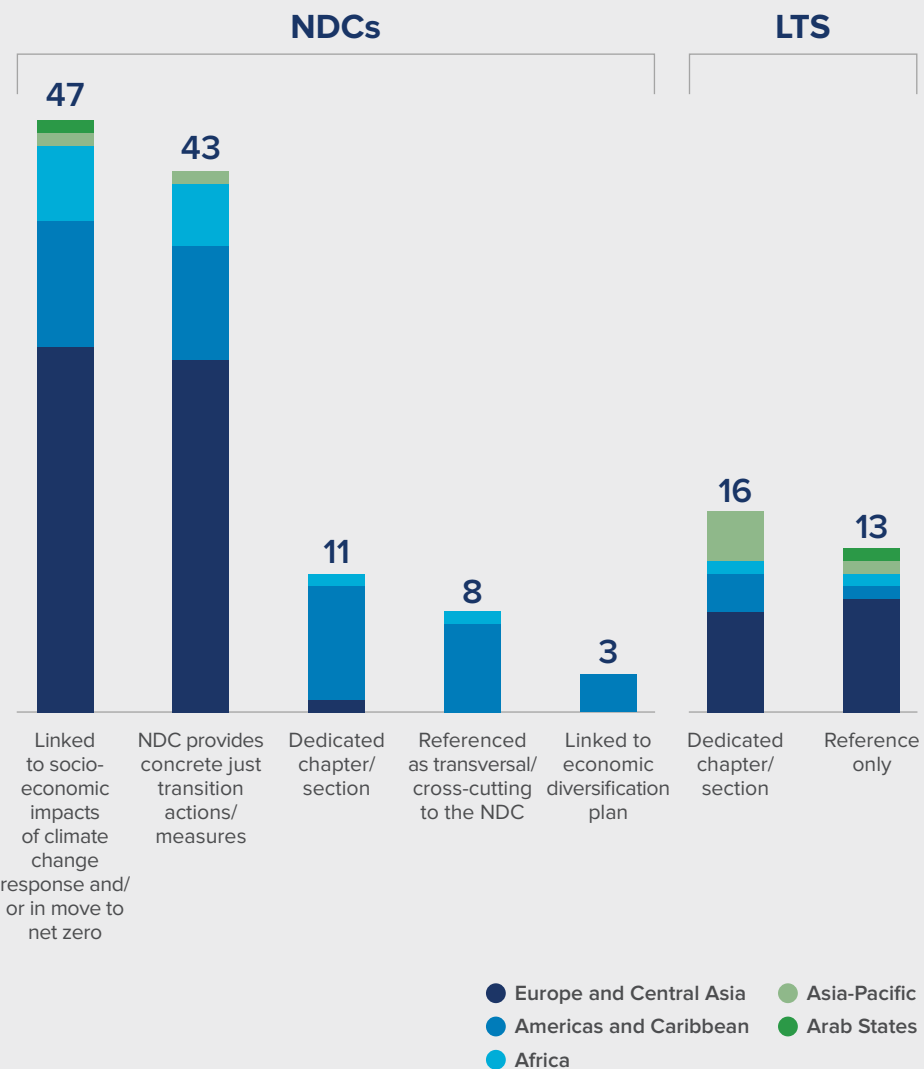
A total of 47 NDCs (72 percent) make linkages between just transition and the socio-economic impacts of climate change response and/or the transition to net zero, but only three (5 percent) making linkages with economic diversification plans.

Importantly, 43 NDCs (66 percent) describe concrete just transition actions or measures, showing national commitment to finance and implement the activities.

Developed countries represent nearly 70 percent of the NDCs with concrete measures and/or links to socio-economic impacts. The Americas and the Caribbean represent nearly all the NDCs with dedicated sections on just transition and/or other defined linkages.

Of the 29 LTS that speak to just transition, 16 (55 percent) include a dedicated chapter or section on the issue, while the remainder reference just transition briefly. Developed countries represent 63 percent of the LTS that are more complete in this respect.

Figure 2
Quantity vs quality? How a just transition is referenced in enhanced NDCs and LTS, disaggregated by region



Source: UNDP and UNFCCC internal analysis.

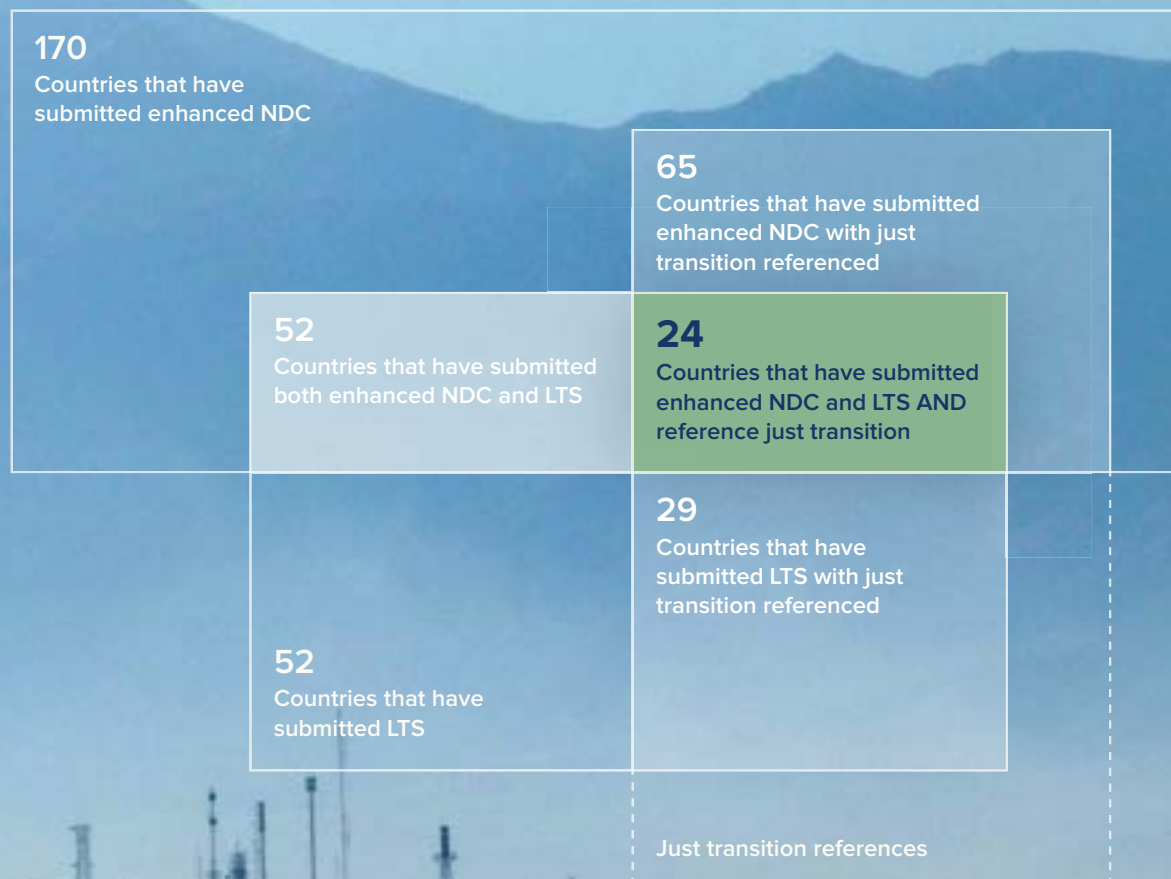
Long-term strategies more consistently address just transition than enhanced NDCs

Proportionally, countries that have submitted LTS are more likely to include references to just transition than countries that have only submitted NDCs.

Of the 52 countries that have submitted both LTS and NDC, 24 refer to just transition in both (Figure 3). Many of these countries (71 percent) are part of the EU or are EU Accession countries. The non-EU countries that reference just transition in both their NDC and LTS are primarily higher emitters in their regions.

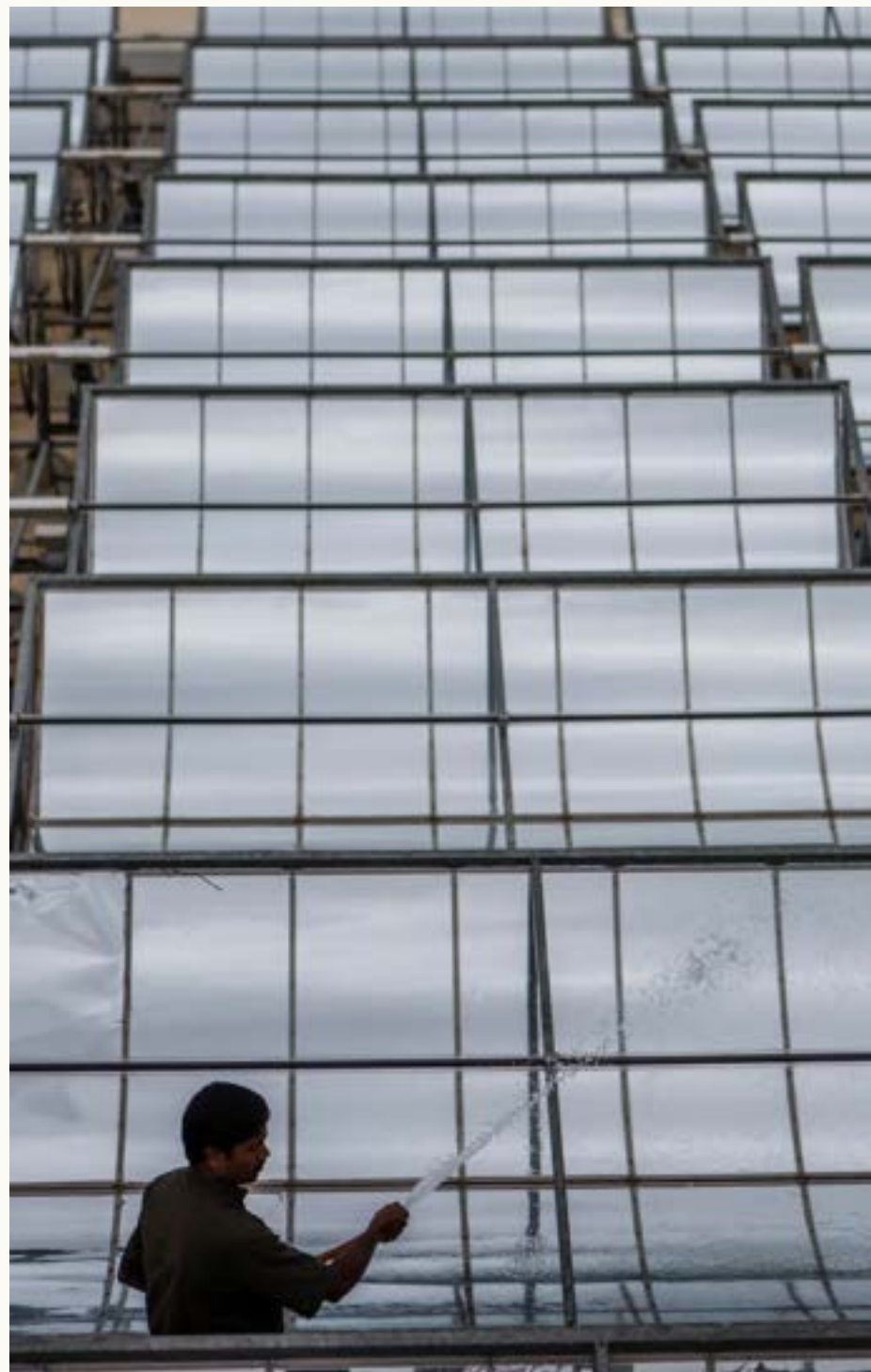
Figure 3

Mapping just transition overlap in enhanced NDCs and LTS



③

The case for a transformative approach to just transition



Energy is the sector of greatest interest in drive for just transition, but other sectors may deliver greater development gains

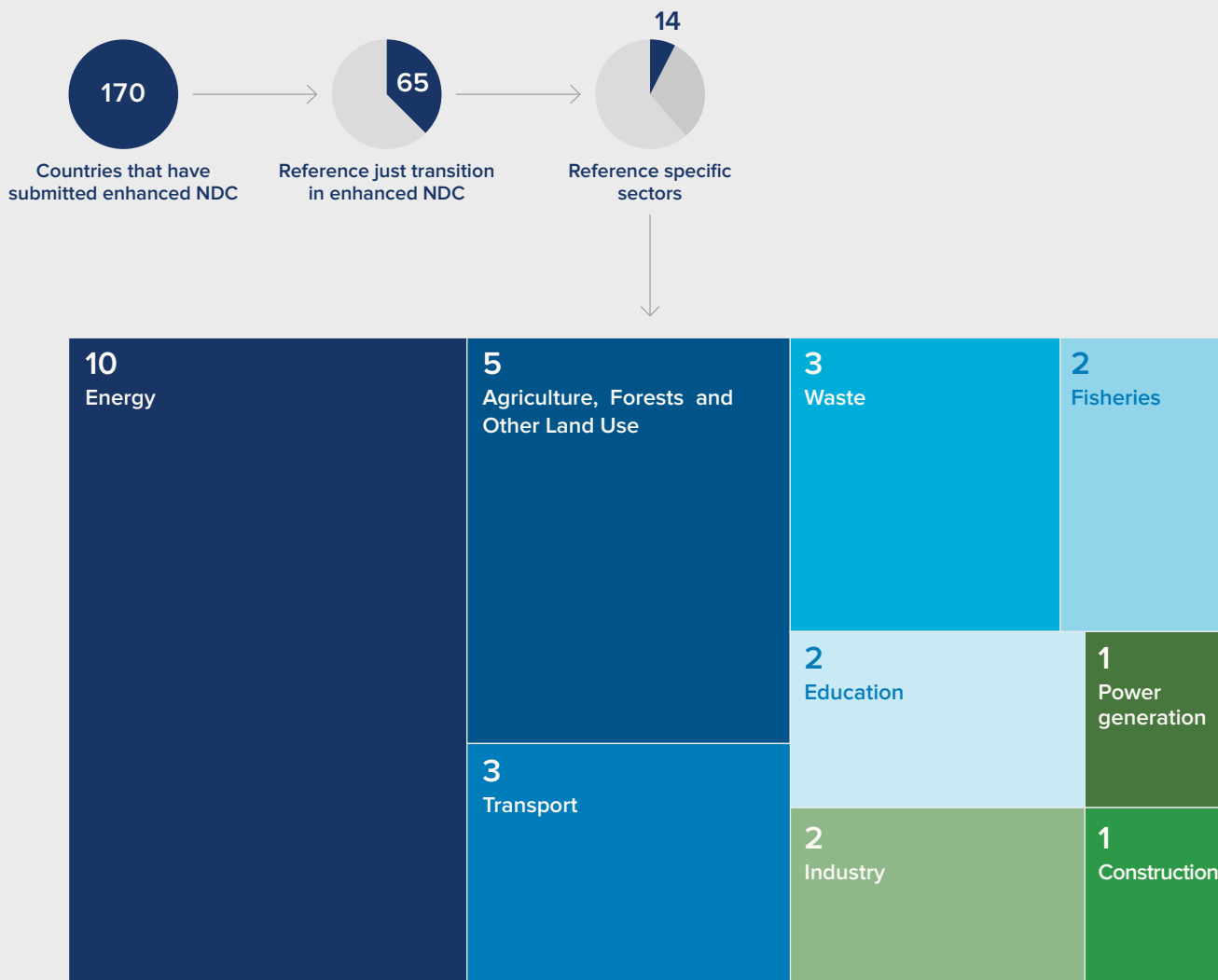
By incorporating just transition approaches into NDCs and LTS, countries can begin to reap transformative benefits. It involves, however, addressing the impacts of economic change across all sectors and stakeholders and moving beyond the basic recognition and participation of stakeholders and vulnerable groups towards empowerment of their roles. It also means looking at, and reforming, existing systems that undermine climate equity and social equality.

To date, countries' just transition efforts have narrowly focused on specific sectors (predominantly energy) and stakeholders (specifically workers in male-dominated industries).

Experience, however, shows that achieving a just transition requires addressing the impacts of decarbonization on consumers, employers, and communities, and guiding a successful economic transformation across each and every sector and industry.

Of the 65 submitted enhanced NDCs that reference just transition, only 14 (22 percent) explicitly reference specific sectors. Of these, 10 link just transition to the energy sector, with associated sectors including Transport; Industry; Construction; and Power Generation. Other sectors referenced were Agriculture, Forests and Other Land Use (AFOLU); Waste; Education; and Fisheries (Figure 4).

Figure 4
Just transition sector focus in enhanced NDCs



Source: UNDP internal analysis.

Box 3

Looking beyond energy: Just transition in Small Island Developing States

Small Island Developing States (SIDS) have specific characteristics which present challenges for decarbonization and a just transition. They generally are:

- Small in population, have limited human capital and face considerable capacity constraints;
- Highly dependent on external economic forces, international trade, and special and differential treatment;⁹
- Not able to afford large-scale, immediate infrastructure investments with heavy sunk costs;
- Reliant on imports for most goods, from fossil fuels to renewable energy technologies;
- Have elevated levels of debt and when government underwrite decarbonization technology, they are potentially taking on substantial public debt; and
- Have a limited range of economic activities with many relying heavily on tourism revenues.

SIDS that depend on tourism have an additional vulnerability, given the sector's reliance on aviation and the costs associated with switching to low-carbon fuels. Therefore, tourism must be at the center of these countries' just transition strategies.

Source: Bishop, Matthew et. al, 2021. [Just Transitions in Small Island Developing States \(SIDS\)](#).

It is important to note that transition pathways have distributional consequences – job losses are more likely to occur in sectors, regions, and communities where there is high dependence on fossil fuels or carbon-intensive practices, and where economic diversification is limited.

A focus on the energy transition, without due attention to these differentiated socio-economic impacts, risks perpetuating existing vulnerabilities and overlooking systemic inequalities. It may also enable the politicization of the just transition agenda.

3.1. Just transition brings the biggest benefits through economic transformation across all sectors

By narrowly focusing on certain sectors, particularly energy, governments risk missing the benefits of addressing sectors such as agriculture and land-use. This is particularly so in developing countries in which agriculture provides livelihoods to large majorities of the population. In Africa and Asia, for example, around 50 percent and 30 percent, respectively, of employment is derived from the agriculture sector.¹⁰ These figures can be even higher for women, who in many developing countries, make up more than 50 percent of the agricultural workforce.¹¹

In these countries, scaled-up climate adaptation approaches such as conservation agriculture for example, can have a high job multiplier and support gender equality and other social benefits.¹²

According to the [green jobs assessment](#) conducted jointly by ILO and UNDP, in **Zimbabwe**, for example, a policy encouraging a shift to climate-smart and conservation farming has significant labour market effects (Figure 5). Under the policy, increased organic fertilizer use and production generates jobs in supplying industries and reduces use of chemical fertilizer, which in turn reduces imports. The policy also calls for 10 percent additional direct agriculture-related jobs in soil preparation, management, harvesting, and post-harvest activities. The policy's net effect is estimated at close to 100,000 additional full-time equivalent jobs in 2035. Because the investment requirements are very small – and relate more to training and upskilling for farmers than actual capital – the job multiplier is the highest of all the scenarios. A \$1 million investment in conservation and climate-smart agriculture is expected to create some 30,000 jobs by 2035.

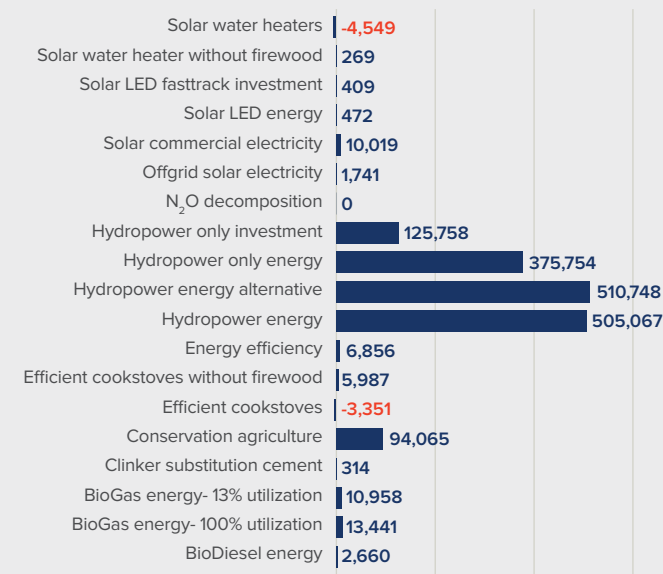
Comparable results were found in an [assessment](#) carried out in **Nigeria**. Comparing 11 scenarios in terms of job creation and GHG emissions reduction potential, per million dollars invested, shows a relatively high job multiplier of around 150 jobs in renewable energy. Changes in the AFOLU sector, however, are the biggest job generator, with between 230 and 290 job opportunities across the economy per million dollars invested.

Figure 5

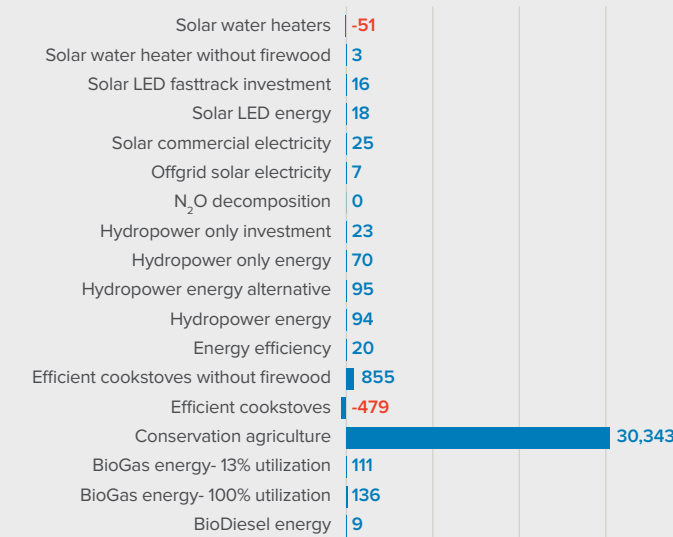
Total additional jobs created by selected climate policies (NDCs) in 2035 VS job multiplier in 2035 per dollar invested in Zimbabwe and Nigeria

Zimbabwe

Biggest job gains are in energy

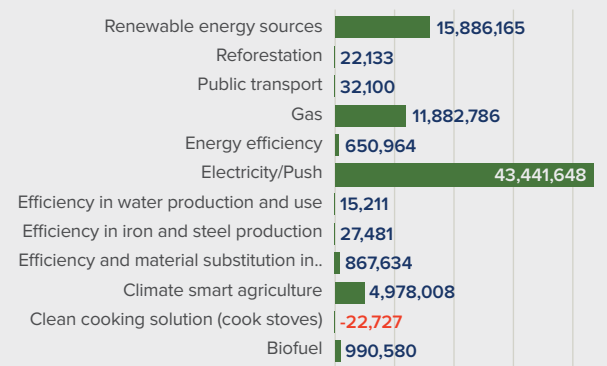


Biggest job gains, by \$ invested, are in agriculture

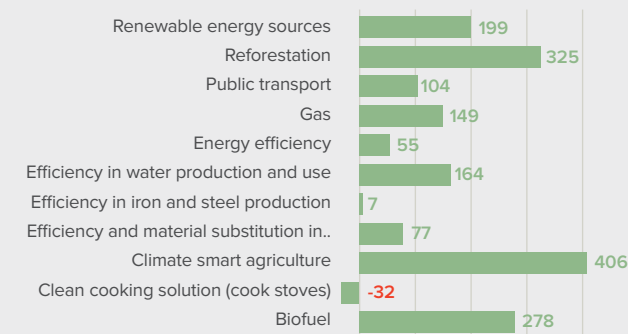


Nigeria

Biggest job gains are in energy



Biggest job gains, by \$ invested, are in agriculture



3.2. Including all of society invites everyone be part of a net-zero future

While some individuals will gain new jobs in green sectors, others may not be well-positioned to take advantage of the opportunities. In the renewable energy sector, in particular, gender norms may exclude women from new high-tech value chains unless deliberate policy incentives and targeted capacity-support measures are enacted.

It is important, then, that countries recognize the gender-differentiated impacts of a green transition and ensure that women and

other groups can improve their livelihoods and take on leadership roles.

For example, according to the green jobs assessment in **Zimbabwe**, policy interventions to create hydropower energy would benefit unskilled men the most, while the policy intervention to invest in conservation agriculture would benefit unskilled women the most (Figure 6). Conversely, a transition away from the use of firewood and other fuels in cookstoves poses jobs losses in firewood collection, notably by

women and girls. In making the switch to cleaner cooking technologies, the Zimbabwe government must therefore consider the livelihoods affected and how they will be transitioned to productive paid employment in other industries.

Globally, it is a positive sign that more and more countries are indeed acknowledging women's influential roles in key climate sectors. Almost three-quarters of enhanced NDCs now refer to women or gender in specific sectors, up from 16 percent in the first generation of NDCs. Coun-

tries' gender analyses have included women's positions across value chains and employment types and refer to the importance of women in decision-making and leadership.

Figure 6

Gender and skill distribution of labor in 2035 compared to baseline in Zimbabwe

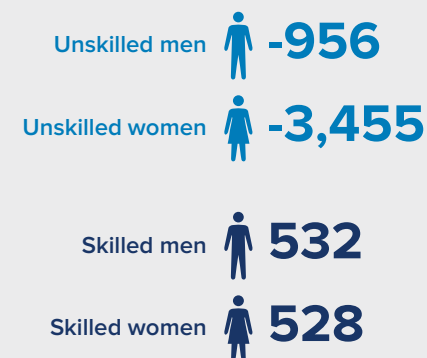
Gender and skill distribution of hydropower energy alternative job gains



Gender and skill distribution of conservation agriculture alternative job gains

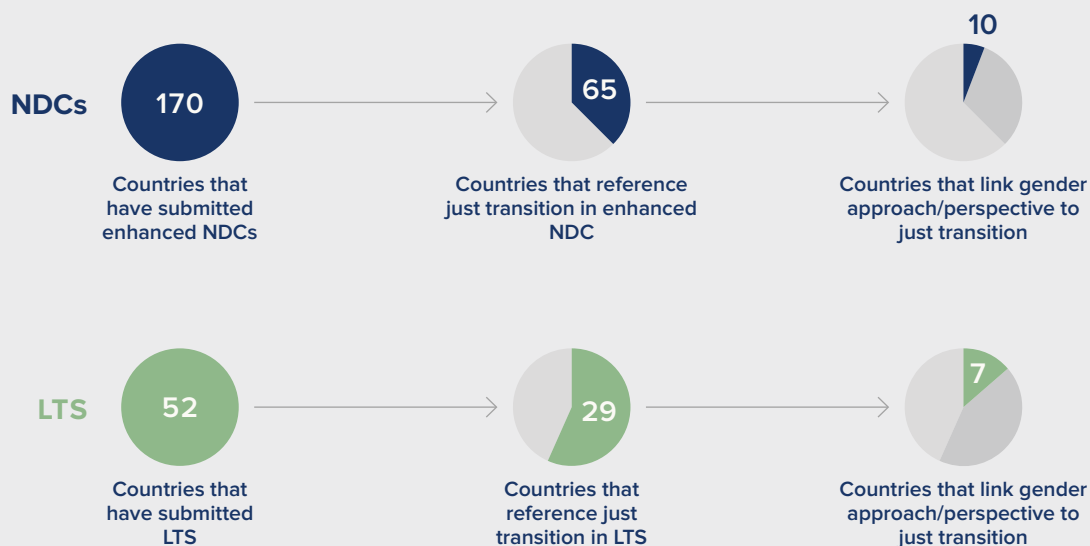


Gender and skill distribution of efficient cookstoves alternative job gains



Effectively incorporating gender equality into a just transition requires an inclusive approach, with multiple stakeholders, to identify capacity gaps and planning priorities. However, only 10 (15 percent) of the 65 countries that reference just transition in their enhanced NDCs have made a linkage with gender (Figure 7). Similarly, only 7 (24 percent) of the 29 countries that reference just transition in their LTS have done so. Now these linkages must be made in NDCs and LTS in the context of just transition.

Figure 7
Gender and just transition in enhanced NDCs and LTS



Source: UNDP and UNFCCC internal analysis.

Box 4
Gendered impacts of climate action

Anticipated changes in labour markets due to climate change have a clear gender dimension, with serious policy implications.

If measures are not adopted to increase women’s participation in emerging green occupations, current gender stereotypes are likely to persist and women will only have access to a fraction of the jobs created. The renewable energy sector is one example – while the number of jobs is set to grow greatly, women’s employment in the sector currently only makes up 20 to 25 percent in some advanced economies.

According to ILO, “gender-transformative” reskilling measures will be necessary for low-, mid- and high-skilled occupations to ensure women’s access to new jobs.

Source: ILO, 2022. *Just transition: An essential pathway to achieving gender equality and social justice.*



Box 5

The role of youth in a just transition

With 1.8 billion young people in the world, youth are critical stakeholders in climate action and have the right to participate in public affairs that impact their future. In fact, their leadership, energy and perseverance have been the engine for a global movement demanding bold climate action from world leaders. At the same time, they have been leading impactful initiatives in their countries and communities.

However, as highlighted at the United Nations Economic and Social Council's Youth Forum in April 2022, meaningful youth involvement in governance and policymaking continues to be hampered by a range of factors including lack of technical, political and financial support; discrimination related to age, gender, and capabilities; unequal access to information and education; and shrinking civic space. This is despite youth constituting a sizable portion of national populations. In some developing countries, young people represent upwards of 80 percent.^a

Many young people are also struggling to access education and employment. While glob-

ally, more than 160 million youth are working, many are living in poverty.^b The situation is made even more precarious with sectors that traditionally employ youth, such as agriculture, forestry, and fisheries, under threat from over-exploitation and the impacts of climate change.

At the same time, there is hope and promise in the energy transition. Up to 60 million new jobs in the green economy could be created by 2030^c, while renewable energy alone could create up to 42 million by 2050.^d Green growth, then, presents an opportunity to foster youth employment while simultaneously preserving the environment and increasing climate resilience.^e

Listening to young peoples' voices and working on youth-inclusive data collection, analysis, and research are critical first steps to tap into young people's potential, creativity, and entrepreneurship.

Some key recommendations from UNDP's recent publication, "[Aiming Higher: Elevating Meaningful Youth Engagement for Climate Action](#)", include:

- **Meaningfully engaging with youth, enabling young people to influence norms, behaviour, institutional structures, formal and informal political processes and accountability mechanisms;**
- **Supporting and encouraging youth initiatives that introduce alternatives for large-scale system transformations; and**
- **Initiating and strengthening research in support of policy recommendations on the role of youth in just transition and sectoral decarbonization pathways, including energy, transport, higher education, and green jobs.**

^a UNDP. 2022. [Aiming Higher: Elevating Meaningful Youth Engagement for Climate Action](#).

^b ILO and UN Environment. 2022. [Green Jobs for Youth: Boosting Decent Jobs for Young People, Greening the Economy](#).

^c Ibid.

^d IRENA, 2020. [Global Renewables Outlook: Energy Transformation 2050](#).

^e ILO and UN Environment. 2022. [Green Jobs for Youth: Boosting Decent Jobs for Young People, Greening the Economy](#).

3.3. Emphasizing opportunities and co-benefits channels necessary investment in human and social capital

Support for a just transition advances several Sustainable Development Goals (SDGs), notably in relation to affordable and clean energy (SDG7), gender equality (SDG5), decent work and economic growth (SDG8), reduced inequalities (SDG10), responsible production and consumption (SDG12), and climate action (SDG13).

These potential SDG gains are best maximized through deliberate efforts to connect the dots and build capacities to reap those benefits. Well-intended climate policies and capital investments in the low-carbon economy require that managers, workers, enterprises and entrepreneurs have the right skills to finance, manage, construct, operate and maintain the capital asset – and use it productively in the long term.

Countries, however, are failing to make the linkages with the SDGs explicit in short- and long-term climate plans with respect to just transition. Only nine percent of enhanced NDCs and 14 percent of LTS make the linkage with SDGs (Figure 8).

Recognition of the need for education, training, and skills development of the workforce is higher in LTS than enhanced NDCs (79 percent of LTS and 18 percent of NDCs respectively), but still leaves room for improvement (Figure 9).

Figure 8
SDGs and just transition in enhanced NDCs and LTS

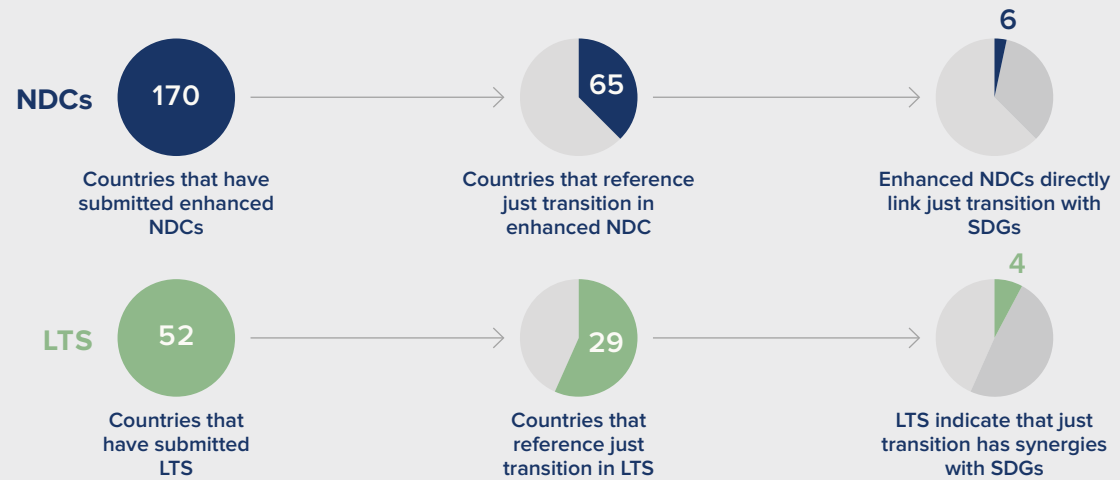
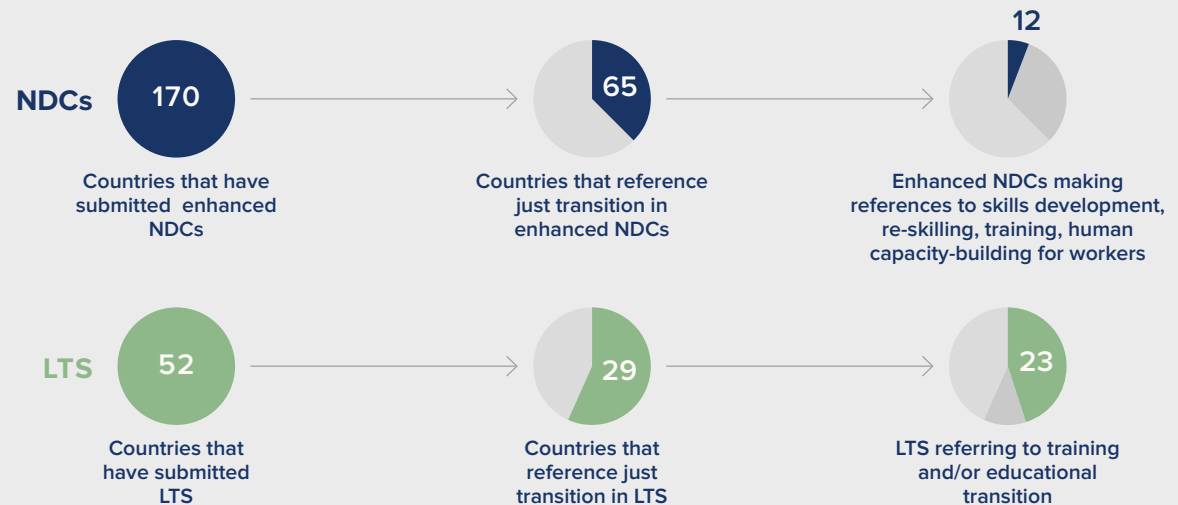


Figure 9
Education, training, and skills development of workforce in enhanced NDCs and LTS



24 million

The number of jobs which could be created worldwide by 2030 in the transition to a green economy.¹³

122 million

Projected renewable energy jobs created worldwide by 2050, should countries accelerate the energy transition.¹⁴

Box 6

SDG co-benefits of a just energy transition

The 2021 UN Report '[Enabling SDGs Through Inclusive, Just Energy Transitions](#)' emphasizes the multitude of SDG benefits that could flow from an inclusive energy transition:

"If designed and implemented with the right enabling factors (e.g., capacity, human and social capital, finance, stakeholder consultation), achieving universal access to affordable, reliable and modern energy services, for example, would electrify health clinics serving 1 billion people without access to a reliable source of power (SDG3), prevent 4 million premature deaths annually through clean cooking (SDG 3, SDG 5), dramatically reduce air pollution that is presently killing 7 million people annually (SDG 3), provide power to over 200 million children at unelectrified schools (SDG 4), empower rural and indigenous women by reducing drudgery (SDG 5), generate business and job opportunities in rural communities (SDG1, SDG 8) and enhance opportunities for some 79.5 million forcibly displaced people worldwide, many with currently little access to energy (SDG 16)."

"A dramatic acceleration of renewable energy and energy efficiency would result, for example, in generating 42 million jobs by 2050 in renewable energy (SDG 8), improving global GDP by 2.5 percent by 2050 compared with business as usual (SDG 8), phasing out fossil fuel-consumption subsidies of \$400 billion per year (SDG 7, SDG 12), and drastically reducing the social and environmental costs of such fossil fuel subsidies in the order of 5 trillion per year (SDG 7, SDG 8, SDG 12). Achieving net-zero emissions entails a reduction of 85 percent of total global CO₂ emissions and approximately 66 percent of the total global GHGs emissions (SDG13)."



④

UNDP's framework for incorporating just transition into NDCs and LTS



As countries worldwide continue to update and implement their NDCs and LTS, there is the opportunity to embed the principles, processes, and practices of just transition within them, and drive greater climate action

With a broad mandate on sustainable development and poverty reduction – including support to countries to address climate change and to tackle inequalities – UNDP is providing holistic solutions to countries seeking to integrate equity, justice, and just transition approaches in climate action. In this, UNDP is leveraging the expertise of partners, including ILO and UNFCCC.

Supporting more than 120 countries and territories to enhance and implement their NDCs, UNDP’s Climate Promise has been working closely with countries to connect the dots between climate action, social inclusion and gender equality, and sustainable development.

Existing policies, transparency and financial frameworks, coordination platforms, and assessments associated with NDCs and LTS each provide potential entry points for just transition considerations.

As of 31 October 2022, under the Climate Promise, UNDP has supported, or is supporting,

34 countries and territories to strengthen just transition through the four areas of UNDP’s Framework for Integrating Just Transition into NDCs and LTS: assessment; engagement; institutional, policy, and capacity-building; and finance (Figure 10).

The most common request from governments has been for institutional, policy, and capacity-building support, selected by 71 percent of countries (Figure 11). This can be broken down into support for government institutions (71 percent), support for workers and vulnerable populations (54 percent), and support for employers/private sector (25 percent).

Another commonly requested area of support has been for assessments, requested by 56 percent of countries.

Around one-third of countries (38 percent) are pursuing engagement. Only six percent are looking at finance.

Figure 10
UNDP’s framework for integrating just transition into NDCs and LTS

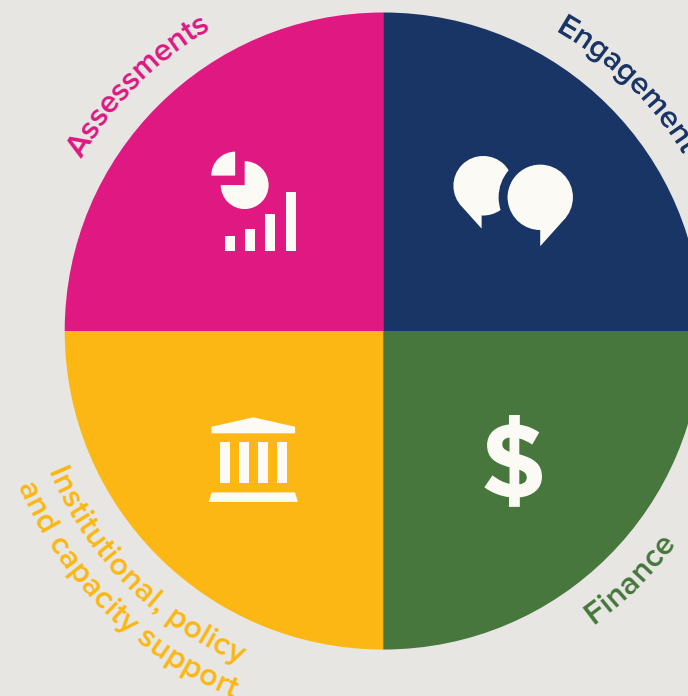
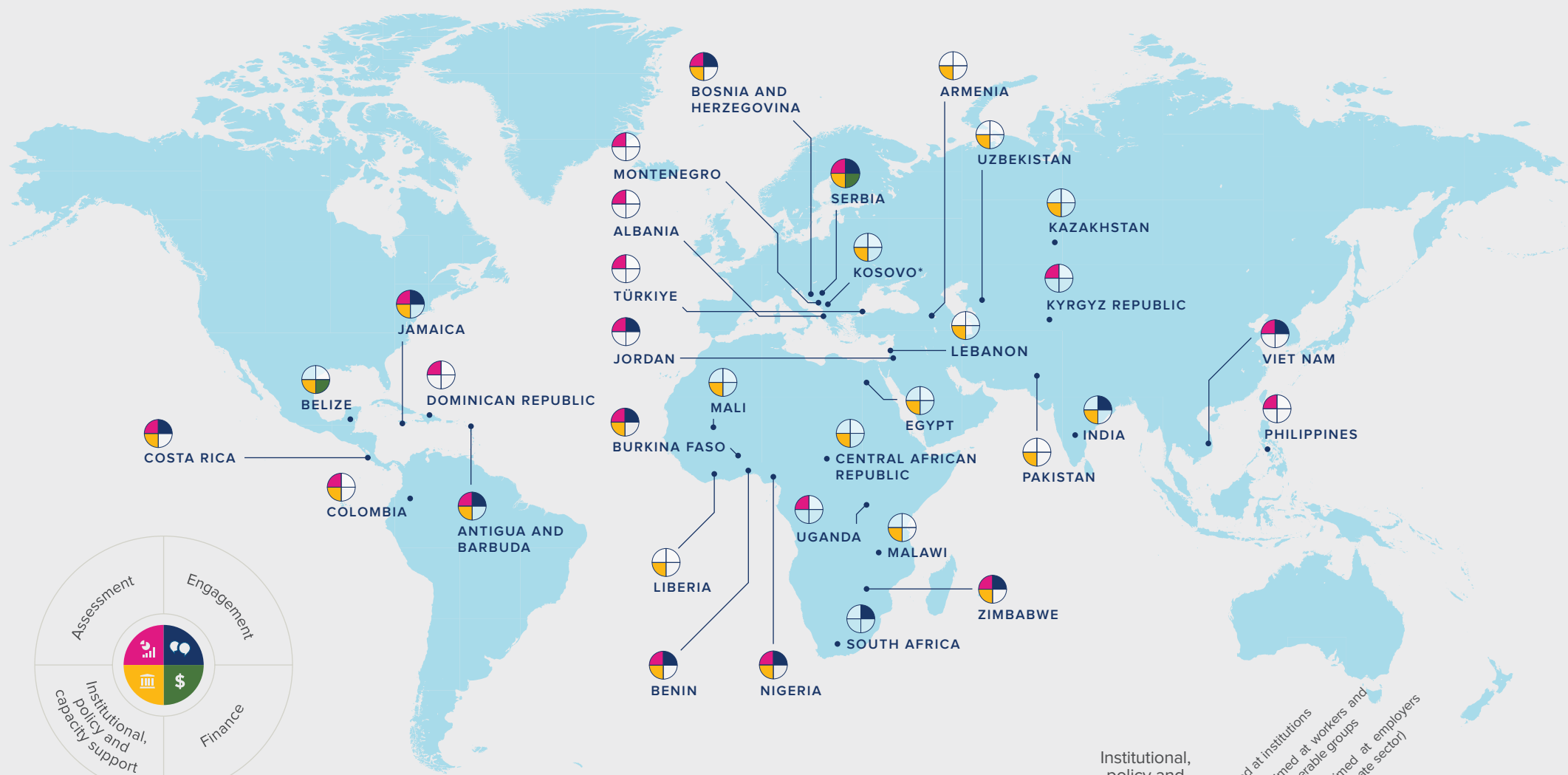


Figure 11
UNDP's Climate Promise support for just transition



Climate Promise-supported countries and territories undertaking just transition work, by framework areas (%)	Assessment	Engagement	Institutional, policy and capacity support			Finance
	56%	38%	71%	71%	54%	25%
			aimed at institutions	aimed at workers and vulnerable groups	aimed at employers (private sector)	

*References to Kosovo shall be understood to be in the context of Security Council resolution 1244 (1999).



Assessment: Transition assessments and modelling

One of the biggest challenges in addressing the consequences of climate action is the uncertainty in net benefits, as well as the distribution of costs and benefits among winners and losers.

A key barrier for developing countries is obtaining the hard data required to anticipate changes and show how shifting to a green economy will have overwhelming benefits – not just for the environment, but also for job creation and economic growth.

To overcome this data gap, the Climate Promise has guided countries on how to conduct qualitative and quantitative assessments (for example, modelling) to estimate the impacts of NDC measures on key indicators such as GDP, employment, skills, income distribution, and gender equality.

This evidence-based approach helps countries to understand the distributional impacts of their NDC and identify targeted measures for vulnerable populations, such as women and informal workers, to ensure a just transition.

In [Nigeria](#) and [Zimbabwe](#), for example, results from the national green jobs assessments using ILO's Green Jobs Assessment Model (GJAM)

have informed the countries' NDCs and just transition roadmaps. Likewise, in [Türkiye](#) the same model has been used to analyze the effects of decreasing the share of coal in electricity production and increasing investments in wind and solar electricity. This foundational work is now being expanded to measure the broader socio-economic implications of implementing NDCs and LTS targets. In [Colombia](#), for example, UNDP has supported an [assessment](#) of the energy, transport, and agriculture sectors that examined the impact of just transition on the respective labour forces and on consumer behaviour. The resulting report provided proposals for the inclusion of the just transition of the workforce as part of the country's 2050 strategy.



Box 7

Applying a Green Jobs Assessment Model

Ideally, any NDC process should be informed by an assessment of the employment impacts – positive and negative – of climate action, as well as an indication of the measures needed to ensure a just transition for workers.

Against this background, UNDP and ILO are supporting a number of countries to apply ILO's [Green Jobs Assessment Model](#) to measure how green and climate policies affect job creation, including for women and youth; income distribution; and skills development and economic growth.

To obtain quantitative and qualitative employment estimates, countries develop their own national Green Jobs Assessment Model. The findings help policymakers to understand the co-benefits and distributional impact of proposed policies, and ultimately to choose those which will reduce greenhouse emissions and reap the biggest economic and social returns. Findings for both Nigeria and Zimbabwe can be explored on [UNDP's Data Futures platform](#).



Engagement: Social dialogues and stakeholder consultation

As of 2020, at least seven national commissions or task forces on just transition had been established worldwide, as well as seven sets of national policies, and a multitude of other actors, networks, and movements.¹⁵

In each country, however, just transition means different things. Governments therefore need to engage with a broad range of stakeholders to co-create a vision and to conceptualize pathways to get there.

In this, the approach of tripartite dialogue, or discussion between three key parties: government, employers and workers, may be helpful. The approach has a long history of supporting country-level just transitions, including in South Africa. Key, however, is to ensure that social dialogue – encompassing all kinds of negotiation, consultation, and simple exchange of information between representatives of governments, workers, and employers on issues of common interest – continues to inform transition pathways.

Box 8

Agents of change in the just transition

Governments, employers, and workers share responsibility for developing new and innovative ways of working in a low-carbon economy.

1. The role of government

Governments participate in just transition processes as convenors of social dialogue and other forms of formal and/or informal consultation mechanisms, including youth and women's groups. They are also regulators responsible for the design of the industrial, climate, energy and labour markets and policies; investors; owners of state enterprises and infrastructure; and employers of public sector workers.

2. The role of employers

A just transition requires employers to address business risks and tap into opportunities. They must also ensure labour and human rights as businesses enter green sectors. This is critical for retaining consumers and financiers, as green sectors are increasingly scrutinized from a broader sustainability standpoint. Just transition efforts at company level will also support their license to operate and position them to benefit from incentives and emerging financing.

3. The role of workers

Understanding the needs of workers is critical for designing a just transition, which is why local and/or regional labour or trade unions should be part of any community's transition conversation.

Source: Just Transition Center, 2018. [Just Transition: A Report for the OECD.](#)

Engagement: Social dialogues and stakeholder consultation



In **South Africa**, the National Economic Development and Labour Council (NEDLAC) has been established with representatives of the government, workers and employer organizations, and civil society. The council is seeking to cooperate, through negotiations, on economic, labour, and development issues, and other related challenges facing South Africa.

Meanwhile, the small island state of **Antigua and Barbuda** is planning to conduct a series of social dialogues with trade unions, employers' associations, and sector representatives on the transition to a climate-resilient and low-carbon economy.

When it comes to implementation of the Paris Agreement, a similar whole-of-society approach is being applied to enhance the inclusivity and feasibility of the ambitious climate action. For example, around 96 percent of Climate Promise-supported countries have included gender-related considerations in their NDCs, while 60 percent consulted youth groups during their NDC revision processes, resulting in specific youth-focused policy measures and actions.

More, however, can be done worldwide to leverage existing processes and stakeholder engagement platforms, ensuring that women, indigenous peoples, people with disabilities, workers, and employers help drive net-zero commitments.

Engagement: Social dialogues and stakeholder consultation

Box 9

Youth leadership for a just transition in Zimbabwe

In Zimbabwe, youth have been actively involved in the NDC enhancement process and are playing a leadership role in the push for a just transition.

To facilitate youth involvement in the NDC enhancement process, the Climate Promise supported gender-responsive consultations with more than 200 urban and rural youth representatives from youth, women, and persons with disabilities organizations from all ten provinces of Zimbabwe. The objectives of the consultations were to raise awareness and a sense of ownership among youth in relation to the NDC process, to discuss and make recommendations around youth priorities for climate action, and to strengthen cooperation between youth, youth-led organizations, and government.

A major outcome of the consultations was the development of a [policy brief](#) that outlined youth recommendations for each sector covered by the NDC. The policy brief attracted the attention of the Minister of Environment and prompted the creation of a Youth Desk within the Ministry. The Youth Desk is tasked with ensuring that youth concerns and needs are fully integrated into implementation of the NDC as well as other environmental issues under the Ministry's remit. By elevating youth voices, the policy brief suc-

cessfully advocated for increased capacity within the Ministry to respond to youth needs and specific challenges.

Also in Zimbabwe, UNDP is supporting several climate measures that target youth livelihoods. Under the Climate Promise, a Green Jobs Assessment was conducted, with support from ILO, to identify climate policy scenarios that can contribute to green jobs creation for youth as per the National Development Strategy 1 (2021-2025).

The waste sector was identified as a sector in which green jobs could be generated, specifically in waste transfer centers. In turn, UNDP is supporting the rollout of one waste transfer center in Bulawayo and will target youth for skills development and business sustainability training, better positioning them to apply for jobs at the center.

Meanwhile, under an Energy Offer project in Zimbabwe, UNDP is supporting the construction and deployment of 4 'Energy Kiosks' in 2 rural districts in Zimbabwe, through an initiative titled SMEK (Solar Minigrid Energy Kiosks). Partnering with Youth Economic Capital, a youth-led and youth-focused impact investment company, the 10kW solar-powered kiosks will serve as a multi-service station of

products and services ranging from charging stations for lamps and batteries to offering entertainment and education. The SMEK initiative is part of UNDP's rural renewable energy social enterprise programme that builds and manages a network of solar mini-grid shops constructed and installed in the heart of remote and non-electrified villages in Mashaba and Dete,

through a franchise model. The main goal is to make products and services with a high social value available to as many people as possible, through an appropriate sale or renting system. Thus, SMEK seeks to provide sustainable solutions to improve the quality of life in rural areas by ensuring the creation of incomes for women and youth.





Institutional, policy and capacity-building support

Governments have the primary responsibility to put in place the policy frameworks to accelerate just transition and to convene social dialogue.

This encompasses the development of social protection policies – required to prepare workers for change and to boost the quality of jobs and income – as well as advances in equality and social inclusion. This includes the provision of welfare safety nets and adequate compensation for people, communities, and regions that stand to be negatively impacted by planned policies.

The [ILO resolution](#) on sustainable development, decent work and green jobs and the [ILO Guidelines](#) for a just transition towards environmentally sustainable economies and societies for all, adopted by representatives of governments and employers' and workers' organizations, highlight key policy areas through which to create enabling environments for sustainable enterprises to thrive and create green jobs (Box 10).

With support from the Climate Promise, **Colombia** developed policy recommendations to embed the principle and process of just transition into its LTS.

Armenia will also develop a comprehensive policy framework for a just transition to a sustainable and low-carbon economy.

With new jobs to be created – and existing jobs to be substituted, eliminated, or redefined during the transition – investing in human and institutional capital, training, and education systems is also key.

To meet the challenge, countries must diversify affected economies; build relevant knowledge, expertise and supply chains; and offer relevant interim support (relocation support and social protection).

With this, capacity-building has been a core support area for UNDP:

In **Egypt**, the Climate Promise is strengthening vocational training by technically and financially supporting the development of the Sustainable Electrical Energy Efficiency Unit by the Ministry of Education.

In **Lebanon** the development of a training programme for energy-related software and skills will target women engineers, while the private sector will be supported to more fully participate in a just transition.

In **Belize**, UNDP is providing support to enhance the capacities of small- and medium-sized enterprises to access green technology, digitalization, and innovation.

Together with UNFCCC and ILO, UNDP is organizing regional capacity-building workshops worldwide to enhance national capacity to as-

sess energy transition impacts and identify target groups and measures for a just transition.

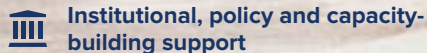
With a long history of supporting south-south cooperation, UNDP is also promoting more extensive knowledge-sharing across countries and regions, further building national capacities for just transition.

Box 10

Key policy areas to address environmental, economic and social sustainability simultaneously

- (A) Macroeconomic and growth policies
- (B) Industrial and sectoral policies
- (C) Enterprise policies
- (D) Skills development
- (E) Occupational safety and health
- (F) Social protection
- (G) Active labour market policies
- (H) Human and labour rights
- (I) Social dialogue and tripartism

Source: ILO, 2015. [Guidelines for a just transition towards environmentally sustainable economies and societies for all.](#)



Box 11

Just transition approach in national recovery, crisis, and conflict-affected and fragile contexts

Around the world, intersecting geopolitical, economic, and environmental crises – including climate change, the COVID-19 pandemic, and the global fallout from the ongoing crisis in Ukraine – are throwing a spotlight on inequality and questions of justice.

These crises present an opportunity to pursue fairer, more equal societies.

Several countries supported under the Climate Promise, for example, have identified their economic recovery from COVID-19 as an opportunity to re-build a greener economy and advance a just transition. To this end, **Albania, Viet Nam, Jordan, Benin**, and the **Philippines** are all conducting assessments to prioritize NDC measures that contribute to green recovery (for example, in job creation, economic growth, inclusivity, and social protection), with a particular focus on supporting livelihoods of those most affected by the pandemic.

Meanwhile, in conflict-affected and fragile contexts, including UNDP-supported countries and territories such as **Iraq, Mali, Nigeria, Sudan, Palestine**, and **Yemen**, decentralized access to clean energy has emerged as a key factor in restarting livelihoods and local economic development, building resilience, and setting countries on sustainable development pathways.



\$

Finance

According to the [IPCC](#), climate finance in support of a just transition is likely to be key to a successful low-carbon transition globally. Governments alone will not be able to cover the cost – investments must come from both public and private capital.

At the same time, there are still significant gaps in systematically aligning financial flows with just transition goals. Many existing NDC financing and transparency frameworks and climate finance instruments, however, can contribute to the building blocks of a just transition.

Public investment in a just transition could learn from the experience of building stronger public finance systems through NDC and LTS enhancement processes. NDC and LTS financing frameworks are already articulating costs associated with climate action, tracking finance flows, highlighting finance gaps, and identifying private-sector investment opportunities. These can be further leveraged to understand the gaps in just transition finance and, as a result, better target and mobilize resources, including from the private sector.

The impact of private sector investment in a green transition extends far beyond a single sector, influencing much wider environmental and social outcomes. This impact comes from the sector's business practices, but also the activities it facilitates by providing

capital and access to financial services in a broader sense.

This leads many governments to ask, how can the private sector be more deeply engaged in NDC implementation and investments, and in a just transition? The answer lies partly in policy and financial de-risking to help lower the perceived risks of green transition. Financial service providers also play an important role in supporting the climate transition by allocating assets to public debt instruments dedicated to addressing local transition issues.

To attract private sector investments in green transition, UNDP is supporting several Climate Promise countries, including [Cote d'Ivoire](#) and [Senegal](#), to effectively cost, promote, and scale-up private sector investment in renewable energy using its [De-risking Renewable Energy Investment](#) (DREI) framework. The DREI framework systematically identifies the barriers and associated risks which can hold back private sector investment in renewable energy and recommends packages of targeted interventions to address these risks.

On the sustainable finance market side, UNDP is working with G20 members to address challenges such as the limited access of SMEs to domestic and international sustainable finance markets, in an affordable way.

Box 12

G20 Just Transition Finance Framework¹⁶

1. Identification of transition activities and investments;
2. Reporting of information on transitional plans, activities and investments;
3. Transition-relevant financial instruments;
4. Designing policy measures; and
5. Assessing and mitigating negative social and economic impact of transition activities and investments.

As a Secretariat for the G20 Sustainable Finance Working Group (SFWG), UNDP is also helping G20 members in the design of a Just Transition Finance Framework (Box 12). As discussed in the [2022 G20 Sustainable Finance Report](#), transition finance refers to financial services supporting the whole-of-economy transition, in the context of the SDGs, towards lower and net-zero emissions and climate resilience, in a way aligned with the goals of the Paris Agreement.

The G20 SFWG Transition Finance Framework will help scale-up financing that can help countries in their climate transition. This high-level framework aims to help enable the financial market to support an orderly, just, affordable, and equitable transition of the global economy towards sustainability, including the goals of the Paris Agreement and the 2030 Agenda.

Finally, just transition implies that climate action should not widen the asymmetries between rich and poor countries and recognizes the

obligation of financial flows from developed to developing countries. Just Energy Transition Partnerships, such as the one launched in South Africa and currently being explored in other countries around the world, demonstrate the potential of leveraging international cooperation to drive financing for just transition.

⑤

Country case studies



Serbia

Supporting just transition and decarbonization in coal-intensive regions through social dialogue and policy

UNDP FRAMEWORK
AREAS OF SUPPORT



SOCIO-ECONOMIC PROFILE

GDP per capita	\$9,215 (2021) ¹⁷
Total population	6,834,326 (2022) ¹⁸
Income distribution/ Gini index ¹⁹ (%)	34.9 (2019)
% of population in poverty	21.7 (2019) ²⁰
% of population unemployed	10.6 (2022) ²¹
% of population defined as youth (15-29 years old)	18.02 (2018) ²²
% of youth population not in education, employment, training	16 (2021) ²³

CLIMATE PROFILE

Total emissions ²⁴	61.86 MtCO ₂ e (2019)
% of global emissions ²⁵	.13
Enhanced NDC emission targets (submitted August 2022)	13.2% GHG emission reduction compared to 2010 level (33.3% compared to 1990) by 2030
% of energy from fossil fuels	86 (49 from coal) (2019) ²⁶
Sectors with highest contribution to emissions	Electricity and heat generation: 70% of emissions ²⁷
Enhanced NDC sector coverage	Mitigation: Energy, IPPU, Agriculture, Waste Adaptation: Agriculture, Forestry, Water
Lead ministry for NDC implementation	Ministry of Environmental Protection
Enhanced NDC aligned to National Development Plan	Emission targets aligned to draft National Energy and Climate Plan (NECP) and Low Carbon Development Strategy
Enhanced NDC and SDG alignment	NDC does not reference SDGs
Enhanced NDC adaptation commitment overview	Adaptation measures in draft Third National Communication to the UNFCCC, along with the Adaptation Planning Framework, will contribute to achievement of full mitigation potential in agriculture, forestry, and water sectors

SERBIA CASE STUDY

Country context for a just transition

Over the past decade, Serbia has made great strides to enact comprehensive environmental and climate legislation, with the country's desire to join the EU positively influencing policy development, as Serbia harmonizes to the [EU climate acquis](#). Nonetheless, Serbia remains reliant on fossil fuels, with around half of energy supply coming from coal.²⁸ To phase out coal, Serbia is currently preparing a new Energy Sector Development Strategy that will implement the obligations under the Energy Community Treaty, including increasing the use of renewable energy. In parallel, in cooperation with the European Bank for Reconstruction and Development (EBRD)

the project, '[Study Diagnostic on Just Transition for Serbia](#)' is further supporting a green economy transition through impact analysis and by developing a pipeline of targeted investments.

Around the country, poverty²⁹ has been declining, however as of 2019, around one-fifth of the population, largely people based in rural areas, were living in poverty.³⁰ Economic inequality has also been narrowing but remains high.³¹ Although the national labour market has seen considerable growth, a number of workers are stuck in precarious, relatively low-paid jobs. Informal employment stands at around 18 percent and low work-intensity and underemployment are widespread.³²

A sizable pay gap between Serbia and EU countries has incentivized migration, especially for low- and medium-skilled workers.³³ Youth (aged 15-29) make up around 18 percent³⁴ of the population and within this demographic, 16 percent are not in education, employment, or training.³⁵ Public expenditure on education is low and the transition from education to the labour market is under-supported.³⁶

Why a just transition in Serbia?

Political, economic, environmental, and social factors all contribute to the growing interest in Serbia to strengthen a just transition.

EU accession: With the EU's goal to be net-zero by 2050, and its advocacy for ensuring

no-one is left behind, the accession process has provided a strong basis for just transition approaches in Serbia. In particular, the [EU Just Transition Mechanism](#) provides accession countries with support to ensure their transition to a low-carbon economy happens in a fair way. The mechanism centers on providing technical and advisory support through a Just Transition Platform and financing support through a Just Transition Fund expected to raise €25 billion in investments. Additionally, a new public sector loan facility is being created that will combine €1.5 billion of grants with €10 billion in loans from the European Investment Bank, to mobilize €18.5 billion in public investment. To access funds, countries must prepare territorial plans that identify the regions, industries, and workers in need and

POLICY TIMELINE



SERBIA CASE STUDY

how they will address social, economic, and environmental challenges. While there is no formal financing for Western Balkans countries, there is scope for just transition actions to be supported through co-financing under the mechanism.

The Green Agenda for the Western Balkans:

This is an EU-backed agenda that lays out policy recommendations in five key areas that include: 1) Aligning to the EU's target to be net zero by 2050; 2) unlocking the potential of circular economy; 3) fighting pollution of air, water and soil; 4) promoting sustainable methods of food production and supply; and 5) exploiting the huge tourism potential of the region, focusing on biodiversity protection and restoration of eco-systems.

Another EU initiative, the Green Agenda for the Western Balkans, also supports a just transition in Serbia. In line with the EU Green Agenda, it is a development and growth strategy that aims to move countries away from a traditional economic model to a more sustainable economy, at the same time stimulating the long-term recovery of the Western Balkans and facilitating their economic convergence with the EU. Aligning Serbia's Low-Carbon Development Strategy (mandated by the Climate Change Law) and the National Energy and Climate Plan (NECP) to the Green Agenda has provided an opportunity to introduce just transition principles into these policies.

Commitment to phase-out coal and transition to renewable energy: Reducing Serbia's heavy reliance on coal is not only important for EU compliance, but also for driving Serbia's decarbonization. While the move away from coal is expected to cause a net job loss in the mining and quarrying sector and the electricity, gas, and steam supply sector, there is potential for jobs growth in the agriculture and forestry sector.³⁷ For the regions of Kolubara and Kostolac, where most coal mining and coal-based electricity production take place, phasing out coal will impact a number of groups, from workers – including in mines and thermal power plants – to downstream services to the mines/plants and their workers to the energy poor and general population at large. Decarbonization, then, requires a growth in green jobs. But it also provides an opportunity to ensure the shift benefits the population in an equitable way, reaching the most vulnerable populations including youth.

Supporting just transition in Serbia

UNDP began responding to the just transition needs of the Serbian government – to align to the EU Just Transition Mechanism and its potential to leverage financing sources – under the first phase of the Climate Promise.

To first build an evidence-base for a just transition, UNDP supported the report, '[Initiating the Just Transition in Serbia: Leaving no one behind in the coal intensive regions and communities in Serbia](#)'. The report was a solid initial step to assessing decarbonizations scenarios, based



SERBIA CASE STUDY



off the Low-Carbon Development Strategy, and their respective potential socio-economic impacts. A 'Roadmap for a Just Transition' provided recommendations for the planning and implementation of key measures. Lastly, the report provided options for a financial mechanism for a just transition. Importantly, the report has increased discussion around a just transition and provided an evidence-base around what it means in coal regions.

Meanwhile, under the project '[EU for Green Agenda](#)', Serbia, with UNDP support, is aligning its key climate and energy policies to the EU's Green Agenda for the Western Balkans. One aspect of this seeks to influence the Green Agenda with just transition principles through the development of a just transition plan. Building off the report developed under the first phase of the Climate Promise, this plan expands the view of just transition beyond the energy sector and looks deeper into decarbonization aspects including green industries, circular economy, agriculture, and environmental protection. It is hoped that the plan will help connect the dots between the many aspects of decarbonization and just transition, and in turn, be a useful tool to help access finance.

To raise awareness and build consensus around the development of a just transition plan, UNDP will now support the Serbian government in hosting extensive stakeholder consultations at national and local levels. The dialogues will include national climate stakeholders and decision-makers, business alliances, labour unions, private sector, and civil society and will inform and influence Serbia's just transition plan. Elevating a diversity of voices and strengthen-

ing support and ownership of just transition principles, the dialogues will also provide the foundation for an institutionalized government mechanism on just transition by increasing the participation of the Ministry of Energy; Ministry of Environment; Ministry of Economy; Ministry of Labour, Employment, Veteran and Social Policy; and Ministry of Finance.

Meanwhile, recognizing the fundamental role that the private sector plays in NDC implementation and the just transition, Serbia is also strengthening businesses' participation in climate action under the second phase of the Climate Promise. UNDP's [Innovation Challenge](#), for example, is awarding investments to public and private companies, providing them with knowledge and seed funding for a just, green transformation and decarbonization of their business operations. Critically, the support provides an opportunity to put just transition principles into action, while promoting good practices — for example, re-skilling employees to improve competitiveness and staff retention.

South Africa

Strengthening a whole-of-society approach to South Africa's just transition

UNDP FRAMEWORK
AREAS OF SUPPORT



SOCIO-ECONOMIC PROFILE

GDP per capita	\$6,994 (2021) ³⁸
Total population	60.6 million people ³⁹
Income distribution/ Gini index (%)	62 (2017) ⁴⁰
% of population in poverty ⁴¹	55.5 (2014) ⁴²
% of population unemployed	From total population: 34.5 (2022) ⁴³ From youth population: 63.9 (ages 15-24); 42.1 (ages 25-34) ⁴⁴
% of population that is defined as youth	34 (ages 15-34) ⁴⁵
% of youth population not in education, employment, or training	30.7 ⁵¹

CLIMATE PROFILE

Total emissions ⁴⁶	562.12 MtCO ₂ e
% of global emissions ⁴⁷	1.13
Enhanced NDC emission targets (submitted September 2021)	Conditional target: Reduce GHG emissions to 398-510 MtCO ₂ e by 2025, and to 350-420 MtCO ₂ e by 2030
% of energy from fossil fuels	90 (74% from coal) (2020) ⁴⁸
Sectors with highest contribution to emissions	Power: 55%; Energy: 15%; Transport: 12% ⁴⁹
Enhanced NDC sector coverage of mitigation/adaptation	Mitigation: Energy, IPPU, AFOLU, Waste Adaptation: Agriculture, Coastal Zones, DRM, Environment, Health, Water, Cross-cutting
Lead ministry for NDC implementation	Department of Environment, Forest, and Fisheries
Enhanced NDC aligned to National Development Plan?	Yes (National Development Plan, 2011)
Enhanced NDC and SDG alignment	Not specified in NDC
Enhanced NDC adaptation commitment overview	5 goals: 1) Enhance climate change adaptation governance and legal frameworks; 2) Develop understanding of impacts on South Africa of 1.5° and 2° global warming and underlying global emission pathways through geo-spatial mapping of physical climate hazards, and adaptation needs in context of strengthening key sectors of economy; 3) Implement NCCAS adaptation interventions; 4) Access funding for adaptation implementation through multilateral funding mechanisms; 5) Quantify and acknowledge national adaptation and resilience efforts.

SOUTH AFRICA CASE STUDY

Country context for a just transition

Despite leading Africa in GHG emissions, South Africa has committed to move towards a low-carbon economy and net-zero future that addresses the broader impacts of climate change. Dependence on exploitable and inexpensive coal has contributed to this reality which places South Africa as the most coal-dependent economy within the G20.⁵² At present, around three-quarters of energy needs are generated from coal.⁵³ Understanding the impact that a low-carbon transition will have on the population, since 2012, the nation’s climate policy framework has made explicit links to a just transition, as evidenced in the Climate Change Bill, the National Development Plan, the enhanced NDC, and the Low Emission Development Strategy 2050. In 2022, a [Framework for a Just Transition in South Africa](#) was de-

veloped to support coordination and coherence to just transition planning.

As a vital step to financing South Africa’s just transition, the [Just Energy Transition Partnership](#) seeks to mobilize an initial commitment of \$8.5 billion through various mechanisms including grants, concessional loans and investments, and risk sharing instruments, including those aimed at increasing private sector participation. While the funds have yet to fully materialize, this commitment to financing can operationalize a whole-of-society approach to implementing the just transition, importantly bringing in businesses.

Such an inclusive approach is paramount as South Africa has some of the highest rates of inequality in the world. This is illustrated, in part, through unequal access to opportu-

“In South Africa, a just transition is core to shifting our development pathway to increased sustainability, fostering climate-resilient and low GHG emissions development, while providing a better life for all.”

South Africa’s enhanced NDC

nities, income, and wealth. Dichotomies in the education system influence opportunities available to youth and contribute to vastly different outcomes for different segments of the population.⁵⁴ In 2019, the top 10 percent of the population received about two-thirds of national income, while the poorest 50 percent received less than 5 percent.⁵⁵ Racial and gender inequalities also persist – white-headed households earn 4.7 times more than black African-headed households⁵⁶ and on average, woman-headed households are 10 percent more likely to be poor than man-headed households.⁵⁷ Youth unemployment remains

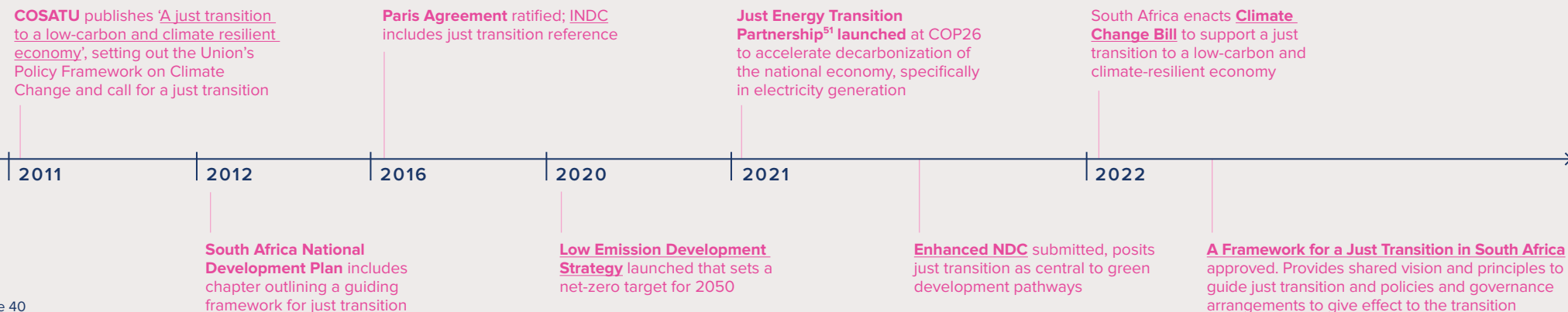
stubbornly high at 63.9 percent (ages 15-24) and 42.1 percent (ages 25-35 years).⁵⁸

Why a just transition in South Africa?

History of just transition in national discourse:

South Africa’s support of a just transition is not new. The concept was bought to the fore by the Congress of South African Trade Unions (COSATU) 2011 [policy brief](#) calling for the participation and leadership of organized labour in demanding a just transition and requesting government

POLICY TIMELINE



SOUTH AFRICA CASE STUDY



support for climate-related jobs and renewable energy. This policy brief was instrumental in kick-starting the discussion around a just transition in South Africa. More than a decade later, labour unions continue to advocate for a just transition, particularly in coal-intensive regions, ensuring the concept is part of national thinking while laying a foundation for the whole-of-society to engage.

Enabling policy environment: Starting with South Africa's [National Development Plan](#) (2012), the concept of a just transition to a low-carbon economy is firmly rooted in South Africa's policy environment. Illustrating the influence of CASATU's 2011 policy brief, the National Development Plan dedicated a chapter to just transition titled, 'Ensuring Environmental Sustainability and an Equitable Transition to a Low-Carbon, Climate Resilient Economy and Society'. In addition to South Africa's first NDC (INDC) and enhanced NDC supporting just transition, the country's LTS sets net zero goals by 2050. A set of policies and incentives are in place to facilitate the shift away from coal power generation to renewable electricity.⁵⁹ The recently approved Framework for the Just Transition Process in South Africa provides concrete guidance to support the transition.

Political will: In 2017, to elaborate on the just transition guiding framework set out in the National Development Plan, the National Planning Commission launched the '[Social Partner Dialogues on Pathways for a Just Transition](#)'. These dialogues led to the establishment of the Presidential Climate Commission in 2018, mandated to oversee and coordinate socially-inclusive pathways to net zero. This Commission led the development of the Framework for a Just Transition in South Africa.

Just transition still a contested space: The impact of a low-carbon transition will have serious implications on national GDP, the livelihoods of those employed in the coal industry, and the local economies that have grown to support them. For instance, in Mpumalanga province, home to 90 percent of South Africa's coal production and 70 percent of its coal powerplants, 10 percent of employment comes from the coal industry⁶⁰ while 57 percent of businesses surrounding mines and plants service the industry.⁶¹ The substantive changes that the energy transition will bring, not only in the coal industry, require common agreement on the social compact needed to move towards a green, low-carbon economy. With the newly approved Framework for the Just Transition Process in South Africa providing guidance on this social compact, it will be vital to bring civil society, academia, labour unions, and private sector stakeholders together to support this common vision.

Supporting just transition in South Africa – social dialogue and stakeholder engagement (with focus on tripartite dialogue)

The conversation in South Africa surrounding a just transition is advanced thanks to a conducive policy environment and high stakeholder engagement.

From 2017 to 2019, the National Planning Commission, with the support of UNDP and the Wits School of Governance, hosted multi-stakeholder roundtable dialogues with the goal of strengthening the social compact for just transition pathways to a low-carbon, climate-resilient economy and society. Inviting labour and

SOUTH AFRICA CASE STUDY

trade unions and organizations, youth representatives, academic researchers, and key government actors to share their insights into what a just transition means for the groups they represent, the roundtables helped further the national discourse.

Within South Africa's current context and considering the new Just Energy Transition Partnership, UNDP is now proposing to strengthen social dialogue around just transition through the development of a Just Energy Transition (JET) Platform. In collaboration with the Presidential Climate Commission, the platform will support government priorities surrounding just transition while leveraging UNDP's role as a convener. Its main aim is to unlock and build thought leadership and consensus around the implementation of the just transition, bridging the gap between the stated national vision and its reality on the ground. It will jointly formulate solutions with different actors and stakeholders which result in a win-win just transition. To achieve this, the platform will:

- (i) **Stimulate research and critical debates among global and national experts and stakeholders (public, private, labour, CSOs, and academia) on the wide spectrum of issues associated with a just energy transition;**
- (ii) **Promote the creation of different narratives and discourses on the just transition in South Africa, drawing on experiences from similar countries;**
- (iii) **Facilitate learning exchange between leaders in the just energy transition process; and**
- (iv) **Present policy, strategic, and practical implementation recommendations to stakeholders.**

It is proposed that the JET Platform will be strategically located at a university, in a space defined by 'free-thinking' and 'free-speech'. It will provide a high-profile and a formidable space for

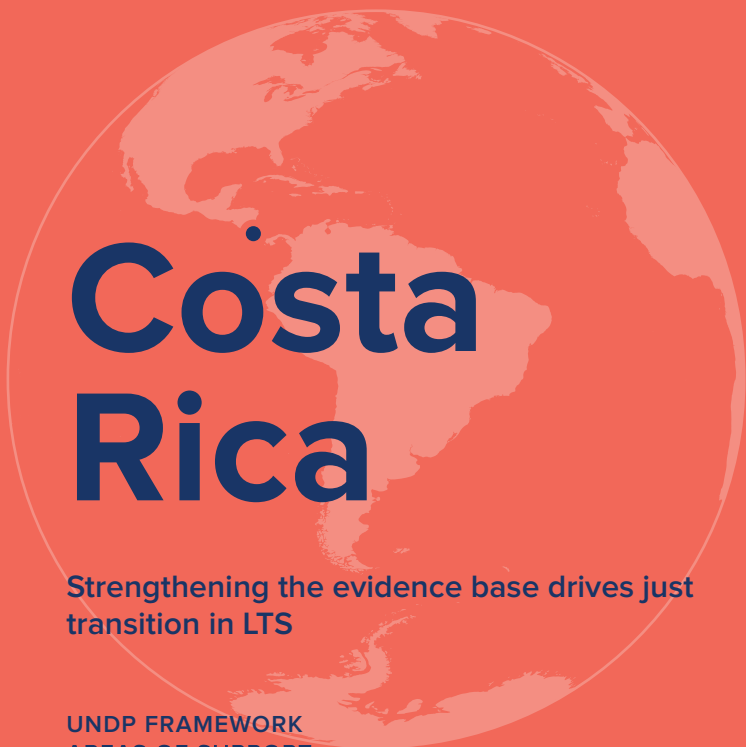
thought leaders, acclaimed academics, senior industry captains, and voices from civil society and labour, to share views on the just transition process, while the debate will provide an honest feedback mechanism for policymakers and technocrats tasked with the transition. The platform aims to shift entrenched positions, enable new perspectives, and facilitate the emergence of solutions while offering the opportunity to think beyond the just transition. As support to green economy takes hold in South Africa, particularly under the new [Economic Reconstruction and Recovery Plan](#), the focus on green sectors, such as agriculture and water security, is likely to take more of the green economy space and will require just transition considerations.

Key government actors will include the Presidential Climate Commission; National Planning Commission; Department of Mineral Resources; Department of Environment, Forestry and Fisheries; and Department of Agriculture, Land Reform, and Rural Development. Furthermore,

engagement from actors who have historically not had strong involvement in discussions will be brought into the conversation. These include stakeholders in the green economy space (outside of the energy sector), the private sector, and financial institutions and actors.

With their inclusion, the platform will explore climate finance: from how to leverage private finance and capital markets to how financing from avoided carbon emissions could benefit renewable energy generation. It is hoped that by bringing the private sector into the conversation, the just transition can move from being perceived as a government responsibility to a multi-stakeholder process, drawing support and finance from non-government sources as well.





Costa Rica

Strengthening the evidence base drives just transition in LTS

UNDP FRAMEWORK AREAS OF SUPPORT



SOCIO-ECONOMIC PROFILE

GDP per capita	\$12,508 (2021) ⁶²
total population	5,139,053 (2019) ⁶³
Income distribution/ Gini coefficient (%)	49 (2021) ⁶⁴
% of population in poverty	26.2 (2021) ⁶⁵
% of population unemployed	18 (2021) ⁶⁶
% of population defined as youth (15-24 years)	16 (est. 2020) ⁶⁷
% of youth population not in education, employment, or training (15-24 years)	23 (2021) ⁶⁸

CLIMATE PROFILE

Total emissions ⁶⁹	11.51 MTCO ₂ e
% of global emissions ⁷⁰	.02
Enhanced NDC emission targets (submitted 12/29/2020)	Unconditional targets: Maximum of net emissions of 9.11 MTCO ₂ e at 2030; maximum budget of net emissions of 106.53 MtCO ₂ e during 2021-2030
% of energy from fossil fuels	49 (2018) ⁷¹
Sectors with highest contribution to emissions	Energy sector, specifically Transport contributes 75.4% of energy emissions ⁷²
Enhanced NDC sector coverage of mitigation/adaptation	Mitigation: Energy; IPPU; AFOLU; and Waste Adaptation: Agriculture, Coastal Zone, DRM, Environment, Health, Cross-cutting (Climate Services, Climate Risk Management, Capacity-building)
Lead ministry for NDC implementation	Ministry of the Environment and Energy, Climate Change Directorate
Enhanced NDC aligned to National Development Plan?	NDC targets/goal is consistent with the trajectory of the National Decarbonization Plan presented by Costa Rica in 2019 and seeking net-zero emissions in 2050 and is consistent with the trajectory of 1.5 °C.
Enhanced NDC and SDG alignment	The updated NDC has references to the corresponding SDGs
Enhanced NDC adaptation commitment overview	NDC commits to strengthening the social, economic, and environmental resilience conditions of the country to the effects of climate change through capacity building and information for decision-making; inclusion of adaptation criteria in financing and planning instruments; the adaptation of public services, productive systems, and infrastructure; and the implementation of nature-based solutions. Costa Rica has included a section “Communication on Adaptation” as part of their enhanced NDC.

COSTA RICA CASE STUDY

Country context for a just transition

Costa Rica has been an early climate and net zero champion, pledging in 2007 to reach carbon neutrality by 2021. Since then, the country has steadily strengthened its climate policy framework to center on a just transition to a green economy. This is illustrated in the [National Decarbonization Plan 2018-2050 \(NDP\)](#) that sets a timeline for carbon neutrality to 2050. In 2020, Costa Rica updated and submitted an [enhanced NDC](#), aligning it to the National Decarbonization Plan and its decarbonization scenario of achieving 1.5°C by 2050. In reaffirming the national commitment to net zero, the NDC provides the short-term roadmap to achieve this and, vitally, the legal basis as a signatory to the Paris Agreement.

Under the National Decarbonization Plan and the NDC, just transition is both cross-cutting and essential to achieving net zero. The National Decarbonization Plan emphasizes “just transition labour strategies” and acknowledges that political viability of the major transitions supported in the plan will “be associated with the process of adapting to the opportunities and challenges that will arise in the labour market.” The NDC highlights specific actions including analyzing the state of green jobs, establishing a Just Transition Governance Scheme for NDC sectors, and developing a Just Transition Strategy and Green Jobs Policy.

Meanwhile, on the renewable energy front, Costa Rica has made impressive strides. Currently, 99.92 percent of electricity comes from renewable sources, almost three quarters from hydropower.⁷³ Yet despite being a world leader

in renewable energy generation, the country is still dependent on fossil fuels, particularly in the transport sector, which is responsible for around three quarters of energy emissions and is central to decarbonization efforts.⁷⁴

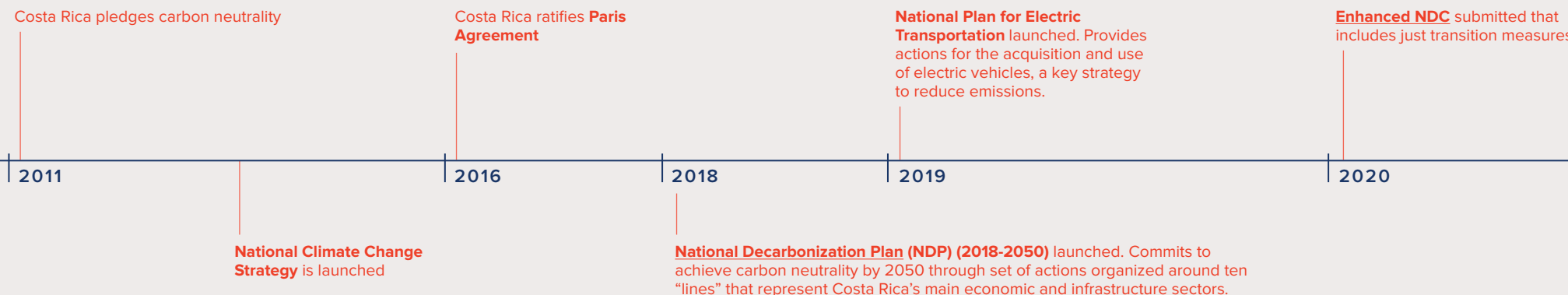
After years of steady economic growth, Costa Rica is now considered a middle-income country. Nonetheless, one quarter⁷⁵ of its population still live below the national poverty line, with

female-headed households more likely to be poor.⁷⁶ COVID-19 had a negative impact on labour markets, disproportionately affecting vulnerable and youth populations. In 2021, young people (aged 15-24) faced an unemployment rate of 38.1 percent, compared to 11.5 percent rate for those aged 25 and over.⁷⁷ The unemployment gap is also gendered: 12.2 percent of men versus 19 percent of women are unemployed.⁷⁸

“Costa Rica sees the just transition, focused on social and climate justice, as the best vehicle to build a better Costa Rica, so that the country can maximize decarbonization and increase resilience while enhancing prosperity.”

Costa Rica’s enhanced NDC

POLICY TIMELINE



COSTA RICA CASE STUDY



Why a just transition in Costa Rica?

A ‘social approach’ is commonplace in Costa Rica: Undertaking a ‘social approach’ to policymaking and development – in which the social implications of a policy are considered alongside the needs of the most vulnerable – has long been embedded in the Costa Rican mentality and political discourse. The approach extends to Costa Rican climate change policy and action which has historically prioritized inclusion and equity, for example, as seen in the consultative process that informed the country’s enhanced NDC and National Decarbonization Plan. The principles of a just transition are aligned to those of a ‘social approach’ – a just transition considers the social impacts that a shift to a green economy will have, including labour.

Political will: In 2018, the Ministry of Environment and Energy mandated the National Decarbonization Plan to be developed in six months, including, at the request of the previous administration, pathways for decarbonization. The Minister of Environment and Energy became a champion of the plan and was instrumental in providing the political capital to move discussion forward. There was also political support for applying just transition principles to the country’s NDC as it was seen as an effective means to assess the impact of NDC actions on jobs.

Conducive policy environment: A well-established environmental and climate policy environment laid the foundation for the development

of Costa Rica’s National Decarbonization Plan and NDC. Since the National Climate Change Strategy was created in 2007, Costa Rica has been implementing mitigation (NAMAs) and adaptation actions as well as running two phases of a National Programme for Carbon Neutrality. Support to a just transition strategy was initiated by a previous administration with the backing of the National Planning Ministry. While the strategy is yet to be completed, it has helped create awareness of just transition principles and laid the groundwork for its inclusion in the National Decarbonization Plan and NDC.

Supporting just transition in Costa Rica

Alongside other development partners, UNDP supported Costa Rica’s Climate Change Directorate to develop the National Decarbonization Plan by providing technical input and by facilitating consultations with the private sector, public sector, and civil society using a whole-of-society approach. To increase the buy-in of sectoral ministries for the plan, including state-owned utilities, the Climate Change Directorate developed decarbonization scenarios underpinned by data and evidence, including the concrete outcomes expected under each.

Applying just transition principles to the decarbonization scenarios was necessary as they inherently include a social and labour dimension. UNDP facilitated negotiations with ministries and grounded discussions in the science relating to decarbonization. This fact-based approach

COSTA RICA CASE STUDY

proved fundamental to garnering sectoral support. Key government stakeholders included the Ministry of Labor and Social Security and the Ministry of Planning. In addition, UNDP facilitated discussions with private utility companies, private sector transport and automobile stakeholders, and the Chamber of Industry.

Just as the National Decarbonization Plan was finalized in 2019, the country's NDC revision process was beginning. A key priority of the revision was to align it to the National Decarbonization Plan's 2050 target. As a result, the NDC not only reflects the emissions scenarios of the National Decarbonization Plan but also its' cross-cutting approaches, including just transition. The updated NDC builds on the just transition approaches presented in the National Decarbonization Plan and strengthens the country's ability to operationalize it by including specific just transition activities, including the development of a Just Transition Strategy.

The development of the National Decarbonization Plan was thus critical to influencing the revision of the NDC. Key too, with UNDP support, was consultation with vulnerable groups including indigenous people, the elderly, youth, women, Afro-descendants, and the trans community.

In response to the COVID-19 pandemic and its impact on the Costa Rican economy and labour force, UNDP supported a study on what would happen if the national recovery was guided by the National Decarbonization Plan. The [study](#) aligned Costa Rica's decarbonization investments with economic recovery. It evaluated possible recovery trajectories by estimating the potential effects of three decarbonization investment scenarios on employment (including employment distribution between women and men and job skill categorizations) and economic activity (as described by value added by economic sector).

By comparing modeled economic activity and employment across the scenarios, the report estimated the potential benefits of decarbonization spending on COVID-19 economic recovery (Figure 12), as well as how decarbonization investments could contribute to the achievement of the SDGs.

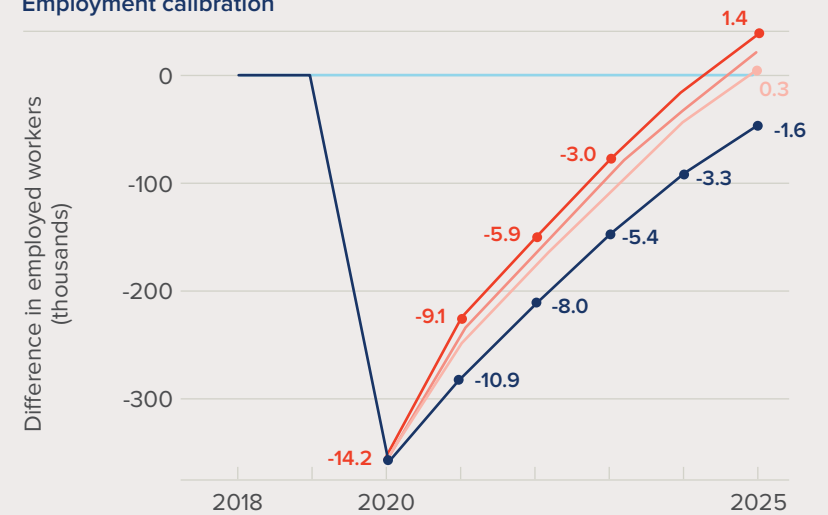
The results were clear: using the National Decarbonization Plan as a guide will accelerate recovery and produce more green jobs. Importantly, the findings also assessed the gendered impact of job loss and growth under different scenarios, showing how women's employment could be boosted through significant investment in decarbonization.

Figure 12

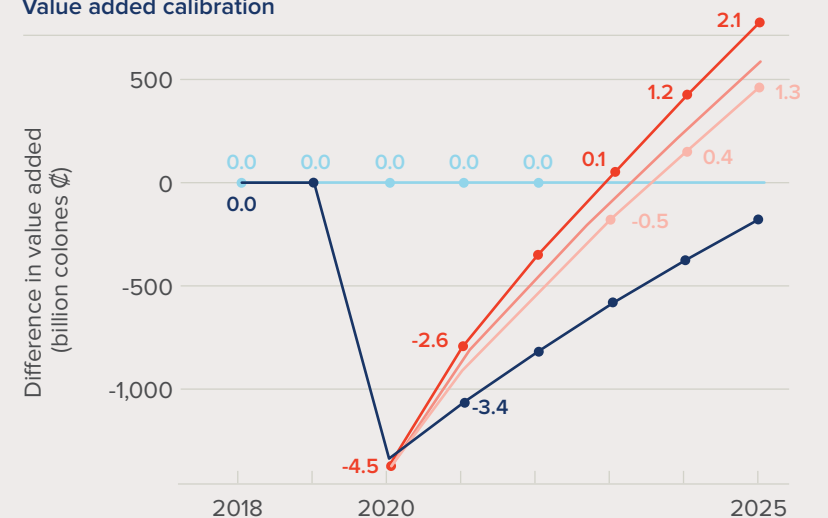
Modelled change in jobs and value added for three decarbonization investment scenarios relative to the no COVID-19 baseline

- None
- \$4.85 billion
- \$6.20 billion
- \$8.30 billion
- No COVID-19 baseline

Employment calibration



Value added calibration



India

Bolstering just transition through skills development and green jobs

**UNDP FRAMEWORK
AREAS OF SUPPORT**



SOCIO-ECONOMIC PROFILE

GDP per capita	\$2,277.4 (2021) ⁷⁹
Total population	1.39 billion people (2021) ⁸⁰
Income distribution/ Gini index (%)	35.7 (2011) ⁸¹
% of population in poverty	10.2 (2019) ⁸²
% of population unemployed (% of total labour force)	General population: 6 ⁸³ Aged 15-24: 12.9 ⁸⁴
% of population defined as youth	27.3 (15-29 years old) ⁸⁵
% of youth population not in education, employment, training	No data available

CLIMATE PROFILE

Total emissions ⁸⁶	3.36 (Gt CO ₂ e)
% of global emissions ⁸⁷	7
Enhanced NDC emission targets (submitted August 2022)	Reduce emissions intensity of GDP by 45% by 2030, from 2005 level; 50% of cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030. Goal of being net zero by 2070.
% of energy from fossil fuels	58.5 ⁸⁸
Sectors with highest contribution to emissions	Energy sector at 71% followed by Agriculture, Manufacturing, Transportation and IPPU ⁸⁹
Enhanced NDC sector coverage of mitigation/adaptation	Mitigation ⁹⁰ : Energy, IPPU, Waste, Transportation, Forestry Adaptation: Agriculture, Water Resources, Coastal Zone, Health, Disaster Management
Lead ministry for NDC implementation	Ministry of Environment and Climate Change
Enhanced NDC aligned to National Development Plan?	Not specified in NDC
Enhanced NDC and SDG alignment	Not specified in NDC
Enhanced NDC adaptation commitment overview	To better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change.

INDIA CASE STUDY

Country context for a just transition

India represents one of the world's fastest growing economies whose population is set to overtake China's within this decade.⁹¹ Such dramatic growth is transforming Indians well-being, with an expanding middle class and rapid urbanization. Meeting this growing demand presents India with environmental and climate challenges.

To support the twin objectives of development and climate action, India launched the National Action Plan on Climate Change in 2008. To compliment this, the government also put in place several sectoral policies, specifically in the building and transport sectors, surrounding energy conservation, energy efficiency, energy poverty, and promotion and incentives for renewable energy and electric vehicles. In August 2022, India submitted its [enhanced NDC](#) committing to reduce the emissions intensity

of its GDP by 45 percent by 2030, from 2005 levels, as well as derive 50 percent of energy needs from non-fossil fuel-based energy resources by 2030.

India's non-fossil fuel capacity for electricity generation (including nuclear) surpassed the 40 percent target that the country set in its initial NDC, however, 58.2 percent of its power still comes from fossil fuels (half of that from coal).⁹² Not surprisingly, demand for electricity is growing as more households connect to the grid, consumer appetite for household appliances and electric vehicles grows, and industries such as aluminum, steel, and cement⁹³ grow to meet construction and infrastructure needs. Reducing the use of fossil fuels while meeting rising electricity demands, however, is paramount if India is to meet its NDC targets.

Meanwhile, India has made remarkable progress in reducing absolute poverty with estimates

showing poverty dropping from 22.5 percent in 2011 to 10.2 percent in 2019.⁹⁴ The benefits, however, have not been proportional, with more than three quarters of the nation's wealth concentrated with just 10 percent of the population.⁹⁵ Moreover, there is a clear rural/urban divide: while the multi-dimensional poverty index (MPI) in rural areas stands at 15.5 percent, in urban areas it is 4 percent.⁹⁶ Such disparities are reflected in India's coal districts which experience some of the highest rates of multi-dimensional poverty. In the coal-dominant states of Jharkhand and Odisha, the MPI is 42 percent and 29 percent, respectively.⁹⁷ For these districts, the coal sector is often the leading employer, supplying both formal and informal work. It is estimated that for every formal job in the coal sector, there are three informal jobs, which aligns with the high rates of employment in the informal economy in India, standing at 90 percent.⁹⁸ With one of the largest youth populations in the world, India faces im-

mense pressure to create opportunities for decent and just work. The transition to green energy provides an opportunity to support these objectives.

Why a just transition in India?

Enhanced NDC has LTS commitments: The Indian government's pledge to be net zero by 2070 has elevated national discussion around net-zero pathways and a just transition. The government, led by the Ministry of Environment, Forest, and Climate Change, is in the process of developing a LTS which is expected to outline India's net zero target. In light of India's revised NDC, all states are currently revising their State Climate Action Plans. Both processes provide excellent entry points to further advocate for just transition principles and approaches.

Government demand to support coal regions and renewable energy initiatives: The gov-

POLICY TIMELINE

National Action Plan on Climate Change is launched. Contains eight missions for priority actions centered on adaptation and mitigation, energy efficiency and natural resource conservation

2008

Paris Agreement ratified

2016

India-US Climate Clean Energy Agenda 2030 established to mobilize finance and accelerate the deployment of clean energy

2021

Enhanced NDC submitted

2022

INDIA CASE STUDY

ernment of India is increasingly requesting international support to further just transitions in coal regions. Specifically, the Ministry of Coal asked UNDP to support analysis of coal mining states – those with both active and closed mines – to better understand SDG implementation and the re-skilling and mine reclamation opportunities available. Similarly, the Ministry of New and Renewable Energy has urged development partners to promote decentralized renewable energy and solarization in livelihood applications.

Supporting just transition in India

Building on the successful relationships that UNDP has developed in the states of Jharkhand and Odisha, the second phase of the Climate Promise will support two areas of work that will increase the evidence-base and policy prescriptions for a just transition through reskilling, the creation of green jobs, and working with the private sector.

The first area of work will support the promotion of low-carbon technologies, develop nationally accredited solar certification training programs, train youth and vulnerable groups in solar certification programs, and support decarbonization efforts of micro, small, and medium enterprises (MSME). UNDP is supporting the promotion of solar energy through the expansion of electric vehicle (EV) charging stations, installation of solar panels in government health centers, and through solar cold storage promotion in agriculture value chains, specifically targeting farmer groups at the farm gate.

Importantly, a component of these initiatives is to look at existing skills and skills gaps in relation to the deployment, operation, and maintenance of renewable energy infrastructure. For example, despite there being an active network of publicly accessible charging stations, there are only 970 public EV charging stations in India against the required number of 400,000 to meet commitments made for 2026. Therefore, India requires widespread charging infrastructure to meet the growing adoption of EVs and, alongside this, the human capacity to install and maintain the stations.

To address the skills deficit, UNDP is working with the government agency, National Skill Council for Green Jobs, to develop four qualification training programs in solar-powered cold storage and EV charging infrastructure that will result in certification. One thousand people will be certified and linked to actors in the cold storage and EV-charging value chains.

UNDP is also supporting MSMEs to decarbonize their operations. In India, MSMEs are a critical driver of the Indian economy and play an important role in the context of energy-intensive industries. Although their individual energy consumption is relatively low, their collective footprint is considerable. Limited access to the latest technologies make the sector vulnerable to fluctuating energy prices and therefore competitiveness in the global market. Support to MSMEs will facilitate decarbonization of their operations by diffusing energy-efficient technologies in motors, boilers, and induction furnaces, supporting the twin objectives of greening the economy and

enhancing the competitiveness of MSMEs by reducing power costs. This support also has an employment dividend, with businesses more likely to provide stable employment to more people than otherwise.

Another area of work UNDP is supporting relates to the phase-out of coal and the implications for skills development and employment opportunities. In Jharkhand and Odisha, where the state governments are targeting unskilled coal sector workers and vulnerable groups living near abandoned mines, UNDP

will support extensive consultations with community members to better understand their needs and ideas for potential vocations once mines close. Around 2,000 people – with a focus on poor and women-headed households and socially marginalized groups – will be trained or re-skilled in relevant value chains or sectors. The initiative is seeking partnerships with private sector companies to scale-up skills development programs in the districts. To support an evidence-base and advocacy around just transition in coal regions, UNDP will develop a white paper.



Antigua and Barbuda

Building the just transition evidence-base by focusing on green jobs

UNDP FRAMEWORK
AREAS OF SUPPORT



SOCIO-ECONOMIC PROFILE

GDP per capita	\$14,900 (2021) ⁹⁹
Total population	98,728 (2021) ¹⁰⁰
Income distribution/ Gini index	No data available
% of population in poverty	18 (poor); 5 (in extreme poverty) (2016) ¹⁰¹
% of population unemployed	Adults: 6 (2020) Youth: 26 (2020) ¹⁰²
% of population defined as youth (10-24 years old)	22 (2020) ¹⁰³
% of youth population not in education, employment, training	18 (2020) ¹⁰⁴

CLIMATE PROFILE

Total emissions ¹⁰⁵	1.22 MtCO ₂ e (2019)
% of global emissions ¹⁰⁶	.002
Enhanced NDC emission targets (submitted September 2021)	Conditional targets: 86% renewable energy generation from local resources in the electricity sector by 2030; 100% of new vehicle sales to be electric vehicles by 2030; and 100 MW of renewable energy generation capacity available to the grid by 2030
% of energy from fossil fuels	96.5 ¹⁰⁷
Sectors with highest contribution to emissions	Power and Transport sectors ¹⁰⁸
Enhanced NDC sector coverage of mitigation/ adaptation	Mitigation: Energy, Waste, AFOLU Adaptation: Energy, Environment, Health, Water
Lead ministry for NDC implementation	Department of Environment under Ministry of Health
Enhanced NDC aligned to National Development Plan	Yes, NDC states, “strategy and approaches are aligned with the developmental priorities of the country and where appropriate, examined a sector coupling approach for the energy and agricultural sectors, energy and resilience building, energy and transportation and decoupling of energy for economic growth.”
Enhanced NDC and SDG alignment	Yes, NDC states, “the NDC targets are aligned with significant Sustainable Development Goals (SDGs), and the co-benefits have been identified. The NDC is fully supporting the implementation of the 2030 Agenda for Sustainable Development and its 17 SDGs.”
Enhanced NDC adaptation commitment overview	Not specified in NDC. Adaptation Communication submitted to UNFCCC in 2022.

ANTIGUA AND BARBUDA CASE STUDY

Country context for a just transition

As a SIDS, Antigua and Barbuda’s faces substantial risk to its economy, physical infrastructure, and natural resource base because of climate change.

Although the country contributes less than .002 percent to global GHG emissions, it is disproportionately vulnerable to climate-induced shocks and environmental changes. Sea level rise and increasingly extreme weather events, including more severe hurricanes and droughts, present a troubling reality for an island nation whose economy is dependent on tourism and whose electricity systems are ill prepared to withstand such events.

The loss and damage from events such as Hurricane Irma – which in 2017 destroyed 95 percent of structures on the island of Barbuda, including the entire power system (overhead lines, diesel generators, power poles)¹⁰⁹ – has diverted development financing to recovery and overall weakened economic growth.

Like many other Caribbean nations, Antigua and Barbuda’s power system is dependent on imported fossil fuels, with renewable energy accounting for only 3.5 percent of power generation.¹¹⁰ To address the country’s emissions and to strengthen resilience to climate change, the government has set a goal in its enhanced NDC of net zero by 2040. To get there, the government will scale-up renewable energy, support a socially inclusive en-

ergy transition, and ensure a just transition of the workforce.

Antigua and Barbuda’s population largely resides on the island of Antigua. Although it has relatively high rates of life expectancy, literacy, and GDP per capita, inequality still exists. Prior to the COVID-19 pandemic, poverty and severe poverty impacted around 18 percent and 5 percent of the population respectively.¹¹¹ However, the drop in economic activity caused by the COVID-19 pandemic increased severe poverty dramatically¹¹² and it was estimated that there was a 20.7 percent decline in active employment.¹¹³

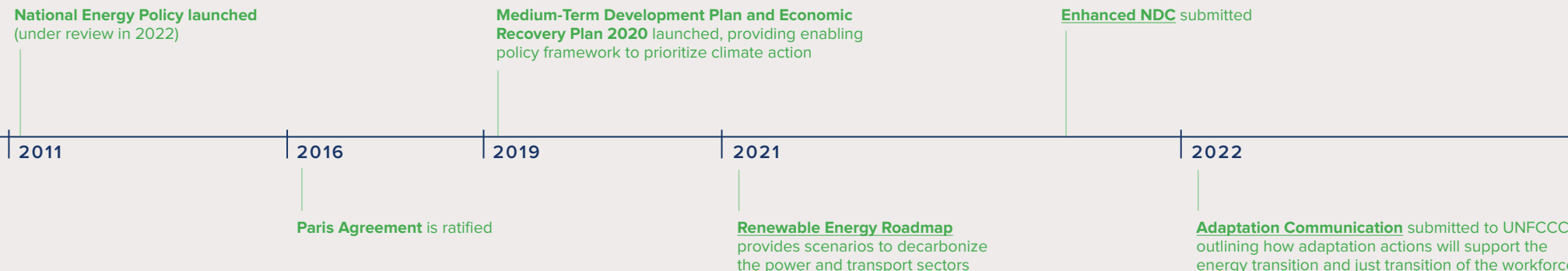
Youth, who make up almost a quarter of the population, face higher rates of poverty and unemployment than the overall population. Gender inequalities also persist: woman-head-

ed households, for example, are more likely to be in extreme poverty than man-headed households, while young women face higher rates of unemployment than young men.¹¹⁴

Why a just transition in Antigua and Barbuda?

Commitment to an energy transition: Antigua and Barbuda relies almost entirely on fossil fuels to meet its energy needs. Like other Caribbean Island nations, 100 percent of petroleum products are imported, amounting to 10 percent of Antigua’s GDP annually and contributing to high energy costs for Antiguan and Barbudans.¹¹⁵ Some groups have borne the cost more than others. For example, research conducted by the Department of Environment shows that women-headed households pay

POLICY TIMELINE



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more of their income towards energy than men, increasing their likelihood of falling into energy poverty.¹¹⁶ Additionally, the susceptibility of the power system to damage and service disruption due to natural disasters is high.

Transitioning to a more climate-proof energy supply and grid is paramount for sustainable generation and to reduce the high cost to consumers. Estimates of Antigua and Barbuda's decarbonization pathway suggest that energy costs could be brought down from USD .15 cents per kilowatt hour to USD .09 cents per kilowatt hour.¹¹⁷ The government is initially focusing on the power and transport sectors, the largest contributors of GHGs, where the energy transition to 100 percent renewable power will reduce emissions and create the necessary environment for 100 percent adoption of EVs.

Impact of energy transition on workforce:

From a labour perspective, the energy transition will significantly impact the livelihoods of workers in fossil fuel-dependent industries. This will extend to downstream industries that support electricity generation and road transportation. Nonetheless, as noted in the enhanced NDC, "transitioning towards phasing-out of fossil fuels can become a strong driver of job creation, job upgrading, poverty eradication, and social justice, and reduce youth unemployment." While the NDC prioritizes the energy and transport sectors for a just transition, it ultimately will target the whole economy and include critical sectors such as tourism.

Conducive just transition policy environment:

Antigua and Barbuda's enhanced NDC acknowl-

edges the disruption that an energy transition will have, requiring a significant shift in policies and in the country's infrastructure. The NDC lays out specific actions to support a just transition of the workforce across the whole economy, including training for the workforce in mitigation technologies; support for MSMEs to enter renewable energy value chains; development of a gender-responsive approach to just transition in the energy and construction sectors; development of new training and entrepreneurial programmes; and operationalization of the Sustainable Island Resources Framework Fund (SIRF) to act as a funding mechanism focused on vulnerable communities. The revision of the National Energy Policy is also providing an opportunity to integrate just transition principles. While the NDC provides the framing for the just transition, increasingly these principles and approaches are being mainstreamed in other policies.

Supporting just transition in Antigua and Barbuda

To facilitate strategic policy and planning discussions, the Department of Environment¹¹⁸ undertook several key studies to build the evidence base for a just transition. These included a national survey looking at the spending patterns of men and women on climate change mitigation, adaptation and response that found women spend more on energy and more on responding to climate change impacts than men.

With support from UNDP's Climate Promise (and the NDC Partnership's Climate Action Enhancement Package and other key implementing

partners such as Climate Analytics), Antigua and Barbuda has undertaken a preliminary study that analyzed the employment implications of transitioning to a low-carbon economy, based

on the country's proposed NDC targets in the electricity and transport sectors. Based on an analysis of jobs in the electricity and transport sectors undertaken by Climate Analytics, the



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Figure 13
Towards a just transition of the workforce: Baseline analysis for the electricity and road transport sectors in Antigua and Barbuda

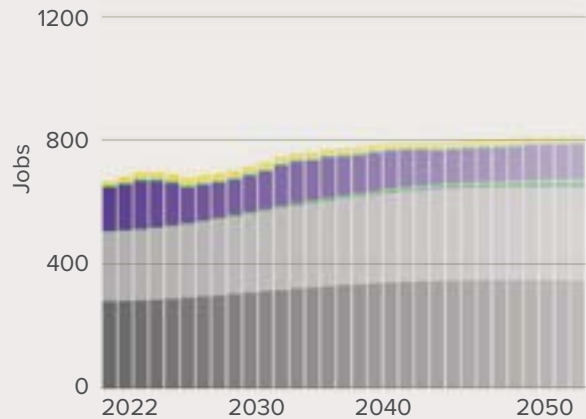
The study found:

“The aggregated direct employment estimates suggest that the energy transition and transport electrification would create substantial employment benefits compared to the fossil-fuel dominated Business-as-Usual Scenario. Specifically, the

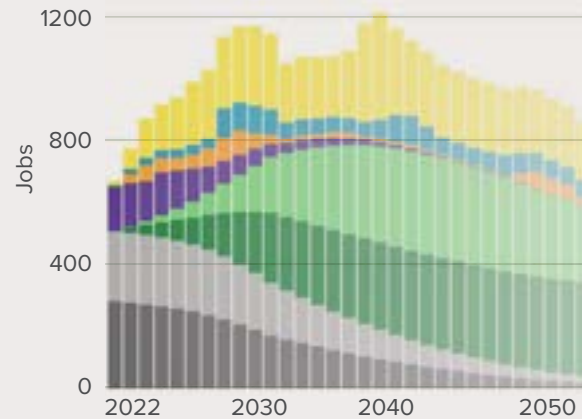
build-up of new infrastructure – with substantial amounts of renewable energy and battery storage installations as well as electric vehicle charging infrastructure to be installed – is expected to create new and ‘greener’ jobs as compared to the BAU case, replacing fossil-related jobs. In the longer term, when the new in-

frastructure is already mostly built, jobs in typically less labour intensive operations and maintenance would dominate. At the same time, learning effects would also increase productivity over time and the employment impacts may settle at a more moderate level similar to the employment in the BAU.”

BAU Scenario - Total jobs in electricity and road transport



NDC Scenario - Total jobs in electricity and road transport



- Transport fuel supply, gas stations and sales (ICEV)
- Repair (ICEV)
- Transport charging infrastructure and sales EV
- Repair (EV)
- HFO plants and diesel generators
- Batteries
- Wind and dispatchable RE
- Solar PV

study made key recommendations for developing a policy framework for a just transition. Figure 13 indicates the estimated number of jobs to be created in the electricity and road transport sectors as a result of NDC implementation. While the results of the study show there will be positive job growth in some areas, such as green jobs in renewable energy systems and infrastructure, other jobs will be negatively affected and dedicated interventions will be needed to support workers’ transition to new industries. Importantly, gender inequalities can be addressed through targeted programmes. For instance, the transition provides an opportunity to facilitate women’s technical careers in the renewable energy sector.

Each of the studies provided solid data and insights that informed Antigua and Barbuda’s final enhanced NDC, which, critically, applied the just transition approach to the whole of the economy and the power and transport sector in particular. The data also provided the foundation for policy discussions with government, civil society, and private sector stakeholders to raise awareness of a just transition and to garner sectoral support to adopt such an approach. While buy-in has been forthcoming from some stakeholders, as to be expected, there are divergent opinions about what a just energy transition means and how Antigua and Barbuda should get there.

To continue raising awareness around a just transition and to address the diversity of opinions on how to achieve it, the Department of Environment is creating a Just Transition Working Group with support from UNDP and ILO.

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Comprised of trade unions (Workers Union, Antigua and Barbuda Trades Union, Employer's Federation), employers' associations, government stakeholders (from the Department of Labour, Department of Finance, Department of Agriculture, Department of Energy, and Department of Tourism), educational institutions, the Chamber of Commerce, and private sector actors, the Working Group will facilitate dialogue aimed at building consensus for what a just transition means for Antigua and Barbuda.

Some key areas the Working Group will support include: a Green Jobs Model Assessment for the energy and transport sectors; a capacity gap analysis for key sectors other than energy and transport; an assessment of the labour impact of the NDC in all sectors; and the potential redesign of curricula for technical education and vocational training institutes.

Alongside support to the Working Group, the Department of Environment is mainstreaming the just transition approach as seen in the NDC update process and in the Adaptation Strategy development, and the country's recent [Adaptation Communication](#) to the UNFCCC. Linking the just transition to adaptation strategies is critical for SIDS and therefore this is an important development. In fact, it is argued that in a world where mitigation is not happening rapidly enough, 'just adaptation strategies' are necessary for SIDS, to manage the accelerating environmental and social consequences of climate change.¹¹⁹

With a whole-of-economy focus, the Department of Environment is considering developing a requirement/checklist for all new projects to ensure they align to just transition principles. In this way, the government does not see a just transition strategy as a stand alone policy document, but wants to see it mainstreamed across sector strategies and projects.

In addition to the Working Group, the Department of Environment (with support from ILO) is developing a just transition communications strategy aimed at raising public awareness. The strategy will highlight how Antigua and Barbuda's economy has experienced periods of transition to new development and growth pathways, including the islands' successful transition from an economy focused on sugar production to one focused on telecommunications and tourism/services. Communication will also emphasize that a just transition is not just about skills and training, but that it touches people's lives more broadly – in how individuals and households adapt to climate change through shifts in consumption patterns and technology choices. To specifically target youth, just transition strategies will be incorporated into a national environment youth engagement strategy and action plan that the Department of Environment is engaging with UNICEF to develop.



⑥

Key lessons



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Some common lessons have emerged from the country case studies that may be helpful to other countries interested in strengthening just transition approaches in their climate action. These lessons have been organized around thematic areas that include governance, data and evidence, stakeholder engagement, mainstreaming and finance.

Governance

- **Institutional leadership is needed for coordination:** It is vital to have a government institution to provide leadership to just transition work and facilitate strong coordination. Without this, just transition can become ‘everyone’s but nobody’s’ issue.
- **Capacity-building at the sectoral level is key:** When introducing the just transition concept, it is critical to raise awareness among and build the capacity of institutions across the whole of government. This will increase participation and ownership of the process. This is especially important for regions most affected by the transition.

Data and evidence

- **Hard data is essential to make the case for a just transition and for informed decision-making:** Garnering support from sectoral ministries and the private sector for a just transition requires being equipped with facts and figures. Approaching these actors without an evidence-based approach will likely stifle discussion. Conversely, presenting evidence of the benefits of decarbon-

ization scenarios will pave the way for their support.

Stakeholder engagement and empowerment

- **Include the private sector from the outset:** Transitioning to a decarbonized economy will require the support of businesses across multiple sectors. Bringing these actors in from the beginning of the process will demonstrate that they are seen as valued partners.
- **Engage first with stakeholders who are willing:** Inevitably, green transition will be disruptive and so will attract resistance from some quarters, including businesses or regions which see a significant financial impact. To build a national base of support, governments should work first with actors who see value and opportunity in moving to a green economy and in applying just transition approaches.

- **Be mindful of national attitudes towards gender equality:** The just transition of the workforce presents a plethora of opportunities to open up sectors and value chains that have typically been dominated by men in comparison to other groups. Programmes that target women for skills development, for example, are common in countries pursuing a just transition. Yet, norms and attitudes around men’s and women’s roles in society could limit women’s employment in these areas. Understanding and planning for how gender inequalities and barriers can be overcome is critical to ensuring a just transition for all.

- **Start with a common vision:** In realizing a just transition, it is vital that stakeholders share a common understanding of what it means in the specific context. Lack of consensus will act as a barrier to working together.

- **Language matters:** The language used to talk about the just transition inevitably shapes how stakeholders view it. For instance, “fossil fuel phase-out” is less appealing than “green energy transition”. Similarly, a push to cut “carbon emissions” is less appealing than a push to cut “carbon pollution”. Experience shows that the phrase “fossil fuel phase-out” is often negatively received by the coal, oil and gas sector and creates roadblocks to productive discussion. However, use of the phrase “energy transition” helps put the focus on the opportunities associated with adopting renewable technologies.

Mainstreaming

- **Anchor a just transition in existing cross-cutting social approaches:** By linking the just transition agenda to existing national social inclusion and equity approaches, countries can help ground these efforts and ensure benefits reaches the marginalized and vulnerable, including the informal workforce.
- **Identify strategies to reconcile a just transition with economic stability and growth:** Aligning existing sectoral policies to just transition plans and principles is a challenge, especially for fossil fuel-intensive sectors, as

sector growth strategies can be at odds with just transition principles. Countries need to develop concrete (local) transition plans for fossil fuel dominated regions with clear strategies for economic diversification, stability, and growth.

- **Embed just transition principles and approaches in sub-national climate change strategies and plans:** Embedding just transition principles and approaches in local-level climate change strategies and plans – while building the related capacity of local government – will help ensure budgets are allocated and action is taken.

Finance

- **Look inwards and outwards to meet the cost of a just transition:** Securing finance to support a just transition is a widespread challenge. While there are opportunities to secure international finance, countries must pursue mechanisms to strengthen domestic financing of just transition initiatives.

7

Conclusions



Without urgent and drastic cuts in GHG emissions, the impacts of climate change will continue to grow. News headlines will increasingly be filled with extreme weather events and the devastating consequences for people around the world.

The world stands on the precipice of climate catastrophe and what is required of all countries is no small feat. All governments must completely transform their high-emissions economies of old to ones powered by clean energy.

This transformation will be disruptive and will impact some more than others. Governments must manage this, ensuring all communities and all workers are brought along for the ride.

There are enormous opportunities. In fact, in many ways, a just transition is key to achieving

the goals of the Paris Agreement, by bringing the public along, supporting the green jobs revolution, and driving contextualized local solutions. It is also an opportunity to address systemic inequalities.

Recognizing the benefits, more and more countries are choosing just transition pathways.

NDCs and LTS have become key means through which governments are acknowledging the principles of a just transition and integrating them into process and practice.

More than a third of countries now reference a just transition in their enhanced NDC. It is an important development because doing so helps ensure efforts are holistic, economy-wide, and not politicized. At the same time, the number of

global and regional initiatives in relation to just transition is growing.

Much more, however, can be done. Almost two-thirds of countries do not yet reference a just transition in their enhanced NDCs.

Further, to date most of the focus has been on the energy sector and male-dominated industries. There are enormous benefits, however, in the just transition of all sectors, including, most notably, agriculture and land-use.

So how do governments move forward? The experiences of countries such as Serbia, South Africa, Costa Rica, India, and Antigua and Barbuda, among others, offer lessons in evidence-building, stakeholder engagement, and finance for a just transition.

It is an exciting time. With the right choices and measures, countries can exploit the development dividends of climate action while sharing the proceeds widely and fairly across all society.

UNDP stands ready to support countries wanting to make the most of the opportunities.

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¹⁸ Statistical Office of the Republic of Serbia, 2022. [Estimated number of population in the Republic of Serbia, 2021.](#)

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³⁷ UNDP, 2021. [Initiating the Just Transition in Serbia Leaving no one behind in the coal intensive regions and communities in Serbia.](#)

³⁸ World Bank, 2021. [GDP per capita – South Africa.](#)

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Methodological note

In this report’s analysis, enhanced NDCs and LTSs that explicitly reference the term ‘just transition’ are counted as referencing just transition. NDCs and LTS that make indirect references to just transition themes but do not use the term ‘just transition’ are not counted.

To analyze NDCs/LTS, as a first step, key word searches were used to assess whether enhanced NDCs and LTS referred to the term ‘just transition’ explicitly. Analysis included all enhanced NDCs and LTS submitted as of 31 October 2022. For purposes of country comparisons, the EU’s NDC and LTS submissions were not included in the count. Instead, this report only considers individual submissions of EU countries.

For countries whose NDC/LTS included the term ‘just transition’ explicitly (see table), further analysis was undertaken to assess how the topic was addressed in the respective enhanced NDC/LTS. This included if just transition was referenced in relation to: gender, youth, education/training/skills development of workforce, the socio-economic impact of transition, economic diversification plans, concrete measures and actions on just transition, and the SDGs.

<p>Countries and territories referring to just transition explicitly in enhanced NDCs (n = 65)</p>	<p>Albania, Antigua and Barbuda, Argentina, Austria, Belgium, Belize, Bulgaria, Canada, Chile, Colombia, Costa Rica, Cote d'Ivoire, Croatia, Cyprus, Czech Republic, Denmark, Dominica, Dominican Republic, Egypt, Estonia, Finland, France, Germany, Greece, Guatemala, Honduras, Hungary, Iceland, Indonesia, Ireland, Italy, Kenya, Korea (Rep. of), Latvia, Lebanon, Liberia, Lithuania, Luxembourg, Malta, Mauritania, Mauritius, Montenegro, Namibia, Netherlands, Nigeria, North Macedonia, Norway, Oman, Pakistan, Palestine (Occupied Territory), Paraguay, Philippines, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, South Africa, Spain, Suriname, Sweden, UK, Ukraine, and Zimbabwe.</p>
<p>Countries referring to just transition explicitly in LTS (n = 29)</p>	<p>Austria, Belgium, Chile, Colombia, Costa Rica, Denmark, Finland, France, Hungary, Iceland, Indonesia, Japan, Korea (Rep. of), Latvia, Lithuania, Luxembourg, Malta, Morocco, New Zealand, Nigeria, North Macedonia, Norway, Portugal, Slovakia, Slovenia, South Africa, Spain, Thailand, and Uruguay.</p>
<p>Countries referring to just transition explicitly in both enhanced NDCs and LTS (n = 24)</p>	<p>Austria, Belgium, Chile, Colombia, Costa Rica, Denmark, Finland, France, Hungary, Iceland, Indonesia, Korea (Rep. of), Latvia, Lithuania, Luxembourg, Malta, Nigeria, North Macedonia, Norway, Portugal, Slovakia, Slovenia, South Africa, and Spain.</p>

The country case studies are based on data, information, and insights collected through interviews with UNDP country offices and government counterparts.

With respect to the 34 countries and territories where UNDP is providing direct support on just transition efforts, this support has been categorized according to the four main entry points of UNDP’s Framework for Incorporating Just Transition into NDCs and LTS.



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