



EXECUTIVE SUMMARY

CLIMATE AND DEVELOPMENT: AN AGENDA FOR ACTION

Emerging Insights from World Bank Group 2021–22 Country Climate and Development Reports © 2022 The World Bank Group 1818 H Street NW, Washington, DC 20433

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Achieving Climate and Development Goals Together

Foreword by David Malpass

Developing countries face a unique challenge of having to achieve their economic development goals in the context of a changing climate.

Policymakers face tough questions. How to translate short- and long-term climate impacts into decisions today? What policy reforms and investments should be prioritized? What are the trade-offs between immediate benefits and costlier delays?

The answers to these questions will impact every sector of their economies and societies. Moreover, there is no single solution: the energy transition in China looks very different from in Chad, and the development priorities of Pakistan vary significantly from those of Türkiye.



All countries can benefit from a systematic approach that combines the best available data, models, and tools to provide immediate and actionable recommendations that integrate climate and development goals.

That is what our transformative new diagnostic—the **Country Climate and Development Reports**—sets out to do.

The reports build on the World Bank Group's long and ongoing country engagement as the world's leading development institution and the leading provider of climate finance to the developing world. Each report is rooted in its unique country context: from the country's climate commitments and development priorities to its income level and its sectoral transitions. The reports take a people-centric approach, from people living in flood-prone areas to workers in the coal industry, to protect the poorest and most vulnerable and contribute to a just transition. They capture the essential role of the private sector in increasing resilience and reducing emissions. They also examine the

"All countries can benefit from a systematic approach that combines the best available data, models, and tools to provide immediate and actionable recommendations that integrate climate and development goals. That is what our transformative new diagnostic—the Country Climate and Development Reports—sets out to do."

technologies and innovations needed for lower carbon intensity production of electricity, steel, cement, and manufacturing, and how the world will build green and efficient supply chains for sustainable development.

The result is that each report contains a wealth of information on the pathways and investments that can help each country to shape a low-carbon, resilient development future. These reports do not provide all the answers, but they offer new analysis and lay out the challenges and opportunities of climate and development in an integrated way that enables policymakers to better find the answers they need.

The first batch of reports spans 24 countries: Argentina, Bangladesh, Burkina Faso, Cameroon, Chad, China, Arab Republic of Egypt, Ghana, Iraq, Jordan, Kazakhstan, Malawi, Mali, Mauritania, Morocco, Nepal, Niger, Pakistan, Peru, Philippines, Rwanda, South Africa, Türkiye, and Vietnam. Each report is conducted jointly by the World Bank and its private sector arms, the International Finance Corporation and the Multilateral Investment Guarantee Agency, and in close coordination with the International Monetary Fund. I want to thank all those who have taken part in this groundbreaking exercise for their insights, rigor, collaborative spirit, and hard work.

This analysis, *Climate and Development: An Agenda for Action*, draws from the richness of the individual country reports and shares some early insights we have gleaned from the first batch. These early insights are striking. In CCDR countries, investing an average of 1.4% of GDP in adaptation and mitigation could increase their resilience and reduce their emissions by as much as 70% by 2050. The transition could see positive impacts on GDP and employment, but these must be balanced against losses in fossil fuel-intensive sectors which will impact some populations and communities.

The gains are there to be reaped but they are not automatic: they depend on carefully designed policies as well as increased financial support from richer economies. Especially in lower-income countries, where investment needs for climate action often exceed 5 percent of GDP, increased volumes of concessional finance—including through grants—are critical to a successful and just transition.

The first batch of CCDRs show us that tackling climate and development is achievable. Together, we can forge a path toward a low-carbon resilient future.

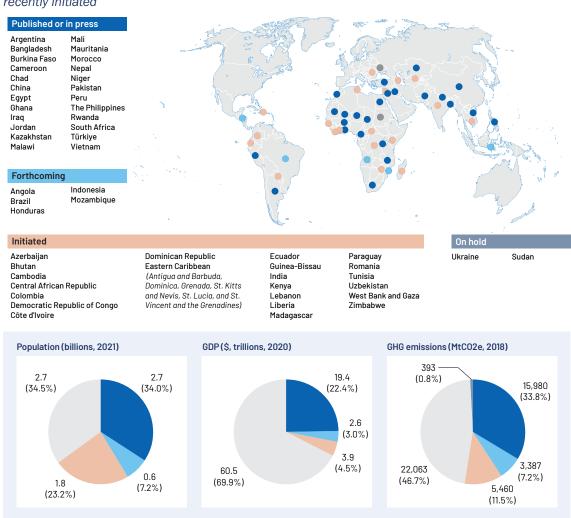


Executive Summary

Climate change—caused by greenhouse gas (GHG) emissions from human activities—poses a major threat to countries' ability to protect past development gains and achieve future improvements in living standards for all. Tackling climate change and development challenges together is therefore at the heart of the World Bank Group's Climate Change Action Plan 2021–25¹ and the World Bank's Green, Resilient, and Inclusive Development (GRID) approach.²

To support the alignment of development and climate objectives at the country level, the World Bank Group has launched a new core diagnostic tool: the Country Climate and Development Report (CCDR). These country reports combine the best available data, models, and tools to provide immediate and actionable recommendations for decision makers today. Integrating climate change and development considerations, the CCDRs aim to help governments, the private sector, citizens, and development partners prioritize the most impactful actions that can boost resilience and adaptation and contribute to global public goods by reducing GHG emissions, while delivering on broader development objectives. The first set of 20 CCDRs covers 24 countries (figure S.1).³

FIGURE S.1: CCDR countries covered in this synthesis paper and those where CCDRs have been recently initiated



Note: MtCO2e = million tons of carbon dioxide equivalent.

https://openknowledge.worldbank.org/handle/10986/35799

² https://openknowledge.worldbank.org/handle/10986/36322. ³ https://www.worldbank.org/en/publication/country-climate-development-reports.

This synthesis paper summarizes the main emerging findings from the first set of CCDRs. It identifies commonalities as well as differences and specificities across country contexts, income groups, and geographies. It also aims to combine these insights to inform how international development partners and especially high-income countries (HICs) should support the global transition toward a more resilient low-carbon development path, including through their own climate action and through support to climate action in low- and middle-income countries (LICs and MICs).

The first set of CCDRs shows that resilient, low-carbon development is possible, but only if all countries embrace major change. For LICs and MICs, this means changes to policies, regulations, and investments; for HICs, it means accelerating their own climate action and providing increased support to LICs and MICs.

Key Messages

Climate change poses a major threat to long-term development objectives.

- » Climate change—caused by GHG emissions from human activities—poses a major threat to long-run development objectives, especially poverty reduction.
- » With appropriate adaptation policies, countries can reduce impacts in the short term.
- » Even with appropriate adaptation, successful development and poverty reduction require rapid reductions in global GHG emissions, which requires first and foremost accelerated mitigation action in HICs and other large emitters.

The first set of CCDRs demonstrates the significant impact of climate change, even when estimated only for a subset of impact categories and without including the larger impacts expected post-2050. The CCDRs explore some of the most critical transmission channels of climate change impacts, such as labor productivity, agricultural yields, and water availability. Sectoral impact assessments demonstrate high vulnerability to climate change with significant implications for food security and human health (table S.1). CCDRs also look at the bi-directional relationship between climate change and risks related to fragility, conflict, and violence. Different analyses were performed for different countries, depending on their needs and vulnerabilities, but not all challenges could be explored in every country.⁴ Even these partial analyses, however, show significant macroeconomic effects, particularly for poorer countries and especially under the assumption of higher levels of global warming.

The CCDR analyses show a large and disproportionate impact of climate change on poverty and economic opportunities, especially for the most vulnerable members of society. Higher vulnerability of people in or close to poverty is linked to higher exposure to risk (for example, working outdoors or living in low-quality housing). But it is also linked to a lower ability to prepare and respond (for example, lacking access to borrowing or having no or low savings) and lower access to support systems, such as remittances, social protection, health care, or a voice in decision making.

⁴ In particular, the first set of CCDRs does not include small islands that may face more daunting—or even existential—challenges. CCDRs covering small islands are in progress.

TABLE S.1: Examples of climate change impacts from the first set of CCDRs

By 2030, **Vietnam** could experience **agricultural losses** up to 6.2% compared to 2010 levels as opposed to a scenario without climate change where agricultural output is estimated to increase by 25%

Water availability in Iraq could decline by 13-28% by 2050 due to climate change

By 2040, hydropower generation in Ghana could be reduced by 8-30% compared to 2020 levels

Due to increased frequency, duration, and intensity of heat waves, *outdoor worker productivity* in some provinces of **China** could decline by 2–15% by 2060

By 2050, in a moderate-warming scenario, increased temperatures in **Argentina** could slightly reduce *mortality* thanks to a decrease in extreme cold days, but climate change would increase mortality under a pessimistic-warming scenario

While drought conditions in **Malawi** increase the probability of an individual falling below the poverty line by 14%, the impact on individuals with only a primary *education* rises to 26%, versus 9% for those with a higher education

In Rwanda, higher average temperatures could cause international tourism demand to drop by 11-20% by 2040

The **poverty rate** in the **Sahel** countries could increase from a 27% baseline to 34% by 2050 in a dry and highemission scenario, with an additional 13.5 million people falling into poverty

To reduce short-term climate change impacts, the CCDRs make recommendations for countries to boost their resilience by combining:

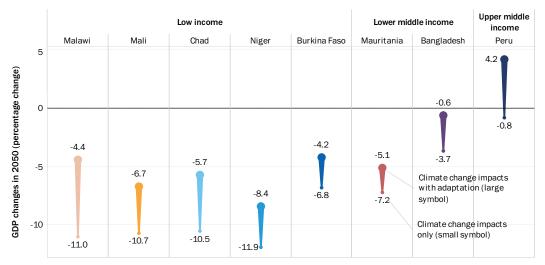
- 1. Rapid and inclusive development—particularly through poverty reduction and levers such as universal access to infrastructure, financial services, education and health services, and effective social protection systems—to enable people, firms, and communities to better adapt to climate change and cope with and recover from shocks.
- 2. A whole-of-society approach to resilience and adaptation to ensure that climate risks are incorporated in all investments and decisions at all levels. This requires increased investments and major improvements in decision-making capacity and governance, which can significantly reduce vulnerability and the impacts of climate change.
- **3. Sectoral interventions**, covering a large range of issues such as water management, agriculture, ecosystems, disaster risk management, resilience of infrastructure systems (energy, transport, water, communication), and protection of the poorest and most vulnerable.

Figure S.2 shows the benefits from adaptation interventions explored in a subset of CCDRs, with substantial reduction in impact on gross domestic product (GDP) even with a limited set of adaptation measures included.

Even with adaptation, successful development and poverty reduction require accelerated mitigation action, especially from HICs and other countries with large emissions. Limits to adaptation and the growing risks of tipping points as temperatures increase highlight the need for accelerated action to reduce global GHG emissions. While all countries have a role to play to achieve the temperature goal of the Paris Agreement, HICs—with their greater responsibility for historical emissions, higher emissions per capita, higher capacity to develop new solutions and technologies, and larger resources—must lead the way with deeper decarbonization at a

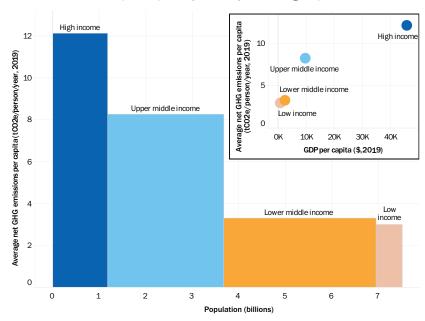
faster pace (figure S.3). LICs, lower middle-income countries (LMICs), and poor people within most countries contribute very little to GHG emissions. Ultimately, however, all countries will need to adopt mitigation measures, particularly high-emitting MICs which represent a growing share of global emissions. LICs and MICs can also benefit from low-carbon development policies and investments, including by avoiding locking themselves into carbon-intensive urban patterns, energy systems, and value chains that cannot be easily corrected and may constrain their future economic prospects.

FIGURE S.2: GDP impacts of climate change and adaptation and resilience interventions in 2050 in pessimistic (high-emission) scenarios, for selected countries



Notes: The small dot is partial impacts without adaptation; the large dot is partial impacts with (partial) adaptation and some of their co-benefits.

FIGURE S.3: Net GHG emissions per capita, by country income group, 2019



Sources: Net GHG emissions data from Climate Watch, World Resources Institute 2022, https://www.climatewatchdata.org; GDP and population data from the World Bank DataBank

Key Messages

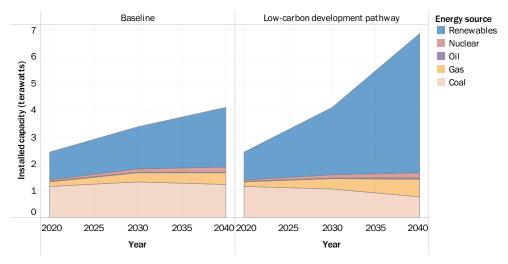
Climate objectives can be achieved without compromising development, but only if key conditions are met.

- » Substantial reductions in GHG emissions are compatible with economic growth and country development goals, but only if key conditions are met, including well-designed climate actions, strong participation of the private sector, adequate international support, and appropriate complementary measures to manage unavoidable trade-offs, protect poor people's consumption, and facilitate a just transition.
- » Most CCDR low-carbon development pathways are more ambitious than existing Nationally Determined Contributions (NDCs) and they would reduce total GHG emissions in CCDR countries by 70 percent by 2050, compared with a current-policy scenario. Taken together, however, they would still lead to significant emissions in 2050. This shows not only the need to adjust these pathways to increase ambition over time, but also for enhanced support from and action in HICs, including with negative emissions.

The CCDRs explore illustrative pathways toward low-carbon development that consider each country's climate commitments, income level, potential for renewable energy or landbased emission reductions (or carbon removals), domestic development priorities, and other characteristics. As a result, transition timings and ambition levels vary by country. The CCDRs identify climate actions that accelerate local economic growth and development and contribute to emissions reductions in the near-term while countries strengthen their institutions, governance, and economic structures in parallel, to unlock the full potential in the long term. This includes the important role of private sector investments in priority sectors and adequate international support. Opportunities include renewable energy and clean cooking; electrification and energy efficiency of transport, buildings, and industry; better water and land use management; and wider participation in green value chains, including critical mineral mining. While solar and wind energy is part of the least-cost strategy in all countries, even without considering climate objectives, their role grows even larger in low-carbon scenarios. Figure S.4 shows the declining role of coal and the growth in renewables (primarily solar and wind) across CCDR countries in the low-carbon development pathways compared with the baseline scenarios. But countries often lack the policies and institutions required to attract or mobilize the financing they need to achieve the speed and scale of renewable energy investment-including large investments in power grids and interconnections-to achieve their climate goals at the lowest cost. Achieving this massive scale up will also require a strong global supply response and expansion of production capacity for key technologies.

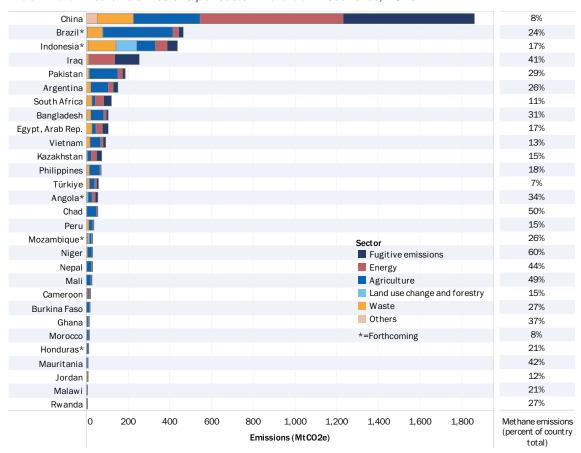
Reducing methane emissions is crucial for achieving global climate targets and can improve resource efficiency. For some of the countries covered by the first set of CCDRs, methane emissions represent a significant share of overall emissions (figure S.5). Opportunities explored in CCDRs include capturing fugitive gases in the gas supply chain; including methane in emissions trading; improved livestock and manure management; and improved municipal waste collection, sorting, and treatment.

FIGURE S.4: Aggregated power generation capacity installed in the baseline and low-carbon development pathways



Notes: The ambition level and timing of the energy transitions analyses vary by country. Some low-carbon development pathways were not designed to achieve net-zero emissions by mid-century. This figure describes the energy transition (in the power sector only) that resulted from these low-carbon analyses in aggregate but should not be interpreted as a prescription for low-carbon development. Some of the natural gas capacity in the low-carbon development pathways includes carbon capture and storage. Within the analyses, nuclear deployment reflects the commitments of governments. Total capacity is higher in the low-carbon development pathways, due to lower capacity factor and increased demand from electrification in other sectors. Countries included in the figure are: Bangladesh, Burkina Faso, China, Egypt, Ghana, Iraq, Jordan, Malawi, Mali, Mauritania, Morocco, Niger, South Africa, Türkiye, and Vietnam.

FIGURE S.5: Methane emissions per sector in the CCDR countries, 2019



Source: Climate Watch, World Resources Institute 2022 https://www.climatewatchdata.org

Note: MtCO2e = million tons of carbon dioxide equivalent

Taken together, these low-carbon pathways reduce GHG emissions by more than 50 percent by 2040, and more than 70 percent by 2050 (compared to reference scenarios based on current policies), but GHG emissions still total more than 5 gigatons of carbon dioxide equivalent in 2050 (figure S.6). This shows that, although the 2030 emissions milestones for most of the low-carbon development pathways are more ambitious than submitted NDCs, for the world to achieve globally net zero emissions in or around 2050, countries would have to adjust these pathways to increase ambition over time or rely on negative emissions in other countries, including HICs.

22 21.0 20.7 20 18.6 Argentina Bangladesh 18 Ghana Kazakhstan 16 Morocco Pakistan 14 Emissions (GtC02e) Peru Philippines 12 Rwanda Türkiye 9.6 10 Vietnam China Forthcoming 8 5.4 6 Δ 2 0 CCDR low-carbon CCDR low-carbon 2020/2021 CCDR reference CCDR reference scenarios, 2050 pathways, 2040 pathways, 2050 scenarios, 2040

FIGURE S.6: Total GHG emissions in select CCDR countries (representing 41 percent of global emissions)

Note: GtCO2e = gigatons of carbon dioxide equivalent

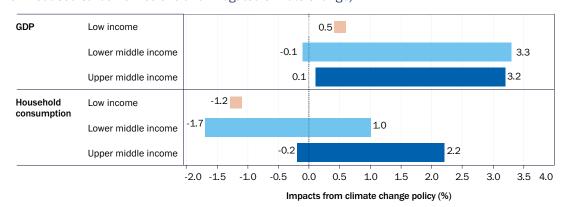
Although sectoral transition costs can be substantial—including for the private sector—the illustrative low-carbon development strategies in the CCDRs would have small, and often positive, macroeconomic effects on GDP and consumption, when compared with a current-policy scenario. Even without accounting for the benefits from avoided climate change impacts, the effects on GDP range from slightly negative to slightly positive, with more positive outcomes in higher-income countries (figure S.7). Immediate economic benefits are linked to reducing fuel spending and imports (thanks to energy efficiency, electrification, and the shift to renewable energy), while labor productivity gains and health benefits are linked to better air quality and reduced congestion.

The transition has small (often positive) impacts on aggregate employment, but aggregate values hide losses in exposed sectors (especially fossil fuel sectors) and gains in key sectors, such as health and education (figure S.8). These all have gender implications due to existing occupational segregation, while job losses in the brown (polluting) sectors often disproportionately affect lower-skilled, poor, informal, and in some cases women and rural, workers. Without addressing underlying structural labor market issues and constraints on private labor demand, countries will struggle to mitigate the impacts of climate change on workers and facilitate the labor market transition required to support a shift toward more resilient and lower-carbon economies. Climate actions offer opportunities for creating jobs, but spatial, skill, and expectation mismatches can

derail these benefits. Complementary just transition policies and programs can maximize positive job outcomes and minimize disruptions and displacement from the transition.

However, avoiding a negative impact on growth or consumption requires that some key conditions are met. For instance, costs are higher if labor market frictions are not managed or if the lack of access to financing means that required investments crowd out other investments. And increased investment needs often lead to impacts on household consumption that are more negative (or less positive) than GDP impacts, especially in lower-income countries (figure S.7). The impact on consumption highlights the importance of mobilizing finance to minimize trade-offs with consumption, but also the need for appropriate compensation and social interventions to protect poor people's consumption and facilitate a just transition.

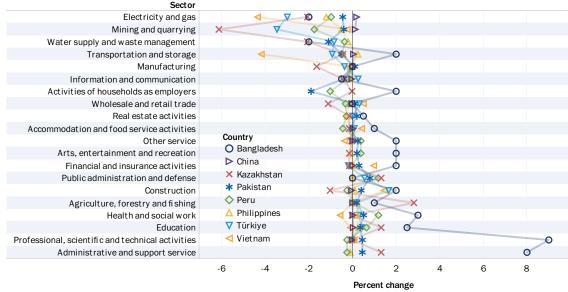
FIGURE S.7: Macroeconomic effects on GDP and consumption in 2030 of the most ambitious climate policies explored by select CCDRs, per country income group (without accounting for benefits from reduced carbon emissions and mitigated climate change)



Note: Included CCDR countries are: low-income countries (Rwanda); lower middle-income countries (Bangladesh, Egypt, Ghana, Morocco, Nepal, Pakistan, Vietnam); and upper middle-income countries (Argentina, China, Iraq, Kazakhstan, Peru, Türkiye).

FIGURE S.8: Sectoral labor demand changes in 2030 across sectors, for selected countries

Sector



Notes: Sectors are ordered by average labor demand changes across the included countries. The simulations show near-term changes in sectoral labor demand relative to a business-as-usual scenario, stemming from sector-specific, largely fiscal, mitigation and/or adaptation policy measures. Mining and quarrying (-26.0%) for Bangladesh is not shown due to the scale of the figure.

Key Messages

Success requires challenging policy reforms, reallocation of scarce public resources, increased mobilization of private capital, and increased financial support from the international community.

- » Resilient and low-carbon pathways can deliver net economic gains. But they will not be realized without improved and sustained access to finance and mobilization of private capital to meet additional annual investment needs averaging 1.4 percent of countries' GDP over 2022-30 in all CCDRs and 8 percent in low-income CCDR countries.
- » The transition to more resilient and lower-carbon development also requires managing political economy obstacles, strengthening institutional capacity, accelerating diffusion of new technologies, and careful management of negative distributional outcomes.
- » To overcome these challenges and achieve a just transition, all countries will require carefully designed policies and reforms and scaled-up financial support from richer economies. LICs in particular will need access to sustained levels of concessional resources, including grants, to meet the investment and spending needs for resilient lowcarbon development.

CCDR countries need public and private investments that average 1.4 percent of their GDP over 2022-30 to build resilience and be on track to reduce their emissions by 70 percent by 2050. These financing needs, aligned with other assessments, are large but meeting them is achievable. Investment needs, as a share of GDP, are larger in lower-income countries, which have contributed the least to global warming and have more limited access to financing, because they include investments toward unmet development needs and to close the infrastructure gap (figure S.9).

FIGURE S.9: Investment needs for a resilient and low-carbon pathway, by income group, 2022–30 8.0% Low income

Lower middle income 5.1% Upper middle income 1.1% 0% 1% 2% 3% 4% 5% 8% 9% Additional investment needs (share of GDP)

Note: These estimates include scenarios from published, in press, and forthcoming CCDRs. In many CCDRs, these investment needs include development needs, especially those linked to closing infrastructure gaps—such as solar mini grids to provide energy access—and cannot be considered entirely "additional" to pre-existing financing needs. That the CCDRs identify a larger share of investment needs in LICs and LMICs partly reflects larger unmet development needs in these countries.

Constrained by macroeconomic conditions and debt ceilings, countries need to improve the efficiency of their public spending, repurpose subsidies, ensure enabling conditions for the private sector, and leverage concessional resources, carbon markets, and results-based financing. Repurposing energy subsidies or introducing carbon pricing offers opportunities for domestic resource mobilization, fiscal consolidation, and increased investment in development and climate, with less negative impacts on growth than alternative taxes or spending cuts (even though distributional impacts and political economy issues need to be managed carefully).

Some of these investments can be financed by the private sector with the right enabling environment, which would require policy change and reforms, including in the financial sector. Prioritizing capital market development is key in all countries—for example, through project preparation support to develop a larger project pipeline, or instruments to address political risk. Developing a national strategy for greening the financial sector can also facilitate climate action financing, through climate-related disclosure and by developing green taxonomies. In countries with poor credit ratings or high perceived risks, public capital or concessional funds may be needed to improve the risk-return profile of investments. For example, in LICs and many MICs, high capital costs often prevent investments in capital-intensive, renewable-energy projects that are otherwise economically viable. A just transition—for example, away from coal—will also require transfers and compensation, and LICs will need both public resources and international support to meet these needs.

Multiple financing instruments can help countries meet their investment needs, with concessional resources playing an important role, especially in LICs. Some countries have already issued sovereign or corporate green bonds and could explore green equity, insurance, and alternative financing products, including performance-linked bonds. Most CCDRs recommend blended finance instruments, such as credit enhancement for issuing bonds, and public-private partnerships. International carbon markets and sustainability-linked bonds and loans can also provide funding or financing for sovereigns and state-owned enterprises. To help cover some of the costs identified in the CCDRs, governments need to be able to access—and the world community must make available—grant funding to help cover some of the costs identified in the CCDRs, especially for social expenditure and ensuring a just transition, and in particular in LICs.

Although access to financing is a critical barrier, the CCDRs identify four other major challenges that require careful consideration in policy design, as well as specific support from the international community.

- 1. The complex political economy barriers to climate action where powerful actors, interest groups, or the public do not support reforms. Some key reforms identified by the CCDRs—for example energy, water, or agricultural subsidies reform—could have large aggregate benefits but are blocked by difficult political economy challenges. Building effective institutions, managing distributional impacts, political incentives, and clear policy communication can all help improve the political economy of policy reform. Many of the CCDRs also call for framework legislation or a strong institutional anchor for climate policy to embed long-term policy direction. Maximizing and emphasizing the immediate and direct benefits that climate action delivers can also help build consensus and facilitate implementation.
- 2. Poor governance and inadequate institutional capacity. The lack of a cohesive and comprehensive legal, regulatory, policy and institutional framework for effective integration of climate change adaptation and mitigation actions across various sectors and government plans is a major obstacle to unlocking resilient and low-carbon development. Further work is needed to mainstream climate change into countries' planning, public finance, intergovernmental, and accountability systems.
- 3. Availability and cost of key technological solutions. Although the short-term solutions highlighted in CCDRs are based on commercially available technologies, over the long run, resilient and low-carbon pathways rely on innovative technological solutions (such as green

steel, hydrogen, or carbon capture and storage) and rapid diffusion of existing technologies, such as battery energy storage. Accelerated climate action, especially in HICs, is needed to improve low-carbon technologies and reduce costs of existing technologies. LICs and MICs need to invest in education and an enabling environment to accelerate the diffusion of these innovative solutions.

4. Negative distributional outcomes on certain communities, sectors, or regions, even when the transition is positive in aggregate. Nearly all the CCDRs recommend strengthening social protection and improving targeting to make cash transfers more effective to promote a fair and just transition. A just transition must offer alternative livelihoods, give a key role to education and labor market policies, and support investments in affected communities. Beyond reskilling, countries need to address broader inclusion of the poor in the transition toward a low-carbon economy. This transition should also include opportunities for the private sector to create new jobs.

Key Messages

To achieve a successful transition, all countries will need to prioritize and sequence policy reforms and investments.

- » The CCDRs identify country-specific priority actions and interventions that would either deliver immediate development benefits or whose delay would create lock-in effects or larger costs in the future.
- » These priorities, which cover all sectors and include both adaptation and mitigation, demonstrate the importance of mainstreaming climate change into macroeconomic and sectoral policies, regulations, and investments.

Most of the CCDRs identify a set of priorities for the next five years, focusing on the most important or urgent issues in each country context. In practice, prioritization and sequencing are based on two dimensions:

- The outcomes of the proposed interventions in terms of development benefits, prioritizing
 interventions that deliver climate benefits as well as development gains in terms of growth,
 poverty reduction, or improved well-being.
- The urgency of the proposed interventions, for both resilience and emissions reductions, prioritizing interventions that cannot be delayed, because it would either increase the costs and reduce feasibility or create irreversible damage.

Due to the difficult barriers faced by all countries, particularly LICs, prioritizing and sequencing investments is crucial, and international support—through technical assistance and finance with concessional elements—is essential. Accelerated emissions reductions in higher-income and large-emitting countries, including action on short-lived climate pollutants with high global warming potential such as methane, are also necessary to stabilize climate change and reduce the increasing need for adaptation.

An analysis of the recommendations across the CCDRs shows the multisectoral and macroeconomic dimension of resilient and low-carbon development. While the number of recommendations in each sector does not fairly represent their importance or urgency, figure S.10 shows that the CCDR recommendations span all sectors. The high number of economywide recommendations confirms the need to mainstream climate adaptation and mitigation into development and economic policies, including on fiscal and financial issues. The top five issues covered by the recommendations highlighted in the CCDRs are climate finance, decarbonizing power, economywide resilience and adaptation (including social aspects), water-related resilience, and decarbonizing transport (figure S.11).

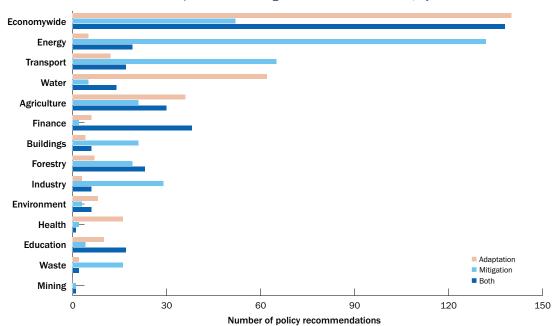
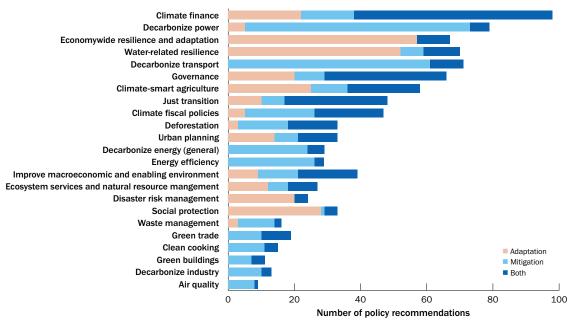


FIGURE S.10: Distribution of adaptation and mitigation recommendations, by sector





The CCDRs are World Bank Group diagnostics that aim to help countries achieve their development and climate goals together, but they only represent one step and one component in a longer and broader process. The CCDRs recognize that in each country, a government-led prioritization and sequencing exercise is an essential step to translate the diagnostic into a country-owned strategy and implementable investment plan. For the countries in the first set of CCDRs, we will be striving to use the analysis to engage with our public and private sector clients to translate key recommendations into development and climate priorities going forward, including through the World Bank Group country engagement framework and operational portfolio and by informing the design of interventions supported by the International Monetary Fund Resilience and Sustainability Fund. Beyond the World Bank Group portfolio, a CCDR can be an opportunity for governments and private sector investors, citizens, international financing institutions, and World Bank partners to engage on development and climate action, with better country-level coordination.

Through our global advocacy, convening power, and support to client countries and the private sector, the World Bank Group will participate in this effort through a variety of channels, including supporting CCDR actions and recommendations, while delivering on our corporate mandate to eliminate extreme poverty and boost shared prosperity.