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Climate Change Action Plan 2016–2020

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Cover design: Richard Fletcher, Fletcher Design.

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Abbreviations

AFR	Africa region
BRT	bus rapid transit
CCSA	Cross-Cutting Solutions Area (World Bank)
CIF	Climate Investment Fund
CO_2	carbon dioxide
COP	Conference of Parties
CPF	Country Partnership Framework
CPLC	Carbon Pricing Leadership Coalition
CRIP	Investment Plan for the Strengthening of Resilience to Climate Change in the Niger River Basin
CSP	concentrated solar power
CTF	Clean Technology Fund
CUTPP	China-GEF-World Bank Urban Transport Partnership Program
DESCO	distributed energy service company
DPL	Development Policy Loan
DRM	disaster risk management
EAP	East Asia and Pacific region
ECA	Europe and Central Asia region
EDGE	Excellence in Design for Greater Efficiencies
ESMAP	Energy Sector Management Assistance Program
FAO	Food and Agriculture Organization of the United Nations
FAP	Forest Action Plan
FY	fiscal year
GCF	Green Climate Fund
GDP	gross domestic product
GEF	Global Environment Facility
GFDRR	Global Facility for Disaster Reduction and Recovery
GHG	greenhouse gas
GIF	Global Infrastructure Facility
GP	Global Practice (World Bank)
GW	gigawatt
ha	hectare
HFCs	hydrofluorocarbons
IBRD	International Bank for Reconstruction and Development
ICT	information and communications technology
IDA	International Development Association
IFC	International Finance Corporation
iNDC	Intended Nationally Determined Contribution
IPCC	Intergovernmental Panel on Climate Change
LCR	Latin America and the Caribbean region
LPG	liquefied petroleum gas
MDB	multilateral development bank
MIGA	Multilateral Investment Guarantee Agency

MNA	Middle East and North Africa region
MW	megawatt
NBA	Niger Basin Authority
NDC	Nationally Determined Contribution
NGO	nongovernmental organization
PSNP	Productive Safety Nets Program (Ethiopia)
PV	photovoltaic
REDD+	Reducing Emissions from Deforestation and Forest Degradation (REDD), Conservation of Forest Stocks, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks
SAR	South Asia region
SCD	Systematic Country Diagnostic
SE4All	Sustainable Energy for All
SDAP	Sustainable Development Action Plan
SIF	Strategic Investment Fund
SSA	Sub-Saharan Africa
tCO_2eq	tons of carbon dioxide equivalent
Tcal	tera calories
TTL	task team leader (World Bank)
UN	United Nations
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
WB	World Bank
WBG	World Bank Group

Executive Summary

Climate change is a threat to the core mission of the World Bank Group (WBG). Current weather extremes already affect millions of people, putting food and water security at risk, and threatening agricultural supply chains and many coastal cities. Without further action to reduce extreme poverty, provide access to basic services, and strengthen resilience, climate impacts could push an additional 100 million people into poverty by 2030.

Climate change presents enormous challenges and opportunities for development, making it essential that climate and development be tackled in an integrated way. The world needs to feed nine billion people by 2050, provide affordable energy access to all, and extend housing and services to two billion new urban dwellers—and to do so while minimizing emissions and boosting resilience.

Recent global developments favor bold climate action by the WBG. At the most recent Conference of the Parties (COP21) in Paris, 140 World Bank client countries committed to implement their Nationally Determined Contributions (NDCs) as part of an agreement to limit global warming to less than 2°C by 2100, and make best efforts to limit warming to 1.5°C. At the same time, public and private actors have renewed their global commitments to increase investments and research and development, boost carbon pricing, and end wasteful energy subsidies.

This Climate Change Action Plan (for short: "the Action Plan") demonstrates how the WBG intends to meet these challenges and opportunities, by scaling up climate action, integrating climate change across its operations, and working more closely with others. The Action Plan is driven by client demand, focused on activities that support the WBG's core mission, and builds on the WBG's comparative advantage.

Countries start from different points and have different emission levels, and therefore need differentiated actions and support. These differences translate into different climate commitments in the NDCs, and into different needs in terms of support that the WBG can and will provide.

To get impact at scale, the Action Plan is focused on helping to shape national investment plans and policies and leveraging the private sector. Financing needs for resilient, low-carbon growth are much larger than available public resources, and WBG resources are small relative to these needs. Policy and institutional support for national investment plans and for facilitating private sector initiatives will be critical to having impact at scale.

The Action Plan reconfirms the WBG's commitment to increase the climate-related share of its portfolio from 21 to 28 percent by 2020 in response to client demand, with total financing (including leveraged co-financing) of potentially $29 billion per year by 2020. Meeting these targets is conditional on sustained aggregate WBG lending volumes, access to concessional finance, and client demand.

The Action Plan is underpinned by five strategic shifts for the WBG's climate work: (i) *Implementation:* the WBG focus will accelerate support for countries

and companies to implement the plans they have developed. (ii) *Convergence:* the WBG climate and development agendas will be fully integrated into strategies and operations, and global- and country-level action will be aligned. (iii) *Maximizing impact:* the WBG will increase its focus on impact at scale, including shaping national investment policies and programs and mobilizing private finance. (iv) *Resilience:* the WBG climate portfolio will be rebalanced—putting a greater focus on adaptation and resilience. (v) *Transformation:* achieving global climate commitments will require a shift from business as usual. The Action Plan will focus on facilitating transformational impacts.

The Action Plan is based on comprehensive joint preparation between the Climate Change Cross-Cutting Solutions Area (CCSA), Regions, Global Practices (GPs) and other CCSAs, International Finance Corporation (IFC), and Multilateral Investment Guarantee Agency (MIGA). The Regions and GPs, as well as the IFC, have prepared a background analysis and developed complementary and detailed contributions. The Action Plan also includes the IFC Climate Change Implementation Plan and the Africa Climate Business Plan.

WBG activities under the Climate Change Action Plan are organized along four top-level priorities: (i) support transformational policies and institutions, (ii) leverage resources, (iii) scale up climate action, and (iv) align internal processes and work with others.

Support Transformational Policies and Institutions

The WBG will support countries in translating their NDCs into climate policies and investment plans into actions, and in mainstreaming climate considerations into policies and budgets, through advisory services, public expenditure reviews, and development policy operations. The objective is to help client countries strengthen their resilience and adaptive capacity, and deliver affordable and efficient services (especially energy) in a low-carbon manner and in a way that is consistent with their NDCs and global climate commitments. The WBG will work to ensure that the vulnerable are protected and will help build country capacity in this regard.

The WBG will scale up country-level support and global advocacy work to "get prices right", by helping clients to reform fossil fuel subsidies, put a price on carbon, deepen market-based instruments, and reform other distorting subsidies. Carbon pricing work will be extended to widen, deepen, and connect markets.

Leverage Resources

The IFC will crowd in private sector finance by significantly scaling up its own investments—from $2.3 billion to about $3.5 billion in five years. By 2020, it will mobilize at least $13 billion per year in external private sector investments through its operations.

To "green" the financial sector, the WBG will work with regulators, create green banking champions, provide climate credit lines, and promote continued growth and development of the green bond market.

The WBG will scale up financial leverage in operations for resilience and mitigation through improving the preparation, structuring, and aggregation of projects; de-risking private investments; and scaling up support for a climate-smart focus in project preparation facilities. Cross-WBG "deal teams" will focus on delivering bankable/investable projects, including through the use of blended concessional finance, for high-impact sectors—such as energy infrastructure, rooftop solar, distributed energy service companies, and resilient urban infrastructure.

The International Development Association (IDA) has a strong record of supporting climate change activities, and the WBG has a strong record of using blended non-IDA concessional finance, but existing funding is limited. There is an ongoing need for concessional finance, IDA and non-IDA, to accelerate the transition from fossil fuels to renewable energy, build climate resilience, and meet climate targets. The WBG is counting on a strong IDA18 replenishment and significant non-IDA concessional financial support to meet the targets in this Action Plan. In the coming months, the WBG will develop an integrated approach to the mobilization and management of these different sources of funding in the context of the Forward Look initiative.

The WBG will focus on enhancing the effectiveness of, and helping countries gain access to, concessional climate finance. Concessional climate finance will be concentrated on the incremental cost of climate action, to redirect investment flows and maximize impact. The WBG will work to ensure that policy options, institutional practices, and reforms are deployed to minimize the required level of concessional finance.

Scale Up Climate Action

By 2020, the WBG will have significantly scaled up its activities with climate co-benefits in multiple sectors and increased its impact in countries through direct investments, advisory services, and the shaping of new and innovative solutions. In particular, the WBG will deepen and scale up its action in six high-impact areas, with indicative targets that represent current expectations of future demand. Achievement of these targets will be dependent as always on client demand; these targets are not commitments and will be adjusted over time. The six areas are described in the following.

Renewable Energy and Energy Efficiency

The World Bank will use multiple instruments to de-risk renewable energy investments, with a cumulative target of adding 20 gigawatts (GW) in renewable energy generation over five years, that is, a doubling of current World Bank additions. The World Bank will "green" grids with the aim to enable the addition of 10 GW of variable renewable energy over the same period, and ensure that all energy investments are adapted to climate change. The IFC and

MIGA will support grid-connected clean energy by focusing on large hydropower, wind, and solar, continuing to open new markets with "first-of" investments, and helping industrial and commercial clients expand the use of low-carbon captive power. The WBG will increase its share of energy efficiency operations and aim to invest $1 billion to promote energy efficiency and resilient building in urban areas. The World Bank will aim to mobilize $25 billion in commercial funding for clean energy over the next five years.

Sustainable Mobility

The WBG will help countries develop sustainable mobility alternatives and implement transport adaptation options. It will increase the share of its transport portfolio that contributes to climate mitigation and resilience. It will pursue urban mobility and low-carbon, multimodal transport operations in all regions and aim for $2 billion in lending for adaptation in the transport sector over fiscal year (FY) 16–FY20 (four times the level in the previous five-year period), with a strong focus on enhancing the resilience of the road portfolio. The WBG will also focus on improving the competitiveness and fuel efficiency of the trucking sectors, promote green freight, and lead a global coalition to develop a framework for sustainable mobility.

Sustainable and Resilient Cities

The WBG will further integrate climate into urban planning, by developing tools and knowledge products through the Global Platform for Sustainable Cities, and aim to roll these out in at least 30 cities by 2020. It will develop and aims to pilot in 15 cities by 2020 a city-based resilience approach that integrates infrastructure development, land use planning, disaster risk management, institutions/governance, social components, and infrastructure investment. It will incorporate principles of integrated urban water management in its urban operations. By 2020, transit-oriented development solution packages will be piloted in at least five cities. The IFC and MIGA will increase investments in municipal transport.

Climate-Smart Land Use, Water, and Food Security

Climate-smart agriculture profiles and investment plans will be developed by 2020 for at least 40 countries, and climate-smart agriculture programs will be delivered at scale, with a focus on hybrid seeds and carbon capture practices, high-efficiency/low-energy-use irrigation programs, livestock productivity, energy solutions for agribusiness, and mainstreaming of risk management. Under the Forest Action Plan, the WBG aims to support Reducing Emissions from Deforestation and Forest Degradation, Conservation of Forest Stocks, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks (REDD+) strategies in more than 50 countries, and develop/implement in 10 countries a large-scale, multisector program promoting "forest-smart" development and mobilizing International Bank for Reconstruction and Development (IBRD)/IDA/REDD+ financing. The WBG will work with its

partners to improve the effectiveness of the various forest climate funds. The WBG will develop a series of area-based operations in climate-sensitive locations, using ecosystem-based adaptation, land restoration, integrated water management, and biodiversity conservation, to maximize the development benefits and the use of carbon sinks. It will implement large-scale national and transboundary programs to promote water efficiency across sectors, and improved water management. Analytical work will be further developed on the energy-water-food nexus.

Green Competitiveness

By 2020, the WBG aims to have assisted 20 countries in enhancing their capacity to innovate in climate sectors and increase industrial competitiveness in response to climate change, including through greening global value chains and trade practices, developing eco-industrial zones, and introducing best practices for standards and labeling. The IFC will intensify its work with entrepreneurs, through incubators and private equity investments, to increase impact and grow the market in climate-smart innovation.

Leaving No One Behind

By 2020, the WBG will aim to (i) help bring access to high-quality hydrometeorological data and early warning systems to another 100 million people in 15 developing countries; (ii) help bring adaptive social protection to an additional 50 million people; and (iii) provide five more countries coverage with integrated sovereign disaster risk financing instruments, including insurance, risk pools, and contingent finance. The Small Island States Resilience Initiative will build capacity, better use the existing fragmented funds, and mobilize increased financing for small island states. The WBG will produce a flagship report on climate change and migration/conflict. The WBG will also strengthen action on climate and health, increase its capacity to respond to the 32 IBRD and 40 IDA-eligible countries that have included health in their NDCs, and integrate climate considerations within its support for universal health care.

Align Internal Processes and Work with Others

With selected partners, the WBG will create, share, pilot, and implement new and innovative solution packages that answer client countries' demands, especially those linked to their NDCs, and continue contributing to the global debate on climate and development. The WBG's internal capacity to respond will also increase. WBG country strategies will take into account climate goals and opportunities, and climate risks. The World Bank will screen all projects for climate risks and account for the social cost of carbon emissions in project evaluations; the WBG will move toward accounting for climate and carbon risks in its operations. In addition, the impact of WBG operations on greenhouse gas (GHG) emissions will be calculated and reported.

The WBG will work with others to benefit from what they do best, and ensure synergies across actors active in the field. The WBG will continue to strengthen alignment and cooperation with multilateral development banks (MDBs) and bilaterals on strategies and work programs; work on mainstreaming principles and reporting with MDBs and the international development finance agencies; strengthen collaboration with leading think tanks, research groups, nongovernmental organizations, and business alliance groups, including on coordinated analytical work and country support; and build on work already started to increase collaboration with the International Monetary Fund on fossil fuel subsidies, carbon pricing, and the fiscal implications of climate change, especially for small island states.

Global advocacy will be stepped up on selected issues where the WBG has an established voice—carbon pricing, mainstreaming climate action, and protecting the poor and vulnerable—with a focus on "how" to deliver rather than "why."

The WBG will align internal processes, metrics, and incentives to support the implementation of the Action Plan. Systematic Country Diagnostics and Country Partnership Frameworks will consider the risks and opportunities created by climate change and countries' climate priorities. Risk screening will be extended to IBRD operations in early 2017, after a review of existing tools and the lessons drawn from application to IDA countries, and will integrate gender considerations into the screening tools. The IFC will start screening some sectors after having tested and validated its climate impact risk screening tool; this is expected to be done by September 2016 and to lay the basis for the IFC's path forward. The WBG will continue to roll out GHG accounting and account for carbon emissions, and resulting risk, in its project evaluations. The World Bank will account for the social cost of carbon emissions in its project evaluations, and the IFC will evaluate such an approach later this year.

Over the next 18 months, the WBG will continue to develop and mainstream metrics and indicators to measure the outcomes of WBG operations, and move monitoring and evaluation from inputs to outcomes, to incentivize a greater focus on leverage.

Easily accessible, consolidated "one-stop-shop" data will be made available to all staff on climate impacts, NDCs, climate finance, analytic tools, and methodologies. Learning modules on climate will be expanded and mainstreamed into the World Bank's core curriculum, and support to the community of practice of climate change practitioners across the World Bank will be strengthened.

The WBG organization is now aligned to deliver on this Action Plan. All WBG units have put in place structures to mainstream climate change into their activities and operations. The IFC has developed a Climate Business Network that includes one climate anchor from each industry department and from each region, advisory, and operational unit. The Climate Change CCSA works with all WBG units to provide targeted, cross-cutting climate support.

1. Context and Rationale

Climate change is a threat to the core mission of the World Bank Group (WBG): to end extreme poverty and increase shared prosperity in a sustainable way. Current weather extremes already affect millions of people, putting food and water security at risk, and threatening agricultural supply chains and many coastal cities. As shown in the WBG's *Turn Down the Heat* reports,[1] climate change will make these events more frequent and extreme. WBG borrowers are exposed to greater climate risks than high-income countries are. Climate impacts on food security are especially strong, for example, in Africa. Lower-income countries suffer disproportionally from natural disasters, with almost half of disaster casualties occurring in low-income countries, and economic losses sometimes exceeding 10 percent of gross domestic product (GDP) in small, vulnerable economies. Specific locations, such as small islands or large cities located in deltas and low-lying coastal zones (especially in Africa and Asia), are at very high risk. As the WBG's *Shock Waves* report[2] demonstrates, without further action to reduce extreme poverty, provide access to basic services, strengthen resilience, and increase adaptive capacity, climate impacts could push an additional 100 million people into poverty by 2030.

Sustaining long-term poverty reduction means that it is essential to meet global climate objectives to keep average temperature increases below 2°C, which in turn requires rapid global action to reach zero net emissions by the second half of the century. There are limits to what adaptation and resilience actions can achieve, and avoiding the long-term threat to prosperity requires stabilization of the climate. Maintaining the increase in global temperature below 2°C would prevent many of the worst impacts of climate change from occurring. Doing so requires urgent action to reduce carbon emissions and increase carbon sinks. Delaying action would significantly increase the cost of keeping warming below 2°C—according to Intergovernmental Panel on Climate Change (IPCC) scenarios, delaying action until 2030 would increase total mitigation costs by 50 percent.[3]

Climate change presents enormous challenges, and opportunities, for development, making it essential that climate and development be tackled in an integrated way. The world needs to feed nine billion people by 2050 while reducing emissions, increasing carbon sinks, and ensuring climate-resilient food security. It needs to provide affordable energy access to the 1.1 billion people worldwide who still live without electricity, while keeping emissions to a minimum and managing a transition away from fossil fuels. New research suggests that more than four billion people already experience severe water scarcity during some part of the year, and climate change will increase water stress in many regions. Countries will have to provide access to mobility using resilient and low-carbon transport modes and systems. Cities will have to welcome two billion new urban dwellers with livable, energy-efficient dwellings, low-carbon transport, good jobs, and appropriate access to services, while reducing vulnerability to climate shocks. Populations need to be

protected against natural disasters and climate-related diseases, even as hazards are expected to increase in frequency and intensity over time. And $90 trillion in low-carbon, climate-resilient infrastructure investment will be needed by 2030—mostly in developing countries. Building more resilient infrastructure is essential to adapting to climate change, but is also likely to increase upfront costs, although it will be cost-effective in the longer run.

There are also opportunities to exploit the co-benefits from climate-smart development. Climate-smart urban planning and public transit can improve the livability of cities; renewable energy and mini grids can provide new opportunities to improve energy access; energy efficiency can reduce energy costs and improve fuel security; and climate-smart agriculture and efficient food supply chains lead to higher agricultural productivity, less waste, and better food security.

Recent global developments favor bold climate action from the WBG. At COP21 in Paris, the world came together and agreed to limit global warming to less than 2°C by 2100, and make best efforts to limit warming to 1.5°C. As part of the Paris process, 140 World Bank client countries committed to implement their Nationally Determined Contributions (NDCs), which outline their actions on climate action. In 2015, the world also committed to the Sustainable Development Goals, the Financing for Development Agreements, and the Sendai Framework for Disaster Risk Reduction. In parallel, many firms made strong commitments before or during COP21: 114 companies announced emission reduction targets; 36 multinationals committed to use 100 percent renewable energy; and more than 1,000 companies are setting up carbon pricing systems.

The negotiators have done their job. The priority in the next few years is to focus on accelerated implementation. COP22 in Morocco will be an opportunity to take stock of the implementation of the first year of these commitments. All these commitments show increasing global demand for climate change action and a mandate and opportunity for the WBG to support countries and companies in meeting these objectives, in partnership with others. At the same time, good policies and technological advances are making more rapid advances possible. Renewable energy prices continue to fall, there is a renewed global commitment to research and development, and the use of big data is enabling cheaper and faster risk assessments. And there is growing momentum behind carbon pricing and ending wasteful energy subsidies. There are large opportunities for WBG interventions.

Notes

1 http://www.worldbank.org/en/topic/climatechange/publication/turn-down-the-heat.
2 https://openknowledge.worldbank.org/handle/10986/22787.
3 See IPCC, 5th Assessment Report, Synthesis Report, http://ipcc.ch/report/ar5/syr/.

2. Climate Change Action Plan: Structure and Drivers

This Climate Change Action Plan demonstrates how the WBG intends to meet these challenges and opportunities. It lays out concrete actions to help countries and companies address current and future climate risks and opportunities, and describes how the WBG will build on its comparative advantage, scale up climate action, integrate climate change across its operations, and better work with others.

WBG climate action will be driven by client demand, focusing on those activities that support the WBG's core mission and build on its comparative advantage. The actions proposed focus on supporting client demand, recognizing that client needs differ. The Action Plan focuses on supporting the WBG's core mission of eliminating extreme poverty and enhancing shared prosperity in a sustainable way. And it builds on the WBG's comparative advantage to tackle complex, multisector problems in an integrated way, combining all of its instruments (funding, knowledge, and convening power), its local presence but global reach and experience, its deep technical expertise and multisector integration, and its ability to work across the public and private sectors.

To get impact at scale, a key focus of the Action Plan is to help to shape policies and national investment plans and leverage the private sector. Financing needs for resilient, low-carbon growth are much larger than available public resources, and WBG resources are small relative to these needs. The investment needs embedded in the NDCs amount to more than $1 trillion per year over the next 15 years, while WBG annual commitments are around $60 billion per annum. Although WBG funding will remain important, policy and institutional support for national investment plans and strategic use of private sector finance to open markets and facilitate increased actions from external investors will be critical to having impact at scale.

To achieve its global climate commitments, the WBG will support transformational changes in multiple domains. While action on the ground will be driven by demand in countries, the Action Plan will accelerate action by driving innovative solutions shaped by WBG global experience in several high-priority areas.

To enable this change, WBG activities under the Climate Change Action Plan are organized along four top-level priorities and four objectives for 2020 (see table 2.1).

The Action Plan is underpinned by five strategic shifts for the WBG's climate work:

- *Implementation*. With Paris behind us, the WBG will shift its focus toward supporting countries, companies, and teams to accelerate implementation, giving more attention to "how" to get results on the ground than on advocacy as to "why" change is needed.
- *Convergence*. The WBG climate and development agendas (including subcomponents like gender, health, and others) will be fully integrated

TABLE 2.1 The Four Priorities of the WBG Climate Change Action Plan, and associated objectives for 2020

WBG Climate Change Action Plan	By 2020, the WBG will have contributed to sustainable poverty alleviation and shared prosperity by building resilience to climate change impacts and policies and decarbonizing development.
Priority I: Support Transformational Policies and Institutions. Deep economic transformations need to be enabled by a supportive policy and investment environment and stronger institutional capacity that redirects investment flows, including public and private as well as international and domestic capital.	**Objective.** By 2020, the WBG will have supported new enabling policies and institutional change in client countries, integrating the development and climate agendas, with a focus on the poorest and most vulnerable.
Priority II: Leverage Resources. Meeting global climate goals will require the crowding in of much higher levels of private sector finance and investment.	**Objective.** By 2020, the WBG will have facilitated larger private capital flows toward resilient and low-carbon projects in its client countries, making the best possible use of concessional climate resources. It will have mobilized at least $13 billion per year in external private sector investments through its operations.
Priority III: Scale Up Climate Action. To accelerate transformation and develop new solutions, the WBG will increase its investments with climate co-benefits, focusing on a few high-impact areas and rebalancing its portfolio with more focus on adaptation and resilience.	**Objective.** By 2020, the WBG will have significantly scaled up its activities with climate co-benefits in multiple sectors and increased its impact in countries through direct investments and the shaping of new and innovative solutions. At least 28 percent of WBG operations will generate climate co-benefits, and at least 75 percent of the scaled-up initiatives proposed in this Action Plan will have had a measurable impact.
Priority IV: Align Internal Processes and Work with Others. The climate challenge can only be met through collective action and partnerships. The Action Plan will strengthen the WBG's partnerships, engage in focused global advocacy, develop and share knowledge and solutions, and align internal processes to support staff in implementation.	**Objective.** With selected partners, the WBG will have created, shared, piloted, and implemented new and innovative solution packages that answer client countries' demands, especially those linked to their nationally determined contributions, and contributed to the global debate on climate and development. WBG country strategies will take into account climate goals and opportunities, and climate risks. The World Bank will screen all projects for climate risks and account for the social cost of carbon emissions in project evaluations; the International Finance Corporation will move toward accounting for climate and carbon risks in its operations.

into strategies and operations, and global objectives, such as climate stabilization, will be distilled into and coordinated with country strategies and operations.

- *Maximum impact*. The WBG will move from measuring inputs to measuring impacts, with better metrics and evaluation. In particular, it will increase its focus on the total resources mobilized and catalyzed, rather than only focus on its own account lending, and adjust internal processes and incentives accordingly.
- *Resilience*. The WBG climate portfolio will be rebalanced with a greater focus on adaptation and resilience, taking into account the contribution of resilience to poverty alleviation and the contribution of development and poverty reduction to resilience.
- *Transformation*. Achieving global climate commitments and protecting the world against the negative impacts of climate change will require a shift from business as usual in multiple domains. The Action Plan will focus on facilitating these transformational impacts.

The Action Plan is based on comprehensive joint preparation by the Climate Change Cross-Cutting Solutions Area (CCSA), Regions, Global Practices (GPs) and other CCSAs, International Finance Corporation (IFC), and Multilateral Investment Guarantee Agency (MIGA). Such preparation ensures ownership: each Region and GP, as well as the IFC, has prepared background analyses (see the appendix). The preparation also includes the IFC Climate Change Implementation Plan and the Africa Climate Business Plan.

The Action Plan has been designed through an iterative process. Agreed actions are a combination of bottom-up proposals from different units and a top-down push for strategic coherence and ambition. The process of development of the Action Plan deepened unit-level understanding of options and led to increased ambition. And the Action Plan promoted IFC-MIGA-World Bank and cross-sector cooperation in the design of high-impact actions (for example, leverage of private capital) and in the definition of regional priorities.

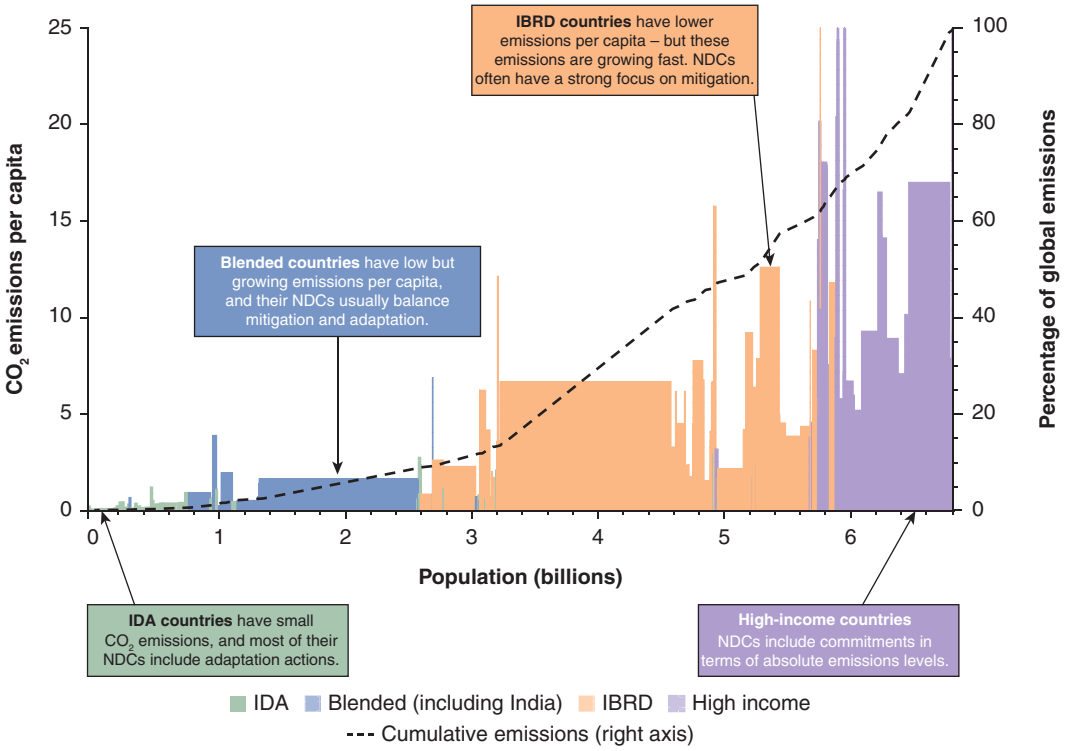
A Demand-Driven Plan

Countries start from different points and have different emission levels, are exposed to different impacts, and therefore need customized actions and support (figure 2.1 and 2.2). Low-income countries currently have very low levels of emissions per capita; they are not expected to implement the same actions as richer countries, although they would benefit from avoiding carbon-intensive lock-ins and a future of high emissions. These differences translate into different climate commitments in the NDCs, and different needs in terms of support that the WBG can and will provide.

Sub-Saharan Africa (SSA) has immense needs for adaptation, food security, resilience, and energy access. Most NDCs in Africa prioritize adaptation. Current WBG climate funding up to FY16 focuses on mitigation, but the WBG's Africa Climate Business Plan aims to raise $16 billion for adaptation investments by 2020, including strengthening the resilience of natural, physical, and human capital, powering resilience, which will focus on improving energy access via renewable energy, and enabling resilience with support for hydrometeorological services and improved tools and capacity for climate-resilient investment planning. The IFC will invest in large-scale renewable energy, green buildings, and off-grid electricity, and will also be looking at developing agricultural adaptation opportunities, which will require new business models and technical assistance.

The East Asia and Pacific (EAP) region contributes a third of carbon dioxide (CO_2) emissions. The region also includes some of the areas that are most vulnerable to climate impacts (for example, small islands). Generation capacity is expected to double by 2030 and, despite a decline in the share of coal, generation from coal is projected to increase by 455 gigawatts (GW) under a business as usual scenario. Forests and landscapes are a key element of the climate challenge in the region and a major focus of climate policies. Current WBG operations are well aligned with the NDCs. A significant level of deliveries is expected

FIGURE 2.1 CO_2 Emissions Per Capita in Countries Ranked by GDP Per Capita



Note: Existing iNDCs become NDCs upon ratification of the Paris Agreement. CO_2 = carbon dioxide; GDP = gross domestic product; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; NDCs = nationally determined contributions.

FIGURE 2.2 Example of Country Typology with Associated Priorities for Action

Large (non-forestry) emitters	Forest countries	Poorer IDA countries	Small islands and most vulnerable countries	Carbon-intensive countries
Common menu of activities to (1) help countries mainstream climate change into development activities and (2) build resilience and adaptation to climate change				
Analytic work on options to support accelerated emissions reductions and support for low-carbon investments and policy reforms	Support growth patterns that significantly reduce deforestation and increase carbon sinks while addressing livelihoods for forest dependent people	Focus on poverty reduction, resilience and energy access, maximizing climate co-benefits, with a view on the long-term to avoid carbon lock-ins and future high emissions	Create specific solutions for low-capacity and extremely vulnerable countries	Help countries manage a transition toward high-efficiency lower-carbon-intensive patterns

Note: IDA = International Development Association.

in FY16, with an expected share of investment with climate co-benefits near 50 percent. The IFC will expand its climate business in urban infrastructure and renewable energy, with an emerging focus on South-South business. The IFC will also build its climate-smart agriculture business in key markets.

Europe and Central Asia (ECA) has countries with high energy intensity, large forest resources, and differentiated vulnerability depending on subregions. The NDCs focus on mitigation, but several also mention adaptation. Current climate action in ECA aims to address energy intensity, green growth, sustainable forestry, sustainable cities, climate resilience, and support for clients' NDCs. There are opportunities to scale up climate funding, especially by tackling high energy intensity, implementing integrated multisector planning, and fostering cross-country knowledge exchange to support long-term action on climate change at the national level. There are private sector opportunities in renewable energy, sustainable cities, and sustainable energy finance.

Latin America and the Caribbean (LCR) is vulnerable to natural disasters and a shifting energy matrix that risks raising emissions through increased reliance on fossil fuels, but is an innovator on climate policies (for example, green growth strategies and carbon tax on fossil fuels in Mexico, and sustainable forest management in Brazil). The region has developed ambitious NDCs with many unconditional pledges, although some action is conditioned on the availability of climate finance. The current WBG climate portfolio already targets climate, mostly mitigation and disaster risk management (DRM), with increasing private sector opportunities in urban infrastructure and agribusiness.

The Middle East and North Africa (MNA) region represents 7 percent of global emissions, but has high per capita emissions in oil-producing countries, and half of the world's energy subsidies. Extreme vulnerability to climate change is linked to water availability and agriculture, sea level rise, and heat waves. The NDCs are often less ambitious than the reforms already underway in the energy sector, which can offer large mitigation co-benefits. The WBG is ramping up its climate co-benefits in MNA from 13 to 29 percent, primarily via mitigation in energy, finance and markets, and transport (93 percent) in FY16–FY17. There is large potential to grow WBG climate co-benefits in MNA in agriculture, cities, and water.

The South Asia region (SAR) is extremely vulnerable to sea level rise, floods, landslides, and agriculture—and rural areas have low access to clean and modern energy services. Between FY11 and FY15, 29 percent of the regional portfolio included climate co-benefits. Transformative action on climate change requires partnership with countries to mobilize additional capital for mitigation and adaptation action. The NDCs suggest large demand for funding for adaptation and mitigation, with private sector opportunities in urban infrastructure, and wind and solar, and potential for sustainable agriculture.

Some regions are preparing bottom-up regional climate business plans, based on known demands and needs. The Africa Climate Business Plan was launched at COP21 in December 2015; other regions are undertaking a similar process, with identification of current demands and needs at the country level. A summary of priorities and key actions per region is included in the appendix. In parallel, the GPs, IFC, and MIGA are working on new solutions to offer our

FIGURE 2.3 Identification of WBG Comparative Advantage

Source: World Bank Group, Forward Look initiative.
Note: WBG = World Bank Group.

client countries and private sector actors, with an FY20 time horizon and based on global knowledge and lessons learned. These solutions will be tailored to country contexts and offered through country-level engagement.

Building on WBG Comparative Advantage

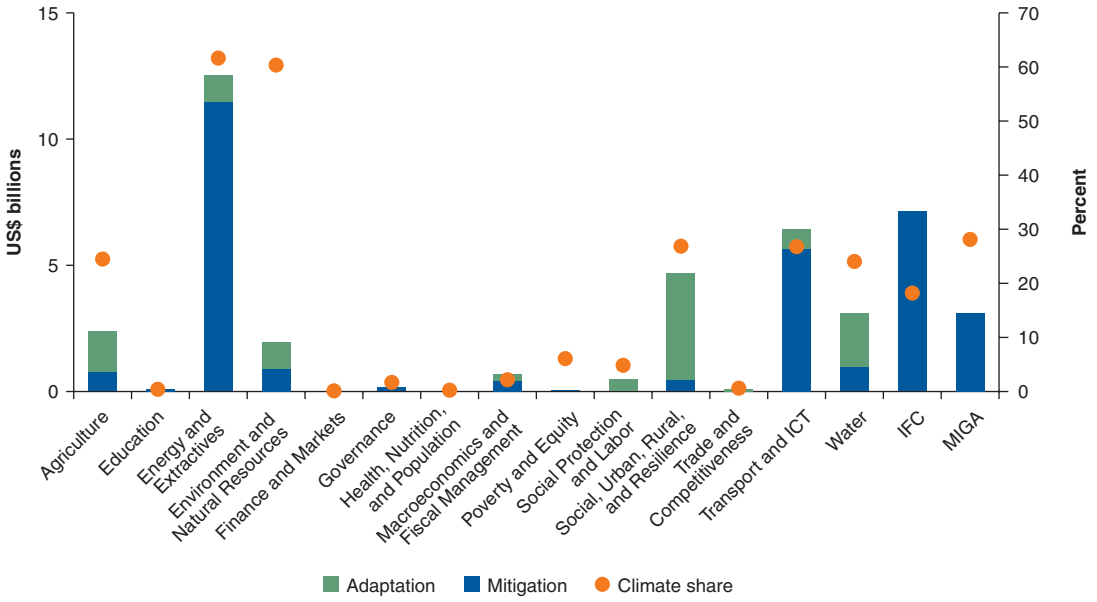
The WBG is uniquely positioned to bring the global climate agenda into the country-level development agenda, and align climate objectives with development. The WBG will focus on combining its knowledge, finance, and convening power in areas of comparative advantage, as identified by the Forward Look Initiative and summarized in figure 2.3.

- *Country AND global.* As a leading provider of globally informed knowledge and solutions, and with a strong country presence, the WBG can develop, pilot, share, and support the implementation of innovative, climate-smart development options and policies, integrating country-level solutions and global experience and advocacy.
- *Public AND private.* As a Group, the World Bank, IFC, and MIGA are uniquely positioned to help develop and implement the public-private collaborations that are required to accelerate innovation and leverage private capital and resources for climate change.
- *Single AND multisector.* As an organization that has engagements with all ministries and sectors, the WBG develops and implements the complex cross-sector and integrated solutions that the climate change challenge calls for.

Building on WBG Experience

The main agencies of the WBG have deployed increasing balance sheet resources and dedicated climate funding to catalyze many projects with significant climate co-benefits.[1] Over the past five fiscal years, the WBG has committed an average of $10.3 billion a year of its own resources, or around 21 percent[2] of commitments, to help developing countries and emerging economies mitigate the effects and adapt to the challenges of climate change. More specifically, in that period, more than $50 billion has been committed by the WBG through more than 900 projects with climate-related activities,

FIGURE 2.4 World Bank Group's Commitments with Climate Co-Benefits by Global Practice and Entity, FY11–FY15



Note: IBRD = International Bank for Reconstruction and Development; ICT = information and communications technology; IDA = International Development Association; IDC = International Finance Corporation; IFC = International Finance Corporation; MIGA = Multilateral Investment Guarantee Agency. FY = fiscal year.

with 27 percent focusing on helping people and countries adapt to a changing climate and 73 percent on mitigating the impact of climate change. The IFC's core climate business nearly doubled between FY11 and FY15, and 27 percent of MIGA guarantees have climate co-benefits.

Climate co-benefits are generated in multiple sectors. Mitigation activities have included investments in renewable energy (solar, wind, geothermal, and hydropower), the promotion of energy efficiency, and changes to urban transportation and railways. Adaptation activities have included projects supporting coastal and flood protection, irrigation and drainage systems, protection for forests and landscapes, and the development of resilient crop systems. Beyond investment funding, the WBG provides policy and technical advice, including on project design. Although technical support to client countries on climate change may be small in financial terms, it can deliver major impacts for low-emission and climate-resilient development. Figure 2.4 provides the breakdown of climate co-benefits per GP and entity. Mitigation action has dominated the current portfolio of projects with climate co-benefits.

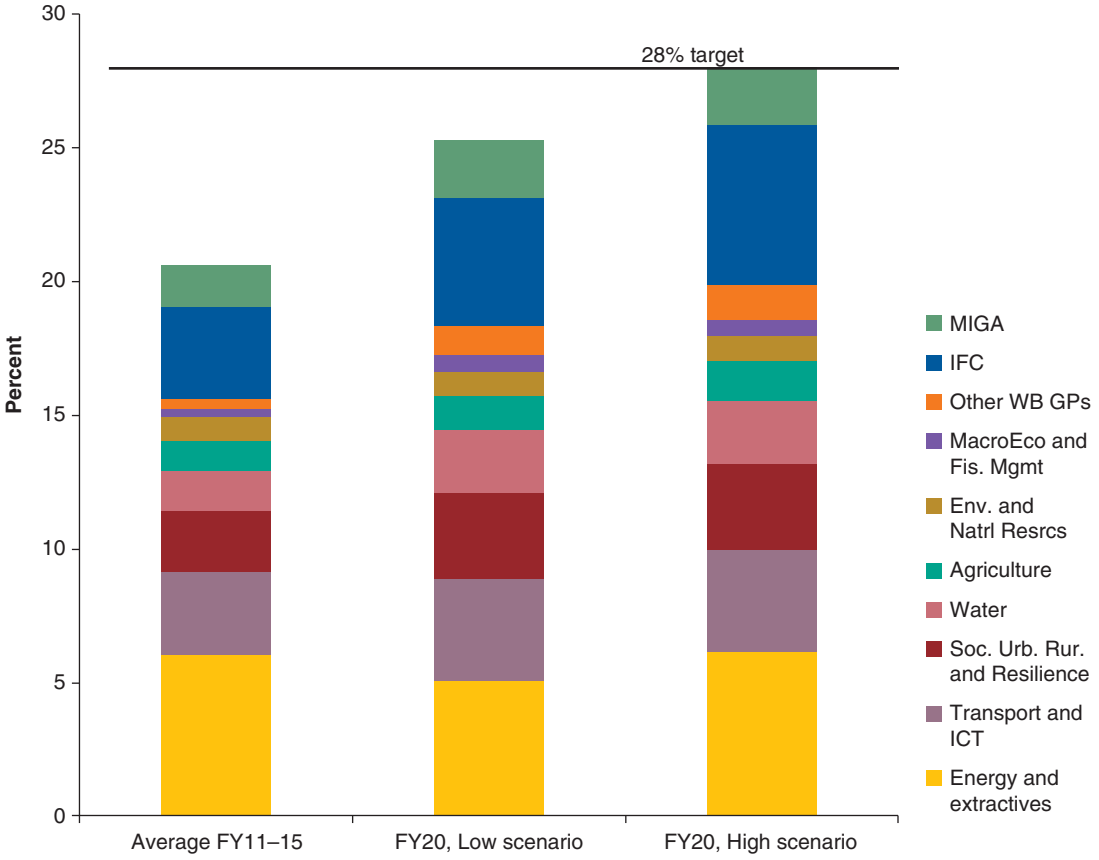
Meeting WBG Commitments

The Action Plan reconfirms the WBG's commitment made at the 2015 Annual Meetings in Lima, Peru, to increase the climate-related share of its portfolio from 21 to 28 percent by 2020 in response to client demand, with total

financing (including leveraged co-financing) of potentially $29 billion per year by 2020. Meeting these targets is conditional on sustained aggregate WBG lending volumes, access to concessional finance, and client demand.

Based on estimates from the GPs, IFC, and MIGA, climate co-benefits could represent 28 percent of total lending by FY20 in a high scenario, and 25 percent in a low scenario. The GPs, Regions, IFC, and MIGA have identified and assessed areas of business growth, based on known and expected demand, under high and low scenarios (figure 2.5). The Action Plan works toward increasing the probability that the high scenario will materialize by (i) supporting demand growth with analytical work and country engagement; (ii) developing innovative solutions based on global experience that will create their own demand (for example, new approaches for resilience, and business models for scaling up renewable energy); (iii) better leveraging concessional climate finance to increase demand and generate more climate co-benefits with WBG resources; and (iv) building new climate business models and markets in key strategic areas where commercial capital needs assistance.

FIGURE 2.5 Target Climate Co-Benefits Generated by the GPs, IFC, and MIGA by FY20



Note: GPs = Global Practices; ICT = information and communications technology; IFC = International Finance Corporation; MIGA = Multilateral Investment Guarantee Agency; WB = World Bank.

Meeting these targets is conditional on sustained aggregate WBG lending volumes, sustained access to concessional finance, and sustained client demand. The WBG's commitment in Lima noted that this is "in response to demand" and "with support of its members." The analysis presented in this Action Plan assumes (i) constant lending volume for the International Bank for Reconstruction and Development (IBRD) (at FY15 levels); (ii) constant volume for the International Development Association 18 (IDA18) (compared with IDA17); (iii) growth in the IFC's own account consistent with the IFC's strategy and business outlook FY17–FY19 (and then a continued 4 percent per year growth to FY20); and (iv) a 10 percent annual growth rate in MIGA's issuance of new guarantees (consistent with MIGA's Strategic Directions FY15–FY17 paper, extrapolated to FY20). Should aggregate lending be lower, then the level of climate co-benefits will be lower than targeted, because of the lower overall lending and the probability that the share of climate co-benefits will be closer to the lower end of the projected range, in the face of competition for scarce resources.

Sustained access to concessional climate finance, blended with WBG resources and private finance, will also be critical to meeting these objectives. In addition, this will require that the implicit client demand for climate solutions be translated into firm demand, in the face of competing demands for non-climate poverty reducing activities. The largest risk in this regard would arise if economic conditions were to remain weak or worsen in several large borrowers, and this resulted in a relative increase in demand for policy reforms, budget support operations, and a higher proportion of social protection lending.

Many actions proposed in the Action Plan will contribute to increasing the share of climate co-benefits in WBG operations. These actions are presented in the following sections, with indicative targets that represent current expectations regarding future demand. These targets are not commitments and they will be adjusted over time. Increasing climate co-benefits does not necessarily crowd out other sector investments. The focus on climate co-benefits tracks the amount of WBG lending that is tagged for climate benefits. Operations so tagged also deliver development benefits in mobility, energy access and security, clean air, agricultural production, etc. Thus, they do not crowd out other investments. However, an increase in climate co-benefits does mean that the relative share of operations with climate benefits will increase, and the share of operations that do not have climate benefits will as a result decline.

Notes

1 That is, projects that contribute to mitigation (by reducing greenhouse gas emissions or increasing sinks) or to adaptation (by reducing the vulnerability of human or natural systems to the impacts of climate change and climate variability-related risks, including by maintaining or increasing adaptive capacity). For this analysis, the WBG uses a methodology for tracking climate co-benefits that is

consistent across multilateral development banks. For all these analyses, the WBG uses the term climate co-benefits. Under the Paris agreement, the United Nations Framework Convention on Climate Change (UNFCCC) will be supporting further work on what counts as climate finance under the UNFCCC agreements. The numbers reported in this paper are related to but may or may not be the same as what is counted for UNFCCC purposes.

2 The three-year rolling average (expressed as a percentage) has been used to assess the share of finance with climate-co-benefits in any given fiscal year. This rolling average is based on the average of the given fiscal year and the rolling averages of the preceding two years. Similarly, the FY11–FY15 average number is calculated by taking the average of the available three-year rolling averages for that period.

3. Priority I: Support Transformational Policies and Institutions

To increase resilience and achieve climate commitments, deep economic transformations will be necessary, enabled by the policy and investment environment and institutions. The WBG will support countries in strengthening their sector-specific and national development planning processes, policies, and expenditure and fiscal frameworks, and in building institutional capacity to enable these transformations (see Box 3.1 for examples). These actions will aim to improve policies and public and private investments. To enhance

BOX 3.1 Mainstreaming Climate Considerations into Policies and Budgets—A Few Examples

Bringing Climate into Investment Plans in the Philippines

The government is scaling up climate financing, building on the recommendations of the Climate Public Expenditure and Institutional Review. The World Bank, with support from the Australian government, is providing technical assistance to the Philippines government to implement these reforms. So far, 53 national government agencies have prioritized and tagged their budget proposals for climate change spending using common guidelines and typology.

Inclusive Green Growth DPLs and the Integrated Disaster Risk Management and Resilience Program for Results in Morocco

The Second Inclusive Green Growth Development Policy Loan (DPL) is focused on policies aimed at preserving the environment and protecting the livelihoods of the most vulnerable citizens, while developing new, climate-friendly job opportunities. In particular, it contributes to higher incomes and improved livelihoods in rural areas, where a substantial part of Morocco's poor and vulnerable live. The Program for Results for Integrated Disaster Risk Management and Resilience supports the development of a "national resilience fund" and aims at establishing a more systematic process within the Government of Morocco to cover risk management activities implemented by central government line ministries (horizontal integration) and local governments (vertical integration).

Partnership for Market Readiness Support to Design iNDCs

Country-specific analysis builds on modeling and analytical work undertaken as part of countries' intended Nationally Determined Contribution (iNDC) formulation process. The Partnership for Market Readiness provides critical technical input to this formulation and helps establish and present a pathway for reaching countries' mitigation targets. As of 2015, the country-specific analytical work is conducted in Brazil, China, Colombia, Costa Rica, Kazakhstan, and Peru.

impact, the WBG will work to build coalitions of partners to support this work in a coordinated way.

Support Countries to Transform Climate Commitments and Priorities into Actions

The WBG will support countries to translate their NDCs into climate actions, and to mainstream climate considerations into policies and budgets. The NDCs are a new and welcome instrument. However, their quality and specificity vary considerably across countries. Building on the analysis already completed of all the NDCs, and requests from several countries for specific support, the WBG will expand its support, on demand, to more countries to translate their NDCs into specific targets, prioritized policy interventions, targeted investment plans, and financing plans. To provide further support for implementation, the WBG will, building on experience in a few countries to date (see Box 3.1 for examples), support client countries in integrating their NDC plans and broader climate considerations into their national planning and budgeting processes. Over time, the WBG will also support, on demand, the design of future NDCs to enable a progressive increase in ambition.

The exact extent of demand for support on mainstreaming NDCs is uncertain. This will be a priority for the WBG, but the speed will be determined over the coming years. Several partner organizations are looking to support countries in this area. The WBG will work to form coalitions to avoid duplication and focus on its comparative advantage. In this regard, the WBG has strong connections with ministries of finance and planning, strong public finance skills, and the ability to bring a multisector and strong analytical perspective and global experience. However, there is a strong role for other partners as well, and the WBG will work closely with others in this area.

The WBG will intensify its efforts to support low-carbon development, including with support to reforms of the energy sector (for example, through development policy financing or the Program for Results), to help client countries deliver affordable and efficient services (energy, mobility, etc.) in a low-carbon manner and in a way that is consistent with their NDCs and global climate commitments. This work will rely on country engagement and analytical work to identify lower-carbon options and pathways, and subsequent policy and investment needs, with a focus on countries where a large increase in energy consumption is expected in the next decades.

The WBG will support resilient development through advisory services, public expenditure reviews, and development policy operations, with a strong focus on ensuring that the vulnerable are protected. The WBG will expand the use of development policy operations to support policy and institutional reforms to strengthen resilience. Based on the *Shock Waves* report[1], poverty impact analysis at the country level will be used to inform climate action, consider distributional impacts, and design ongoing analytical work. Gender considerations will be built into climate risk and policy analysis and support.

To complement the policy and advisory support, the WBG will, in collaboration with others, support building institutions and capacity for climate-resilient investment planning and help countries build resilient and low-carbon alternatives into sector and project decisions.

Get Prices Right

A deep reduction in carbon emissions requires changes in public and private investments, and price signals are an efficient and powerful instrument to redirect investments toward lower-emissions projects and technologies. To accelerate progress and facilitate climate action, the WBG will scale up country-level support and global advocacy to "get prices right" by reducing damaging fossil fuel subsidies, putting a price on carbon, and deepening market-based instruments, and reforming other distorting subsidies. WBG workstreams within this space will be strengthened, including through stronger coordination of instruments and approaches. The resulting changes in the relative prices of renewable versus fossil fuel energy sources, when accompanied by other policy choices and concessional finance, could have a major impact on future energy mixes, ensuring that future capacity growth has a lower carbon content.

In the past five years, the WBG has assisted many governments in assessing and reforming their energy sectors and subsidies (box 3.2), and will continue to do so. Direct fossil fuel subsidies were estimated at $493 billion in 2014, exceeding 1 percent of GDP in 31 countries. When properly implemented,

BOX 3.2 Examples of Successful Energy Sector Reforms

Jordan

The Jordan First Programmatic Energy and Water Sector Reforms Development Policy Loan ($250 million) improves financial viability and increases efficiency gains in the energy and water sectors in Jordan. World Bank development policy financing supports the country's efforts to diversify its fuel supply for power generation and shift power generation from heavy fuel oil and diesel toward cleaner options, through scaling up the development of renewable energy resources and gas-fired generation, increasing energy efficiency in the energy and water sectors, and optimizing the allocation of water resources in an environment of extreme water scarcity.

Ukraine

With support from the World Bank's Energy, Poverty, Social Protection, Social Development, Macro, and Communications teams, the Ukrainian government announced significant increases in gas (470 percent) and heating (260 percent) tariffs for households as of April 1, 2015. The government simplified social assistance mechanisms on February 28, 2015. The government approved a Gas Sector Reform Implementation Plan on March 25, 2015; energy tariff increases and strengthening of social assistance mechanisms are an essential part of the plan. Media coverage of the reform improved, thanks to specific media training sessions.

subsidy reforms can generate large benefits in terms of economic performance and poverty reduction, fiscal savings, and climate co-benefits. The WBG will continue to support fossil fuel subsidy reform on demand in priority countries (work is currently underway in 20 countries), integrating fiscal, social, political, and climate considerations. The current low fuel prices provide an opportunity to reduce these subsidies, but sustainable mechanisms will need to be put in place to keep these prices from rising again when fuel prices increase.

Carbon pricing work will be extended to widen, deepen, and connect markets, with a focus on implementation at the country level. Carbon pricing is increasingly being used to incentivize reductions in greenhouse gas (GHG) emissions (see box 3.3). And an increasing number of private actors are supporting the introduction and use of carbon pricing. However, further efforts are needed to accelerate the increasing coverage of emissions (currently only 15 percent of GHG covered) and ensure the success and efficacy of pricing schemes, including but not limited to their effective price (85 percent of trades cost less than $10/ton). The WBG will work with partners in the coming months to agree on targets for a significant increase, by 2020, in the global share of GHG emissions covered by carbon prices, and a material increase in the effective carbon price in many of those markets. Much of this work will be supported through the convening, knowledge sharing, and analytical work of the Carbon Pricing Leadership Coalition (CPLC), where the goal would be to increase the number of CPLC partner countries to cover more than 75 percent of global GHG emissions by 2018 (up from the current 30 percent), and to have actively supported country-level dialogues in 15 countries by end-2017 and in 30 countries by 2020. Support will be continued for country programs through the Partnership for Market Readiness and extending the work on Networked Carbon Markets. The WBG will continue its influential annual flagship "State and Trends of Carbon Pricing" report. The Heads of State Panel on Carbon Pricing will be supported to expand its work at the global political level. Results-based financing mechanisms, which put

BOX 3.3 Toward Carbon Pricing in Two Countries

Mexico

In February 2014, the Mexican Ministry of Energy announced the possible development of a carbon market in the energy sector. This would complement Mexico's tax on fossil fuel sales, excluding natural gas, which went into effect on January 1, 2014.

Chile

In September 2014, the Chilean Parliament approved the implementation of a national carbon tax. The tax applies to all stationary sources with a thermal input capacity greater than 50 megawatts. The level of this tax is the local currency equivalent of $5/ton of carbon dioxide equivalent.

funding behind innovative market-based instruments such as the Pilot Auction Facility and the Transformative Carbon Asset Facility, will be expanded, and options to scale up these mechanisms will be evaluated.

Work will continue on non-energy subsidies, such as water- and agriculture-related subsidies, and land tenure issues, which will be necessary to align incentives for development, environmental, and climate action.

Note

1 https://openknowledge.worldbank.org/handle/10986/22787.

4. Priority II: Leverage Resources

Delivering on climate ambitions will require significant increases in investments in resilient and low-carbon infrastructure, in the context of a preexisting financing gap. Renewable energy—even when it is cost-effective—requires higher upfront investment; efficient and highly productive cities rely on public transit and resilient water and sanitation infrastructure that are highly capital-intensive; flood management infrastructure implies large investments; and energy-efficient and disaster-resistant buildings are more expensive to build, although the operating savings make up for more than the investment costs. As a result, meeting the development and climate challenges will require a significant increase in investment, and thus in financing, going beyond what public resources can provide. Increasing private capital flows toward developing countries—and toward infrastructure in these countries—is an imperative, making it critical to leveraging public resources.

The WBG already achieves significant leverage of its resources. First, it leverages domestic public resources. Second, it mobilizes private capital through the IFC. And third, the WBG catalyzes public and private, domestic and international resources through, for instance, programmatic interventions to remove barriers, the opening of new markets with "first-of" investments, and piloting of new instruments or technologies.

The IFC systematically mobilizes private sector capital through syndicated loans, asset management companies, public-private partnerships, and IFC initiatives ("core mobilization"). The IFC's climate scorecard includes core mobilized capital, creating an internal incentive to bring in external investors. The IFC brings in additional co-financing by typically financing no more than 25 to 35 percent of the total project cost. Since 2009, the IFC has mobilized $4.7 billion in core mobilization from private sector sources, and catalyzed an additional $30 billion in co-finance, for total climate-related private co-financing of $34.7 billion. These figures represent a 1:3 leverage ratio to the IFC's own account. (Including public sector co-finance, this ratio is 1:4.)

Opportunities for further leverage of private capital will grow, if the right conditions can be met. In 2014, a coalition accounting for more than $24 trillion in assets committed to invest in the low-carbon economy; and a year later, a group of 15 investors with $2.5 trillion in assets under management committed to scale up financing for energy efficiency. However, there are also risks and challenges related to private capital mobilization, including the weak operating environment in some countries, low energy prices in others, and the recent slowdown in economic growth.

Catalyze Private Capital

The IFC's Climate Implementation Plan includes a significant scale-up of IFC own account investments with climate co-benefits, which will also increase

the volume of mobilized and catalyzed private capital. The IFC plans to grow its commitment with climate co-benefits to 28 percent, that is, to $3.5 billion by 2020, from the current level of $2.3 billion—a 50 percent increase in five years. The IFC's biggest impact is not its own account financing, but its ability to bring in external capital for co-investment in climate sectors. The WBG pledged to mobilize $13 billion in external private sector capital annually by FY20. To achieve this private sector co-financing, the IFC will need to increase its private sector leverage ratio from 1:3 to almost 1:4. To do so, the IFC will create products that attract larger institutional sources of capital through aggregation and securitization, create de-risking vehicles that use blended finance, and increase its climate-related public-private partnerships.

The WBG will help to "green" the financial sector through a coordinated and integrated approach across banking, pensions, and capital markets to implement the changes needed globally and nationally. Resilient and effective financial sectors will need to address the risk of climate change for the financial sector, as well as the impact of the financial system on the climate through allocation of resources that could be misdirected, for example, because of fossil fuel subsidies and the absence of carbon pricing. The WBG will expand financing for green investments by working with regulators on the enabling environment; demonstrating the business case and creating green financial champions; using programmatic interventions to remove barriers to financial sector growth and use; promoting the adoption of appropriate environment and social performance standards by pension funds and banks; providing climate credit lines directly to private sector banks; and working with banks and investors/pension funds to identify and build the pipeline in climate sectors, as well as to measure and track their climate investments.

This work includes providing technical advice to banks and pension funds, and integrating green elements into the development of bond markets. The WBG will provide climate finance policy guidance for regulators, including through the IFC-managed platform of the Sustainable Banking Network. The WBG will gather data on whether climate risk threatens the stability of the financial sector (globally but first in poor countries sensitive to climate risk), and develop a performance framework to assess the level of greening of the whole financial system and its contribution to climate change in terms of efficacy, efficiency, resilience, and transparency. By 2020, the WBG aims to have five country programs that can integrate green elements into banking, capital markets, and pension funds.

The WBG will promote continued growth and development of the green bond market, at the corporate, financial institution, and municipal levels. The WBG has already played a significant role in developing a robust, liquid green bond market, reaching $41.8 billion in 2015. The IBRD has issued more than $8 billion in green bonds and the IFC has issued about $4.3 billion. This work will continue. To go further, the WBG will develop and deploy asset-backed, project, and other new classes of green bond issuances, and continue existing work in two or three countries, to implement green elements in ongoing bond market development programs.

Well-designed strategic investment funds (SIFs), with the government as anchor investor, could act as powerful catalysts to crowd in domestic and international institutional investors in large, climate-resilient infrastructure projects, by sharing and mitigating the risk of private investors. By 2020, the WBG plans to work with SIFs in 34 markets, to make them greener and support them in crowding in equity and debt financing from domestic and international institutional investors.

The WBG will also scale up financial leverage in World Bank, IFC, and MIGA operations for resilience and mitigation by (i) improving the preparation, structuring, and aggregation of projects, and (ii) helping rebalance risk-reward profiles or de-risking private investments, for example, through blended finance instruments (such as senior/mezzanine loans, equity, quasi-equity, and guarantee products), asset-backed securities, collateralized loan obligations, or renewables performance insurance. As one example, the objective is to mobilize $25 billion in commercial funds for clean energy between FY16 and FY20, including funds to support up to 20 GW of renewable energy generation.

The WBG will scale up support for project preparation facilities, such as the Global Infrastructure Facility (GIF) and the Africa Climate Resilient Investment Facility, so that they support the creation of resilient or low-carbon projects, and ensure that projects are developed following best practices in terms of resilience and climate change adaptation. For instance, the GIF will encourage its technical partners to include shadow carbon pricing analysis for all projects, where relevant. It will also monitor and report on the portfolio share that delivers climate co-benefits. The GIF's effectiveness and efficiency in supporting climate-smart projects, among others, will be evaluated as part of the facility assessments. And the GIF will pursue operational collaboration with the Green Climate Fund (GCF) and follow the same principles and approach in its design of the Downstream Finance Window. The World Bank, African Union Commission, and United Nations Economic Commission for Africa have teamed up to develop the Africa Climate Resilient Investment Facility to support the integration of climate change into infrastructure planning and design by developing guidelines, providing training, delivering on-demand advisory services, making data and knowledge tools more easily accessible, and ultimately helping attract funding from sources of development and climate finance.

The WBG will also leverage expertise in a coordinated way across the WBG to tackle high-opportunity sectors. It will create "deal teams" to work with countries to deliver transactions at scale by generating a robust pipeline of bankable/investable projects from early stage to financial closure. For selected high-impact opportunities, blended concessional finance may be needed to demonstrate viability and attract private capital. Early-stage ideas include the following:

- *Energy infrastructure.* The idea is to improve infrastructure deal flow and financing by operationalizing the work of the Sustainable Energy for All (SE4All) Finance Committee. By 2020, the WBG aims at working in six

countries, including four IDA countries, to help bundle projects and attract private investors. In FY17, an Infrastructure Management System Delivery Manual will be available to support all teams.

- *Rooftop solar.* The photovoltaic (PV) solar industry has experienced tremendous growth in recent years, driven largely by declining costs and a growing interest in emission-free power. Rooftop installations for commercial, industrial, and residential customers make up a significant volume of total solar capacity, but growth is often held back because financing is unavailable. Creating the conditions for the flow of institutional capital into these smaller systems would have a major impact on scaling the deployment of rooftop solar. The goal is to close two systematic transactions on rooftop solar in two countries by 2020.
- *Distributed energy service companies (DESCOs).* DESCOs provide assets at below cost to customers who pre-pay for energy services. DESCOs have benefited from innovative approaches to establish and monetize client relationships, increased mobile phone penetration, and the falling cost of PV. However, the model requires large sums of working capital and many DESCOs are struggling to finance rapid annual growth. A joint IFC/World Bank team will explore how the WBG can accelerate the growth of distributed solar in SSA. By 2020, the objective is to close two transactions in two countries and crowd in private capital through successful securitization. By 2020, the team expects the number of deployed solar home systems in Nigeria to have increased by 50,000 and the number in SSA by 150,000.
- *Resilient urban infrastructure.* The ability of cities to finance urban infrastructure depends on their: (i) budgets and creditworthiness, (ii) ability to exploit existing assets to finance new ones, (iii) ability to access regional or national government funding streams, and (iv) access to capital markets and private finance. The existing financing gap highlights the challenge to connect the necessary private capital to governments. A WBG "transaction team" would act as brokers, engaging a global network of partners to leverage public/private funding solutions. By 2018, the objective is to close three transactions in more than one country, and by 2020, to close six transactions in two or more countries.

Optimize the Use of Concessional Finance

IDA has had a strong record of supporting climate change activities. Sustained investment in good development outcomes is an important part of building the resilience of poor communities to climate change. Under IDA17, the WBG is contributing to mainstreaming climate and disaster risk in IDA countries' strategies, policies, plans, and investments, and screening all IDA projects for climate change and disaster risks (and where risks are identified, incorporating resilience into project design). It is expected that climate change will continue as an important theme in IDA18, the focus of which is under discussion with the IDA deputies.

The WBG has a strong record of using non-IDA concessional finance to support other resources used for mitigating the impact of climate change (see box 4.1), but existing funding is limited. The Climate Investment Funds (CIFs) supported $9.8 billion of IBRD, IDA, and IFC resources with their own $4.1 billion from 2010 to 2015. Across the multilateral development banks (MDBs), including the WBG, $8.3 billion from the CIFs is on track to

BOX 4.1 Transformational Impact of Well-Used Concessional Climate Finance

Concentrated Solar Power in Morocco

The Moroccan Agency for Solar Energy, the government agency established to realize the country's solar ambitions, used a $43 million World Bank–Global Environment Facility (GEF) grant to test the viability of solar thermal technology at Ain Beni Mathar, in the northeast of the country, and encourage its replication nationwide. This laid the groundwork to scale up and secure the more than $3 billion needed for the Noor-Ouarzazate complex from the World Bank, the Climate Investment Funds' (CIFs') Clean Technology Fund, the African Development Bank, and European financing institutions. The approach accelerated cost reduction and the commercial adoption of large-scale, low greenhouse gas–emitting generation technologies while testing the viability of solar thermal technology to encourage its replication in Morocco and elsewhere.

The China-GEF-World Bank Urban Transport Partnership Program (CUTPP)

The program supports development of a national approach to sustainable urban transport, with activities in 14 cities. Approved in 2008, the CUTPP's $21 million GEF grant has leveraged more than $500 million of investment, including approximately $200 million in World Bank funds. The project has stimulated collaboration among national ministries, including the National Development and Reform Commission, which plays a key role in urban transport.

Increasing Tajikistan's Resilience

Tajikistan is considered the country most vulnerable to climate change in Europe and Central Asia. It is leveraging $60.7 million from the Pilot Program for Climate Resilience (from CIFs), with more than $80 million from development partners for climate-proofing water management and hydroelectric infrastructure, improving institutional capacities for integrating climate resilience into national development and investment planning, and supporting land management measures to enhance rural livelihoods, the latter of which also includes financing from a GEF grant ($5.4 million) and the International Development Association (IDA). Tajikistan's strategic program for climate resilience has become a model for the region, with Central Asian countries engaged in the preparation of the Climate Adaptation and Mitigation Program for the Aral Sea Basin, a platform for increased regional cooperation on climate action.

Supporting Jamaica's First Wind Independent Power Producer

The $10 million from the IFC-Canada Climate Change Program, alongside $10 million from the IFC and the Overseas Private Investment Corporation, financed a 36 megawatt (MW) wind farm

BOX 4.1 Transformational Impact of Well-Used Concessional Climate Finance *(continued)*

in Jamaica, the first renewable independent power producer developed by the private sector in the country. Blended finance was needed to provide a debt package on terms that enable the project to achieve commercial viability at the proposed tariff. The project is expected to demonstrate the bankability of utility-scale wind farms in Jamaica and reduce early entrant costs, particularly on regulatory aspects and legal documentation, for future private sector developers.

Geothermal Power in Kenya

Geothermal is now the largest source of electricity for Kenya. As a result of the government's investment in geothermal energy, since August 2014, the cost of power to industrial and domestic consumers has fallen by over 30 percent. Kenya's plan is to increase geothermal capacity by another 460 MW by 2018. The WBG is the largest development financier of geothermal power in Kenya. Through IDA and the CIF, the World Bank has provided funding for feasibility studies, exploration, geothermal steam development, and construction of power plants. The IFC has supported power generation by private investors, while the Multilateral Investment Guarantee Agency has provided investor risk mitigation.

support at least an additional $58 billion from the MDBs and public and private sources, with $35 billion already committed for projects under implementation. These projects will deliver emission reductions of approximately 1.5 billion tons of CO_2 equivalent over the projects' lifetime—the equivalent of taking 315 million cars off the road—and support more than 30 million people through climate resilience projects. However, the CIFs are already mostly committed, and if they are to continue to play this catalytic role and support the WBG and other MDBs to deliver on their climate mandate, they would need to be recapitalized in the near future.

The IFC has built a solid track record in blending concessional funds alongside its investments in renewable energy and energy efficiency. Over the past five years, the IFC has committed $280 million in concessional finance from multilateral and bilateral sources across multiple sectors and instruments, alongside $1,100 million in IFC investments and $3,800 million from other financiers. The IFC's disciplined blended finance criteria (to ensure additionality beyond what the IFC can do for its own account, targeting and leveraging subsidies to minimize market distortion), and its own account co-investment requirements ensure significant leverage in every transaction. When reviewing all donor fund sources and instruments from FY10 to date, the overall leverage ratio is 1:17. That ratio may become lower if new allocations emphasize challenging areas like infrastructure, agriculture, and IDA countries and fragile and conflict-affected situations. The IFC currently has an unfunded, concept-approved, blended finance pipeline of at least $300 million, mostly in infrastructure projects in Sub-Saharan Africa and MNA, which

cannot proceed because of the lack of (geographically and sectorally) flexible concessional finance. If that financing were available, it could leverage at least $500 million of IFC funds and $1.7 billion from other investors.

There is an ongoing need for concessional finance, IDA and non-IDA, to support the WBG in accelerating the transition from fossil fuels to renewable energy, and expand energy efficiency. Although some renewable energy technologies are now competitive with fossil fuels in several markets, targeted concessional finance will still be needed to accelerate this transition. Concessional financing will help de-risk investments and lower the cost of capital, which is substantially higher in developing countries. Concessional finance can therefore help level the playing field between low-carbon projects and fossil fuel–based technology by addressing viability gaps, such as those associated with high capital costs or different types of risk (such as first-mover risk, technology risk, sovereign risk, and financing risk). In addition, concessional finance will support critical enabling infrastructure, such as transmission, smart grids, and solar parks, to help lower transaction costs and allow higher penetration of renewable energy. Another market barrier that concessional finance could help address is the weak creditworthiness of the power off-takers in many of the markets, which presents a key challenge for attracting private capital.

Concessional finance is also needed to fund the incremental costs associated with "climate proofing" infrastructure investments and for technical assistance and project preparation work. Even if the incremental costs associated with making infrastructure more resilient to climate change impacts result in savings later and are cost-efficient overall, financing higher upfront costs may be challenging, and there is a strong case for this funding to be made concessional in the smallest, poorest, and most vulnerable countries. In many countries, concessional funding is also needed to support the design of policies, strengthen institutional capacity, and prepare projects, all aimed at expanding the pipeline of financeable climate-smart projects. The WBG will also need sustained, ongoing access to trust fund resources—such as the Energy Sector Management Assistance Program (ESMAP) and the Global Facility for Disaster Reduction and Recovery (GFDRR)—to support analytic work, policy dialogue, and project preparation activities.

Additional concessional funds will be key to supporting the WBG in meeting its new climate targets and mobilizing private sector participation at scale. A strong IDA replenishment will be critical to allowing the WBG to meet the climate objectives set out in this Action Plan, which is based on an IDA18 replenishment comparable to IDA17. In addition, the WBG would need to be able to access further non-IDA concessional climate finance, comparable at least to past amounts, for the areas noted. This kind of non-IDA concessional climate funding (especially through the CIFs and bilateral funds such as the IFC-Canada Climate Change Program) has in the past allowed IDA, IBRD, and IFC to finance climate investments that would not have been possible without this concessional financing. The World Bank, IFC, and MIGA are counting on significant non-IDA concessional financial support to meet the targets in this Action Plan.

Although the WBG is working strategically with the GCF and sees possibilities for strong collaboration, uncertainties exist around how this process will move forward and how much concessional finance might be available from this source. There remains a risk of a global shortage of access to leveraged "climate finance" for transformative activities in the critical period from Paris through 2020.

Options are being explored and will be considered in June 2016, at the request of the CIF Trust Fund Committee, for the future role of the CIFs to (i) support the MDBs and help them deliver on their increased climate mandates, and (ii) catalyze action where gaps persist in the climate finance architecture. This will include options for: (i) mobilizing more private sector investments at a larger scale by leveraging finance from institutional investors and through a broader offer of risk mitigation instruments in key infrastructure sectors, (ii) catalyzing private sector investments in resilience, (iii) using innovative financial instruments for natural resources, and (iv) enhancing efficiency in the use of public finance by deploying more targeted concessional finance.

The WBG will work with the Global Environment Facility (GEF) to identify ways to deepen collaboration in the future. The World Bank has been one of the largest implementing agencies for the GEF in the past, with climate change playing a dominant role, contributing substantial leverage to the GEF as a whole, and contributing the largest transformational impacts. Although the total share of GEF funding through the World Bank and other MDBs has fallen over the past two replenishment periods, there are good examples of GEF support that helps enable the WBG to innovate and mainstream climate through larger platforms, like the Sustainable Cities and Amazon Programs, and other investments. The WBG will continue to work with the GEF to mainstream the Paris climate commitments through its ongoing development work, while advocating a continued reduction in transaction costs in the operating model. Under the Paris Agreement, the GEF has been given a renewed mandate on capacity building and support for the NDC process. In the coming months, the WBG will work with the GEF to identify more specific opportunities to collaborate in this regard, especially to support actionable investment strategies.

Going forward and regardless of the available resources, the WBG will further enhance the use of concessional financing to increase impact, and leverage private capital. Countries will need the appropriate combination of concessional development finance, concessional climate finance, and other forms of financial and technical support. Concessional climate finance will be concentrated on the incremental cost of climate action, redirecting investment flows, and maximizing impact. The WBG will also work with partners to ensure that policy options (including pricing), institutional practices, and reforms (such as structured bidding and strengthening of offtake agreements in the power sector) are deployed to minimize the required level of concessional finance. As part of the work being done for the CIF Trust Fund Committee, a "concessionality framework" will be completed by June 2016 to help more systematically guide when and where and how much concessional

finance would be appropriate in different situations. The IFC will continue to use its rigorous screening, established concessionality and financial sustainability principles, and strong governance framework for its blended finance projects.

Although the amounts of climate finance currently available are limited with respect to climate needs, the WBG will continue to facilitate country access to a menu of external climate finance instruments, and work with partners and donors to harmonize, simplify, and rationalize access to concessional finance, especially in forestry, where climate finance remains fragmented, which increases transaction costs. The IFC and the World Bank will continue to coordinate approaches to concessional finance, when the ultimate beneficiary is the private sector, to leverage most effectively the WBG's strengths and minimize market distortions.

Over the coming months, in consultation with its shareholders, the WBG will articulate a more comprehensive, integrated strategy on how to balance the need for a robust IDA18 replenishment with the mobilization and management of non-IDA concessional finance, as well as in relation to IBRD/IFC/MIGA financial capacity discussions in the context of the Forward Look Initiative. These are complex, interrelated strategic questions, and non-IDA concessional resources raise wider strategic issues, which, while very important for the Action Plan, cannot be addressed in its context.

5. Priority III: Scale Up Climate Action

To help client countries meet their development and climate objectives, the WBG will deepen and scale up its action in six high-impact areas: (i) renewable energy and energy efficiency; (ii) sustainable mobility; (iii) sustainable and resilient cities; (iv) climate-smart land use, water, and food security; (v) green competitiveness; and (vi) leaving no one behind. The WBG will in particular increase its action toward resilience and adaptation to climate change.

The actions in each impact area have been selected and prioritized based on (i) where transformation is an imperative to meet client and global climate goals; (ii) where the WBG has a comparative advantage, has been successful, and can make a difference; and (iii) where client demand or appropriate market conditions are observed in some countries or regions. These actions will involve scaling up what works, deploying existing tools where relevant, developing new tools and solutions (often with partners), piloting in selected countries—ensuring replicability and maximizing the demonstration effect—and then rolling out more broadly, based on specific demand. Each high-impact area and its related actions are discussed in turn.

Renewable Energy and Energy Efficiency

Renewable energy and energy efficiency are critical for stabilizing climate change and reaching universal access to energy, and require an integrated approach. Around 1.1 billion people worldwide still live without access to electricity. Providing universal access to affordable, reliable, and renewable energy is vital to ending extreme poverty and promoting shared prosperity, with the lowest possible emissions. To ensure that global warming remains below 2°C, it is critical to accelerate improvements in energy efficiency and more rapidly de-carbonize energy supply. The NDCs announced in Paris go a long way in this direction, but still fall short of the 2°C target. Renewable energy—including hydropower, solar, wind, and geothermal—is instrumental in reaching this goal. However, renewables cannot scale up without the appropriate enabling environment, governance of the energy system, system planning, and the necessary investment in transmission and distribution, in first-of and high-risk generation capacity, and sometimes in non-renewable production.

In the past 15 years, the renewable energy market has grown from 46.8 to 467.9 GW in cumulative capacity. This growth has been supported by significant decreases in the price of renewable energy, coupled with favorable national policies that aim to reduce pollution and increase energy independence. Bloomberg New Energy Finance predicts that non-hydro renewables, just 6 percent of global electricity in 2014, will reach at least 33 percent of global

electricity production by 2040 (46 percent with hydroelectricity), with most of the projected growth (78 percent) occurring in developing countries. The cumulative installed capacity of large, grid-tied solar in non-OECD countries is expected to require about $1.3 trillion in new capacity investment through 2040. Onshore wind is expected to grow in developing countries by 585 percent through 2040, driven by India, with investments of approximately $1.8 trillion. Hydroelectric capacity will also grow in emerging markets, by about 64 percent, needing approximately $1 trillion in the next 25 years.

Energy efficiency investments will also be critical to meeting carbon reduction objectives. These investments are often cost-effective and produce large economic and development co-benefits; many countries have energy efficiency commitments in their NDC. However, challenges remain in implementing business models that work at scale to produce greater energy efficiency. According to the International Energy Agency, 50 percent of the potential for reducing GHG emissions will come from energy efficiency gains.

The SE4All initiative and the WBG's Energy Sector Directions Paper form the cornerstone of the WBG's energy objectives. WBG energy financing has topped $49 billion since 2010, of which more than $21 billion was for energy efficiency and renewable energy projects—of this, $5.8 billion was the IFC's own account investments (see box 5.1). Of the balance of $28 billion, most has been to improve access, sector reform, and transmission and distribution.

BOX 5.1 Promoting Renewable Power Generation and Energy Efficiency

Hydropower in Nepal

The world's second richest country in inland water resources, Nepal can meet not just its own electricity needs, but also serve energy-hungry neighbors like Bangladesh and India. Yet, Nepal's 30 million people remain starved for electricity. One major challenge is to address the grid interface for small and micro hydro plants, so the World Bank—with the Asia Sustainable and Alternative Energy program—provides policy, operational recommendations, and advice on reforms to government and development partners. The World Bank Group (WBG)—through the International Development Association and International Finance Corporation (IFC)—also approved $84.6 million in financing for Kabeli, the first project-financed hydro plant in the country, with support for the Investment Board of Nepal to improve its ability to facilitate the development of hydro projects in line with international standards.

Private Sector Renewable Energy and Energy Efficiency in Turkey

The $100 million invested by the Clean Technology Fund (CTF) alongside the $500 million from the World Bank accelerated the development of small hydro and wind energy facilities, and pioneered industrial-scale energy efficiency through the Industrial Development Bank of Turkey and the Development Bank of Turkey. Following the successful implementation of its initial

BOX 5.1 Promoting Renewable Power Generation and Energy Efficiency *(continued)*

$500 million loan, the World Bank approved an additional $500 million loan in November 2011. Overall, the $100 million in CTF financing leveraged $1.53 billion, and the Development Bank of Turkey and Industrial Development Bank of Turkey were able to attract an additional $1 billion for renewable energy and energy efficiency from other international financiers. The project has financed 960 megawatts (MW) of renewable energy capacity and achieved energy savings of 2,100 Tcal for a total greenhouse gas emission reduction of 3.3 million tons of carbon dioxide equivalent per year.

Concentrated Solar in South Africa

In 2011, South Africa launched a program aimed at awarding 3,600 MW of private sector concessions for renewable energy production, including concentrated solar power (CSP). As is typical with first installations, CSP faced high upfront costs. The IFC's investment in the first two CSP projects—KaXu and Khi—with $41.5 million in concessional finance (CTF) and $154.3 million from the IFC's own account, leveraged an additional $1.2 billion in financing for a total project size of $1.4 billion. The IFC's first-mover position, enabled by strategic use of blended finance, lowered the perceived risk for a new technology and established a track record for CSP that led to a competitive private sector market. Multiple rounds of bids resulted in reduced bid tariffs and project costs for the CSP investments.

Green Building Code and Certification Program

The Excellence in Design for Greater Efficiencies (EDGE) program provides technical assistance to governments and the private sector on mandatory building codes and voluntary certification, to raise the minimum standards of resource efficiency and carbon intensity while incentivizing private sector innovation and leadership. The EDGE program convenes building sector stakeholders around a metrics-driven vision of green buildings as superior financial assets, contributing to firms' profitability and countries' competitiveness. Partnering with financial institutions, EDGE aims to facilitate $91 billion in green investment a year by FY23.

Since FY11, more than 80 percent of IBRD/IDA lending for power generation has been in renewable energy, with fossil fuel investments limited—as guided by the WBG's Energy Sector Directions Paper—to those justified by emergency situations, strong cases for development impacts, or when they support a transition to a cleaner energy mix. The WBG has not financed any greenfield coal projects since FY10. The IFC has grown its grid-tied renewable energy investment business at a compound annual growth rate of 26 percent over the past 10 years, and the IFC's own account investment in green buildings has reached $1 billion (with $400 million mobilization). Between 2013 and 2015, WBG financing brought new or improved electricity supply to nearly 29 million people.

The WBG supports technical assistance through partnerships and trust funds, such as ESMAP and the Global Gas Flaring Reduction Partnership.

Recent tools include the Global Tracking Framework to track progress in countries, and the Readiness for Investment in Sustainable Energy indicators to help countries improve the enabling environment for investing in clean energy and access. The Excellence in Design for Greater Efficiencies (EDGE) Green Building Market Transformation Program provides advice to governments on building codes and supports green building certification (box 5.1). Codes are in implementation in four countries and in development in three. The EDGE certification is available for 125 emerging markets.

Going forward, the WBG will carry out long-term system planning to identify and accelerate the implementation of the most economic low-carbon options in client countries, and support with lending and assistance as appropriate, to help client countries deliver affordable and reliable energy services in a manner that is consistent with their NDCs, the global climate goals, and the WBG's Energy Sector Directions Paper. The WBG will work to lower net carbon emissions from energy generation, transmission, and distribution investment projects, as well as from energy efficiency investments. It will continue to support natural gas in accordance with the Energy Sector Directions Paper.

The World Bank will de-risk renewable energy investments, through policy advice, regulatory reforms, direct investment funding, guarantees, and other products, and by reducing resource risks and using development policy financing, the Program for Results, or technical assistance. The indicative cumulative target will be scaled up 20 GW in renewable energy generation over five years, representing a doubling of current World Bank additions to renewable capacity over the previous five-year period.

Further, the World Bank will facilitate the expansion of renewable energy by supporting grid infrastructure and systems (for example, grid planning, solar parks, electricity market design, and regulations for grid access and operations), with the aim to enable an additional 10 GW of variable renewable energy sources to become integrated into grids over the next five years. This requires improving the ability of power systems to absorb more variable renewable electricity by investing in: (i) smarter transmission and distribution grids; (ii) hydro storage and, increasingly, electric batteries; (iii) natural gas-based generation to balance variable renewable energy, especially where hydro-based storage is not available; and (iv) expansion of power grid interconnections and scaling-up of regional energy trade to allow efficient utilization of renewable energy resources.

The WBG will focus on crowding in private sector funding for clean energy, with the objective of mobilizing $25 billion of commercial funds over FY16–FY20, more than double the amount mobilized over the past five-year period. Crowding in this funding and expanding access to renewables will require a significant volume of concessional finance.

Country-level engagements will be supported by using analytical instruments and tools to engage in upstream dialogue on policies, regulations, and practices. The WBG will support the sharing of good practices, such as the "Scaling Solar" initiative in Africa, which replicates transparent bidding with pre-agreed template documents and stapled finance from IFC, MIGA, and World Bank partial risk guarantees, to reduce payment risk from power

off-takers and concessional financing to buy down costs. The WBG will continue to support the recently announced International Solar Alliance, which brings together 122 countries to share knowledge, technology, costs, research and development, innovation, and project financing mechanisms that reduce financing costs for grid and off-grid solar power.

The WBG will explore opportunities to facilitate and encourage technological innovation in the energy sector. Innovation will be critical to achieving the level of de-carbonization needed for a 2°C world. The exact nature of the WBG's role in this area will be defined over the next year.

The IFC and MIGA will support the growth of grid-connected clean energy by focusing on large hydropower, wind, and solar; continuing to open new markets with "first-of" investments; increasing programmatic interventions to remove barriers; and supporting specific instruments (for example, renewable energy performance insurance). The IFC expects financing for grid-connected renewable energy to remain approximately constant—around $1 billion on average.

The IFC and MIGA will help industrial and commercial clients directly access renewable energy by financing captive power or brokering power purchase agreements, and increasing investments in commercial/residential rooftop solar and off-grid solar home systems. The IFC is developing de-risking tools and renewable energy insurance that will help facilitate additional outside investment in the distributed renewable market. The objective is a net increase in investments in distributed renewable energy, and the opening of new markets.

The World Bank will also ensure that 100 percent of World Bank hydropower and other energy investments are adapted to climate change, and create financial mechanisms to encourage upfront investments in resilient hydropower infrastructure. The IFC will look at resilient hydropower investment opportunities in the private sector, but making climate adaptation the market standard will require time and effort, and concessional finance for some of the first private sector movers will probably be needed.

The WBG will invest in energy efficiency, especially in the built environment. The WBG will increase the share of energy efficiency operations in the WBG portfolio, with an initial scale-up in the urban space, which offers large emission reduction potential and where the clearest scale-up models exist. It will ensure that 50 percent of World Bank infrastructure operations in the urban space integrates energy efficiency measures (and reduces CO_2 and hydrofluorocarbon (HFC) emissions). By 2020, the WBG aims to support at least 10 operations, investing at least $1 billion to promote energy efficiency and resilient building. The WBG will further explore new business models and implementation strategies for further scaling up industrial and residential energy efficiency and utility demand-side management. The World Bank will develop action plans in two demonstration countries to reduce emissions in the health sector.

The IFC will expand energy efficiency credit lines (box 5.2), propose energy efficiency components in corporate loans and green bonds, and increase advisory services for sector-level interventions. It will also ensure that 50 percent of IFC building investments are green certified.

BOX 5.2 IFC Promotes Private Sector Financing for Clean Energy and Energy Efficiency Projects

Energy Efficiency Credit Lines in Brazil

The International Finance Corporation's (IFC's) climate credit lines through local banks help strengthen financial institutions' capacity to on-lend to climate-related projects. In FY15, the IFC provided $100 million from its own account and mobilized an additional $300 million for climate credit lines to Itau Unibanco in Brazil. These funds will be used to on-lend to energy efficiency, renewable energy, and other climate-related loans.

Boosting Sustainable Energy Financing in Lebanon

The IFC together with the IFC–Canada Climate Change Program provided $20 million to Fransabank and its leasing arm, the Lebanese Leasing Company, to promote the first sustainable energy financing in Lebanon. The role of blended finance was instrumental in making this financing package viable, by providing the bank with adequate incentive to offset the additional costs of establishing a new line of business. This project, accompanied by IFC advisory services, is expected to increase energy efficiency and renewable energy investments in Lebanon and set a new standard of sustainable energy financing for other banks to follow.

The World Bank will continue to play a key role as an Implementing Agency of the Montreal Protocol, working to channel Multilateral Fund grants to help countries meet their international regulatory compliance targets, especially where climate impacts and mitigation benefits are highest. The World Bank will support clients to stay at the leading edge of the best feasible technology alternatives to reduce HFCs—which have high greenhouse gas potentials—especially in the refrigeration and cooling equipment manufacturing sectors, in combination with energy efficiency, helping to transform domestic and international markets. The same technical knowledge will be brought proactively into World Bank operations to help teams and clients identify opportunities in the refrigeration and cooling sectors and boost climate benefit goals.

The WBG will work with governments, oil companies, and other development institutions to end ongoing routine flaring of gas at oil production sites around the world by 2030, and to avoid entirely routine flaring at all new oil fields. So far, 17 countries have signed on to the World Bank-led "Zero Routine Flaring by 2030" initiative, as have 20 oil companies and 11 development institutions. The initiative aims to cover at least two-thirds of global gas flaring by 2020, compared with more than 40 percent today. The initiative is important because of flaring's considerable climate impacts: emissions of CO_2, methane, and black carbon (soot). Flaring is a major source of the black carbon that deposits on the Arctic snow and ice cap, accelerating melting. Ending flaring is also good resource management—if converted to electricity, the gas flared around the world could produce more electricity than what is currently consumed on the entire African continent.

Sustainable Mobility

Sustainable mobility is needed to achieve countries' development and climate objectives, and the transport sector needs deeper action on climate adaptation and resilience. Actions to stabilize climate change will fall short if they do not include the transport sector. Investments in low-carbon solutions are urgently needed in the sector, and opportunities exist in the design of public transport, vehicle efficiency, demand management, regional development, and land use. An estimated 30 percent reduction in carbon emissions is thought to be possible by 2030 from new information and communications technologies (ICT). But transport is also vulnerable to climate risk, which can affect the entire transport value chain: new and existing transport systems urgently need greater investment in resilience. The challenge is how to respond to rising global demand for mobility and greater interconnectedness in a sustainable manner while improving the resilience of transport networks. With 76 percent of NDCs including transport actions, there is strong potential demand from clients to address climate change in the sector.

Currently, over FY11–FY15, the World Bank's contribution in transport and ICT to climate benefits is $7.3 billion (26 percent), driven by urban mobility and railways, with a strong regional focus on EAP, LCR, and SAR (box 5.3). Climate co-benefits in adaptation reached $373 million over the period. Transport has the second largest volume of climate co-benefits in the World Bank. The MDBs made a concerted move at the 2012 United Nations (UN) Conference on Sustainable Development (Rio+20), where they pledged $175 billion in loans and grants for more sustainable transport over the

BOX 5.3 Investing in Sustainable Mobility

Cebu Bus Rapid Transit

This $141 million financial package, consisting of loans from the World Bank and the Clean Technology Fund, will help finance the construction of a 23-kilometer bus rapid transit (BRT) system along a major transport corridor in Cebu City in the central Philippines. The corridor spans from Bulacao to Talamban in the city, and will include transit ways, stations, terminals, a depot, and other facilities. Expected to carry 330,000 passengers daily, the new BRT system will improve the mobility of Cebu residents while reducing pollution and increasing travel safety. The project will also install a state-of-the-art computerized traffic management system for the entire city, to ensure smoother overall traffic flow and provide other improvements to integrate the BRT with other modes of transport.

Mozambique Roads and Bridges Management and Maintenance Program

Phase II of this project is addressing the increased vulnerability of road infrastructure to floods and cyclonic activity through: (i) the preparation of national design and construction standards that enhance climate resilience; (ii) the piloting of improved road designs; and (iii) "building back better" 196 kilometers of road damaged by the Limpopo floods in January 2013.

2012–22 decade. At COP21 in Paris, the MDBs joined forces to commit to ramp up climate action in transport.

The WBG will help countries develop sustainable mobility alternatives and implement transport adaptation options, especially in lagging regions. The WBG will increase the share of the transport portfolio that contributes to mitigation and resilience. It will pursue sustainable urban mobility opportunities across all regions and multimodal freight operations in several portfolios. It aims to reach $2 billion in lending for adaptation over FY16–FY20 (four times the level in the previous five-year period) and enhance the resilience of the road portfolio. The WBG will partner with the GFDRR and other donors to create a knowledge platform to build climate resilience in the roads sector. The IFC will build on existing engagements with municipal clients and develop new relationships with creditworthy cities that are looking to address congestion and mobility issues.

This scale-up of investment will be paired with targeted analytical work, to provide advisory services to countries that need support for identifying specific interventions in the transport sector (for example, for future NDCs and trucking, fuels, and vehicles). In particular, the WBG will focus on improving the competitiveness and fuel efficiency of the trucking sectors and promoting green freight, and on investing in capacity building on adaptation.

The WBG will lead a global coalition to develop a framework for sustainable mobility. The World Bank has been tasked with leading the transport track of the Climate Action 2016 Summit, which will take place May 5–6, 2016. This will deepen and expand the multi-stakeholder action coalitions launched at the UN Secretary-General's Climate Summit in 2014. The summit provides an opportunity to link the transport-related climate change and sustainable development agendas, and bring coherence and clarification of goals to the international community.

Sustainable and Resilient Cities

Cities are hotspots for global emissions and climate vulnerability. With more than 80 percent of global GDP generated in cities, urbanization can contribute to sustainable growth. Significant urbanization is expected in the coming decades in all regions. Cities are responsible for 80 percent of GHG emissions, and up to 80 percent of adaptation costs are expected to be borne in urban areas. Building sustainable and resilient cities requires an integrated and multisector approach that combines planning, policies and regulations, and investments. Delayed action would create lock-ins in high-risk or carbon-intensive patterns. In particular, buildings offer a large potential for immediate, cost-effective action with short-term development gains through lower energy expenditures, better comfort, and higher resilience. Tackling urban development in an integrated way is essential for meeting climate change mitigation and adaptation challenges and is in line with many countries' NDCs.

In the past 10 years, World Bank commitments for cities almost doubled, to an annual average of $4.11 billion (FY09–FY13) and several resilient cities

initiatives have been established. The urban strategy aims to ensure that urbanization is managed for resilient, inclusive, and sustainable growth (box 5.4). Urbanization Reviews have been completed in 14 countries. The WBG helps reduce the climate impact on cities through investments in waste, water, transport, and buildings. The Global Platform for Sustainable Cities promotes an integrated approach to sustainable urban planning and management and will serve as a key knowledge platform to connect and support

BOX 5.4 Promoting More Resilient and Sustainable Cities

Metro Manila Flood Master Plan

After the massive flooding in 2009 in the wake of tropical storms Ondoy and Pepeng, with the technical and financial support of the World Bank, the Philippine government prepared a Flood Management Master Plan for Metro Manila and Surrounding Areas. The plan, approved by the National Economic and Development Authority Board on September 4, 2012, proposes a set of priority structural and nonstructural measures to provide sustainable flood management up to a certain safety level. The total estimated cost for the implementation of the Master Plan is about ₱352 billion (about $8 billion) over a 20- to 25-year period. The World Bank will support the implementation of part of this plan.

Ho Chi Minh Flood Risk Project

The $436 million Ho Chi Minh City Floods project (FY17) will strengthen the ability of Ho Chi Minh City and its people, economic assets, and commercial businesses to withstand the impacts of natural hazards and climate change. The project will strengthen the capacities of urban integrated flood risk management, including urban planning, institutional coordination, flood forecasting, and early warning systems, at the city and provincial/regional/national levels.

Emergency Urban Environment Project in Benin

The World Bank is supporting Beninese municipalities as they work to improve sanitation conditions in the cities of Cotonou, Abomey-Calavi, Ouidah, Porto-Novo, and Sèmè-Podji. These joint efforts will create better living conditions for 1,426,000 beneficiaries and reduce by 30 percent the number of households vulnerable to flooding. Benin's local governments are also benefiting from training and technical assistance that will help boost disaster preparedness.

Nanchang Urban Rail Project

In June 2013, the World Bank approved a loan of $250 million to support the development of an urban rail line in Nanchang Municipality in Jiangxi Province in China, a city that has expanded rapidly in recent years. The project finances construction and equipment for urban rail Line 2 (24 kilometers and 21 stations), as well as technical assistance to improve ridership levels, increase land value around stations, and improve financial management for the Nanchang Urban Rail Company. The project will directly benefit about 506,000 people, providing efficient accessibility to their homes, jobs, and better urban services in terms of speed, safety, and commuting quality, and will result in lower carbon emissions.

integrated solutions. The Resilient Cities Program aims to help cities adapt and withstand shocks while maintaining essential functions, with CityStrength Diagnostic and City Creditworthiness Academies. ESMAP's City Energy Efficiency Transformation Program helps identify, develop, and mobilize financing for investment programs in urban energy efficiency. Through its focus on climate-smart urban development, the IFC has invested in transport, waste, and green buildings—for example, with investments in public transit deals in the cities of Izmir and Istanbul in Turkey (with MIGA), and Bogotá in Colombia and Lima in Peru, through the IFC's subnational lending program.

Going forward, the WBG will further integrate climate into urban planning. The WBG will support cities directly and by developing tools and knowledge products through the Global Platform for Sustainable Cities, and roll these out in at least 30 cities by 2020.

The WBG will develop and pilot in 15 cities by 2020 a city-based resilience approach that integrates infrastructure development, land use planning, DRM, institutions/governance, social components, and infrastructure investment. It will scale up the cross-GPs team that provides assistance to task team leaders (TTLs) on incorporating the principles of integrated urban water management (multi-stakeholder, integrating urban, environment, water supply, sanitation planning, and investments) to improve efficiencies and outcomes, to ensure climate resilience.

To ensure consistency between infrastructure development and urbanization, the WBG will develop and pilot solution packages for transit-oriented development. By 2020, transport-oriented development solution packages will be piloted in at least five cities. The IFC and MIGA will increase investments in municipal transport, leveraging advisory engagements to create the pipeline.

Climate-Smart Land Use, Water, and Food Security

Climate-smart land use is central for food security and resilience, poverty reduction, GHG emission reductions, and natural resource protection. More than one billion people are undernourished today; the world will need to produce at least 50 percent more food by 2050. With current practices, the world will face a 40 percent shortfall between the forecasted demand and available supply of water by 2030. Climate-smart land use, applied across the agricultural, forestry, fisheries, and conservation sectors, can increase food production and farmers' income while offering large opportunities for climate resilience, emissions reduction, more sustainable water use, and carbon sequestration. Land use–related emissions currently represent 19 to 29 percent of global GHG emissions, over half of which is caused by deforestation. At COP21, leading global agribusiness leaders outlined their ambition to make 50 percent more food available and strengthen the resilience of farming communities while reducing GHG emissions by 50 percent.

Climate-smart land use includes different components: (i) climate-smart agriculture, an approach to better managing the food and agricultural system to simultaneously increase productivity and resilience, and reduce GHG emissions (box 5.5); (ii) forestry; (iii) land restoration; (iv) ecosystem-based adaptation and coastal area management projects; and (v) improved water management, including groundwater. These actions all seek to enhance the ways in which our natural capital can protect people's assets in the face of climate change, and enhance their incomes through ecosystem services, water supply, and flood protection.

The WBG has a large portfolio in agriculture, water, forestry, and environmental management. Currently, the WBG is scaling up climate-smart agriculture, has been financing many projects with forestry components, and has played a catalytic role in sustainable land management. In 2015, the WBG committed $8 billion ($4.7 IBRD/IDA and $3.2 billion IFC) to

BOX 5.5 Examples of Projects Promoting Climate-Smart Agriculture

Climate-Smart Agriculture in Vietnam

In Vietnam, rice is a major source of greenhouse gas (GHG) emissions, irrigated rice farming being the largest contributor. The Agricultural Competitiveness Project introduced farming practices that: (i) reduced water use by 20–25 percent and fertilizer use by 10–15 percent; (ii) reduced GHG emissions by 30–35 percent, equivalent to six tons of carbon dioxide (CO_2) per hectare; (iii) are being scaled up to an area of 250,000 hectares of core rice zones involving 200,000 smallholder rice farmers; and (iv) expect to avoid the emission of about 2.5 million tons of CO_2 over five years.

National Dairy Support Project, India

Dairying is a major source of livelihood for a large part of the population of rural India. Milk and milk products are also an important part of food and nutritional security for more than one billion Indians. The project will support long-term investments in animal breeding, extensive training of dairy farmers, and doorstep delivery of artificial insemination and ration balancing advisory services. Balancing animal feed and nutrition has the potential not only to increase milk yield, but also to contribute to reduced methane emissions.

West African Agricultural Productivity Program in Senegal

A lack of rainfall during Senegal's planting season has led to withered crops and low yields, obliging farmers to reseed in an effort to recover their losses. An emergency program initiated by the World Bank's West African Agricultural Productivity Program is providing one-time subsidies on the sale of almost 2,000 tons of certified maize, millet, and sorghum seeds. The subsidized seeds produce higher yields, are more drought-resistant, and have shorter maturity cycles.

agriculture and related sectors; 42 percent of the Agriculture GP's pipeline projects deliver climate-smart agriculture, and the World Bank has committed to 100 percent of agriculture operations being climate-smart by 2019. The World Bank portfolio also includes approximately $22 billion in lending in the water sector. The WBG has financed $15.7 billion in projects with forestry components (2002–15), and manages about $2.2 billion in climate finance for Reducing Emissions from Deforestation and Forest Degradation, Conservation of Forest Stocks, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks (REDD+). In sustainable land management, the WBG has played a catalytic role from China to Ethiopia, and committed at COP21 to restore 100 million hectares (ha) of degraded land in Africa, at a cost of approximately $750 million. In coastal zones, the WBG has $1 billion in projects with resilience and coastal fisheries benefits.

Going forward, the WBG will deliver on climate-smart agriculture at scale to increase the efficiency and resilience of food systems. Climate-smart agriculture profiles and investment plans will be developed by 2020 for at least 40 countries, and climate-smart agriculture programs will be delivered at scale under six focal areas: (i) the introduction of hybrid seeds and carbon capture practices for major crops, including scaling of agroforestry, in three regions; (ii) the implementation at scale of high-efficiency/low-energy-use irrigation programs in the Africa, South Asia, and Middle-East and North Africa regions (AFR/SAR/MNA); (iii) livestock productivity increases through "feed and breed" and simultaneously pursuing emission reductions with manure management/biodigesters; (iv) leveraged private capital and purchasing to increase the medium-term capital flow for producers, to develop resilient supply chains, aimed at having at least 10 initiatives linking food supply chains with smallholders, thereby increasing resilience and reducing emissions by 2020; (v) energy solutions for agribusiness (for example, solar and biogas); and (vi) mainstreamed risk assessment and management, including using suitable insurance products. The IFC will examine how to increase agricultural adaptation investments, including building resilience into agricultural supply chains. Investments in the agricultural sector are expected to require concessional finance and innovative financing models, such as weather index insurance.

The WBG will also scale up its interventions on forests via the implementation of the new Forest Action Plan (FAP) FY16–FY20. The Forest Action Plan seeks to fully embed forests in the development priorities of countries, by focusing more deliberately on the positive contributions that forests make to poverty reduction, food security, economic development, and the climate action agenda. The FAP builds on an in-depth assessment of the WBG's forest portfolio over the FY02–FY15 period as well as a detailed analysis of the emerging demands coming from clients (in particular through their NDCs). The FAP articulates the WBG's value proposition to tackle the forest challenge with sustainable results, and identifies two focus areas for WBG engagement for the next five years: (i) sustainable forestry, where the WBG aims to have investments contributing to sustainable management of forests and value chains, and (ii) forest-smart interventions, where the WBG aims to

have interventions in other sectors not come at the expense of forest capital. These two focus areas build on three cross-cutting themes that aim to improve the enabling environment and strengthen the foundations for positive forest outcomes: climate change and resilience, rights and participation; and institutions and governance.

Under the first focus area, priority actions are to (i) protect and optimize the management of natural forests, (ii) encourage sustainable plantations and tree planting, and (iii) support sustainable forest value chains (for timber and non-timber forest products). Under the second focus area, the WBG aims to support clients to promote growth that does not come at the expense of their natural forests, and that properly values and recognizes the contribution of forest services to the economy; it will aim to promote forest-smart interventions in other sectors (such as agriculture, transport, energy, and extractives) that consider avoiding or minimizing their potential adverse impact on forests. To do so, interventions in forests and other economic sectors will be guided by comprehensive, ex ante, and robust information on potential trade-offs for forests as well as opportunities for restoration. By 2020, the WBG aims to support REDD+ strategies in more than 50 countries, develop/implement a large-scale, multisector program promoting "forest-smart" development and mobilizing IBRD/IDA/REDD+ financing in 10 countries, and prepare Country Forestry Notes in at least 20 countries.

The WBG will also work with partners and donors to improve the effectiveness of forest climate funds, to reduce transaction costs and increase impact. In the short term, it will work to improve country-level coordination, whereas in the medium term it may need to work toward rationalization of funds and financial innovation to improve the performance of results-based instruments while addressing short-term investment funding needs.

The WBG will produce a series of area-based operations in climate-sensitive locations using ecosystem-based adaptation (natural infrastructure), land restoration, integrated water management, and biodiversity conservation, to maximize the development benefits and carbon sinks (the target is five operations in 2020) (box 5.6). It will strive to integrate landscape-scale planning into infrastructure planning, support the clarification of property rights, improve land use controls, and include considerations of climate impact inequality. The World Bank will also ensure that 50 percent of adaptation projects include ecosystem-based adaptation measures by 2020. Moreover, the WBG will continue to play its role as a strategic partner in many international efforts, like the Bonn Challenge, Global Landscape Forum, and Wealth Accounting and the Valuation of Ecosystem Services global partnership on ecosystem services and their valuation. By 2020, actions will be underway to restore 20 million ha in LCR and 100 million ha in Africa, with results seen by 2030; 15 landscape restoration operations will have been developed in Central Asia, Indonesia, Tunisia, and Vietnam; and environmentally sustainable livelihood alternatives will have been implemented in 50 coastal communities in West Africa.

The WBG will also promote climate-proof fisheries management by focusing on critical marine ecosystems in the face of climate-induced

BOX 5.6 Leveraging Natural Capital to Maximize Development Benefits

Biodiversity Conservation and Rural Livelihood Improvement in India

This $31 million project, financed by the World Bank, Global Environment Facility (GEF), and Government of India, helps address extreme poverty and supports economic growth through conservation-focused models at a landscape scale. The project seeks to demonstrate the benefits of landscape conservation approaches at two pilot sites, then to scale up and replicate these successes elsewhere, while strengthening knowledge management, capacity, and coordination at the national level.

Amazon Sustainable Landscapes Program

This program, recently approved for funding by the GEF, aims to protect globally significant biodiversity and implement policies to foster sustainable land use and restoration of native vegetation cover in Brazil, Colombia, and Peru. The program aims to maintain 73,000,000 hectares (ha) of forest land, promote sustainable land management of 52,700 ha, and support actions that will help reduce carbon dioxide emissions by 300 million tons by 2030. Together with the World Bank, as lead agency, the World Wildlife Fund and the United Nations Development Programme will be implementing the program, which builds on decades of work in the Amazon by governments, bilateral and multilateral agencies, civil society organizations, and private donors, but, for the first time, takes an integrated and coordinated approach to protecting a significant portion of the Amazon ecosystem.

Mekong Delta Integrated Climate Resilience and Sustainable Livelihoods Project

The proposed project is envisioned to be the first phase of a long-term World Bank engagement in the Mekong Delta to strengthen integrated climate-resilient management and development across different sectors and institutional levels. The project will comprise a combination of structural and nonstructural investments, and be informed by the World Bank-financed Building Resilience in the Mekong Delta technical assistance. It has been proposed that the project spans a period of six years and be financed with $330 million ($300 million from the International Development Association and $30 million from the Government of Vietnam).

changes (for example, higher water temperatures, increased salinization, and shifting currents). This includes the development of better monitoring systems, research, and capacity to make more informed decisions, and the strengthening links with the "blue economy." The expanded approach will be piloted in 10 regionally diverse but heavily fisheries-dependent countries by 2020.

The WBG will implement large-scale national and transboundary programs to promote water efficiency across sectors, improved water management (including groundwater), and allocation mechanisms (box 5.7). It will also produce analytical work on and provide support to countries in developing an integrated water-energy-food nexus.

BOX 5.7 The Niger River Basin Management Project

In the Niger Basin, countries understand the need for investment and cooperative action to overcome the water and development challenges they face and to build climate resilience. In addition to their own national-level plans and investment pipelines, the countries have taken several important steps toward shared planning, management, and development of the Niger Basin, including establishing the Niger Basin Authority (NBA); approving the Niger Basin Water Charter in 2008; and developing and approving the Sustainable Development Action Plan (SDAP) in 2007, which emphasizes development of socioeconomic infrastructure, preservation of ecosystems in the basin, capacity building, and stakeholder participation. A related $8.2 billion investment program was adopted in April 2008.

Building on this momentum, the Niger Basin countries asked the World Bank to support their efforts to prepare an "Investment Plan for the Strengthening of Resilience to Climate Change in the Niger River Basin" (CRIP), to identify and elevate the visibility of the important climate adaptation and resilience investments that are needed in the Niger Basin. CRIP, as a subset of SDAP, was prepared through a thorough participatory process, including the nine Niger River riparian countries and led by the NBA, with support from the World Bank and the African Development Bank, and launched during the COP21.

The World Bank is now in the process of assisting the NBA and Niger Basin countries in grouping the first priority actions into thematically homogeneous packages. These themes include (i) climate-dependent rural livelihoods, (ii) climate variability, and (iii) water stress (as well as a few other actions that aim at reducing the Niger Basin's vulnerability to soil degradation and the rising sea level). Underpinning each of these themes is a critical Knowledge and Governance package, which includes vulnerability assessments, integrated adaptation, resilience planning for national and regional institutions, and hydrometeorological information and systems. The World Bank is considering mobilizing a significant amount from International Development Association resources—on the order of $275 million under the first theme—and helping the NBA and Niger Basin countries mobilize the required amounts for the other two themes.

Green Competitiveness

Green competitiveness offers large potential for development benefits and is an important building block for the transition toward zero net emissions. There is growing demand from client countries to involve their private sectors in emerging green business lines and create green jobs. Currently, the Climate Technology Program has seven Climate Innovation Centers around the world, helping nearly 300 companies to scale up innovative and commercial climate solutions. Today, the IFC's Venture Capital group has $122 million invested in 12 climate-related businesses in its portfolio, including in energy storage, agriculture, and software companies, in addition to the solar home system companies.

Going forward, the WBG will support green, innovative sectors in developing countries. There is demand from client countries to involve their private

BOX 5.8 Supporting Innovation in Energy Storage

The International Finance Corporation (IFC) helps build markets for new technologies by providing early-stage equity to companies that serve key emerging markets. In October 2013, the IFC invested $7 million in Fluidic Energy, which makes rechargeable metal-air batteries. These batteries are designed to back up telecom networks in Indonesia, which otherwise would require diesel generators or lead-acid batteries. The company aims to expand its reach in Asia and enter markets in South America.

sectors in growing climate-related sectors and create jobs. The market is large: up to $6.4 trillion will be invested in climate-related sectors in developing countries in the coming decade, including energy efficiency, water supply, and climate-smart agriculture. In 2015, clean tech venture capital investments grew to $3.3 billion. In some countries, the WBG would support more systematic analytical/advisory work on the role that green and climate-smart development can play as a new driver of growth.

The WBG will support innovation in emerging clean tech markets, enhanced industrial competitiveness, and business and entrepreneurs (see box 5.8 for an example). The WBG will pilot innovative approaches to support clients' climate technology ecosystems and industrial competitiveness by facilitating policy and regulations to catalyze private investment and green trade. It will respond to market failures exacerbated by climate change, with solutions to reduce energy consumption, water use, and waste in industrial processes, thereby realizing a sizable reduction in industrial emissions and increasing competitiveness. Further opportunities with equipment manufacturers and through supply chains will be developed. By 2020, the WBG aims to have assisted 20 countries in enhancing their capacity to adopt new climate solutions and increase industrial competitiveness in response to climate change. This assistance aims to include eight new Climate Innovation Centers and support to 10 countries to increase industry resilience to climate change. Areas of focus will include greening global value chains and trade practices, establishing eco-industrial zones, and developing best practices for standards and labeling.

The IFC will intensify its work throughout the finance value chain for entrepreneurs, from incubators through private equity, to increase its impact and grow the market in climate-smart innovation. By 2020, the IFC will have increased its early-stage investments in key new markets, including the Internet of Things, distributed systems, and business model innovation.

Leaving No One Behind

In recent years, the WBG has focused on policy development to support the people most vulnerable to climate change (box 5.9). Poor people are more exposed, more vulnerable, and less able to cope with and recover from climate shocks. The WBG will be a voice for the poor and vulnerable, and ensure that

BOX 5.9 Resilience Interventions that Support the Poorest and Most Vulnerable

Africa Hydromet Program

The World Bank, in close partnership with World Meteorological Organization and other donors, is scaling up its support to hydromet modernization. A new, innovative, "Strengthening Climate and Disaster Resilience in Sub-Saharan Africa" $80 million climate and disaster resilience initiative for Sub-Saharan Africa was launched in June 2015, to help strengthen resilience to extreme weather events. The purpose of this support is to enhance systematically country and regional capacities to manage climate and disaster risks and leverage disaster risk management entry points to promote long-term, resilient development.

Productive Safety Nets Program in Ethiopia

Ethiopia's Productive Safety Nets Program (PSNP) program, which has been financed by the Government of Ethiopia, World Bank, and 11 development partners, has proven its effectiveness multiple times since it was set up in 2005. A unique feature of the program is that it responds to local and larger scale shocks. After the 2011 drought that affected East Africa, the program expanded coverage to an additional 3.1 million, reaching 9.6 million beneficiaries in two months. More recently, PSNP has yet again reacted effectively to the 2015 drought, by providing three rounds of cash transfers to 624,000 people in the country's highlands.

Uttarakhand Disaster Recovery Project

The World Bank's Uttarakhand Disaster Recovery Project was put in place to help with recovery after the 2013 flash floods in Uttarakhand, India. World Bank teams helped communities better understand the recovery policies and engage in the project by communicating more in the local language, and promoting transparency and accountability. In addition, model pre-engineered houses were constructed in each district headquarters, and communities were invited to examine them. With a greater sense of ownership and understanding of the available options, more than 50 percent of the project beneficiaries started rebuilding their own houses within six months of the project cycle.

Eastern Caribbean Islands Test Ways to Adapt to Climate Change

In Saint Vincent and the Grenadines, a newly installed desalination plant addresses water scarcity on the island of Bequia, powered by a photovoltaic system. In Dominica, a technical irrigation scheme was implemented and the National Park Management prepared plans to mainstream climate change. In Saint Lucia, a large tourist resort has installed a rainwater harvesting and wastewater organic load reduction system, and a flagship building was retrofitted to withstand hurricanes.

climate policies and impacts do not slow down poverty reduction. Extremely vulnerable groups include the very poor—those without access to basic infrastructure services and social protection—children, women and the elderly, indigenous populations, refugees and migrants, and people living in extremely vulnerable areas such as small islands and deltas.

IDA is one of the largest sources of assistance for the world's 77 poorest countries, 39 of which are in Africa, and is the single largest source of donor funds for basic social services in these countries. In the fiscal year ending June 30, 2015, IDA commitments totaled $19 billion (including climate and non-climate operations). Since 2005, the IFC has committed $3.5 billion in 219 climate projects in IDA countries and in FY15, 50 percent of the IFC's blended climate finance co-investments went to projects in IDA countries. Climate change is one of the four thematic areas in IDA17, and IDA action helps build poor people's resilience.

The WBG has targeted action on some of the groups most vulnerable to climate change, particularly through (i) the REDD+ readiness process, which has deepened the participation of and collaboration with indigenous peoples; (ii) the recently revised gender strategy; and (iii) specific strategies on very vulnerable countries, such as small islands (with specific IDA allocation and programs) and fragile states and conflict areas (with a commitment to increase IDA financing to fragile and conflict-affected situation countries by 50 percent), which can also contribute to building climate resilience.

Building people's resilience to prepare for and respond to climate disasters is critical to managing climate impacts and eradicating poverty. Between 1994 and 2013, 6,873 natural disasters worldwide were recorded, which claimed 1.35 million lives or almost 68,000 lives on average each year. The cumulative economic losses from disasters since 2000 are close to $2.5 trillion. Climate change will increase the frequency and intensity of disasters in many regions. Making people—especially the most vulnerable—more resilient to climate-related shocks is essential to eradicate poverty. The $1.2 billion Pilot Program for Climate Resilience already assists developing countries in integrating climate resilience into development planning.

Going forward, the WBG will support universal access to hydromet information and early warning with client countries and international partners (for example, through the Climate Risk Early Warning Systems and the Global Framework for Climate Services). The WBG increased its contribution to DRM from 9.4 to 12.0 percent of the portfolio between FY12 and FY15, that is, from $3.7 billion to $5.7 billion. The Hydromet Program has already supported modernized weather, climate, and hydrological services in countries around the world. The WBG will help build the institutions, observation systems, decision-making processes, and service delivery focus. By 2020, the goal is that an additional 100 million people in 15 developing countries, including least developed countries and small island developing states, will have access to high-quality hydromet data and early warning systems. To achieve this, the WBG will mobilize resources to support universal access to climate information and core climate services.

The WBG will help scale up adaptive social protection, by creating a multi-GP team and providing solution packages to support this work. The WBG also supports innovative adaptive social protection systems, including in Ethiopia and Pakistan. By 2020, the aim is to scale up these services so that an additional 50 million people will be covered by climate-adaptive social protection schemes, and be better able to cope with natural disasters and other shocks.

The WBG will also scale up sovereign disaster risk financing. In 2014 alone, World Bank projects in more than 12 countries helped improve financial resilience, with better post-disaster financial response capacity. Significant programs are already in place in the Pacific and the Caribbean. The aim is to add five more countries covered by financial protection instruments, including insurance, risk pools, and contingent finance, by 2020. Beyond sovereign schemes, the WBG is currently working with local government units (for example, in the Philippines) to provide financial cover for natural disasters. The World Bank will work to expand this, if successful, to other countries. It will also develop and expand contingent finance instruments for IDA countries.

The WBG will scale up and expand the use of community-driven development approaches to strengthen resilience at the local level. By 2020, ex ante resilience investments will be integrated into seven community-driven development country programs.

Specific interventions will also include programs for the most vulnerable locations (for example, small islands) and populations (for example, migrants and refugees). The WBG will scale up the Small Island States Resilience Initiative to build capacity and for better use of existing, fragmented funds, and mobilize increased financing for small island states. The WBG will (i) facilitate scaled-up and more efficient resource flows, among others, by increasing absorption capacity and institutional capacity; (ii) strengthen global knowledge of the specific needs and challenges of small islands; and (iii) strengthen implementation support (by building capacity for eventual direct access to global climate funds, etc.). The WBG will also produce a flagship analytical report on climate change and migration/conflict (FY17).

The WBG will strengthen and reinforce action on climate and health. Subject to available resources, the WBG will increase its capacity to respond to the 32 IBRD and 40 IDA-eligible countries that have included health as a focus area in their NDCs, with expectations that by the end of FY17, two countries will have vulnerability assessments; by the end of FY18, two countries will have climate-smart surveillance and early warning systems; and by the end of FY19, 75 percent of TTLs will be trained in climate change and health, and 20 percent of new health, nutrition, and population projects will consider climate in their design.

6. Priority IV: Align Internal Processes and Work with Others

To enhance its impact and support its client countries, the WBG will strengthen its partnerships, internal processes, and organization.

Work in Partnership with Others

The WBG already has a very large set of partnerships in the climate change domain, with other development actors, the research and academic communities, nongovernmental organizations (NGOs), and business groups and associations. Some of these partnerships are broad and highly strategic—such as the work with other MDBs—while others are targeted (for example, on some methodological issues).

To complement its own action, the WBG will work with others to benefit from what they do best, and ensure synergies across actors in the field. But partnerships will be more selective and strategic, so that more synergies can be captured between WBG operations and the actions of other actors. The WBG will align with other MDBs and international development finance agencies on mainstreaming principles and reporting, and with MDBs and bilaterals on strategies and work programs. The WBG will strengthen collaboration with leading think tanks, research groups, NGOs, and business alliance groups (for example, World Resources Institute, We Mean Business, World Business Council for Sustainable Development, Tropical Forest Alliance, New Climate Economy, Global Green Growth Institute, and IPCC), including on coordinated analytical work and country support. The WBG will build on work already started, to increase collaboration with the International Monetary Fund on fossil fuel subsidies, carbon pricing, and the fiscal implications of climate change, especially for small island states.

The IFC will join international initiatives such as the World Business Council for Sustainable Development, We Mean Business, and other business initiatives that mobilize the private sector to move the needle on emission reductions. The IFC is also convening a joint MDB Task Force on private investment leveraging that will allow the MDBs to report accurately the financial impact of their climate action.

The WBG will also further develop strategic relationships with partners active in climate finance. It will further include climate considerations in the GFDRR—for instance on urban resilience. The WBG will work to incorporate climate considerations in the Global Infrastructure Facility, support the United Nations Framework Convention on Climate Change processes—as appropriate—and continue and strengthen country-level and regional partnerships. The WBG will build and expand on CIF and MDB partnerships to

catalyze actions where there are gaps and where the CIF is well positioned to support the WBG in delivering on its ambitious climate targets.

The GCF could be a significant partner for co-investment, building pipeline, and increasing countries' readiness for direct access. However there are still uncertainties at this time. The World Bank and IFC are now both accredited as GCF Implementing Agencies. The GCF has received pledges amounting to $10.3 billion, of which $6.9 billion has been paid in. The GCF is still hoping to approve projects amounting to $2.5 billion in 2016. It has so far approved $168 million, and more projects will be approved at the next board meeting in June 2016. The WBG (and MDBs) have the capacity to deploy resources at scale and in transformational ways on behalf of the GCF, and MDBs could be an especially important channel for countries with weak capacity. The World Bank has started to build a pipeline of projects for the GCF, with initial proposals pending approval for $86 million. The WBG has engaged with the GCF more strategically, with early discussions on projects estimated at $600 million. There is an opportunity for the WBG to provide readiness support for countries to build institutional capability and move toward accreditation to enable direct access. The WBG will continue to work closely with the GCF, trying to develop a strategic programmatic partnership, but strategic and technical issues would need to be resolved. Expectations will need to be managed in the medium term.

Global Advocacy on Key Issues

The WBG will advance selected climate issues through focused global advocacy, focusing on issues on which the WBG has an established voice and that can facilitate large-scale climate action. Such priority topics include carbon pricing—building on momentum from Paris, the CPLC, and the Carbon Pricing Panel; fossil fuel subsidy reforms; issues related to inclusion and poverty and the imperative to leave no one behind; integration of climate into finance for development (including advocating well-targeted and well-scaled blended concessional finance); and increasing private sector capacity and building private sector markets. Moreover, additional issues will be selected annually for a special advocacy effort, such as issues related to climate change and water during 2016. The IFC will contribute to the dialogue through blogs and articles that share lessons learned.

This advocacy work will also take place through participation and leadership in key external events, such as the Spring and Annual Meetings, regular global events such as the World Economic Forum, the Climate Week and UN General Assembly, G20/G7 meetings, the Climate Action 2016 summit, COP22, and major thematic meetings such as the World Humanitarian Summit, Habitat III, and the World Cities Summit.

The WBG will also support COP22 by assisting the host country and pushing forward its clients' agenda. In particular, it will support the Moroccan government, as the host and to demonstrate the leadership the country has shown, with WBG help, on the low-carbon agenda. The WBG will continue

its leading role in global advocacy on specific topics (including carbon pricing, renewable energy, and the blue economy). COP22 will be implementation-focused, with objectives that align with the WBG's agenda for its clients and advocacy. In particular, COP22 can support the delivery of new financial tools that are innovative and able to mobilize private sector flows and unlock public sector resources; facilitate technology transfers and capacity support of new and emerging technologies; increase and accelerate the financing of adaptation; and enhance transparency through, for example, setting up metrics for the NDCs. In that framework, the WBG can in particular build on the Lima-Paris Action Agenda, by creating new and implementing existing coalitions and partnerships, including on transport, renewables, adaptation, forests, water, agriculture, and climate security.

Build the Knowledge Base and Create New Solution Packages

The WBG is a leader in analytical work and data collection on climate-related issues, has produced major influential reports on climate, and has co-developed or shared many global best practices. The WBG has a rich history of developing and implementing overall standards—notably IFC Performance Standards, which have become global benchmarks—as well as sector-specific standards, such as IFC's EDGE standard for green buildings and Climate Assessment for Financial Intermediary Investment, which enables financial intermediary clients to monitor climate results. With its development partners, the WBG has invested in monitoring and evaluation and developing new metrics to measure the impacts and results of climate policies and projects. The WBG is actively promoting learning—targeting staff and country counterparts, organizing conferences, and investing massively in new technologies for training, for instance, through the Open Learning Campus.

The WBG implements and advocates an "open data" approach, a major component for evidence-based policies. Open data are particularly important for DRM and climate change adaptation, considering the need to include risk information and data in planning and design decisions. The 2016 World Development Report, *Digital Dividends*, and the recent *Shock Waves* reports emphasize the potential development and resilience gains from better access to environmental and climate data.

Going forward, the WBG will improve the design and implementation of household surveys, to ensure it has the data needed to understand the climate-related challenges countries face and design better solutions. By 2020, 15 developing countries will have introduced climate-related components in their household data collection.

The WBG will maintain thought leadership that contributes and disseminates key pieces of analytical work, and strengthen knowledge sharing activities. At least four flagship reports on climate change will be published and disseminated by 2020. Suggested topics include helping countries manage the fossil fuel transition; the distributional impacts of climate policies;

resilient infrastructure; metrics for measuring policy outcomes on resilience and carbon emissions; migration, climate change, and resilience; climate change and cities; and climate change, gender, and poverty. The WBG will also continue doing regional and country-level analytical work, as needed, and produce country-level reports.

The WBG will also build on its strong track record to develop and roll out decision support tools and metrics for staff and clients, to help them understand the implications of their own development pathways and improve policies for low-carbon, climate-resilient development—for example, the IFC's EDGE, ESMAP's Tool for Rapid Assessment of City Energy, and the Climate Policy Team's Climate Action for Urban Sustainability Tool. The WBG will continue ongoing work to define resilience indicators at the project and national levels, and develop methodologies to measure the outcomes of emission-reduction policies.

The WBG will work in partnership to increase the impact of analytical work. In particular, it will partner with NGOs, UN technical agencies, think tanks, research centers, and key businesses to leverage and share lessons learned, and produce co-branded reports and analyses. It will work within international standard-setting groups to bring usable, "science-based standards," and new technology innovations to its clients as they seek to set ambitious climate targets. It will also participate as an observer at the IPCC and contribute staff to future IPCC reports.

Organizational Capability and Collaboration to Deliver

All WBG units have put in place structures to mainstream climate change into their activities and operations. The country departments, GPs, and global industry departments have the responsibility for determining and delivering operational programs. In the World Bank's regions, the focal points take the lead on climate change for the regional strategies. The Regional Leadership Teams have regular review meetings on climate change priorities and progress. Most of the World Bank's GPs have a member of the GP's Leadership Team serving as the climate change focal point, and some have dedicated teams focusing on this issue. The IFC has developed a Climate Business Network that includes one climate anchor from each industry department and from each region, advisory, and operational unit. The IFC's Climate Business Department, which is part of the CCSA, coordinates the network, develops strategy, and provides key centralized support.

The Climate Change CCSA works with all WBG units to provide targeted, cross-cutting climate support to clients. The CCSA will continue to develop innovative solutions that have the potential to be scaled up, and support other WBG units on cross-cutting, climate-related issues. It will step up its technical support to operations for lending, analytical work, and mobilization of private sector climate finance. In collaboration with others in the WBG, the CCSA helps shape the overall WBG climate strategy. The CCSA will oversee

and support the implementation and updating, as needed, of the Climate Change Action Plan; advance further strategic analysis of climate-related issues, enabling the optimal use of concessional finance; and promote cross-WBG interventions. The CCSA is also the interlocutor/spokesperson for the WBG on cross-cutting global dialogue on climate change issues, working closely with the GPs, which lead externally on sector-specific climate issues. The CCSA also leads on relevant corporate functions, including the development of indicators, leading the climate theme for IDA, and monitoring IDA commitments to ensure compliance. The CCSA hosts global climate funds, including the CIFs, the IFC-Canada Climate Change Program, Forest Funds, and Carbon Funds, and will lead the efforts to streamline and simplify access to these funds, and reduce the fragmentation of climate finance.

Align Internal Processes and Incentives

The WBG will align internal processes, metrics, and incentives to support the implementation of the Action Plan. These processes include Systematic Country Diagnostics (SCDs) and Country Partnership Frameworks (CPFs), which will consider the risks and opportunities created by climate change and countries' climate priorities; project design, which will consider climate risks; and monitoring indicators, which will include new indicators to help the WBG track its progress in implementing the Action Plan. The World Bank's GPs and regions, World Bank's Treasury, IFC's global industry departments, and MIGA will work together—with the support of the Climate Change CCSA—to create and fulfill demand for climate change action.

The WBG will take climate change into account in its country strategies. The WBG will ensure that SCDs consider available climate information and data to examine the potential impact of climate change on future poverty reduction, and adaptation and resilience priorities and needs. Where appropriate, SCDs will also take into account the implications of a country's energy mix and proposed shifts to a lower-carbon economy, as articulated in the NDC. The WBG will also ensure that the CPFs addresses climate change issues and risks as appropriate for each country—in line with current guidance—and include, when and where it is appropriate, NDC priorities and the multiple available sources of financing to increase the climate-related contributions of WBG-financed projects.

The WBG will also ensure that its operations take climate change risks into account. It plans to extend risk screening to IBRD operations in early 2017, after a review of existing tools and the lessons drawn from application to IDA countries. The IFC will start screening some sectors after testing and validating its climate impact risk screening tool; this is expected to be done by September 2016 and to lay the basis for the IFC's path forward. The World Bank will also build gender considerations into its climate screening tools (FY17), and take stock of lessons learned from the incorporation of gender issues into climate change considerations and adapt those tools as needed (FY18). The ongoing work on resilience and "decision making under

uncertainty" methodologies will help standardize sector approaches and reduce the cost and help connect TTLs and investment officers with experts.

To measure its project impacts, the WBG will continue to roll out GHG accounting and account for carbon emissions, and resulting risk, in its project evaluations. It will generalize and formalize project-level economic analysis with and without a social value for carbon in all World Bank projects subject to GHG accounting, based on a forthcoming discount rate guidance note. The IFC will also further explore tools to include carbon risks in the best possible way in its decision-making process. All WBG buildings-related operations will conduct an economic analysis on a lifecycle basis and account for energy and resource efficiency. The World Bank will review by June 2018—and improve if needed—the "social value of carbon" guidance note, based on new science and application to World Bank operations.

The WBG will align incentives rewarding WBG collaboration, external funds mobilization, and cross-sector operations. To do so, it will develop, implement, and report new mobilization and catalyzing metrics, and explore moving from measuring inputs of climate finance to measuring impact and leverage. In particular, it will review and enhance, as needed, mobilization metrics for corporate scorecards and memorandums of understanding, to increase incentives for private sector leverage. The WBG will work to use WBG financing in a way that builds climate investments without distorting nascent markets. To facilitate cross-sector operation, it will facilitate shared budgets across GPs for multi-GP projects, and encourage multisector and cross IFC–World Bank–MIGA teams in selected high-priority areas.

Finally, the WBG will strengthen, streamline, and harmonize monitoring, reporting, and evaluation for climate action (resilience indicators, GHG accounting, and climate co-benefits) to improve results frameworks, build capacity, and facilitate evidence-based learning. It will develop new indicators to track progress (for example, resilience indicators) and apply them to support policy dialogue (for example, the Readiness for Investment in Sustainable Energy Index). The WBG continues to track the emissions of investment lending projects to capture the development impact. The World Bank will join the IFC in tracking gross emissions and will calculate sector-level gross emissions-based intensity metrics, allowing the World Bank to track performance over time. The World Bank will start reporting annually the net emission impact, and the IFC will continue to report net emission reductions. The WBG will harmonize as much as possible its methodologies with those of the other major development partners.

Over the next 18 months, the WBG will continue to develop and mainstream metrics and indicators to measure the outcomes of WBG operations, and move monitoring and evaluation from inputs to outcomes. However, the WBG will avoid creating a bias toward actions that have quantifiable outcomes versus actions that are essential but difficult to monitor in outcome terms. The outcomes of some of the priority actions under this plan (for example, toward resilience or through institutional building) are notably difficult to quantify, but should not be put at a disadvantage by the results framework.

Going forward, the WBG will increase access to knowledge and data by all staff. By the end of FY16, it will create a one-stop shop to provide TTLs with climate information (for example, climate risks and NDCs) and help TTLs blend climate finance (CIF, GEF, GCF, and others) and use carbon finance instruments. The IFC already has its Blended Climate Finance Unit to serve as a one-stop shop, and plans to increase internal knowledge management through workshops, webinars, and the integration of climate into its training weeks.

The WBG will ensure that its staff—and its counterparts as appropriate—are trained on the challenges created by climate change. It will develop and roll out training on climate essentials in the context of the Paris Agreement, with a focus on NDCs, and include climate change in the WBG staff curriculum. The target is to provide basic climate change training to all WBG staff by FY18. It will build a climate change practitioners community of practice among the 1,200+ staff working on climate change across the WBG, and strengthen the knowledge management system, to collate and share the operational knowledge created and collected by the GPs, IFC, and MIGA. And the WBG will support the development of client and national stakeholders, including private sector capacity, to identify and implement priority climate actions, enable multisector engagements, and create new opportunities for the private sector. The WBG will also scale up climate change knowledge through a new generation of innovative capacity-building products, including facilitated e-learning, Massive Open Online Courses, and learning modules through the World Bank's Open Learning Campus.

Because meeting climate objectives requires innovative and ambitious measures, this Action Plan will require experimentation, learning, monitoring, and regular revisions. It is to be expected that some of the actions under this plan—especially the ones involving the development and piloting of new approaches—will meet unexpected obstacles, while others will deliver more than is expected. The plan's results framework aims for 75 percent of the listed actions having a measurable impact by 2020. This Action Plan is based on a background note from the World Bank's Independent Evaluation Group on lessons drawn from past action plans, and this collaboration will be maintained in the future. The WBG will adjust its strategy as it learns from mistakes and successes, supported by progress made on the indicators and monitoring systems that will be developed over time.

Appendix: Regional Plans and Integrated WBG Priorities

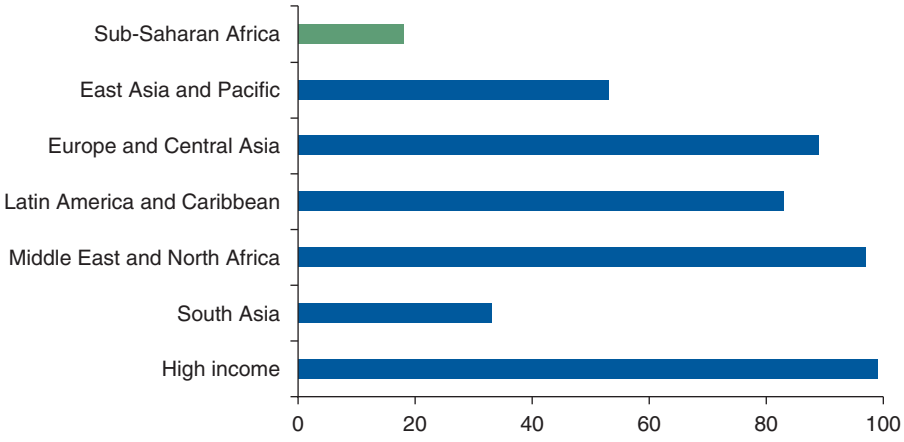
Africa

In the Africa region, resilience, food security, adaptation, and energy access need to be significantly improved. Climate-related shocks, such as droughts, floods, and storm surges, are already severely affecting the region. Food security is already an important issue in many parts of Africa, and climate impacts through droughts and yield changes will have significant consequences for food security in the future. In addition, indexes consistently find adaptation needs to be the highest in the Africa region. On the energy side, the region has the lowest energy access, with access to non-solid fuels estimated at about 20 percent of the population, much lower than in other regions (figure A.1). Furthermore, the region has the lowest carbon emissions per capita.

From FY11 to FY15, the World Bank Group (WBG) portfolio for climate funding in Africa focused on mitigation, but there is large scope to scale up adaptation across sectors. The average climate funding in FY11–FY15 was around $1.7 billion per year, the share of total financing with climate co-benefits being around 17 percent across the period (figure A.2). Most of the climate funding was on mitigation, mainly on energy and green buildings. Adaptation efforts focused on agriculture and water, but there is a large potential in other sectors, particularly urban development.

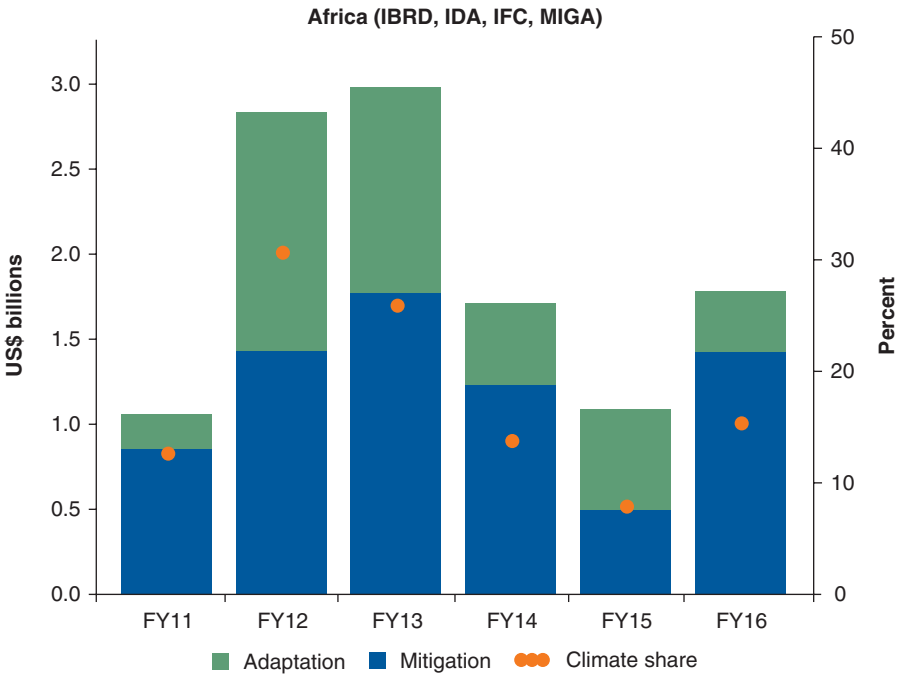
Most of the nationally determined contributions (NDCs) in the region prioritize adaptation. For instance, Niger's NDC includes sustainable land and forest management and climate-smart agriculture, with a strong emphasis on food security, farmers, and pastoralist communities. Moreover, the NDCs in the region also include mitigation actions. For example, Kenya's NDC lists

FIGURE A.1 Access to Non-Solid Fuel across Regions



Source: World Bank World Development Indicators 2015.

FIGURE A.2 Africa Region Active Lending, FY11–FY15 and Pipeline FY16



Note: IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; IFC = International Finance Corporation; MIGA = Multilateral Investment Guarantee Agency.

adaptation to climate change, but also renewable energy, low-carbon transportation systems, and promotion of climate-smart agriculture.

Funding needs for adaptation are high in the region, and will increase with the magnitude of climate change. The World Bank and United Nations Environment Programme estimate that the annual funding needs for Africa's adaptation are about $5 billion to $10 billion for a warming of 2°C, but this may increase to $20 billion to $100 billion by mid-century, with 2°C to 4°C of warming. Indeed, the importance of adaptation financing in the region is exemplified by the relatively high percentage of countries that have estimated their financing needs for adaptation in NDCs: 63 percent of the countries in the region have an estimate, compared with 27 percent in the rest of the world.

The World Bank's Africa Climate Business Plan aims to contribute toward filling this gap and raise $16 billion of adaptation investment by 2020. The plan, announced at COP21 in Paris, aims to strengthen, power, and enable resilience in the region. Around $10.4 billion targets strengthening resilience (for example, $1 billion for improved natural resource management, irrigation, watershed management, and flood protection in the Niger Basin; resilience-building activities are ongoing in four cities and about to be initiated in another five cities; and $3 billion is planned for climate-smart agriculture). About $5.4 billion targets powering resilience (for example, 1 gigawatt (GW) of grid-connected solar photovoltaic and 420 megawatts (MW) of hydropower in West Africa, and 150 MW of geothermal capacity),

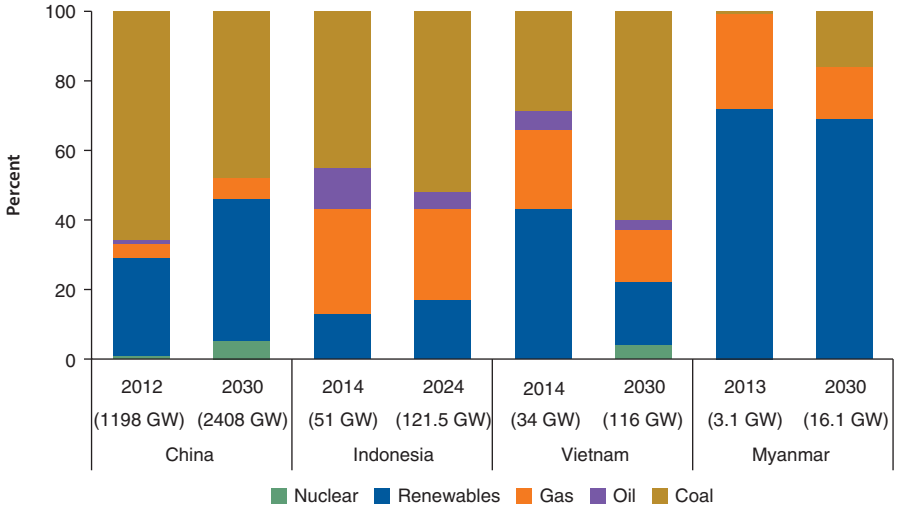
while about $300 million targets enabling resilience (for example, hydromet modernization in 15 countries and four regional centers, and the Africa Climate Resilient Investment Facility).

The International Finance Corporation (IFC) also expects to grow its climate investments in Africa. The IFC aims to focus on large-scale renewable energy, green buildings, and off-grid electricity. Moreover, the IFC is examining ways to increase adaptation investments in agriculture, which will require new business models and technical assistance.

East Asia and Pacific

In East Asia and Pacific (EAP), climate change is one of the critical mega-trends and challenges for the region. The region is expected to be a large and growing consumer of energy over the next few decades. The region's generation capacity is expected to double by 2030, and despite a decline in the share of coal, generation from coal is expected to increase by 455 GW (figure A.3). Several countries in the region contain dense forest ecosystems, and forests and landscapes are a key element of the climate challenge and a major component of climate policies. In terms of emissions, even without accounting for emissions from land use change and forestry, the region contributes one-third of global carbon dioxide emissions. This highlights the immense challenge and opportunity the region faces as countries continue to develop and urbanize further. The region also includes some of the most vulnerable areas to climate impacts, including many highly vulnerable small islands. This is a particularly large challenge, as about 300 million people are still vulnerable to falling back into poverty.

FIGURE A.3 Projected Energy Capacity and Energy Mix in Selected EAP Countries



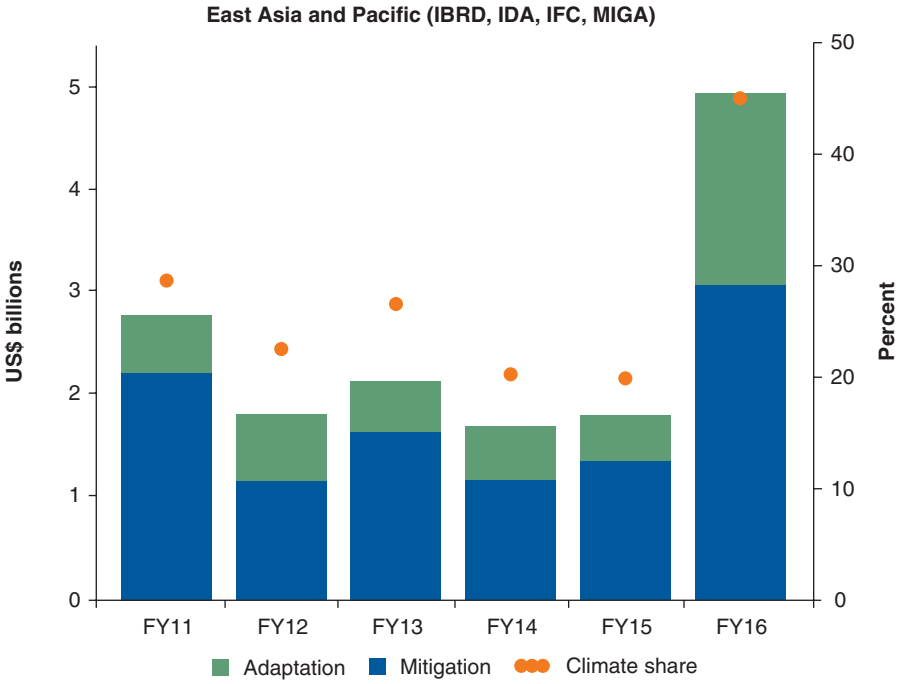
Source: World Bank staff, estimates based on national plans.
Note: EAP = East Asia and Pacific region; GW = gigawatts.

The region has developed a strong program for climate change, mostly for mitigation but with a fast-growing focus on adaptation. Average climate funding in FY11–FY15 was about $2 billion per year, with the share of total financing with climate co-benefits at about 24 percent across the period (figure A.4). There is a significant increase in FY16, with the expected share of climate co-benefits close to 50 percent. Most of the financing has targeted mitigation, although a very significant amount targets adaptation in FY16, with large-scale operations.

The region is well positioned to continue, scale up, and support NDCs, and is therefore on track to meet corporate objectives. EAP's climate change engagement is well-aligned with the NDCs, as the key actions identified in the NDCs are consistent with the region's business line for climate (figure A.5). Moving forward, the priorities in the EAP region align well with the NDCs and include three main priorities.

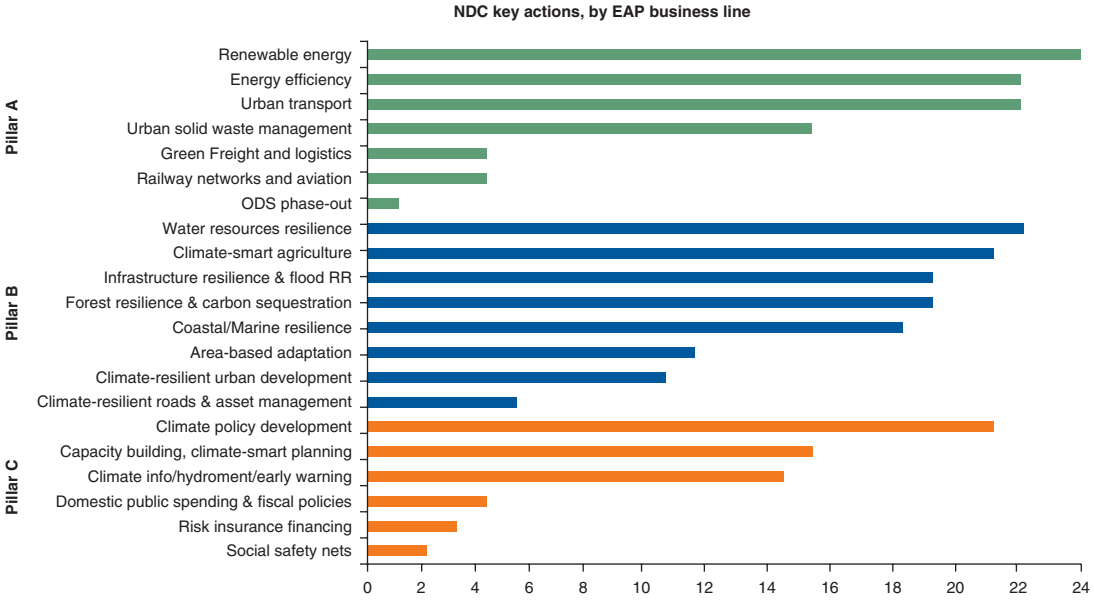
The three main priorities of the EAP region are structured under three pillars: (i) climate policy development and improvements in climate-smart planning, financing, and execution; (ii) climate adaptation and resilient development; and (iii) support for low-carbon development. Under the first priority, EAP will provide support to the implementation and ramping up of the ambition of the NDCs and related financing strategies. EAP will also support countries in enhancing the scale and effectiveness of financing toward adaptation, including through support for better use of climate information for decision making, and improved mobilization of costing and domestic and international

FIGURE A.4 EAP Region Active Lending, FY11–FY15 and Pipeline FY16



Note: Data as of February 29, 2016. EAP = East Asia and Pacific region; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; IFC = International Finance Corporation; MIGA = Multilateral Investment Guarantee Agency.

FIGURE A.5 EAP Region Climate Change Engagement Well-Aligned with NDCs



Note: EAP = East Asia and Pacific region; NDC = nationally determined contribution; ODS = Ozone Depleting Substances; RR = risk reduction.

financing for climate action. The second priority will focus on integrating adaptation and resilience measures into water, agriculture, energy, urban areas, and transport. EAP will also focus on multisector, area-based adaptation and resilience engagements for climate and Disaster Risk Management (DRM). Third, the region will support low-carbon development: EAP will maintain a strong sustainable energy engagement, with the World Bank at the forefront on sustainable transport; undertake significant forest engagements across the region; and scale up coastal zone resilience and climate-smart agriculture.

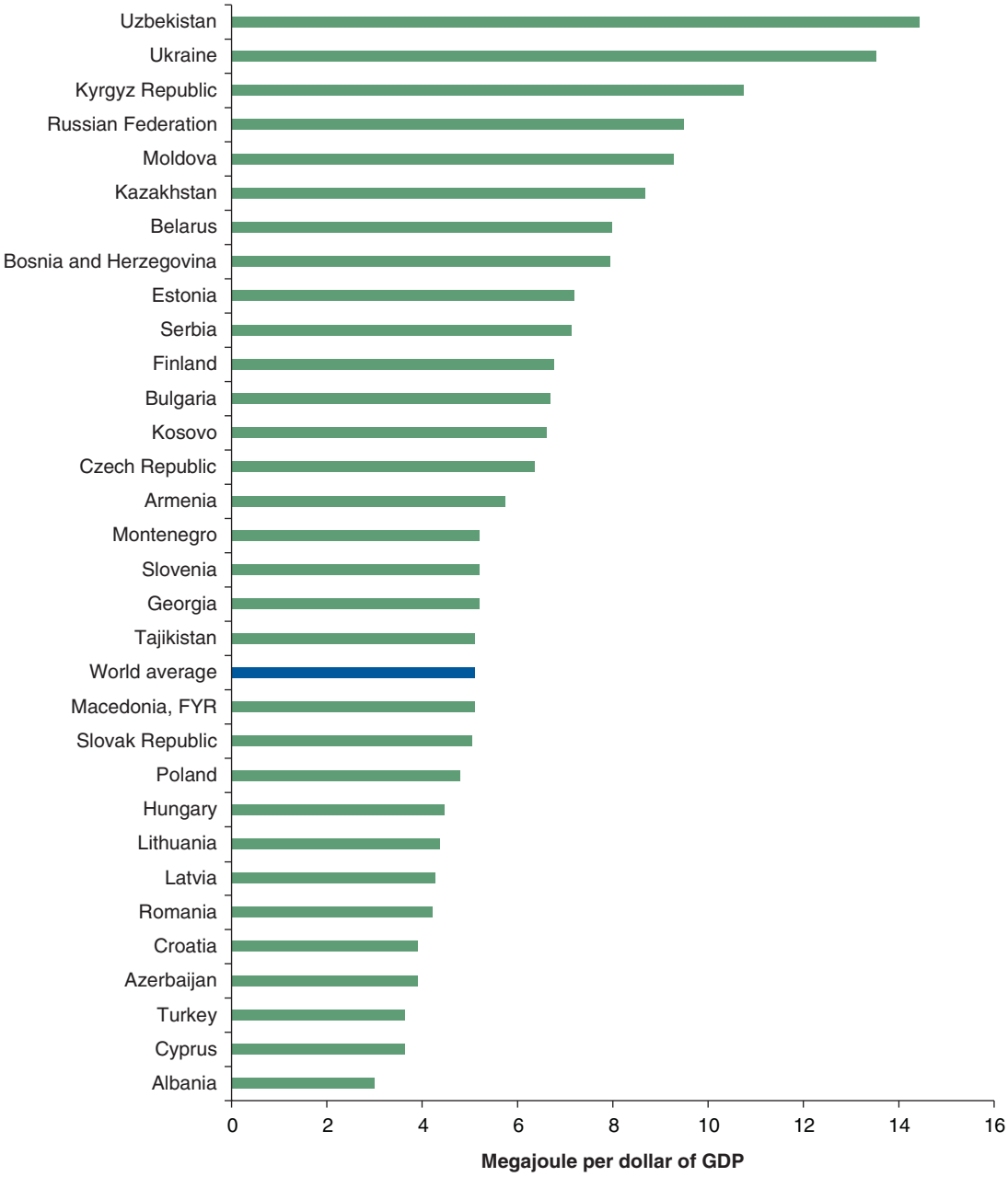
The IFC also expects to expand its climate business in the region. The IFC aims to focus on urban infrastructure, including green buildings, waste, energy efficiency and renewable energy (with an emerging focus on South-South business), water efficiency, and green banking. Furthermore, the IFC will build its business in climate-smart agriculture, for instance, through projects on sustainable rice in Cambodia and protein in Mongolia, and agricultural insurance products in the Philippines.

Europe and Central Asia

Many countries in the Europe and Central Asia (ECA) region are already facing higher temperatures, changing hydrology, and extreme events—droughts, floods, heat waves, windstorms, and forest fires. Central Asia, the South Caucasus, and the Western Balkans are the most vulnerable hotspots in the region and also the least ready to adapt. The Russian Federation's boreal forest, which accounts for 20 percent of the world's forests, is increasingly vulnerable to climate change. ECA is home to 25 percent of the world's

forests, and forestry and land use patterns have a large influence on carbon stocks and the global climate. ECA is also the second most urbanized region, with key infrastructure increasingly at risk. The ECA region contributes 10 percent of the world's total greenhouse gas emissions and is the most energy-intensive region in the world (figure A.6). High energy intensity forms a constraint to development and reducing it is an opportunity to achieve low-carbon growth.

FIGURE A.6 Energy Intensity in ECA Countries



Source: World Bank World Development Indicators data for 2012 (latest year available).

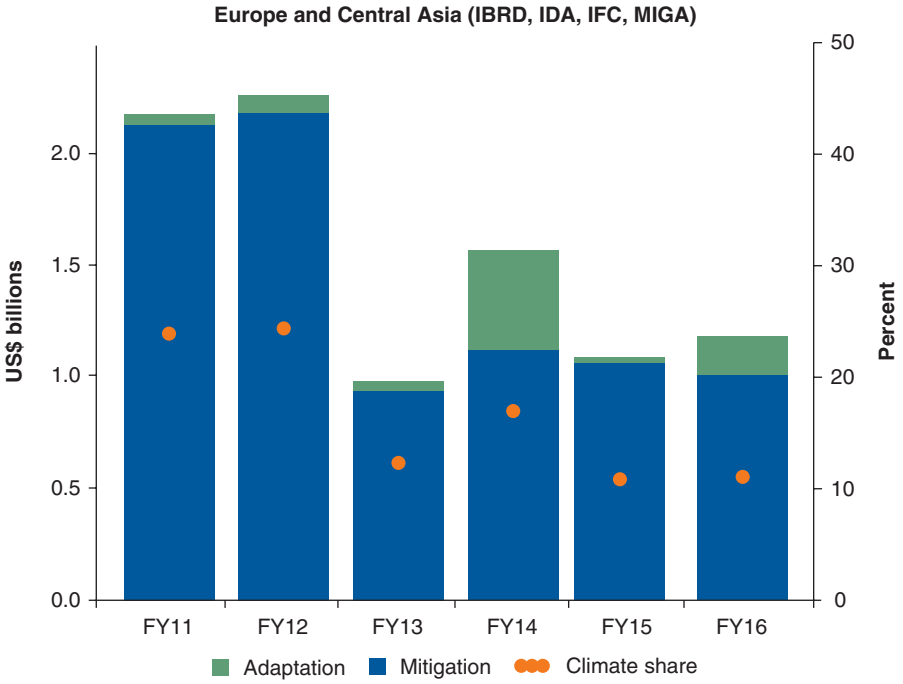
Note: Energy intensity in megajoule per $1 of gross domestic product (constant 2011 purchasing power parity). ECA = Europe and Central Asia; EU = European Union.

There is a large opportunity to scale up climate operations in ECA, and adaptation needs are growing. The average climate funding in FY11–FY15 was about $1.4 billion per year, with a share of total financing with climate co-benefits of about 18 percent across the period, with activities mainly focused on mitigation (figure A.7). Clean energy (energy efficiency and renewable energy) dominates the portfolio, with increasing contributions from sustainable forest management, natural resource management, and advisory services on green growth and climate change.

Most NDCs in the region focus on mitigation (including agriculture, forestry, and other land use), with several NDCs also including adaptation considerations. The NDCs identify large needs related to high energy–intensity industries and power generation, green buildings, and energy efficiency. Furthermore, there are opportunities for renewable energy and sustainable cities. The NDCs in Central Asia (Kyrgyz Republic, Tajikistan, and Turkmenistan), the South Caucasus (Armenia, Azerbaijan, and Georgia), Eastern Europe (Belarus, Moldova, and Ukraine), and Southeast Europe (FYR Macedonia and Serbia) also include adaptation considerations. The World Bank's regional engagement includes supporting the NDCs as one of its main climate actions.

Priorities in the ECA region include low-carbon development, climate policy and multisector planning, climate adaptation and resilient

FIGURE A.7 ECA Region Active Lending, FY11–FY15 and Pipeline FY16



Note: ECA = Europe and Central Asia; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; IFC = International Finance Corporation; MIGA = Multilateral Investment Guarantee Agency.

development, and fostering collaboration and learning across countries. Looking forward, the first priority for the ECA region is to tackle high energy intensity and support sustainable forestry. Second, the ECA region aims to support climate policy development and multisector planning, integrating climate resilience into agriculture, water and land resource management, and DRM. Furthermore, the region aims to foster collaboration, learning, and sharing across countries to benefit longer-term climate action at the national level, especially in the most vulnerable regions (including Central Asia, South Caucasus, and Southeast Europe).

The IFC has identified opportunities for green buildings, urban infrastructure, sustainable energy finance, and renewable energy. Turkey has been the key driver for IFC climate business in the region. Going forward, Russia and Ukraine could offer the next major opportunities. In addition, there are opportunities for renewable energy and sustainable cities in South Caucasus and the Western Balkans, as well as Bulgaria, Croatia, Poland, and Romania.

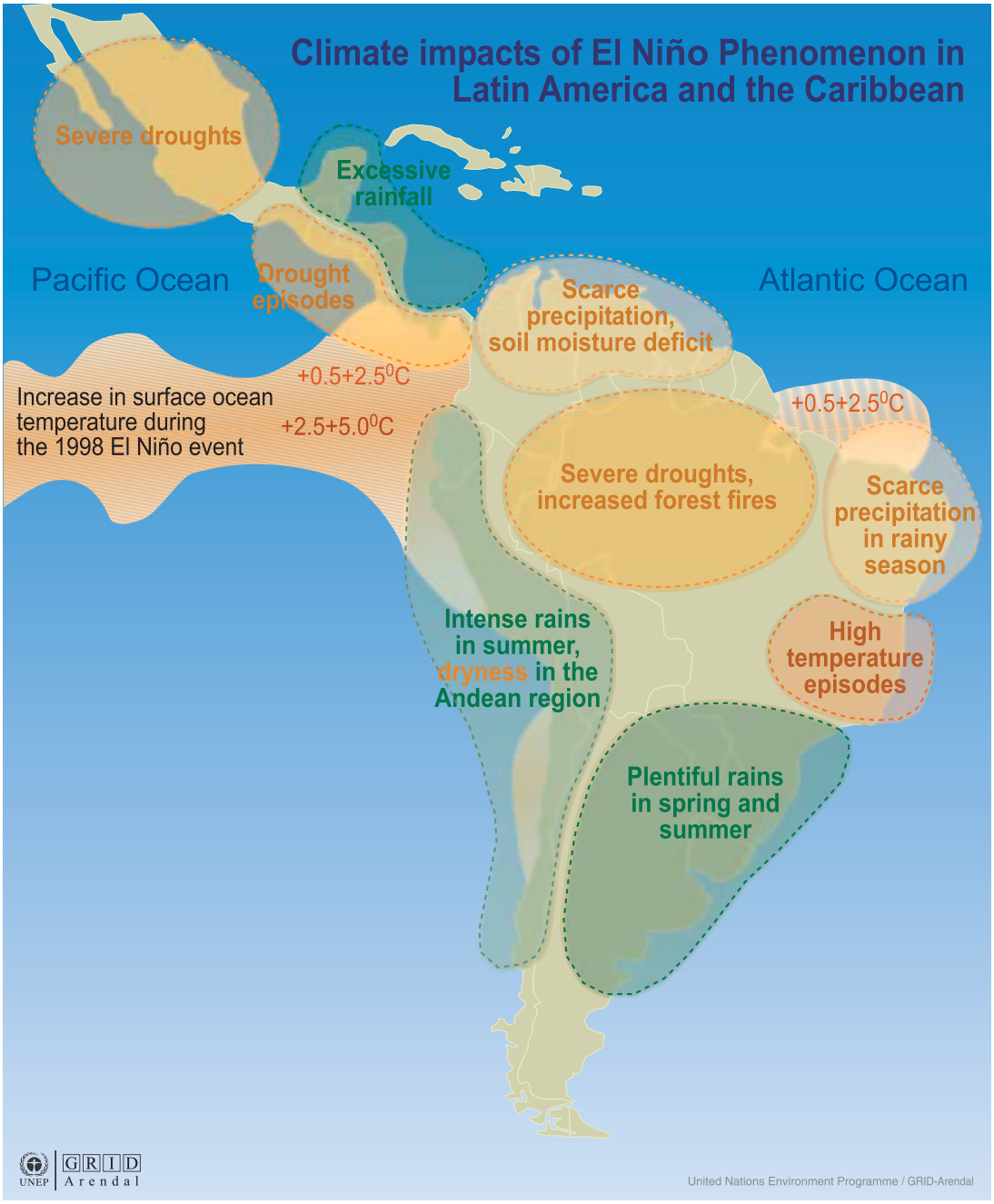
Latin America and the Caribbean

The Latin America and Caribbean (LCR) region is highly vulnerable to natural disasters and water scarcity, and faces challenges in land use practices and sustainable urbanization. LCR is exposed to many climate-related phenomena (glacial retreat, droughts, landslides, hurricanes, and El Niño, see figure A.8), which tend to have a disproportionate impact on the poor in urban and rural areas, and especially in the Caribbean. Projections suggest that climate shocks will become more intense and frequent, further supporting the imperative for adaptation and resilience. On mitigation, there is untapped abatement potential across sectors. In particular, land use practices from deforestation, forest degradation, and agriculture are responsible for half of the region's emissions, and increased reliance on fossil fuels in power and transport risks raising emissions even further. Yet, there are opportunities to embed sustainability in urban development (integrated land use, housing, and transport) in the WBG's most urbanized region.

The LCR region is a first mover on climate action, especially on mitigation. The region has pioneered economic instruments to reduce emissions (for example, carbon taxes) and to provide financial protection from natural disasters (for example, risk insurance). City sustainability has been enhanced through a pipeline of strategic and high-impact infrastructure projects in transport, water, waste management, and buildings. In rural areas, the region is at the forefront of sustainable forest management. For instance, Brazil reduced deforestation by 70 percent in 10 years during a period of record economic growth. The region is also a global leader in attracting and leveraging results-based finance (for example, the Forest Carbon Partnership Facility, and the Carbon Fund).

Most of the WBG financing for climate projects in LCR has been on mitigation, but the pipeline of investments includes low-carbon operations and

FIGURE A.8 Climate Impacts of El Niño in the LCR Region

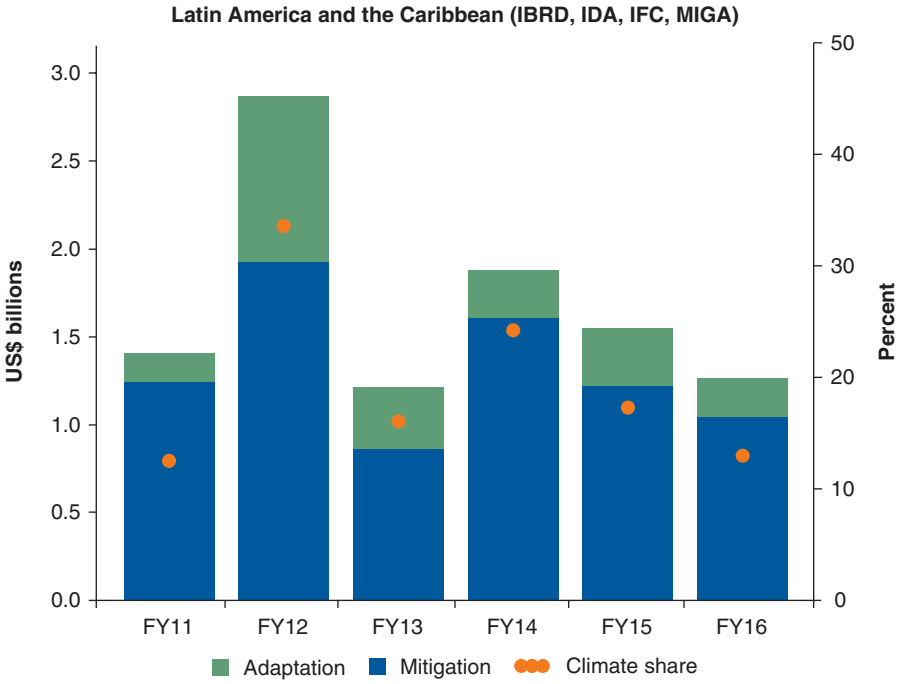


Source: Modified from UNEP GRID Arendal.

Note: The figure shows the climate impacts of the El Niño–Southern Oscillation phenomenon. LCR = Latin America and Caribbean region.

adaptation. The average climate funding in FY11–FY15 was about $1.5 billion per year, with a share of projects with climate co-benefits of about 19 percent across the period (figure A.9). For FY16, the pipeline of investments include financing in low-carbon development (especially in energy, environment, and transport) and in boosting social and economic resilience. Furthermore, the

FIGURE A.9 LCR Region Active Lending, FY11–FY15 and Pipeline FY16



Note: LCR = Latin America and Caribbean region; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; IFC = International Finance Corporation; MIGA = Multilateral Investment Guarantee Agency.

region has the largest share of climate change and DRM development policy financing across the WBG. The region's transformative programmatic approaches include the regional Amazon program, climate-smart cities, and regional risk insurance facilities. There is cross-WBG support for green growth strategies in Colombia and Mexico.

NDCs in the LCR region mainly include unconditional pledges, with supplementary higher-ambition pledges conditional on the availability of external resources. In particular, small states in the Caribbean and Central America will continue to rely on external climate finance to meet their NDCs.

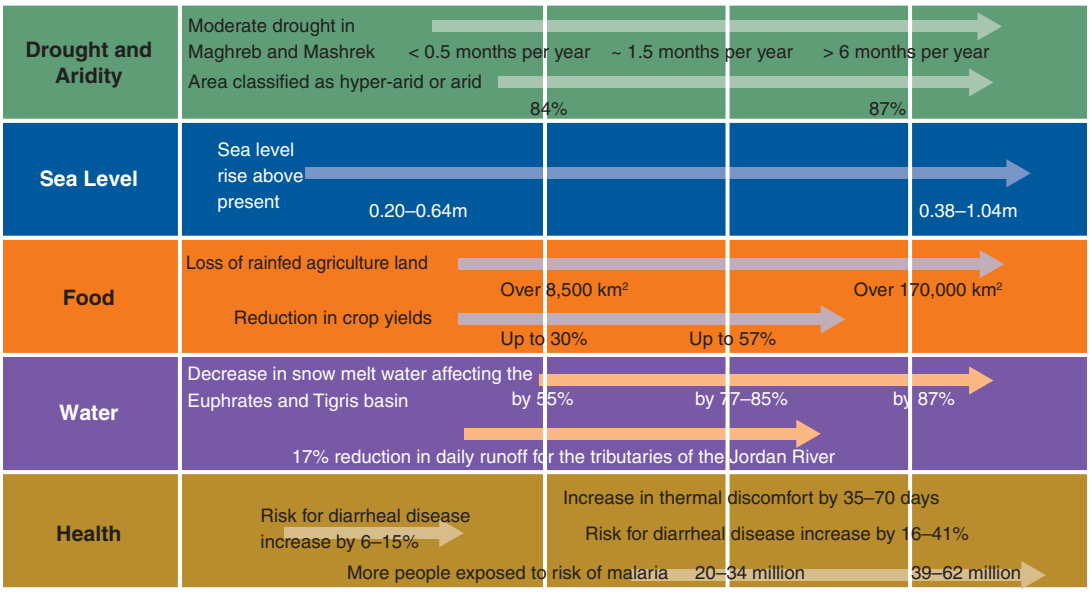
LCR countries draw on the full range of WBG advisory and investment instruments for support. The region will continue to provide technical and financial support through mitigation, adaptation, and leveraging co-benefits. On mitigation, the region will capitalize on LCR's "clean advantage" through sector actions in green energy, waste, transport, and agriculture, and promote more sustainable land use in urban areas and natural resources. On adaptation, the priorities will be landscape planning and investment strategies to (i) enhance resilience and improve disaster preparedness, (ii) protect agri-competitiveness from extreme weather and hydrology change, and (iii) introduce new financial products to boost resilience. On leveraging co-benefits, the region will capture all climate-relevant outcomes from policy and financing operations across the environment and natural resources, industrial, and social sectors.

The IFC will grow investments in urban areas and agribusiness, and support financial instruments. It plans to grow its portfolio in the region on urban infrastructure, such as green buildings, transport, waste management, energy, water and sanitation, telecom, and social infrastructure. Another priority area is agribusiness, especially in Brazil, the Caribbean, and Central America. The IFC will also support financial instruments such as green bonds in the Andean region, Brazil, and the Caribbean.

Middle East and North Africa

In the Middle East and North Africa (MNA) region, there is potential for increased fragility and water scarcity, and some countries exhibit high emissions, mostly those with large energy subsidies. In MNA, many client countries are expected to be significantly affected by climate change, because of reduced water availability (MNA is the most water-stressed region in the world) and heat stress, where extreme summers today could become the average summer in the 2070s. The combined effect of rising temperatures, lower rainfall, and increased evaporation will have major implications for agriculture, livelihoods, and food security (figure A.10), with the potential for increased fragility and conflict caused by deteriorating environmental conditions. On the energy side, oil-producing countries have the highest per capita emissions in the world and, for many countries, hydrocarbons represent the main export commodity. Furthermore, half of the world's energy

FIGURE A.10 In the MNA Region, Climate Change Impacts on Agriculture, Livelihoods, and Food Security



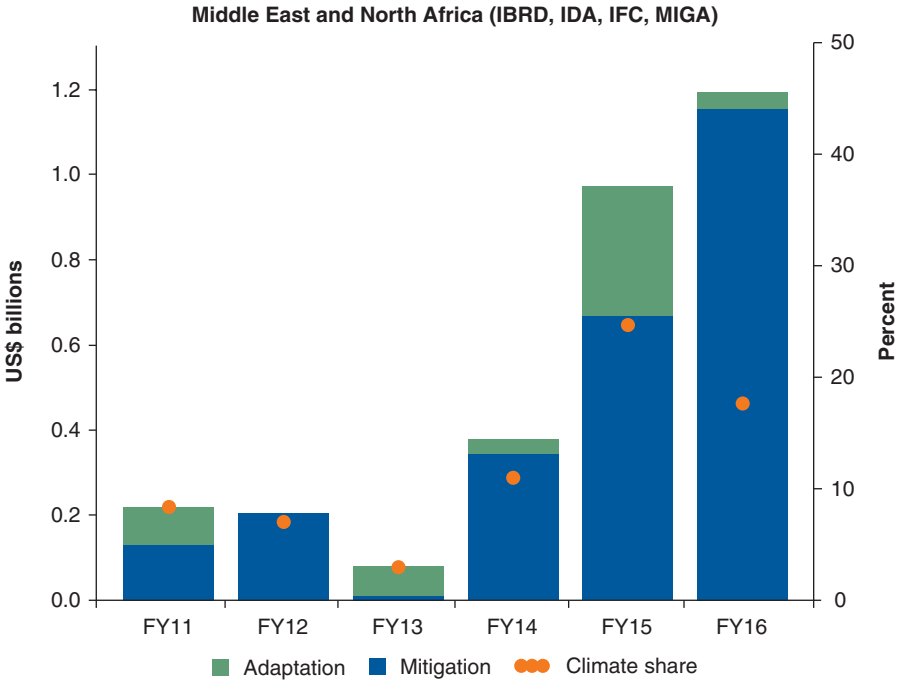
Source: World Bank Turn Down the Heat Report 2014.
Note: km = kilometers; m = meters.

subsidies are in MNA, amounting to 8 percent of regional GDP and 22 percent of government revenues.

In recent years, MNA has been ramping up its financing for climate projects, particularly on mitigation, but the potential exists to grow the portfolio for adaptation. The average climate funding in FY11–FY15 was about $400 million per year, with a share of total financing with climate co-benefits of about 11 percent across the period, with activities mainly focused on mitigation (figure A.11). In FY15–FY16, MNA ramped up its climate co-benefits by 29 percent, primarily via mitigation in energy, finance and markets, and transport. There is also potential to grow the climate co-benefits in agriculture, environment, water, and urban areas (including green buildings and wastewater treatment). In terms of NDCs, the plans submitted by MNA countries are often less ambitious than the reforms already underway (for example, in the Arab Republic of Egypt, Iraq, and Jordan).

In the longer term, priorities in MNA include a shift toward clean energy, competitive cities, successful Development Policy Loans (DPLs), implementation of NDCs, and scale-up of pilots for climate adaptation. One of the main priorities in the region is to support the shift toward clean energy in power, transport, urban development, and water, and the rationalization of energy resources (including regional cooperation on issues such as water). Furthermore, urban development is also a priority, with a focus on improving

FIGURE A.11 MNA Region Active Lending, FY11–FY15 and Pipeline FY16



Note: MNA = Middle East and North Africa; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; IFC = International Finance Corporation; MIGA = Multilateral Investment Guarantee Agency.

the competitiveness and resilience of cities, while lowering environmental footprints. In addition, the region aims to replicate successful DPLs, such as the Inclusive Green Growth DPL in Morocco. In terms of NDCs, the region aims to support their implementation, and ensure the level of ambition is commensurate with national plans. Finally, the region aims to scale up pilots on desert ecosystems, and on climate adaptation and resilient development for the most vulnerable sectors, in particular water, agriculture, and ecosystems.

The IFC also aims to continue to build its renewable energy business and develop new markets in the region. The IFC's priorities include growing its portfolio of green buildings (for instance, in Lebanon), wastewater treatment and re-use, and clean tech innovation (in Egypt and Morocco). There is also opportunity for increased sustainable energy finance through financial institutions, depending on resources for technical assistance.

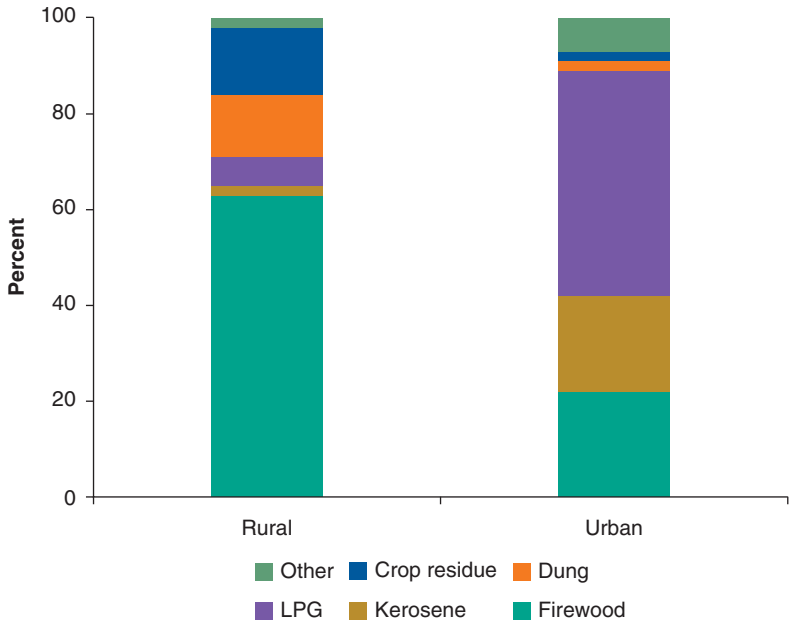
South Asia

In the South Asia region (SAR), extreme vulnerability is evident through sea level rise, floods, landslides, and agriculture, and the region exhibits low energy access in rural areas. World Bank estimates suggest that climate change could bring 62 million people below the extreme poverty line in the SAR by 2030, mostly caused by agricultural impacts. Hotspot areas with an overlap of extreme poverty and high vulnerability (for example, to soil salinization in Bangladesh) already exist in the region. More generally, coastal deltas in the region are vulnerable to climate change impacts, and current trends in sea level rise could make parts of highly populated coastal areas uninhabitable in the future. On the energy side, the energy mix in the region relies on coal; road transport is expensive, inefficient, and insufficient; and rapid urbanization continues to offer opportunities for engagement. Energy access remains a challenge in the region's rural areas, offering opportunities for decentralized renewables and clean cooking (figure A.12).

Most of the WBG portfolio with climate co-benefits in the region targets mitigation, and Bangladesh, India, and Pakistan have the portfolios with the largest climate co-benefits. The average climate funding in FY11–FY15 was about $2.6 billion per year, and the share with climate co-benefits was about 28 percent across the period, with activities mainly focused on mitigation (figure A.13). In FY16, the energy sector dominates in India, water and Social, Urban, Rural and Resilience in Bangladesh, and energy and water in Pakistan.

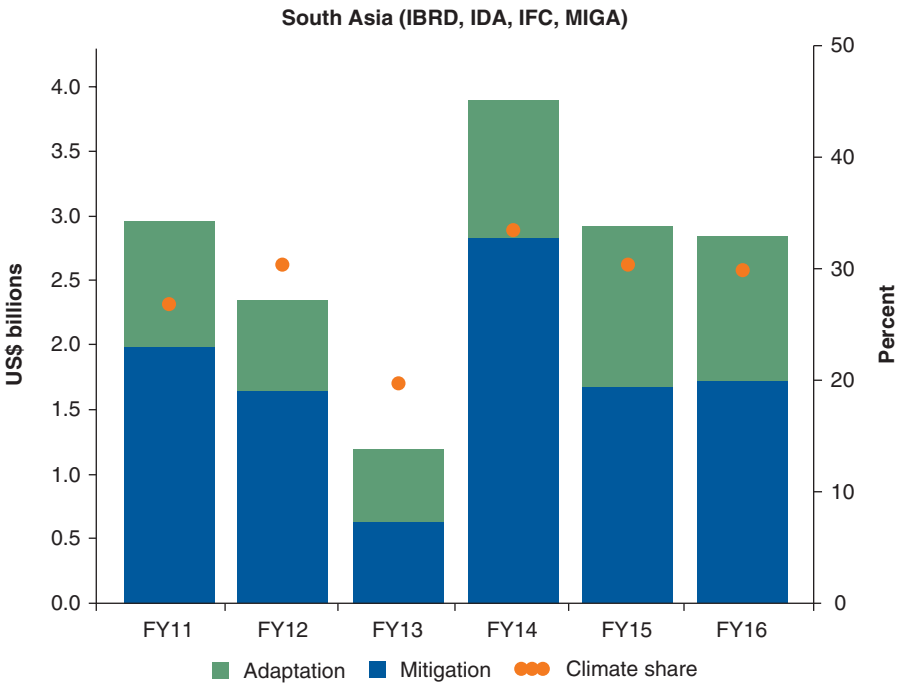
Transformative action on climate change requires partnerships with countries to mobilize additional capital for mitigation and adaptation action. The SAR has identified different priority actions in different countries, with an indicative range of financing that can be provided until 2020. On mitigation, the priority areas include urban (smart cities and mass transit systems), energy (scale-up of solar and wind, hydropower development, and electricity transmission), and transport (modal shift from road transport to railways and waterways) (table A.1). On adaptation, the priority area with the highest

FIGURE A.12 Cooking Energy Use in Rural and Urban India



Source: Bhattacharyya 2006.
Note: LPG = liquefied petroleum gas.

FIGURE A.13 SAR Active Lending, FY11–FY15 and Pipeline FY16



Note: SAR = South Asia region; IBRD = International Bank for Reconstruction and Development; IDA = International Development Association; IFC = International Finance Corporation; MIGA = Multilateral Investment Guarantee Agency.

TABLE A.1 Mitigation: SAR Priority Areas in Different Countries, with Indicative Range of Potential Financing until 2020

Sector	Activity	Applicability in countries				Indicative financing need till 2020 ($ billion)
		BD	IN	PK	SL	
Energy	Scale-up of solar/ wind energy	✓	✓	✓	✓	2–3
	Hydropower development		✓	✓		3–5
	Electricity trade (transmission)	✓	✓	✓		3–5
Transport	Modal shift from road transport	Water ways	Railways	Railways		5–8
Urban	Smart cities (including mass transit systems)	✓	✓	✓		5–10

Note: BD = Bangladesh; IN = India; PK = Pakistan; SAR = South Asia region; SL = Sri Lanka.

TABLE A.2 Adaptation: SAR Priority Areas in Different Countries, with Indicative Range of Potential Financing until 2020

Sector	Activity	Applicability in countries				Indicative financing need till 2020 ($ billion)
		BD	IN	PK	SL	
DRM/ Urban/ ENR	Flood management ("Delta Plan", urban floods, etc.)	✓	✓	✓		10–15
	Coastal management and resilience	✓	✓			3–5
	Forest management (including REDD+)		✓			2–3
Agriculture	Climate smart agriculture	✓	✓	✓		2–3
Water	Water management	✓	✓	✓	✓	3–5

Note: BD = Bangladesh; DRM = Disaster Risk Management; ENR = Environment and Natural Resources ; IN = India; PK = Pakistan; REDD+ = Reducing Emissions from Deforestation and Forest Degradation, Conservation of Forest Stocks, Sustainable Management of Forests and Enhancement of Forest Carbon Stocks; SAR = South Asia region; SL = Sri Lanka.

indicative financing needs until 2020 is DRM/urban/environment, with activities on flood management, coastal management and resilience, and forest management (table A.2). Priority areas also include climate-smart agriculture and water management.

Based on FY11–FY15 trends and the 30 percent increase in financing associated with climate co-benefits, WBG financing with climate co-benefits in South Asia could be in the range of $13 billion to $16 billion in FY16–FY20. Financing needs for the transformative actions on adaptation and mitigation lie in the range of $35 billion to $65 billion until 2020. This would require an increase in International Development Association/International Bank for Reconstruction and Development resources and/or additional resources in the form of international climate finance.

The IFC will focus on sustainable urban infrastructure, such as waste, street lighting, and green buildings, and continue to invest in wind and solar, energy efficiency, and advisory services for scale-up. In agriculture, the IFC is

building a pipeline in solar irrigation, among other areas. Furthermore, the IFC will look toward South Asia for large "pure play energy efficiency," while still developing lines of credit to banks in Bangladesh and India. To scale up large renewable energy investments, to build the pipeline for sustainable urban infrastructure, and for adaptation (especially in Bangladesh and Nepal), the IFC will focus on advisory services.

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