

ESMAP RESULTS FRAMEWORK FY21-24

- *The Results Framework starts with the impact indicators, intended to measure the Theory of Change development objectives. The impact indicators illustrate ESMAP's contributions to the development objectives by informing World Bank Group lending operations. ESMAP will source the data for impact indicators from the project appraisal or other official documents of the lending operations. These indicators are cross-cutting and capture both direct and additional (indirect) contribution from multiple ESMAP programs (e.g. Electricity Access program directly contributes to the Number of People with Access and may additionally contribute to Metric Tons of CO2 Emissions Expected to be Reduced). Since the additional contributions of the programs will be determined by the appraisal documents of the lending operations, ESMAP will not set targets for the impact indicators, but will report the annual achievements.*
- *The Results Framework sets the program-level outcome and intermediate outcome indicators, along with targets for the end of The Business Plan period.*
- *ESMAP will report annual progress towards achieving the targets. ESMAP will conduct a mid-term review of the progress against the Results Framework to determine any necessary adjustments.*
- *All baselines are assumed to be 0, unless specified otherwise in the "Notes" section. Reporting will be based on two primary sources of data: the progress/completion reports of each ESMAP-funded grant and own-managed initiative, and the M&E data from the ESMAP-informed World Bank lending operations.*
- *The gender indicators are consolidated under the Foundations for Energy Transitions program but are also repeated under other thematic programs they support, due to the cross-cutting nature of the ESMAP support to gender and energy. The progress towards the targets will be presented under all respective programs but will be treated as the same result to avoid double-counting.*
- *The Results Framework sets the output targets to be achieved by the end of the Business Plan period. The outputs listed in the Results Framework refer to the deliverables of the own-managed knowledge products, unless specified otherwise in the "Notes" section.*
- *Definitions: "WB" – IBRD/IDA engagements and investments; "WBG" – IBRD/IDA and IFC engagements/investments.*

CROSS-CUTTING IMPACT INDICATORS

- 1) External Financing Mobilized, Including Private Sector
- 2) Number of People Provided with Access to Renewable Energy
- 3) Number of Beneficiaries Expected to be Reached
- 4) Generation Capacity of Renewable Energy Expected to be Installed
- 5) Metric Tons of CO2 Emissions Expected to be Reduced Per Year
- 6) Projected Lifetime Energy and Fuel Savings

PROGRAM: FOUNDATIONS FOR ENERGY TRANSITION

<u>OUTCOME 1: Improved affordability of power</u>		
	Target FY24	NOTES

Outcome indicator 1.1	Reduction in average cost of power supplied	70% of ESMAP supported countries	Affordability is related, among other things, to the cost of power. The average cost of power supplied is expected to come down due to the following factors, which are supported by different elements of ESMAP's work to strengthen the foundations of the energy transition: (i) adoption of least cost generation and transmission planning; (ii) competitive pressure on suppliers selling through electricity markets; (iii) potential to draw upon imports of (lower cost) power; (iv) well-functioning (i.e., efficient) utilities; and (v) robust regulation -- that incentivizes cost reduction and efficient operation. Currently, African countries constitute a large part of the ESMAP portfolio; most of them requested TAs that would, among other things, support activities that facilitate decrease in the cost of their electricity supply in the medium term (e.g., support with least cost planning, support with least-cost access planning, support with improving operational efficiency of utilities support with improved connectivity and power trade, etc.). The target is based on the projected demand for ESMAP grants during the new Business Plan and an expected increase in the number of African countries requesting ESMAP TA support for activities that would reduce their average cost of power. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
<u>OUTCOME 2: Improved financial viability of power sector</u>		Target FY24	NOTES
Outcome indicator 2.1	RISE score on utility creditworthiness reaches the green threshold in all ESMAP supported countries	66.67	The power sector will be financially viable if it is able to cover its costs from revenues generated and not rely on fiscal transfers, i.e., if utilities are well-performing (so not making significant losses) and ideally credit-worthy (so able to borrow on their own). ESMAP's work to strengthen the foundations of the energy transition supports the financial viability of the sector by: (i) working directly with utilities to improve their capacity and operational and financial performance and so reduce the need for state support; (ii) helping governments reform and reduce subsidies for fossil fuels (along with transitional policies to cushion the impact of subsidy removal where needed and thus enhance sustainability); and, (iii) building regulatory capacity to ensure that adoption of new technologies improves utility performance does not undermine utility revenue streams.
<u>OUTCOME 3: Electricity sector carbon intensity reduced</u>		Target FY24	NOTES
Outcome indicator 3.1	Carbon per unit of power generated	768 kg CO2 equivalent/MWh (doubling the annual rate of decline observed for 2014-2019)	For the 135 WB countries that have IEA data, the average carbon intensity calculated using the "OM" IFI data series (weighted by 2015 generation data from the IEA) is 816 tCO2/kWh (as of 11/2019). The CAGR of carbon intensity of non-OECD countries (based on the IEA carbon intensity data history) has decreased at 0.86% per year. Assuming the CAGR of the above mentioned 135 countries were to decrease at 0.015 per year, in 2024 it would be 768.
<u>OUTCOME 4: Fiscal burden of power sector reduced</u>		Target FY24	NOTES

Outcome indicator 4.1	Reduction in fiscal transfers to the power sector in the countries receiving ESMAP support during business plan	Reduced by \$2 billion	The fiscal burden of the power sector will be reduced as utility operational and financial performance improves, reducing the need for state support, and also as subsidies to fossil fuels are phased out. The target is consistent with the expected pipeline for ESMAP grants. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
<u>OUTCOME 5: Improved quality of electricity service</u>		Target FY24	NOTES
Outcome indicator 5.1	Improvement in Doing Business score on Reliability of Supply and transparency of tariff [index 0-8]	1 -point improvement against baseline 2.3 in 2020 (doubling the 0.5-point improvement over FY18-20)	Service reliability will result from availability of adequate power and transmission capacity due to improvements in utility performance; regulatory incentives to improve system resilience; and flexibility resulting from development of markets, including for ancillary services.
<u>OUTCOME 6: Increased share of female employees, leaders, entrepreneurs and consumers in the energy sector</u>		Target FY24	NOTES
Outcome indicator 6.1	Increased share of female employees in energy sector WB projects	5 percentage points improvement over baseline for each supported project	The baseline will be calculated for each supported country/project. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.
Outcome Indicator 6.2	Increased share of women entrepreneurs in energy sector WB projects	10 percentage points improvement over baseline for each supported project	The baseline will be calculated for each supported country/project. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.
Outcome Indicator 6.3	Increased productivity of female farmers and business owners supported by WB energy projects	10 percentage points improvement over baseline for each supported project	The baseline will be calculated for each supported country/project. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.
<u>INTERMEDIATE OUTCOME 1. Power system has capacity, flexibility, financial strength to deliver energy transition</u>		Target FY24	NOTES

Intermediate outcome indicator 1.1	Volume of WB lending that contributes to the achievement of the Outcomes through identified aspects	\$50 billion	Historically (over IDA18) ESRF and ABG informed lending as % share of active WB portfolio was ~3%. Projecting the active portfolio forward over FY21-24, \$50 billion is close to 5% share of the active EEX portfolio. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.
Intermediate outcome indicator 1.2	Number of utilities that have implemented process changes consistent with new business models and technologies	30	The target is an estimate of the number of utilities that will request and implement process changes based on the initial pipeline for sector modernization activities. The target reflects the fact that this is a new program and much of the global knowledge needs to be developed. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Intermediate outcome indicator 1.3	Number of regulators that take account of technology disruptions in regulations issued	30	The target is an estimate of the number of regulatory agencies that will be able to implement regulatory changes in line with sector modernization activities. The target reflects the fact that this is a new program and much of the global knowledge needs to be developed. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Intermediate outcome indicator 1.4	Number of countries with implementation roadmaps developed for Just Transition	2	The target is based on the pipeline of support requested for implementation of strategies for just transition. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Intermediate outcome indicator 1.5	Percentage of ESMAP-supported countries adopting improved policy and regulation for sustainable energy	100%	Policy and regulation are key to improving the environment for modernization of power sectors. ESMAP expects that given the demand for the support, all countries that receive the ESMAP grants will adopt respective policies and regulations. The indicator will be measured with progress/completion reports on ESMAP-funded grants. Another key indicator for this work is the RISE Index, which covers many aspects of sector modernization. RISE indices will also be used where available/applicable to help illustrate increased country capacity to integrate renewables.
Intermediate outcome indicator 1.6	Increased power trade (between countries)	168 TWh (EAPP, SAR, WAPP, CASA, Pan-Arab)	The target represents the total amount of regionally traded energy facilitated through ESMAP-supported projects and/or countries & regions (e.g. Eastern [WAPP], Western [WAPP] and Southern [SAPP] African power pools, Central and South Asia trade [via CASA-1000], and Middle East region). The target is estimated based on the optimized trade scenarios and the pipeline of projects in the regions targeted for ESMAP support. The indicator will be measured with progress/completion reports on ESMAP-funded grants and data from the ESMAP-supported World Bank lending operations.
Intermediate outcome indicator 1.7	Number of countries with new markets for energy services	10	The indicator measures the number of countries where the development work on energy/power market frameworks has been supported and/or informed by ESMAP. The targeted number of countries is estimated based on the prospective pipeline of engagements through investment/development policy/technical assistance dialogue. The indicator will be measured with progress/completion reports on ESMAP-funded grants.

Intermediate outcome indicator 1.8	Countries inter-connected and trading	54 (SAPP, EAPP, SAR, WAPP, CASA, Pan-Arab)	The indicator measures the number of countries with established cross-border transmission connections and commercial trading arrangements. The target is based on the existing and prospective ESMAP support through interventions aiming at developing both hard and soft infrastructure in Africa, South Asia, Central Asia, and Middle East/North Africa regions. The indicator will be measured with progress/completion reports on ESMAP-funded grants and data from the ESMAP-supported World Bank lending operations.
Intermediate outcome indicator 1.9	Number of countries with official plans to reform energy subsidies (including reforming social protection, incorporating energy efficiency measures, and implementing communication campaigns as part of subsidy reform efforts)	20	The target is based on the existing and expected pipeline for country grants and represents an increase over similar target under the FY17-20 Business Plan, based on the results achieved. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Intermediate outcome indicator 1.10	Number of countries that have strengthened their social protection systems to ensure the poor are not worse off due to energy subsidy reforms	10	The target is based on the existing and expected pipeline for country grants and represents an increase over similar target under the FY17-20 Business Plan, based on the results achieved. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Intermediate outcome indicator 1.11	Coal capacity reduced through coal plant retirement/repurposing	5 GW	Estimated coal capacity reduced is based on the pipeline of ESMAP support requests for repurposing of coal plants, accounting for the estimated retirement schedule of the plants. The indicator will be measured with progress/completion reports on ESMAP-funded grants
Intermediate outcome indicator 1.12	Private co-financing mobilized	\$5bn	The indicator measures the amount of private sector participation through both the direct Private Co-financing Mobilization (PCM) and Mobilizing Financing for Development (MFD). The target is estimated as private sector financing mobilized through ESMAP-supported and -informed guarantee, investment and development policy operations. The indicator will be measured with data from the ESMAP-supported World Bank lending operations.
<u>INTERMEDIATE OUTCOME 2: World Bank has expanded support to promoting gender equality in the energy sector</u>		Target FY24	NOTES
Intermediate outcome indicator 2.1	% of WB projects supported by ESMAP to meet Gender Tag to close gaps between women and men (in access, entrepreneurship, and employment)	70%	The World Bank Corporate Target on Gender Tag is set at 55% on Gender Tag. Additional ESMAP support will help exceed the Corporate Target. The indicator will be measured with data from the ESMAP-supported World Bank lending operations.
<u>INTERMEDIATE OUTCOME 3: Countries have supported employment opportunities for women in the energy sector</u>		Target FY24	NOTES

Intermediate outcome indicator 3.1	Number of additional countries that have adopted policies or plans to enhance women's employment at the utility level [across recruitment, retention and promotion with a focus on equal pay, training, childcare etc.]	15	The target is based on the existing pipeline for country grants. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Intermediate outcome indicator 3.2	Number of additional countries supported by WB Development Policy Financing that integrate a focus on closing gender gaps in their energy strategies/policies	7	The target is based on the pipeline of Development Policy Financing operations that can embed a focus on gender equality. The indicator will be measured with data from the ESMAP-supported World Bank lending operations.
Intermediate outcome indicator 3.3	ESMAP-supported decarbonization projects that include a significant women's leadership and employment component/pilot	8	The target is based on the demand estimation for ESMAP support under the Accelerating Decarbonization program. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Intermediate outcome indicator 3.4	Number of countries where there is a WBG engagement in supporting development of roadmaps including maximizing socio-economic benefits derived from RE development with a focus on women's employment and skills development	20	The target is based on the demand estimation for ESMAP support under the EnRen program. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
<u>INTERMEDIATE OUTCOME 4: Countries have supported women's entrepreneurship in the energy sector and productive uses of energy</u>		Target FY24	NOTES
Intermediate outcome indicator 4.1	Percentage of IDA off-grid electrification operations tackling women's entrepreneurship, and access to finance gaps (Electricity Access program)	100%	The indicator measures the World Bank lending operations that incorporate an ESMAP-informed component supporting women's entrepreneurship. The indicator will be measured with progress/completion reports on ESMAP-funded grants data from the ESMAP-supported World Bank lending operations.
Intermediate outcome indicator 4.2	Strategies adopted at the country level on closing productivity gaps between male and female farmers and business owners (Electricity Access program)	10	The ESMAP-supported grants will be informed by own-managed research that identifies barriers to productivity for female farmer/entrepreneurs. The target is based on demand estimation. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
Intermediate outcome indicator 4.3	Percentage of Clean Cooking Fund supported projects that have proactive actions to promote female employment/entrepreneurship and gender co-benefits	100%	Each CCF co-financed WBG/MDBs investment project will require proactive actions to promote female employment/entrepreneurship and gender co-benefits during the design phase as part of the CCF funding requirement. The indicator will be measured with progress/completion reports on ESMAP-funded grants and data from the ESMAP-supported World Bank lending operations.

Intermediate outcome indicator 4.4	Number of new decarbonization projects with enhanced focus on productivity gaps and livelihoods for women	8	The target is based on the demand estimation for ESMAP support under the Accelerating Decarbonization program (through Clean Cooling Facility and Geothermal Direct Use). The indicator will be measured with progress/completion reports on ESMAP-funded grants.
<u>INTERMEDIATE OUTCOME 5: Countries have adopted strategies to support women in host and marginalized communities as consumers in the energy sector</u>		Target FY24	NOTES
Intermediate outcome indicator 5.1	Countries supported by ESMAP that have integrated electrification of displaced people, host and marginalized communities in electrification programs, with a focus on the needs of women and girls	15	Of the countries with the largest number of people currently without access to electricity, 23 have high- and medium-intensity conflicts or high institutional and social fragility, where displaced people, host and other marginalized communities are priority targets for electrification efforts. ESMAP expects to support World Bank electrification projects in 65 percent of these countries. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
<u>OUTPUTS: Utilities for the Energy Transition</u>		Target FY24	NOTES
Output 1: Flagship report	Energy Transition: business and regulatory models in developing countries	1	
Output 2: Training	Digital Academy, to identify and transfer emerging global knowledge, best practice, and deliver training in 5 key areas	1	
Output 3: Tools	Standard documentation for procurement of new technologies (including DER, digital solutions)	1	
<u>OUTPUTS: Markets, Connectivity and Trade</u>		Target FY24	NOTES
Output 1: Flagship reports	(i) Design of next generation commercial agreements and market tools; (ii) Increasing system flexibility via efficient ancillary service markets	2	
Output 2: Analyses	Analytical studies on regional power trade	2	
Output 3: Tools	Best practices on wholesale markets, technical and regulatory harmonization for regional power pools	2	
Output 4: Training/events	Knowledge exchange, workshops, trainings on Market deployment, and Power System Planning	2	
<u>OUTPUTS: Energy Subsidy Reform</u>		Target FY24	NOTES

Output 1: Flagship Report	Reforming energy subsidies: Achievements, Setbacks, Lessons Learned and Way Forward	1	
Output 2: Training/Events	Internal and external knowledge exchange fora every year	4	
<u>OUTPUTS: Closing Gender Gaps</u>		Target FY24	NOTES
Output 1: Flagship Report	(i) Gender and Hydropower; (ii) Environmental and social (incl. gender) considerations in offshore floating solar development	2	
Output 2: Analyses	(i) 20 MTF country reports (covering gender gaps); (ii) 2 MTF Insight reports: gender & impact evaluation; (iii) 4 Annual Gender and Access reports	3	
Output 3: Training/Event	(i) Women's leadership in Decarbonization of Public Sector and End Uses in developing countries; (ii) Innovative technology, business, and financing approaches in Clean Cooking - Women's and Men's preferences and needs	2	
<u>OUTPUTS: Support to Coal Regions in Transition</u>		Target FY24	NOTES
Output 1: Platforms	Regional Collaboration Platforms for Coal Regions in Transition (2-3)	2	
Output 2: Training	Coal Regions in Transition Learning Academy (2 deliveries annually)	8	
Output 3: Analyses	Coal plant decommissioning/repurposing studies for 15-20 plants	2	
<u>PROGRAM: ENERGY DATA AND ANALYTICS</u>			
<u>OUTCOME 1: Government counterparts use the generated evidence in policy decisions</u>		Target FY24	NOTES

Outcome indicator 1.1	World Bank energy lending operations informed by using the Energy Data & Analytics datasets, applications and knowledge reports (including using energy data to close gender gap in energy services)	100%	The Energy Data and Analytics products provide World Bank operational teams with easy access to data on the country contexts to use in project appraisals and can be used as necessary information for better understanding the country context. In addition, the results of the RISE report can be used as outcome indicators for operations with policy components. The indicator will be measured with data from the ESMAP-supported World Bank lending operations.
Outcome indicator 1.2	New World Bank advisory services and analytics projects supported by ESMAP confirm and illustrate the use of Energy Data & Analytics datasets, applications and knowledge reports	100%	Using the Energy Data and Analytics products in the advisory services and analytics projects supported by ESMAP will support well-informed government policy decisions. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Outcome indicator 1.3	Evidence of uses of Energy Data & Analytics outputs in well-established global initiatives (publications, indexes, research series, white papers from global institution including World Economic Forum, UN, IRENA, IEA)	10	The target is based on the average of 2-3 global reports and initiatives per year to be informed with the Energy Data & Analytics products. Informing the global initiatives identifies priorities for increased action in support of SDG7. The indicator will be measured with Energy Data & Analytics program progress reports.
OUTPUTS:		Target FY24	NOTES
Output 1	Publication of the Tracking SDG7 Report	4	
Output 2	Publication of RISE analytical platform website	2	
Output 3	Publication of MTF Country Report (focus on gender gaps in each report)	20	
Output 4	Publication of MTF insight on gender and impact evaluation	2	
Output 5	Refugees Data Report Publication	1	
Output 6	Knowledge products (including RBF data platform) on clean cooking	10	
Output 7	Regulatory benchmarking index portal	2	
Output 8	Launching of Global Electrification Platform 2.0 (including 64 countries)	1	
Output 9	Capacity building workshop for GEP	4	
Output 10	Residential customer demand estimation report including algorithm and input data by country	20	
Output 11	Agriculture energy demand estimation report including algorithm and input data by country	20	

Output 12	Dissemination of demand assessment toolkit (survey instrument and open source algorithm)	1	
Output 13	Adding new institutional partners on EnergyData platform that would publish at least 1 dataset each	12-15	
Output 14	Publish analytical pieces on EnergyData platform	15-20	
Output 15	Present Energy Data and Analytics Hub work at WBG/partner/international events and conferences	3-5	
Output 16	Launch of updates to other existing applications (Global Solar Atlas, Global Wind Atlas, etc)	3	

PROGRAM: CLEAN COOKING FUND

<u>OUTCOME 1: Improved access to clean cooking in client countries</u>		Target FY24	NOTES
Outcome indicator 1.1	Number of people who gained access to clean cooking resulting from policies, programs and strategies	200 million	Africa Energy Leap program includes a target of access to clean cooking for 300 million people by FY26. ESMAP played a key role conceptualizing the Leap program and the CCF will fully support its implementation as well as eligible cooking projects in other regions. ESMAP will continue providing support to government policies to achieve the Energy Leap targets. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Outcome indicator 1.2	Number of people who gained access to clean cooking resulting from financed projects	100 million	Africa Energy Leap program includes a target of access to clean cooking for 300 million people by FY26. ESMAP played a key role conceptualizing the Leap program and the CCF will fully support its implementation as well as eligible cooking projects in other regions. The CCF co-financed projects are expected to mobilize at least \$1 billion public and private investments. Assuming an average switching cost is \$40 per household, an average household size is 4, \$1 billion investments will help 25 million households (100 million people) to gain access to clean cooking. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.
Outcome indicator 1.3	Amount of investments mobilized (including both public and private financing)	USD 2 Billion	The Leap program estimated that to help 300 million people to have access to clean cooking, \$3 billion investments (both public and private) are required. The CCF is expected to play a key role to mobilize such investments through leading by example and replication effects. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.

<u>INTERMEDIATE OUTCOME 1: Governments adopt policies and regulations to support public and private sector investment in clean cooking</u>		Target FY24	NOTES
Intermediate outcome indicator 1.1	Number of policies and regulations adopted by governments to support clean cooking market development	30	The CCF includes country/regional grants which will be used to prepare investment projects and improve readiness of implementation including supporting strategies, policies, regulations development to support clean cooking. Furthermore, each WBG/MDBs investment project is expected to have a component on enabling environment to improve policies and regulations. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Intermediate outcome indicator 1.2	Number of WBG/MDBs investment projects catalyzed by the CCF	30	The CCF includes an innovation fund and a technical assistance program which will catalyze innovative technology, business, and financing approaches. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Intermediate outcome indicator 1.3	Percentage of CCF-supported projects that have proactive actions to promote female employment/entrepreneurship and gender co-benefits	100%	Each CCF co-financed WBG/MDBs investment project will require proactive actions to promote female employment/entrepreneurship and gender co-benefits during the design phase as part of the CCF funding requirement. The indicator will be measured with progress/completion reports on ESMAP-funded grants and data from the ESMAP-supported World Bank lending operations.
<u>OUTPUTS:</u>		Target FY24	NOTES
Output 1	Strategies, policies, regulations to support clean cooking	40	Delivered through ESMAP-supported grants.
Output 2	Joint activities by partners for global outreach or country-level program coordination	30	
Output 3	Innovative technology, business, and financing approaches, incorporating both women's and men's preferences and needs	20	Delivered through ESMAP-supported grants.
Output 4	Own-managed knowledge products (including RBF data platform) on clean cooking with one global flagship report every other year.	10	
<u>PROGRAM: ELECTRICITY ACCESS</u>			
<u>OUTCOME 1: People, farmers, businesses and public institutions with electricity access</u>		Target FY24	NOTES

Outcome indicator 1.1	Population with new electricity access resulting from universal access strategies, programs and plans, with specific electricity access targets by 2030, implementation schedules and financing plans	500 million people, of which mini grid/off-grid: 300 million	According to the 2019 SDG7 tracking report, achieving SDG7 will require providing electricity to 1.2 billion people by 2030. Nearly all of these people (95%) are in the top 50 countries with the largest numbers of people without access today. ESMAP aims to inform universal access strategies, programs and plans in these countries resulting in electricity access for about 40 percent of the 1.2 billion people by 2030. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
Outcome indicator 1.2	30 million households and/or micro and small enterprises and small-holder farmers with new electricity access through projects/programs funded through the World Bank, Governments, development partners and associated private sector investments (measured as targets in operations approved during the business plan period)	150 million people, of which mini grid/off-grid: 90 million	ESMAP expects to inform World Bank operations in 25 of the top 50 countries with the largest populations of people currently without access to electricity. There are currently around 450 million people without access to electricity in these 25 countries. World Bank projects aim to connect about 1/3rd of these 450 million people. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations. The reporting will be disaggregated by types of populations (women, refugees etc.) where data is available from the lending operations.
Outcome indicator 1.3	Schools, health clinics and other community facilities electrified projects/programs funded through the World Bank, Governments, development partners and associated private sector investments (measured as targets in operations approved during the business plan period)	1 million public institutions	The World Bank electricity access operational portfolio shows that the average number of people served by a community-facility ranges from around 60 people in rural areas to over 1,000 in peri-urban areas, with the typical community-facility serving an average of about 150 people. This equates to around 1 million public institutions serving the 150 million people in the countries referenced in Outcome Indicator 2. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.
Outcome indicator 1.4	Electricity access financing mobilized (through IDA, IBRD, climate finance and associated Government, development partner programs and private sector investments)	US\$ 30 billion, of which US\$10 billion private sector	Using cost estimates from the IEA and Bloomberg New Energy Finance (\$281 investment cost per person for mini grids, \$100 investment cost per person for SHS, and \$187 investment cost per person for the main grid), the total cost of providing electricity to the 150 million people referenced under Outcome Indicator 2 under a least-cost approach would be \$30.5 billion. The World Bank expects to leverage every \$1 of its investment to attract \$1 of co-financing from the private sector and \$1 of co-financing from governments and development partners. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.
<u>INTERMEDIATE OUTCOME 1. Countries with supportive enabling environment for an inclusive and impactful electrification</u>		Target FY24	NOTES
Intermediate outcome indicator 1.1	Number of countries supported by ESMAP (technical assistance and operational support for pipeline development and implementation) with electricity access deficit, which officially adopted integrated electrification strategies/least cost	50	There are currently 63 countries that have more than half a million people living without access to electricity. ESMAP aims to support integrated electrification strategies and least-cost planning in at least 80 percent of these countries. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.

	plans, combining grid, mini grid and off-grid technologies, with universal access targets, implementation schedule and modalities and financing plans		
Intermediate outcome indicator 1.2	Countries that have integrated productive use interventions in electrification projects/programs and/or built synergies across energy access and agriculture interventions to support small-holder farmers	20	ESMAP aims to support productive use interventions in 80% of the 25 countries referenced in Outcome Indicator 2, with a particular focus on operations that have large off-grid and mini grid components. The indicator will be measured with progress/completion reports on ESMAP-funded grants. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
Intermediate outcome indicator 1.3	Countries that have adopted and launched implementation of a scalable and sustainable model for electrification of public institutions	20	ESMAP aims to support scalable and sustainable models for electrification of public institutions in 80% of the 25 countries referenced in Outcome Indicator 2. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
Intermediate outcome indicator 1.4	Countries that have adopted integrating electrification of displaced people, host and other marginalized communities in electrification programs, with a focus on the needs of women and girls	15	Of the countries with the largest number of people currently without access to electricity, 23 have high- and medium-intensity conflicts or high institutional and social fragility, where displaced people, host and other marginalized communities are priority targets for electrification efforts. ESMAP expects to support World Bank electrification projects in 65 percent of these countries. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
Intermediate outcome indicator 1.5	Countries that have adopted pro-poor energy access subsidy and delivery model approaches	20	ESMAP aims to help World Bank projects adopt pro-poor energy access subsidy and delivery model approaches in 80% of the 25 countries referenced in Outcome Indicator 2. This relates in particular to the mini grid and off-grid program. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
Intermediate outcome indicator 1.6	Percentage of IDA off-grid operations tackling women's entrepreneurship, and access to finance gaps	100	World Bank projects in all 25 countries referenced in Outcome Indicator 2 are expected to address women's entrepreneurship and access to finance gaps. The indicator measures the World Bank lending operations that incorporate an ESMAP-informed component supporting women's entrepreneurship. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work and data from the ESMAP-supported World Bank lending operations.
Intermediate outcome indicator 1.7	Strategies adopted at the country level on closing productivity gaps between male and female farmers and business owners	10	ESMAP aims to support 40% of the countries referenced in Outcome Indicator 2 to close productivity gaps between male and female farmers and business owners. The ESMAP-supported grants will be informed with the own-managed research that identifies barriers to crop productivity for female farmers. The target is based on demand estimation. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.

OUTPUTS:		Target FY24	NOTES
Output 1	National electrification strategies and plans, based on geospatial least-cost modeling, integrating grid, mini grid and off-grid technologies developed with ESMAP support, and using technical resources and support provided by ESMAP's geospatial electrification team.	30	Outputs represent technical advice provided to Governments and operations and knowledge products issued to scale-up electrification efforts in inclusive and impactful manner.
Output 2	Country-specific policy and regulatory frameworks, business models and/or financing instruments developed with ESMAP support for scaling up mini grid and off-grid electrification.	25	
Output 3	Designed and piloted distinct financing innovations aiming to leverage commercial debt, crowd in private sector finance, and/or sustainably provide demand side subsidies/consumer financing.	6	
Output 4	Business models developed and piloted for sustainable electrification of displaced population and host communities	3	
Output 5	Sustainable business model for electrification of public institutions, leveraging private sector, developed, piloted and results documented	3	
Output 6	Approaches for stimulating demand and productive use developed, piloted and results documented	3	
Output 7	At least 6 global knowledge reports covering mini grids, off-grid solar, productive use, public institution electrification, subsidies and other pertinent topics	6	
Output 8	At least 6 global knowledge events covering mini grids, off-grid solar, productive use, public institution	6	

	electrification, subsidies and other pertinent topics	
Output 9	Delivery of one knowledge product or event related to gender by access program per year (duration of business plan)	4

PROGRAM: RENEWABLE ENERGY

<u>OUTCOME 1: Governments adopt policies and plans to support a major scale-up of RE</u>		Target FY24	NOTES
Outcome Indicator 1.1	RE capacity additions under government policies and plans up to 2030, of which:	60 GW	Target estimates are based on projections of policy commitments under the current engagements with countries, and the demand estimate for additional countries. The target represents the incremental increase in announced policy commitments that have benefited from ESMAP-funded work. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
	1.1.1: Offshore wind in government policies and plans to 2030	20 GW	
<u>OUTCOME 2: Stimulation of public and private investment in RE and ancillary infrastructure</u>		Target FY24	NOTES
Outcome indicator 2.1	RE capacity commitments (direct and enabled through ancillary infrastructure and grid improvements) under WBG financed projects, of which:	32.5 GW	Target estimates are based on projections under the current engagements with countries, and the demand estimate for additional countries. In some countries, the target can represent a subset of policy commitments under Outcome Indicator 1.1. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.
	2.1.1: Capacity commitments under EnRen-supported financed projects	20 GW	
	2.1.2: Innovative solar capacity commitments under financed projects	3 GW	
	2.1.3: Hydropower capacity commitments under financed projects	4.5 GW	
	2.1.4: Offshore wind capacity commitments under financed projects	5 GW	

Outcome indicator 2.2	Volume of financing leveraged for projects that increase RE capacity, of which:	\$25 billion	The total financing leveraged is the sum of World Bank and private financing.
	2.2.1: WB financing leveraged	\$3 billion	The indicator estimates the volume of the World Bank lending necessary for the RE capacity commitments under Outcome Indicator 1.1 and is based on the current pipeline of engagements and demand estimate for additional countries. The indicator will be measured with data from the ESMAP-supported World Bank lending operations.
	2.2.2: Private financing leveraged	\$22 billion	The indicator measures the amount of private sector participation through both the direct Private Co-financing of the World Bank lending projects, and private investments expected as a result of pre-feasibility studies, preparation of auctions etc. The indicator will be measured with progress/completion reports on ESMAP-funded grants and data from the ESMAP-supported World Bank lending operations.
Outcome indicator 2.3	Battery storage capacity commitments under financed projects	15 GWh	Target estimates are based on projections under the current engagements with countries, and the demand estimate for additional countries. The indicator will be measured with progress/completion reports on ESMAP-funded grants and data from the ESMAP-supported World Bank lending operations.
<u>INTERMEDIATE OUTCOME 1: WB is supporting RE scale-up in a wide range of countries following the EnRen approach</u>		Target FY24	NOTES
Intermediate outcome indicator 1.1	Number of countries where there is a WB engagement in increasing the penetration of RE in generation mix	30	The target is based on the estimates of countries that have requested new/additional World Bank engagements (advisory services, RETFs, IFC engagements etc.) achieved as a result of demand stimulation from ESMAP own-managed work. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
Intermediate outcome indicator 1.2	Number of countries where active WB engagement on geothermal power is newly established	3	
<u>INTERMEDIATE OUTCOME 2: Countries have included innovative technologies in their policies and plans</u>		Target FY24	NOTES
Intermediate outcome indicator 2.1	Number of countries where there is WBG engagement on battery storage	40	The target is based on the estimates of countries that have requested new/additional World Bank engagements (advisory services, RETFs, IFC engagements etc.) achieved as a result of demand stimulation from ESMAP own-managed work. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
Intermediate outcome indicator 2.2	Number of countries where there is WBG engagement on innovative solar technologies	12	
Intermediate outcome indicator 2.3	Number of countries where there is WBG engagement on offshore wind	10	
<u>INTERMEDIATE OUTCOME 3: Countries are developing the next generation of hydropower projects</u>		Target FY24	NOTES

Intermediate outcome indicator 3.1	Number of countries where there is WB engagement under the Hydropower Development Facility	10	The target is based on the estimates of countries that have requested new/additional World Bank engagements (advisory services, RETFs, IFC engagements etc.) achieved as a result of demand stimulation from ESMAP own-managed work. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
<u>INTERMEDIATE OUTCOME 4: RE scale-up helps countries support socio-economic development and action on gender</u>		Target FY24	NOTES
Intermediate outcome indicator 4.1	Number of countries where there is WBG engagement in supporting development of roadmaps including maximizing socio-economic benefits derived from RE development with a focus on women's employment and skills development	20	The target is based on the demand estimation for ESMAP support under the EnRen program. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
<u>OUTPUTS: Energizing Renewables</u>		Target FY24	NOTES
Output 1	Flagship report: Sustainable deployment of solar (grid and off-grid) and wind projects (EnRen guidelines)	1	
Output 2	Events: Workshops to disseminate the EnRen integrated approach and promote the related support	2	
Output 3	Report: Lessons learnt from the Noor Ouarzazate complex in Morocco (lessons for EnRen approach)	1	
Output 4	Tool: Diagnostic tool to identify standardized solutions consistent with the EnRen methodology	1	
Output 5	Tool: E-tendering platform for standardized competitive procurement of RE projects	1	
Output 6	Report: Assessment of geothermal drilling costs	1	
Output 7	Event: Gender in geothermal workshops	1	
Output 8	Report: Lesson learnt from cumulative environmental and social impacts from geothermal development in Turkey	1	
<u>OUTPUTS: Energy Storage</u>		Target FY24	NOTES

Output 9	Flagship report: lessons learned from WB projects and pilot projects	1	
Output 10	Reports: Outputs developed under the Energy Storage Partnership	1	
Output 11	Report: Social development framework and sustainable manufacturing practices for batteries	1	
Output 12	Events: Convene exchanges under the Clean Energy Ministerial campaign on energy storage	1	
Output 13	Events: Technology-focused workshops and regional exchange events	4	
OUTPUTS: Innovative solar		Target FY24	NOTES
Output 14	Flagship report: Distributed solar PV in developing countries	1	
Output 15	Report: Benefits of hybridization of hydropower with solar PV	1	
Output 16	Report: Environmental and social considerations for offshore floating PV development (social considerations to include gender aspects)	1	
Output 17	Events: Global knowledge sharing on innovative solar (as a part of EnRen workshops/consultations)	1	
Output 18	Databases: Floating solar potential on existing hydropower reservoirs (geospatial database) and nearshore floating solar potential (geospatial database)	2	
OUTPUTS: Offshore Wind		Target FY24	NOTES
Output 19	Flagship report: Key factors for successful development of offshore wind in emerging markets	1	
Output 20	Report: Environmental framework for development of offshore wind	1	
Output 21	Report: Social framework for development of offshore wind	1	

Output 22	Event: Global seminar and knowledge sharing on offshore wind development (location TBD)	1	
<u>OUTPUTS: Hydropower</u>		Target FY24	NOTES
Output 23	Report: Private Sector Financing	1	
Output 24	Report: Gender & Hydropower	1	
Output 25	Database: Global compendium of hydropower dams	1	
Output 26	Report: Sustainability initiatives	1	
Output 27	Report: Sediment Management in Reservoirs	1	
<u>PROGRAM: ACCELERATING DECARBONIZATION</u>			
<u>OUTCOME 1: Governments adopt policies and plans to accelerate decarbonization</u>		Target FY24	NOTES
Outcome indicator 1.1	Estimated GHG emissions reduced or avoided under government policies and plans up to 2030 (lifetime MtCO ₂ e)	1,100	Target estimates are based on projections of policy commitments under the current engagements with countries, and the demand estimate for additional countries. The target represents the incremental increase in announced policy commitments that have benefited from ESMAP-funded work. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
<u>OUTCOME 2: Stimulation of public and private investment to accelerate decarbonization</u>		Target FY24	NOTES
Outcome indicator 2.1	Expected GHG emissions reductions under WBG financed projects (lifetime MtCO ₂ e)	360	The target is based on the GHG emissions reductions from the World Bank's lending portfolio of demand side EE projects, extrapolating to the projected demand for ESMAP support. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.
Outcome indicator 2.2	Number of WBG financed projects that reduce or avoid GHG emissions, of which:	59	The target is based on the estimated pipeline of expected World Bank Group financing operations (including IFC) from both ESMAP grants and engagements stimulated with ESMAP own-managed outputs. More than one operation can take place in a country. The indicator will be measured with the data from the ESMAP-supported World Bank lending operations.
	Number of projects financed that target decarbonization in the public sector	22	
	Number of projects financed that include use of innovative technologies in industry	10	

	Number of projects financed that are “cooling informed”	20	
	Number of projects financed that include green hydrogen	4	
	Number of projects financed that include geothermal direct use	4	
Outcome indicator 2.3	Volume of financing leveraged for projects that support accelerated decarbonization, of which:	\$3.6 billion	The total financing leveraged is the sum of World Bank Group, and private and concessional financing.
	2.3.1: WBG financing leveraged	\$2.5 billion	The indicator estimates the volume of the World Bank lending necessary for the RE capacity commitments under Outcome Indicator 1.1 and is based on the current pipeline of engagements and demand estimate for additional countries. The indicator will be measured with data from the ESMAP-supported World Bank lending operations.
	2.3.2: Climate finance leveraged	\$300 million	The indicator measures the amount of additional concessional funding leveraged, and the target is based on the existing pipeline. The indicator will be measured with progress/completion reports on ESMAP-funded grants and data from the ESMAP-supported World Bank lending operations.
	2.3.3: Private financing leveraged	\$800 million	The indicator measures the amount of private sector participation through both the direct Private Co-financing of the World Bank lending projects, and private investments expected as a result of pre-feasibility studies, preparation of procurements etc. The indicator will be measured with progress/completion reports on ESMAP-funded grants and data from the ESMAP-supported World Bank lending operations.
<u>INTERMEDIATE OUTCOME 1: World Bank Group has expanded its support to a wide range of client countries to achieve Zero Carbon Public Sector</u>		Target FY24	NOTES
Intermediate outcome indicator 1.1	Number of countries with WBG engagement on decarbonizing the public sector	20	The target is based on the estimates of countries that have requested new/additional World Bank engagements (advisory services, RETFs, IFC engagements etc.) achieved as a result of demand stimulation from ESMAP own-managed work. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
<u>INTERMEDIATE OUTCOME 2: World Bank Group has expanded its support to a wide range of client countries on access and scale up efficient, clean cooling</u>		Target FY24	NOTES
Intermediate outcome indicator 2.1	Number of countries where there is active WBG engagement on sustainable cooling	18	The target is based on the estimates of countries that have requested new/additional World Bank engagements (advisory services, RETFs, IFC engagements etc.) achieved as a result of demand stimulation from ESMAP own-managed work. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.

<u>INTERMEDIATE OUTCOME 3: World Bank Group has expanded its support on technological innovation in industrial decarbonization</u>		Target FY24	NOTES
Intermediate outcome indicator 3.1	Number of innovative technologies that are part of active WBG engagements on industrial decarbonization	5	The target is based on the estimates of countries that have requested new/additional World Bank engagements (advisory services, RETFs, IFC engagements etc.) achieved as a result of demand stimulation from ESMAP own-managed work. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
<u>INTERMEDIATE OUTCOME 4: World Bank Group has expanded its support on Green Hydrogen and/or fuel cell technologies</u>		Target FY24	NOTES
Intermediate outcome indicator 4.1	Number of countries including green hydrogen and/or fuel cell technologies in their decarbonization strategies	8	The target is based on the estimates of countries that have requested new/additional World Bank engagements (advisory services, RETFs, IFC engagements etc.) achieved as a result of demand stimulation from ESMAP own-managed work. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
<u>INTERMEDIATE OUTCOME 5: World Bank Group has expanded its support to develop Geothermal Direct Use</u>		Target FY24	NOTES
Intermediate outcome indicator 5.1	World Bank Group is supporting wide range of client countries to develop Geothermal Direct Use	6	The target is based on the estimates of countries that have requested new/additional World Bank engagements (advisory services, RETFs, etc.) achieved as a result of demand stimulation from ESMAP own-managed work. The indicator will be measured with progress/completion reports on ESMAP-funded grants and own-managed work.
<u>INTERMEDIATE OUTCOME 6: Countries have supported women's entrepreneurship in the energy sector and productive uses of energy</u>		Target FY24	NOTES
Intermediate outcome indicator 6.1	ESMAP-funded decarbonization projects that include a significant women's leadership and employment component/pilot	8	The target is based on the demand estimation for ESMAP support under the Accelerating Decarbonization program. The indicator will be measured with progress/completion reports on ESMAP-funded grants.
Intermediate outcome indicator 6.2	Number of projects with enhanced focus on productivity gaps and livelihoods for women	8	The target is based on the demand estimation for ESMAP support under the Accelerating Decarbonization program (through Clean Cooling Facility and Geothermal Direct Use). The indicator will be measured with progress/completion reports on ESMAP-funded grants.
<u>OUTPUT: Zero Carbon Public Sector</u>		Target FY24	NOTES
Output 1	Flagship report: Opportunities for achieving decarbonization in the public sector	1	
Output 2	Flagship report: The economics of electric mobility	1	

<u>OUTPUT: Industrial Decarbonization</u>		Target FY24	NOTES
Output 3	Flagship report: Technology innovations for industrial decarbonization in developing countries	1	
Output 4	Events: Two dissemination workshops on results of global studies	2	
<u>OUTPUT: Efficient and Clean Cooling</u>		Target FY24	NOTES
Output 5	Flagship report: Access to energy and cooling (sustainable cold chains)	1	
Output 6	Report: Brief(s) on innovative sustainable cooling technologies and systems	1	
Output 7	Events: Workshops/exchanges on efficient, clean cooling in developing countries	2	
<u>OUTPUT: Geothermal Direct Use</u>		Target FY24	NOTES
Output 8	Flagship report: Global market analysis for direct use	1	
Output 9	Development plans: Two regional plans	2	
Output 10	Events: Two regional workshops	2	
<u>OUTPUT: Green Hydrogen</u>		Target FY24	NOTES
Output 11	Flagship Report: Green hydrogen for multi-sectoral deep decarbonization of developing countries (co-led between industrial decarbonization and green hydrogen programs)	1	
Output 12	Report: Technical safety and project design framework	1	
Output 13	Events: Technology-focused workshops and regional exchange events	2	
<u>OUTPUT: All</u>		Target FY24	NOTES
Output 14	Workshop on women's leadership in decarbonization of public sector and end uses in developing countries	1	