

# ACT INVESTMENT PROGRAM MONITORING AND REPORTING TOOLKIT

Operational Guidance on the ACT M&R System

#### M&R TOOLKIT SERIES //

#### Monitoring and Reporting Toolkit

CIF Program: Accelerating Coal Transition

#### TOPICS

- Monitoring and Reporting
- Coal Transition
- Results and Impact

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# EXECUTIVE SUMMARY

**The Accelerating Coal Transition Investment Program Monitoring and Reporting System** (ACT M&R System) described in this toolkit is designed to set expected results and track progress toward the program's main objectives: accelerating the transition from coal-powered to clean energy while supporting socio-economic goals and environmental remediation. The toolkit builds on the theory and design features laid out in the ACT Integrated Results Framework (CIF 2021a) and the ACT Investment Program Design Document (CIF 2021b) and provides detailed, comprehensive operational guidance on how the full ACT M&R System is implemented.

The ACT M&R System is united with other CIF M&R systems through a common framework of key elements, but it is adapted to fit the specific programming context of the accelerated coal transition. This includes specific roles and responsibilities for both ACT recipient countries and implementing MDBs, as well as the CIF Administrative Unit (see Section 2). The ACT M&R System comprises tailored approaches for country investment plan M&R, during design, endorsement, and implementation phases, and project-level M&R, during design, approval, implementation, and completion phases. While this toolkit focuses specifically on ACT's M&R function, ACT M&R plays a role that is complementary to additional evaluation, learning, gender, and social inclusion approaches reflected in the multi-dimensional ACT Integrated Results Framework.

Seven categories of indicators make up the ACT M&R System: (1) CIF Impact Indicators, (2) ACT Country Impact Indicators, (3) ACT Core Indicators, (4) ACT Co-Benefit Indicators, (5) ACT Optional Indicators, (6) ACT Project-Specific Indicators, and (7) Energy Storage Indicators. Some indicators, like CIF Impact Indicators and ACT Country Impact Indicators, are situated at a high level of results and are designed to capture results relevant to CIF as a fund and to specific ACT country investment plans.

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The 11 ACT core indicators (Category 3) form the foundation of the system and are required to be reported by MDBs for all ACT projects on an annual basis. The toolkit provides detailed guidance on each of these core indicators, including an overview and rationale, precise definitions of their components, methodological guidance for baselines/expected results/achieved results, information on required and optional disaggregation per indicator, other considerations, anticipated data sources, and a bespoke reference list.

Co-benefit indicators are designed to capture additional social, economic, and environmental development outcomes that are not a central objective of ACT itself. MDBs are required to identify and report on at least one co-benefit indicator per project. In addition, the CIF Administrative Unit will synthesize additional reporting made available by MDBs on ACT optional indicators and project-specific indicators and will aggregate energy storage results common to both ACT and CIF's Global Energy Storage Program (GESP).

Several additional features of ACT M&R and related CIF approaches to results analysis complement the use of indicators. These include multi-stakeholder review mechanisms for country investment plans, signals and dimensions of transformational change, gender and social inclusion results and analytics, development impact modeling, Sustainable Development Goal mapping, narrative reporting, program evaluation, and capacity building and learning activities. (While covered briefly here, some of these areas are elaborated in more detail outside this toolkit.)

The ACT M&R Toolkit concludes with practical guidance on how users can navigate the online CIF Collaboration Hub portal to fulfill their annual results reporting roles and responsibilities. As a living document, the ACT M&R Toolkit is subject to future review and modifications following CIF's experience deploying the ACT M&R System.

# LIST OF ABBREVIATIONS

ACT	Accelerating Coal Transition
ССН	CIF Collaboration Hub
CFL	Compact Fluorescent Lamp
СНР	Combined Heat and Power
CIF	Climate Investment Funds
CSP	Concentrated Solar Power
CTF	Clean Technology Fund
E&L	Evaluation and Learning
EDGE	Encouraging Diversity Growth and Equity Program
EE	Energy Efficiency
EIA	Energy Information Administration
EPA	Environmental Protection Agency
ESMAP	Energy Sector Management Assistance Program
EUI	Energy Use Index
FIP	Forest Investment Program
GCAP	Global Climate Action Program
GCF	Green Climate Fund
GEF	Global Environment Facility
GESP	Global Energy Storage Program
GHG	Greenhouse Gas
GWP	Global Warming Potential
IEA	International Energy Agency
IPCC	Intergovernmental Panel on Climate Change
IRENA	International Renewable Energy Agency
IFC	International Finance Corporation
ILO	International Labor Organization
JIM	Joint Impact Model

KPI	Key Performance Indicator
LDCF	Least Developed Countries Fund
LED	Light Emitting Diode
LEED	Leadership in Energy and Environmental Design
LSMS	Living Standard Measurement Study
MDB	Multilateral Development Bank
M&E	Monitoring and Evaluation
M&R	Monitoring and Reporting
MEL	Monitoring, Evaluation and Learning
MTF	Multi-Tier Framework for Energy Access
NAP	National Adaptation Plans
NDC	Nationally Determined Contributions
NPC	Nature, People, Climate
ORR	Operational and Results Report
PDM	Private Direct Mobilization
PIM	Private Indirect Mobilization
PPCR	Pilot Program for Climate Resilience
RE	Renewable Energy
REI	Renewable Energy Integration
RISE	Regulatory Indicators for Sustainable Energy
SCCF	Special Climate Change Fund
SDG	Sustainable Development Goal
SREP	Scaling Up Renewable Energy Program
STEM	Science, Technology, Engineering, and Math
TFC	Trust Fund Committee
TWG	Technical Working Group
UNFCCC	United Nations Framework Convention on Climate Change
VRE	Variable Renewable Energy
WOLCOT	Women Led Coal Transition Grant Mechanism

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# 1. INTRODUCTION

### 1.1 Overview

**CIF's Accelerating Coal Transition Investment Program (ACT)** was launched in 2021 to support countries in accelerating the phasing out of coal by ensuring a just transition.

Under the program, CIF provides concessional climate finance to its partner multilateral development banks (MDBs), which support ACT recipient countries in developing bespoke, multi-project investment plans aimed at supporting the transition from "coal-to-clean" in each recipient country. ACT country investment plans are expected to help accelerate the phasing out of coal plants, hand in hand with enhanced resilience, and the development of new economic activities derived from new sources of energy.

The explicit focus of ACT is to tackle key barriers related to governance, people, and infrastructure, and address funding gaps leading to the successful implementation of country-level strategies and associated kick-start projects. It seeks to build support at the local and regional levels and accelerate the retirement of existing coal assets (coal mines and coal power plants), together with enabling new economic activities for those impacted by the transition.

Experience in countries around the world with declining coal use shows that unless these barriers related to governance, people, and infrastructure are overcome, they will continue to inhibit investments in phasing out the global coal fleet at the speed needed to achieve the goals of the Paris Agreement.

**The ACT Monitoring and Reporting System (ACT M&R System)** described in this toolkit is designed to set expected results and track progress toward the program's outcome areas over time. It tests the soundness of the theoretical model and enables course-correction, learning, knowledge generation, and decision making. The system fosters accountability and supports countries and MDBs in strengthening their investments and implementation activities toward ACT's ultimate program objectives.

# 1.2 ACT Integrated Results Theory and Design

ACT's underlying theory of change (see Figure 1) posits that if CIF addresses funding gaps related to the successful implementation of country-level strategies and associated kick-start projects; builds support at the local and regional levels to reconsider the development of new coal plants; and supports policy and investment activity in economic regeneration, social plans, and income support for affected employees and communities; then national governments, public sector utilities and private sector operators will act to accelerate the retirement of existing coal assets and their replacement with new sources of renewable energy while ensuring

a holistic, integrated, socially inclusive and gender equal just transition away from coal. All of this is expected to contribute toward CIF's ultimate mission to accelerated transformational change and climate financing that enable progress toward net-zero emissions and adaptive, climate-resilient development pathways, in a just and socially inclusive manner.

#### FIGURE 1. ACT Theory of Change CIF Accelerated transformational change and climate financing that enable progress toward net-zero emissions and IMPACT adaptive, climate-resilient development pathways, in a just and socially inclusive manner PROGRAM Accelerated transition from coal-powered to clean energy while supporting socio-economic goals and IMPACT environmental remediation OUTCOMES GOVERNANCE PFOPI F **INFRASTRUCTURE** Creating institutional Ensuring equitable social Incentivizing coal-to-clean transitions and policy environments and economic dividends including via the minimizing of economic and that are catalytic for, and from transition environmental losses from transition responsive to, coal-toclean transitions GHG Countries Increased Sources Affected Countries Private Land and transition adopt and aovernment of income employees/ emissions sector other infraimplement and public created for communities to cleaner reduced financing structure policies and readiness affected equipped with mobilized reclaimed enerav strategies and appetite employees relevant skills sources for coalto reduce through iob for iobs of the to-clean coal retention or future transition dependence job creation **OUTPUTS** High-level policy dialogues Mine closure Implementation of social plans Regional and local capacity Plant decommissioning building Economic regeneration Mine reclamation and plant repurposing including packages Transition strategy and energy efficiency development Temporary income support Repowering with RE + storage + ancillary services Economic and social like termination payments, development plans unemployment insurance, Biodiversity protection/restoration early retirement incentives Communications strategy ACTIVITIES Policy Inclusive consultative Economic, financial and Technical due New business analyses processes and community/ labor market analyses diligence and enabling models and and design; stakeholder analyses and design of response technological financing national and packages solutions modalities sectoral due diligence and road map design INPUTS Multi-MDB technical Dedicated Country-led, Consideration of systems Large-scale, Scaled-up, transformation and social expertise and flexible and climate programcoherent inclusion at the onset coordinated climate predictable finance matic, intervention concessional for driving participatory action packages finance for innovation approach public and private interventions

The <u>Accelerated Coal Transition Investment Program Integrated Results Framework</u> (ACT IRF, CIF 2021a) is the approved governing document for ACT monitoring and reporting (as well as evaluation, learning, and results-related aspects of gender) at the design stage. It serves to outline the program's results chain based on the foundational theory of change. It also establishes an innovative, new approach to results management in climate finance that emphasizes holistic, multi-level, multi-dimensional results. The ACT IRF presents within a single framework a comprehensive view of ACT's expected results by fully incorporating elements related to the following areas:

- Evaluation and learning
- Transformational change
- Gender and social inclusion
- Just transition
- Sustainable Development Goals (SDGs)
- Development impacts/co-benefits
- Fundamental program results and corresponding indicators.

Figure 2 illustrates how this structure is set up. A vertical axis stacks **results levels** from "Program Output Results" upward to "Program Outcome Results" and "Program Co-Benefits," "Program Impact Results," and "CIF Impact Results," respectively. Each level contains several discrete results statements expected to be achieved by the program at that level. This is the same approach used in most results frameworks, albeit adapted to CIF's programming context.

Along its horizontal axis, the integrated results framework contains both a **monitoring approach** (the column in the middle following the results levels) and an **evaluation and learning approach** (the right-hand column). Each discrete results statement (in the left-hand column) thus corresponds both to a monitoring approach and an evaluation and learning approach. These dual approaches are designed to complement each other, leveraging different tools, methods, and forms of evidence, but strategically combining them when applicable. Other key results features, such as gender, social inclusion, and just transition components are integrated throughout the framework in both the "monitoring" and "evaluation and learning" columns as applicable.

# FIGURE 2. Structural Overview of CIF's Integrated Results Framework and Key Features of Monitoring, Evaluation, and Learning Functions

RESULTS LEVELS	MONITORING APPROACH	EVALUATION AND LEARNING APPROACH
CIF Impact Results	CIF-level indicators	<ul> <li>Transformational change signals across dimensions</li> </ul>
Program Impact Results	Country-level indicators     Core indicators	Just transition studies
Program Outcome Results	Co-benefits/development impact     modeling and monitoring	Co-benefits/development impact     evaluations
Program Co-Benefits	SDGs	<ul> <li>Gender, social inclusion anyalytics</li> <li>Learning platforms</li> </ul>
Program Output Results	<ul> <li>Gender, social inclusion, and distributional disaggregation</li> </ul>	Other targeted evaluations and learning activities

As a whole, the integrated results framework comprehensively structures both the multi-dimensional results expected to be achieved through ACT and how the program's approach to monitoring, evaluation, learning, gender, and other key issue areas (e.g., SDGs and development co-benefits) attempts to capture these results at multiple levels. This approach is based on the <u>CIF Monitoring, Evaluation, and Learning Policy and Guidance document</u> (CIF MEL Policy, CIF 2022), which governs monitoring, evaluation, and learning activities across all CIF programs. Table 1 summarizes the complementary monitoring, evaluation, and learning functions used to assess each level of ACT's expected results.

#### TABLE 1. Summary of ACT Monitoring, Evaluation, and Learning Approach

RESULTS LEVEL	SUMMARY OF MONITORING, EVALUATION, AND Learning Approach by Level	
<b>CIF Impact:</b> Accelerated transformational change and climate financing that enable progress toward net- zero emissions and adaptive, climate-resilient development pathways, in a just and socially inclusive manner	Anchored by CIF-level indicators and transformational change concepts that are relevant across CIF programs	
ACT Impact: Accelerated transition from coal-powered to clean energy while supporting socio-economic goals and environmental remediation	Country-driven approach based on ACT invest- ment plans, NDCs, national development priorities, and macro-level proxy reporting on the renewable energy sector	
ACT Outcomes:		
<ul> <li>Countries adopt and implement policies and strategies for coal-to- clean transition</li> </ul>	Core indicators reported by MDBs on all ACT projects with CIF aggregation of results at ACT portfolio level	
<ul> <li>Increased government and public readiness and appetite to reduce coal dependence</li> </ul>	Targeted and thematic evaluation, learning, and gender approaches	
<ul> <li>Sources of income created for affected employees through job retention or job creation</li> </ul>		
<ul> <li>Affected employees or communities equipped with relevant skills for jobs of the future</li> </ul>		
Countries transition to cleaner energy sources		
GHG emissions reduced		
Private sector financing mobilized		
Land and other infrastructure reclaimed		
ACT Co-Benefits: Social and economic development co-benefits	At least one co-benefit reported by MDBs per ACT project	
	Additional analytics, evaluation, and learning activities led by CIF	

#### ACT Outputs:

- High-level policy dialogues
- Regional and local capacity building
- Transition strategy and development
- Economic and social development plans
- Communications strategy
- Implementation of social plans
- Economic regeneration packages
- Temporary income support like termination payments, unemployment insurance, early retirement incentives
- Mine closure
- Plant decommissioning
- Mine reclamation and plant repurposing incl. energy efficiency
- Repowering with RE + storage + ancillary services
- Biodiversity protection and restoration

Provides a broad framework of results outputs expected under ACT that can be incorporated into project-level M&E frameworks by MDBs as relevant<sup>1</sup>

More limited, demand-driven evaluation, learning, and gender activities

## 1.3 Objectives and Scope of ACT M&R Toolkit

This toolkit serves as the implementing arm of the monitoring and reporting components<sup>2</sup> of *The ACT Integrated Results Framework*. Whereas the integrated results framework presents a blueprint of the main results the program expects to achieve, **this toolkit provides practical**, **step-by-step operational guidance on how to measure, monitor, and report on program results from start to finish.** 

It is intended as a resource for a broad range of ACT-specific and global stakeholders: MDBs, recipient countries, in-country stakeholders, contributor countries, civil society, observers, and others interested in how to monitor and report on coal phase out issues. It covers both minimum results reporting requirements for the program and flexible opportunities for enhancing results-based design, monitoring, and learning in targeted cases.

At its core, the toolkit outlines and establishes the ACT M&R System. It consists of guidance and tools for monitoring and reporting on the progress and performance of ACT projects and programs<sup>3</sup> via a combination of ACT core indicators, co-benefit indicators, optional indicators, and project-specific indicators (all at the MDB project level), CIF-level indicators (tabulated by CIF based on available data from other indicators), and customized investment plan reporting (at the national level of each recipient country). The toolkit covers specific information on each of the indicator categories, indicator definitions, methodological guidance, stakeholders' roles and responsibilities, and annual reporting protocols, among other areas.

A separate toolkit, <u>Maximizing Transformational Impact</u>, lays out key considerations surrounding ACT's **evaluation and learning** approach, which consists of numerous tools, methods, and instruments that can be deployed on a flexible and demand-driven basis to assess the merit, worth, value, or significance of ACT

interventions. The evaluation processes will draw on data generated by the ACT M&R System but will also generate, analyze, and interpret additional information to support learning and change. The approach will be especially critical in enhancing complex systems-level design and analysis of ACT, such as the program's contribution to **transformational change** and **just transition** processes.

**Gender and social inclusion** elements of the ACT investment program are cross-cutting and are dynamically integrated throughout the monitoring and reporting approach presented in the toolkit, as well as in relevant evaluation and learning activities beyond the scope of this toolkit.

# 1.4 Key Elements of the ACT M&R System

ACT, like all CIF programs, deploys its own M&R system fit for purpose. This approach is intended to reinforce CIF's programmatic approach, while providing distinct mechanisms for reporting on country progress, investment plan implementation, and core project-level outcomes in the context of each program (CIF 2022, Section 5.1, Para 11).

In addition to having program-specific features, the ACT M&R System is unified with other CIF M&R systems through a common framework of the following key elements:

- **a. Integrated results frameworks:** Each CIF program is governed by a single framework that describes the key results the program intends to achieve and indicators to measure them, along with integrated evaluation, learning, and gender considerations. The integrated results frameworks are approved by the appropriate CIF Trust Fund Committee (TFC) at program inception. As living documents, they can be adjusted over time at the request of the TFCs, based on CIF's experience implementing them.
- **b. M&R toolkits (i.e., this document):** Each CIF program's M&R system is comprehensively described through a unique M&R toolkit. Toolkits include, among other features, precise indicator definitions, methodologies, measurement guidance, and reporting protocols. Toolkits for newer CIF programs further integrate evaluation, learning, and gender considerations.
- **c. Core indicators:** Each CIF program measures its primary results via a concise set of mandatory core indicators that are tracked and reported for all projects within the program. Typically reported by MDBs, core indicators are approved by the relevant CIF TFC.
- **d. Expected results:** All core indicators and other indicators reported by CIF projects and programs must first establish their expected results (i.e., set targets). Expected results can cover annual, project lifetime, and/ or investment lifetime periods, as defined in the M&R toolkit. CIF measures the total results achieved for each project.
- **e. Co-benefit indicators:** Defined per program, co-benefit indicators measure outcomes that are central to the economic, social, and/or environmental outcomes of a CIF investment beyond the primary climate and sector goals of the program.
- **f. Optional or project-specific indicators:** These indicators measure project-specific outcomes that are central to a given CIF project's objectives, although not captured in the core indicators. Some optional indicators are included in the integrated results framework as suggestions for projects to consider including. Project-specific indicators are included at the discretion of MDBs.

- **g. MDB project reports:** CIF draws from and optimizes the use of MDBs' own monitoring and evaluation (M&E) function at the project level by collecting and collating project log frames, supervision reports, mid-term reviews, project completion reports, and other project M&E documents from MDBs.
- **h. CIF Collaboration Hub (CCH):** Results from all of CIF's programmatic M&R systems are reported online in the <u>CCH portal</u>, CIF's integrated online information management system.
- **i.** Operational and results reports (ORRs): Annual program results are aggregated, analyzed, and written up for CIF TFCs in a results report or operational and results report for each program. These are main annual outputs produced from CIF's M&R systems
- **j.** Qualitative and narrative reporting: CIF's M&R systems rely on qualitative and narrative reporting approaches to fill information gaps and complement the quantitative results reported.

Many CIF M&R key elements are further defined and customized to meet the specific needs of ACT. For example, whereas all CIF programs utilize core indicators, several ACT core indicators are different from those used in other CIF programs. The ACT M&R System comprises seven categories of indicators overall (see Section 3) and a suite of complementary tools and methods (see Section 4).

The following program-specific features of the ACT M&R System<sup>4</sup> aim to enhance the program's approach to M&R at the recipient country level:

**Country impact indicators**: A limited number of customized proxy indicators are selected in consultation with ACT recipient countries to track each country's overall progress toward the coal-to-clean transition stipulated in the investment plan. These indicators are typically drawn from the national (or sectoral) M&E system; Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs); international monitoring initiatives, such as the World Bank Energy Sector Management Assistance Program's (ESMAP) Regulatory Indicators for Sustainable Energy scores (RISE scores) and its Multi-Tier Framework for Energy Access (MTF); or other available data sources.<sup>5</sup>

**Multi-stakeholder review mechanisms**: ACT recipient countries are expected to utilize multi-stakeholder review mechanisms as part of their ACT M&R approach. The review mechanisms enable recipient countries to inclusively self-assess progress made on their investment plans. They might include national workshops, South-South learning events, or other modalities. CIF encourages countries to deploy this flexible mechanism at least three times over the course of the investment plan's implementation period (at baseline, mid-term, and end-line). CIF also aims to support recipient countries in implementing the mechanism, in coordination with MDBs, on a demand-driven basis.

## 1.5 CIF Monitoring, Evaluation, and Learning Principles and Approach

Since 2022, CIF has adopted an integrated approach to monitoring, evaluation, and learning (MEL), with activities designed to complement each other in the pursuit of a cohesive body of evidence for results management, accountability, and learning (CIF 2022, Section 3, Para 7). While this toolkit primarily focuses on the monitoring function for ACT, the activities and approach described herein all adhere to the following guiding principles of CIF's monitoring, evaluation, and learning umbrella:

- Integrated MEL Approach
- Programmatic MEL with Country Ownership

- MDB Harmonization
- Multi-Stakeholder Engagement
- Applied Learning
- Inclusive Transformational Change
- Gender and Social Inclusion
- Climate and Development Alignment
- Innovation
- Timeliness and Cost-Effectiveness
- Ethical Execution
- Transparency

These principles are applied to the design of the ACT M&R System and are adapted to meet ACT's unique programming context.





# 2. ACT MONITORING AND REPORTING APPROACH

# 2.1 ACT M&R Levels

CIF approaches monitoring of results as the systematic collection and analysis of information to track outputs, outcomes, and impacts from projects and programs throughout implementation, which fulfills dual accountability and applied learning functions at multiple scales (CIF 2022, Section 1, Para 3).

**The central focus of the ACT M&R System is situated at the outcome level.** At this level, all ACT-funded projects are required to report on **the program's 11 core indicators** (if relevant to the project's objectives). The core indicators are designed to capture progress and achievements in the key results areas that the program expects to achieve across projects. MDBs are responsible for reporting on the core indicators on an annual basis through the CCH portal. Core indicators should be identified within each project's results framework at the time of CIF TFC approval, then refined and fully integrated into the project's results framework by the MDB Board approval stage.

The ACT M&R System also features **co-benefit indicators** at the outcome level. While at the same level as the core indicators, co-benefit indicators relate to ACT projects' achieved development outcomes that are not directly linked to ACT's main objective (e.g., reduction of pollutants, such as PM2.5 concentration). ACT-funded projects are required to propose at least one co-benefit indicator at the time of CIF TFC approval, and to include one or more of these indicators within the project's results framework by the MDB Board approval stage.

**Optional indicators** in ACT are listed in the <u>ACT IRF</u> and this toolkit to help guide MDBs in developing results frameworks for ACT-funded projects. CIF will capture and aggregate their progress throughout ACT as reported by MDBs. Optional indicators are situated at both the outcome and output levels.

**Monitoring and reporting activities at the program output level are more limited.** Under CIF's business model, MDBs are responsible for supervising on-the-ground implementation of all ACT-funded projects, and the ACT M&R System is thus intentionally designed not to create duplicate or parallel systems from those the MDBs are already implementing at project level. ACT output indicators are nonetheless included within the <u>ACT IRF</u> to illustrate the results expected at this level, and they can be used by MDBs to help guide project design, monitoring, and evaluation considerations. CIF will primarily track **two output-level indicators within ACT**, which both relate to the program's contribution toward energy storage results.

ACT's program impact-level monitoring approach will be tailored to each recipient country's investment plan focus and national context. CIF will collaborate with ACT recipient countries after their ACT investment plan

is endorsed to identify select impact-level indicators per country, which will be monitored and reported on by ACT recipient country focal points over time. Recipient countries might draw from existing national statistics, NDCs, NAPs, macro-level proxy reporting on sector progress, international monitoring initiatives (RISE scores, ESMAP/MTF, The Living Standards Measurement Study (LSMS),<sup>6</sup> etc.), or other sources to fulfill this level of monitoring. This flexible approach may be adapted over time as the program gains—and learns from—experience implementing it in different country settings.

At the CIF impact level, project results will be tracked and aggregated through the lens of **four CIF impact** indicators: mitigation, adaptation, beneficiaries, and co-finance. Together, these cover key aspects of CIF's mission. In most cases, ACT-funded projects will not need to list specifically these indicators within their own results frameworks. The CIF Administrative Unit is responsible for mapping available results data from core indicators, project-specific indicators, and other project data sources onto these four high-level CIF impact indicators to report results across programs where applicable. Some of the results data from ACT core indicators will automatically feed upward into CIF impact indicators (e.g., GHG emissions reduced/avoided from ACT will automatically feed upward into CIF's total GHG emissions reduced/avoided; while the number and percentage of employees of retired coal plants or mines that have access to sustained income due to ACT will feed upwards into CIF's total beneficiaries.) In other cases, ACT's contribution to CIF impact areas will only be applied if MDBs include a relevant indicator into the project-level results framework of an ACT-funded project (e.g., in the area of adaptation). ACT's gender impacts are considered across the entire M&R spectrum in a cross-cutting manner (see Box 1).

#### **BOX 1.** Monitoring ACT Progress on Gender Issues

ACT progress on gender issues is another important element of ACT's implementation and results. It is assessed through a combination of approaches both within the ACT M&R System and through separate mechanisms. Within the ACT M&R System, gender-disaggregated core and co-benefit indicators are expected to contribute to the body of evidence on gender. MDBs also have the option to identify one or more gender-specific indicators under their co-benefit reporting (see Section 3.4). Additional approaches to assessing gender-related issues in implementation and results are expected to take place outside the main ACT M&R System.

See Section 4.3 for more comprehensive information on CIF's multi-pronged approach to monitoring ACT progress on gender issues.

## 2.2 ACT M&R Roles, Responsibilities, and Process

**The ACT M&R System is the cornerstone of results management in the program. Implementing it is a minimum requirement across all recipient countries and MDB-approved projects.** As in other aspects of CIF, the ACT M&R System relies on the partnership of multiple CIF actors along the investment continuum. The CIF Administrative Unit, MDBs, ACT recipient countries, and other program stakeholders all have a unique role to play in ensuring that the system functions effectively.

**The CIF Administrative Unit** is responsible for managing the system's design and execution, monitoring, and analyzing ACT contributions to expected results (as outlined in the program's theory of change) on an annual basis and submitting achieved results to the CIF TFC for review.<sup>7</sup>

**MDBs** are responsible for ensuring that project-level ACT indicators are identified, and M&R data are collected, aggregated, and submitted for each ACT project under implementation on an annual basis. Depending on the project type (i.e., public or private sector), ACT M&R data are likely to be collected at the project level by project task managers (i.e., task team leaders or TTLs) in coordination with a national executing agency or a private sector implementer. Each MDB's CIF coordination team should supervise the annual M&R process, but it may delegate certain tasks to project task teams as they see fit.

**Recipient countries** are responsible for national investment plan monitoring, evaluation, and learning activities with support and guidance from the CIF Administrative Unit. This includes identifying and reporting on select investment plan-level impact indicators; conducting evaluative multi-stakeholder review workshops, and/or other tools at key moments in the investment plan; and coordinating with MDBs to ensure that project-level results data feed into the investment plan's results framework as required.

Finally, a range of **data producers** are most likely to generate and collect relevant data at the field level, such as line ministries, utility authorities, or project contractors. It is the role of MDBs and recipient countries to broker the data from where it is originally produced, collate it, and report it in a format that is suitable to the ACT M&R System and its parameters.

#### **Country Investment Plan Monitoring and Reporting**

Investment plan-level monitoring and reporting (IP-level M&R) is overseen by ACT recipient country focal points. It involves several distinct activities at key points within the investment plan lifecycle.

#### **INVESTMENT PLAN DEVELOPMENT AND ENDORSEMENT**

Investment plans are expected to include a full integrated results framework at the country level. This framework should be aligned with the program's overall approach to monitoring, evaluation, and learning as described in the <u>ACT IRF</u> and this toolkit, but it should be adapted to fit the scope of the proposed investment plan, the national statistical ecosystem, and other country context. It should include country-specific impacts and investment plan-level impact indicators, in addition to being generally aligned with the <u>ACT IRF</u> at lower levels of results. Data to inform baselines and targets can be sourced through national statistical systems, NDCs, NAPs, SDG monitoring platforms, international monitoring initiatives (e.g., RISE scores, ESMAP/MTF, World Bank LSMS, etc.), MDB support for primary data collection, and other data sources. The data sources selected should be clearly cited and referenced as they appear throughout the investment plan.

Upon designing the investment plan, ACT recipient countries must also determine, in collaboration with CIF and MDB partners, which country-level impact indicators they will track throughout the course of their investment plan. These indicators might include national or sectoral statistics used as a proxy to illustrate progress related to the investment plan over time; important impact/outcome-level indicators related to objectives of the investment plan that are not well captured via core indicators (from the project level); or information available in the country related to NDCs, NAPs, or other national climate change-related monitoring systems. Such indicators should be reflected within the investment plan's integrated results framework and identified for tracking following the investment plan's endorsement.

Investment plans should further describe the overall monitoring, evaluation, and learning approach the country plans to follow (e.g., multi-stakeholder review workshops, analytics, evaluations, etc.). Within the investment plan document itself, the integrated results framework should thus be accompanied by a short M&R implementation plan, plus considerations of any evaluation and/or learning protocol, as guided by CIF's <u>Maximizing</u>. <u>Transformational Impact</u> toolkit. Gender and social inclusion considerations should also be integrated into the proposed monitoring, evaluation, and learning approach, such as gender-disaggregated indicators and specific gender indicators relevant to the investment plan based on the country-level gender and social inclusion diagnostic, proposed interventions, and gender-related outcomes expected.

If the ACT recipient country elects to conduct a diagnostic evaluation or other primary data collection to inform the investment plan and project design, baseline and other data from the diagnostics should directly feed into the investment plan-level integrated results framework and monitoring, evaluation, and learning plan proposed by the recipient country.

Recipient countries may also elect to implement an inception multi-stakeholder review mechanism (e.g., workshop) for the investment plan shortly before or after the initial projects have been approved by the respective MDB Boards. The objective of the review mechanism is to engage a broad constituency of stakeholders (government, implementers, MDBs, beneficiaries, civil society observers, women's organizations, private sector, etc.) involved with the investment plan to critically reflect and establish criteria for monitoring and evaluating the transformational objectives laid out in the investment plan.

#### ANNUAL INVESTMENT PLAN MONITORING AND REPORTING

On an annual basis (or as data are available), recipient countries should submit updates on the pre-identified investment plan-level country impact indicators to the CIF Administrative Unit, along with short narrative updates on any key progress, achievements, and challenges faced during the reporting year (see Section 3.2). Reporting will take place on the CCH portal and is the responsibility of the ACT country focal point or delegated technical personnel on the ACT country focal point team. ACT recipient countries are expected to track three to five national or investment plan-level indicators identified at investment plan inception, in coordination with CIF and MDB partners. Although new results data may not be available for each investment plan-level indicator on an annual basis, recipient countries should report the latest available data annually and assess overall progress qualitatively.

Recipient country focal points are further encouraged to share nationally produced materials related to their ACT investment plan, such as videos, photos, blogs, and country progress reports. They should also coordinate with the MDBs implementing the ACT projects in their country to review project-level M&R and results data available to date.

Additional ways to share and learn from investment plan progress may become available in the form of South-South knowledge exchanges, targeted evaluation and learning activities, and other opportunities.

#### **INVESTMENT PLAN REVIEW AT MID-TERM AND COMPLETION**

As the implementation of a recipient country's investment plan advances, the country should, in coordination with MDBs, make use of the multi-stakeholder review mechanism at key inflection points in the investment plan timeline to assess and reflect on investment plan progress, challenges, and transformational objectives over time. This should be conducted around the mid-term of the investment plan (which can be determined by the recipient country, in coordination with MDB partners) and again as the investment plan reaches completion (when all or most projects in the ACT investment plan are fully implemented). This mechanism is critical to collate the country's investment plan progress across multiple ACT projects and to consider with a wide range of ACT stakeholders the catalytic grid-level effects at scale.

Recipient countries are encouraged to make use of this mechanism on a more frequent basis should the demand and business case arise. The CIF Administrative Unit is available to support recipient countries and MDBs with this approach upon request.



#### **Project-Level Monitoring and Reporting**

MDBs work closely with recipient countries in the CIF business model and are responsible for designing and implementing project operations, including the project's core monitoring and reporting function. The ACT M&R System is designed to absorb the differing M&R protocols, indicator selection, results measurement, supervision, and completion procedures that govern MDBs' operations at the project level by collecting, harmonizing, and aggregating MDB-reported results into key ACT portfolio results at the global level. Nonetheless, MDBs are still responsible for aligning their project results frameworks with dimensions of the ACT/CIF objectives, core indicators, and theory of change, as well as to anticipate the overall monitoring and reporting data needs of the ACT M&R System.

#### PROJECT DESIGN, APPRAISAL, AND APPROVAL

MDBs must ensure that all projects under consideration for ACT funding fully integrate the required ACT indicators into their project-level results framework. The most important aspect of this integration is **to ensure that all ACT core indicators are included** (although core indicators that are justifiably irrelevant to a given project's context may be excluded. This is determined at the MDB Board approval phase.) MDBs can match the definition of these indicators using their own terminology, if necessary. However, the correspondence of the MDB-defined indicator to the ACT core indicator should remain clear, and the measurement methodologies should remain compatible to enable the eventual aggregation of results reported across projects in the program.

In addition to incorporating the core indicators into project results frameworks, **MDBs must identify at least one co-benefit indicator per project** and include it within the project's results framework. Optional indicators may be included at the discretion of the MDBs, as well as project-specific indicators that the MDBs put forward in developing the project's full results framework through their project design and appraisal procedure (i.e., beyond the ACT-specific M&R requirements).

**Energy storage indicators** must also be included within the project-level results framework if the ACT project being appraised contains an energy storage component.

#### MDB Board approval triggers the formal requirement for ACT projects to:

- a. Identify all applicable core, co-benefit, project-specific, and optional indicators and report their expected results (i.e., targets)
- b. Begin reporting achieved results to CIF annually during the reporting period
- c. Share the full project results framework (as devised by the MDB) with CIF. $^{\circ}$

MDBs can take these actions during the first annual results reporting cycle that follows the project's approval (i.e., it does not need to occur at the specific moment of the project's MDB Board approval). CIF will coordinate with MDB teams to ensure that all indicators are identified in alignment with the ACT M&R System and established within the CCH, where all results reporting for the program takes place.

#### ANNUAL MONITORING AND REPORTING

ACT results reporting follows an annual cycle from January 1 to December 31. MDBs must submit updates every spring (approximately March 15) on results achieved by the end of the reporting period (i.e., December 31 of the previous calendar year). Actual results must be reported on all applicable core, co-benefit, optional, and project-specific indicators. Reporting must cover all ACT projects that have at least reached the MDB Board approval phase by the end of the reporting period.

Over time, actual results—annual and cumulative—should continue to be reported as projects advance in their implementation. Each ACT project under implementation should also report on other relevant progress and achievements on an annual basis by submitting to the CIF Administrative Unit the most recently available progress reports or implementation status reports issued during the reporting period (as part of the MDBs' own project monitoring and supervision protocols).<sup>9</sup> All submissions should be made online through the CCH portal. MDB focal points for CIF and relevant project managers should be granted access to the CCH before the first results reporting period of the project(s).

MDBs should also endeavor to share information on results achieved with recipient country focal points and continue to engage in investment plan-level activities related to the country's ACT programmatic approach. Project-level results are expected to serve as the foundation for investment plan-level results management and related activities and should be made available to flow upward to the investment plan level and national level as appropriate.

#### PROJECT MID-TERM, RESTRUCTURING, AND COMPLETION

At project mid-term, MDBs are requested to share with CIF any mid-term review reports conducted through the MDBs' own policies and procedures.<sup>10</sup> Potential changes made during mid-term review or project restructuring that affect ACT projects' expected results, indicators, or implementation scope must be communicated to CIF, along with the justification and formal documentation of these changes. CIF will only adjust expected results and indicators within the CCH upon receipt of such formal documentation. The same policy shall apply to the monitoring and reporting of ACT projects that are restructured following MDB Board approval.

At project completion, ACT projects must report via the CCH the final results achieved on the relevant core indicators, co-benefit indicators, optional indicators, and project-specific indicators. MDB should also share the project completion report generated through their respective MDB's protocol.<sup>11</sup> As multiple ACT projects reach completion; CIF will aggregate lessons learned across projects and analyze evidence garnered from the completion reports submitted.

# 2.3 Considerations for Quality at Entry

The following due diligence considerations at project inception can help facilitate the M&R process throughout an ACT project's lifecycle: baseline data, high-level analysis, data collection and disaggregation protocols, and knowledge and learning development.

#### **Baseline Data**

ACT core indicators and most other indicators measure "the contribution of ACT" toward a specific outcome or output. As a result, the baseline value is implicitly set to zero (0). However, in some cases non-zero baseline values need to be calculated as intermediary steps, such as with GHG emissions levels prior to an operation's intervention or the number of jobs created for an energy operation prior to ACT investment. MDBs should consider baseline data needs, relevant studies, and analyses that will feed not only into project design, but also into investment plan M&R needs and future monitoring and reporting. Likewise, many qualitative indicators, such as those related to the regulatory environment and marketplace, will require adequate baseline descriptions to measure results achieved during and after project implementation.

#### Whole-of-Energy-System or Grid-Level Analyses

ACT investments can be deployed in multiple places within an economic or energy ecosystem, such as at decommission of existing coal assets, addition of new renewable assets, as well as for alternate economic utility of decommissioned infrastructure. The expected interplay between renewable energy integration investments and their broader interlinked systems suggests the need for a "whole of energy system" analysis at baseline, which can be used as a reference point for a full range of specific outputs and outcomes that are to be monitored over the course of implementation. ACT investment plans or projects are strongly encouraged to orient their results measurement approach toward wider systemic analyses rather than simply tracking specific deployment outputs. This will enable a more comprehensive understanding of the impact of the coal transition process, which will ultimately help strengthen the analysis of ACT's impact on questions related to the national energy mix, just transitions, and GHG emissions within specific energy and socioeconomic contexts, markets, countries, and regulatory environments.

#### **Data Collection Protocol**

MDBs are encouraged to devise a full data collection protocol for their projects at the time of approval and to budget accordingly. This should include anticipated data sources, timelines, and collection frequency, in addition to designated personnel for data collection and aggregation among both project teams and MDBs' CIF coordinators. Projects are encouraged to consider the data needs they face in completing robust completion reports and end-line analyses in line with ACT objectives.

#### Disaggregation by Gender and Other Factors

Whenever possible, all indicators should be disaggregated to improve the ACT M&R System's analytical potential by sub-population or sub-category. For example, ACT Core Indicator 1 should report the policies by type (i.e., policies, regulations, codes, standards) and a co-benefit indicator on the number of jobs created should be disaggregated by gender of employees, number qualifying as youth, and the number belonging to vulnerable groups. Planning for data disaggregation should occur from inception. Specific guidelines on disaggregation are included for each indicator in this toolkit and are established in the structure of the CCH's online reporting pages for ACT.

At the very minimum, all beneficiary-related indicators (e.g., ACT Core Indicators 3 and 4) should be fully gender-disaggregated to allow for the analysis of gender gaps in key program outcome areas over the course of implementation (CIF 2022, Section 6, Para 33, Point G). Possible disaggregation by marginalized groups might include ethnic, religious, and racial minorities; Indigenous Peoples and local communities; migrants; youth; persons with disabilities; and others.

#### **Opportunities for Learning and Knowledge Development**

ACT projects are encouraged to consider learning and knowledge development from the onset and to proactively engage with the CIF Administrative Unit on areas of potential interest. The integration of research and learning questions into project design and M&R systems can further strengthen the potential of ACT to generate knowledge and evidence beyond the core indicators in a way that is beneficial to funded operations throughout their execution, as well as the emerging field of coal-to-clean transition more generally.



# **3.** INDICATORS AND DEFINITIONS

The ACT M&R System comprises **seven categories of indicators**, from the impact level of the <u>ACT IRF</u> (highest level) down to output level (lowest level). Each category is designed to cover a complementary aspect of the program's M&R, implicating different ACT stakeholders, data collectors, reporters, analytical potential, and results audience.

**CIF impact indicators (Category 1)** are the highest level of indicators in the program. They relate to CIF's global results, areas that are applicable to and aggregable across both ACT and other CIF programming areas. CIF is responsible for reporting this information, which is fed from available data generated at different levels of the ACT M&R System and other CIF programs' M&R systems. The **ACT country impact indicators (Category 2)** are reported at the national and/or investment plan level from each recipient country.

All **ACT core indicators (Category 3)** are mandatory to report on when applicable and remain constant across ACT projects. The core indicators form the foundation of the ACT M&R System and must be directly integrated into the project-level results framework devised by MDBs for every ACT project approved (unless justifiably inapplicable to a project's design). All ACT projects must also report at least one **co-benefit indicator (Category 4)** selected from the options suggested in this toolkit or another co-benefit identified by the MDB.

**Optional indicators (Category 5)** are similar in nature to the core indicators but are not required to be reported, as these typically vary between different types of projects. CIF will track these indicators if and when they do occur in MDBs' project-level results frameworks. **Project-specific indicators (Category 6)** refer to the remaining indicators that MDBs independently elect to include within ACT individual projects' results frameworks. While these indicators are likely to vary significantly across ACT projects, CIF draws from the information reported from the full project results frameworks to identify areas for further aggregation and other avenues to better capture the program's total achieved results.

Finally, the ACT M&R System includes two **energy storage indicators (Category 7)**. These twin indicators are directly borrowed from CIF's Global Energy Storage Program (GESP) and are required to be reported on by all ACT projects that contain an energy storage component. The intention is to complement and strengthen CIF's overall evidence base on this important emerging sub-field within the sector.

Table 2 provides a complete list of indicators used in ACT. It is followed by detailed definitions and measurement methodologies for the indicators, in addition to overall guidance on reporting processes. **The most comprehensive guidance centers on the core indicators and co-benefit indicators (Categories 3 and 4), since** 

**these two categories constitute required monitoring and reporting for all ACT projects.** However, additional descriptions and examples are also provided for the remaining indicator categories to explain how the full ACT M&R System is intended to function.

#### TABLE 2. List of Indicators for ACT

INDICATORS	APPROACH
Category 1: CIF Impact Indicators (CIF Global)	
<ul> <li>CIF 1. Mitigation: GHG emissions reduced or avoided (Mt CO<sub>2</sub> eq)</li> <li>CIF 2. Adaptation: Strengthened climate resilience of land (ha), people (#), and physical assets (units) through a CIF-supported adaptation mechanism</li> <li>CIF 3. Beneficiaries: Number of women and men benefiting from CIF investments</li> <li>CIF 4. Co-Finance: Volume of co-finance leveraged (USD)</li> </ul>	Aggregated by <b>CIF</b> <b>Administrative Unit</b> based on the ACT core indicators and project-specific indicators that feed into them
Category 2: ACT Country Impact Indicators (Country Investment Plans)	
At least 3-5 investment plan-related indicators per country; Selected in consultation with MDBs and CIF based on national M&E ecosystems/data availability; Varies per country investment plan	Identified and reported by <b>ACT</b> recipient countries
Category 3: ACT Core Indicators (Projects)	
PILLAR 1: GOVERNANCE         ACT 1. Policies: Number of policies, regulations, codes, or standards that have been amended or adopted (#)         ACT 2. Readiness: Coal transition strategies adopted (#)	Must be reported by MDBs for all ACT projects; directly integrated into project-level results frameworks
PILLAR 2: PEOPLE	
ACT 3 ( $\rightarrow$ CIF 3). Income Security for Employees of Subset Industries: Number and percentage of employees of retired coal plants/mines that have access to sustained income (#, %)	
ACT 4. Social Plans and Economic Regeneration Packages: Number of direct beneficiaries of implemented social plans and economic regeneration activities (#)	
PILLAR 3: INFRASTRUCTURE	
ACT 5 (→ CIF 1). Mitigation: GHG emissions reduced or avoided (t CO <sub>2</sub> eq)— direct/indirect	
ACT 6 (→ CIF 4). Co-Finance: Volume of co-finance leveraged (USD)	
<b>ACT 7. Plant Decommissioning:</b> Capacity of existing coal power/heat generation assets accelerated for retirement (MWGJ)	

ACT 8. Repowering: Installed capacity of renewable energy (MW)	
ACT 9. Coal Abatement: Amount of coal diverted (MT)	
ACT 10. Mine Closure, Reclamation: Mine area reclaimed and reforested/ restored (Ha)	
ACT 11. Plant Closure, Repurposing: Annual energy savings (GWh/yr)	
Category 4: ACT Co-Benefits (Examples for Projects)	
ACT Co-Benefit 1. Pollutants:	Must be reported by MDBs (at
<b>Atmospheric Pollution:</b> Decrease in concentration of particulate matters PM2.5, sulfur dioxide, and nitrogen oxide	least one indicator); varies per ACT project
Terrestrial Pollution: Reduction in volume of contaminants discharged	
<b>Health Benefits:</b> Value of avoided health costs due to reductions in atmospheric pollutants, reduction of respiratory illnesses, and premature mortality due to reduction in atmospheric pollutants	
ACT Co-Benefit 2. Just Transition: Social inclusion and distributional impacts	
ACT Co-Benefit 3 (→ CIF 3). Energy Access:	
National RISE scores (ESMAP)	
National MTF rates (ESMAP)/SE4All Global Tracking Frameworks (GTF)	
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ACT Co-Benefit 4. Gender- and Vulnerable Groups-Specific Co-Benefits: Number of beneficiaries (#)

#### **Category 5: Optional Indicators (Projects)**

#### **OUTCOME LEVEL:**

ACT Optional 1: Volume of incomes generated from new economic activity (USD)

ACT Optional 2: New coal capacity addition abated/negated (MW)

ACT Optional 3: Coverage/scale of ecosystems protected and strengthened (Ha)

ACT Optional 4: Value of ecosystem services generated or protected (USD)

ACT Optional 5: Value of coal assets reclaimed or repurposed (USD)

#### **OUTPUT LEVEL:**

ACT Optional 6: Number of persons re-skilled/retrained (#)

**ACT Optional 7:** Number of programs deployed/implemented to minimize environmental and social losses from coal transitions (#)

**ACT Optional 8:** Number of programs designed to minimize environmental and social losses from coal transitions (#)

**ACT Optional 9**: Number of roadmaps, action plans, assessments, and/or related due diligence completed on minimizing environmental and social losses from coal transitions (#)

ACT Optional 10: Number of communications plans designed and rolled out (#)

A**CT Optional 11:** Number of persons consulted via local/multi-stakeholder consultations regarding project impacts and related economic and social regeneration strategies (#)

**ACT Optional 12**: Number of local/multistakeholder consultations regarding project impacts and related economic and social regeneration strategies (#)

Can be adopted by **MDBs** as they see fit; **CIF Administrative Unit** will aggregate information as available

#### Category 6: Project-Specific Indicators (Projects)

Independently selected by MDBs and organically included in the projects' individual results frameworks;

**CIF Administrative Unit** will aggregate information as available

Varies per ACT project

#### Category 7: Energy Storage (Projects)

**GESP 1. Energy Rating:** Energy rating (MWh) of storage systems installed **GESP 2. Power Rating:** Power rating (MW) of storage systems installed

**Must be reported by MDBs** for ACT projects with energy storage components



# 3.1 CIF Impact Indicators (Category 1)

CIF impact indicators are monitored and reported at the CIF level, based on available results data provided by MDBs on ACT projects and a pre-determined alignment of which program core indicators align with CIF impact indicators. For example, reporting on ACT Core Indicator 3 (Sustained Income) feeds into CIF Impact Indicator 3 (Beneficiaries). CIF impact indicators aim to measure the contributions of all CIF programs toward four key impact areas within CIF's overall mission: mitigation, adaptation, climate/development benefits for people, and climate financing.

These indicators are the direct reporting responsibility of the CIF Administrative Unit with no direct action required from MDBs or ACT recipient countries.

Table 3 presents a short overview of the CIF impact indicators with a focus on how they align with the ACT M&R System.

INDICATOR	UNIT OF Measure	DISAGGREGA- Tion	ACT INPUTS	EXAMPLES OF OTHER CIF Inputs	CONSIDERATIONS				
CIF Impact Indicator 1: Mitigation									
Greenhouse gas (GHG) emissions reduced or avoided	Metric tons of CO <sub>2</sub> eq. per year (annual) Metric tons of CO <sub>2</sub> eq (cumulative) Metric tons of CO <sub>2</sub> eq per year (lifetime)	None at present Direct (Scope 1) vs. indirect (Scopes 2 and 3) as feasible	ACT 5	CTF Core Indicator 1 SREP Co-Benefit Indicator 3 FIP Reporting Theme 1.1a REI Core Indicator 1	Flexibility needed for different methodologies across program types (e.g., energy sector vs. forestry and land use sector), sectors, projects, and MDBs, with appropriate caveats cited				
CIF Impact Indicator 2: Adaptation									
Strengthened climate resilience of land (ha), people (#), and physical assets (#) through a CIF- supported adaptation mechanism	People (women/ men) Hectares Number of physical assets	By Gender	Potential contributions from ACT indicators deemed relevant to adaptation	PPCR Core Indicator 5 PPCR MDB indicators on sustainable land management, and climate- resilient infrastructure Potential contributions: FIP Reporting Themes 1.1b and 1.2, REI Core Indicator 4 (physical assets), ACT Core Indicator 7, optional/ project-specific indicators deemed relevant to adaptation, NPC, and other CIF programs	Capturing adaptation results requires proactive tagging of the adaptation context of specific projects/ interventions Inputs to this indicator are likely to be highly decentralized				

#### TABLE 3. CIF Impact Indicators in Relation to ACT M&R System

CIF Impact Indicator 3: Beneficiaries									
Number of women and men benefiting from CIF investments	People (women/ men)	By Gender Direct vs. indirect, as feasible	ACT 3 Optional/ project- specific indicators measuring beneficiaries	PPCR Core Indicator 5 PPCR MDB indicator on persons trained FIP Reporting Theme 1.2 SREP Core Indicator 2 CTF Core Indicator 4 Potential contributions: REI Core Indicator 7, SREP co- benefit indicators, NPC, and other CIF programs	People counted under CIF 2 will also be counted under CIF 3, but the reverse is not necessarily true (i.e., adaptation beneficiaries are a subset of all development beneficiaries) Beneficiaries of ACT social plans and economic regeneration packages may also be considered as an input				
CIF Impact Indicator 4: Co-Finance									
Volume of co-finance leveraged	USD	Source of co- financing Mitigation vs. adaptation (or both or other)	ACT 6	CTF Core Indicator 2 SREP Core Indicator 3 REI Core Indicator 6 PPCR and FIP completed disbursement records Comparable indicator exists in all newer CIF programming areas	Methodologies are likely to differ across MDBs ACT is expected to primarily contribute to mitigation finance				

# **3.2 ACT Country Impact Indicators (Category 2)**

ACT country impact indicators are monitored and reported at the **national or investment plan level**, based on national and sectoral M&E systems, NDCs or NAPs, international monitoring initiatives (RISE scores, ESMAP/MTF, etc.), or other available data sources. They are intended to provide a high-level view of each country's progress on the coal-to-clean transition, as relevant to the scope of its investment plan. They typically cover proxy results of ACT investment plans, (i.e., ACT projects contribute to these country impacts, but the country impacts are not attributable to ACT alone).

The country impact indicators approach is critical in the context of ACT, since many investments are expected to catalyze sector-level effects beyond the geographic and/or temporal scope of the discrete projects under implementation. For example, interventions that repurpose coal plants to generate electricity from renewable energy sources will enable an increased share of renewables to come onboard the grid in the country (not simply an increase in installed capacity of renewable energy). Yet, a country impact indicator like the share of renewables (%) in a country's energy mix is not well captured via a project-specific M&R approach.

In addition, the country impact indicator approach provides a direct mechanism for country focal points to be involved in the monitoring and reporting of results from ACT (rather than attributing all roles and responsibilities to MDBs). This builds on the good M&R practices, experience, and lessons learned from earlier CIF programs and strengthens the programmatic approach throughout the implementation phase of investment plans. It also avoids developing a new set of program-level indicators that might not be well suited in the diverse country contexts involved in the program. Instead, countries have flexibility to draw from their existing national and sectoral M&E systems to identify what should be tracked, or to rely on well-established third-party monitoring, data, and research initiatives relevant to the scope of ACT, such as the ESMAP Multi-Tier Framework for Energy Access (MTF) surveys or country-level RISE indicators. Increasingly, countries should also integrate data systems from their NDCs, NAPs, and other climate change policy instruments with investments like those in ACT.

**Approximately three to five country impact indicators are to be identified during the investment plan development and endorsement process** through scoping discussions and agreement reached between the ACT country focal point team, the CIF Administrative Unit, and MDBs. This can take place during the joint mission for investment plan development, during the drafting stage of the investment plan, or closer to the time of endorsement.

These indicators are the reporting responsibility of **ACT recipient countries** on an annual basis using the CCH system. Additional qualitative narrative reporting related to the selected country impacts is also required. The annual reporting rhythm of country impact M&R should be complemented with more comprehensive multi-stakeholder M&R review mechanisms at key inflection points in the investment plan's implementation timeline (i.e., beginning, mid-term, and late-stage/close-out).

#### Examples of Possible ACT Country Impact Indicators:

- Share of renewable energy generation in supported countries' energy systems (%)
- National RISE Scores (ESMAP)
- Job volume/quality/accessibility/security indicators (e.g., The Good Jobs KPIs, etc.)

**Potential Data Sources:** National statistics, macro-level indicators, primary data collection, World Bank and MDB country data.

# 3.3 ACT Core Indicators (Category 3)

ACT core indicators are monitored and reported at the **project level**, based on MDBs' own M&E systems. They must be integrated into project-level results frameworks for all ACT-funded projects and can only be omitted if they are inapplicable to the scope of a given project. ACT projects must identify which of the 11 ACT core indicators apply during their CIF TFC approval submission and report indicative targets. The identification is to be finalized along with the final target values at the MDB Board approval phase. The core indicators that are relevant to each ACT project are then entered into the CCH, including the target values, the necessary disaggregation, and the disaggregated target values. This set-up is the basis for all future results reporting required by that project.

These indicators are the reporting responsibility of **MDBs** on an annual basis.

The following section describes in detail each of the 11 ACT core indicators, organized into three thematic pillars: Pillar 1: Governance (ACT 1–2), Pillar 2: People (ACT 3–4), and Pillar 3: Infrastructure (ACT 5–11). A summary box is included at the beginning of each indicator sub-section to highlight the headline M&R issues per indicator. Each indicator sub-section then provides: an **overview** of the indicator's contribution to ACT's program objectives; **definitions** of the key terminology undergirding the full indicator; **methodological guidance** on what is needed for establishing a baseline, setting a target, and measuring achieved results; an explanation of the required and suggested **disaggregation** for the indicator; **other considerations** specific to each indicator; the **data sources** that projects can expect to draw from for this indicator; and a linked list of external **references** used and as a potential resource for ACT M&R stakeholders.

#### **PILLAR 1: GOVERNANCE**

#### **ACT 1: Policies**

**ACT Core Indicator 1:** Number of policies, regulations, codes, or standards that have been amended or adopted

Unit of Measurement: Number of policies, regulations, codes, or standards (#)

Disaggregation: By Type; Gender-Responsive vs. Gender-Blind; National vs. Sectoral vs. Local

**Reporting Scope and Frequency:** Reported annually as a cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: Corollary to SREP, PPCR, and REI policy indicators

#### **Overview:**

ACT Core Indicator 1 measures the number (#) of **policies, regulations, codes, or standards** that have been amended or adopted by national or sub-national government entities, following receipt of support from ACT at any point of the policymaking or regulatory process. The different types of policies, regulations, codes, or standards reported under this indicator are intended to illustrate progress toward creating a robust enabling environment for the coal-to-clean transition and delivering positive signals to prospective investors.

Under Pillar 1: Governance, the indicator may measure either actions related to the broader coal transition governance architecture, or actions that are intended to subsequently deliver immediate or long-term outcomes under Pillar 2: People or Pillar 3: Infrastructure. Where the adoption or amendment of policies, regulations, codes, or standards aim to deliver onward outcomes under Pillar 2 or 3 within the project's lifetime, these outcomes should be reflected via the relevant core indicators under such pillars.

#### **Definitions:**

Measured outcomes can relate to policies, regulations, codes, or standards covering, but not limited to: energy, mining, and related financial sectors; just transition, social protection and jobs; vulnerable groups and gender-responsive protections and support that relate to transition; and the environment (i.e., land reclamation). Energy sector actions may relate to the development or deployment of renewable energy (RE) and related markets; coal capacity abatement; financial sector policies; or financing of energy efficiency (EE), RE and related markets, and products that support the transition. They can also include policies targeted at carbon pricing. Just transition, social protection, and jobs actions may relate to labor market policies, economic regeneration policies, or labor/ livelihood protection policies, such as those relating to vocational support and mobility assistance education, training, and small business support services. Policies that are responsive to vulnerable groups may relate to access for and inclusion of younger and older workers, persons with disabilities, labor migrants, and racial and ethnic minorities.

#### Methodological Guidance:

*Baseline:* Identifying whether an ACT intervention affects a policy, regulation, code, or standard is the responsibility of the MDB at project inception. MDBs should apply this categorization in accordance with the policy ecosystem and terminology used in each country's context.
*Expected Results:* Targets are set as the total number of policies, regulations, codes, or standards expected to be amended or adopted before the project conducts its completion report. Any policy, regulation, code, or standard for which ACT provides direct support (e.g., technical assistance) qualifies under this indicator, regardless of the specific stage of policymaking or regulation during which ACT intervenes. Not all ACT projects may entail policy and regulatory interventions, so in these cases, the expected result for this indicator should be reported as zero (0) with clear justification provided on how the project scope is not relevant to addressing any enabling environment issues pertaining to the coal-to-clean transition.

Achieved Results: To report on this indicator, MDBs are expected to tally the total number of policies, regulations, codes, or standards that have been amended or adopted by project completion. MDBs are encouraged to complement this indicator with a qualitative assessment of how policies, regulations, codes, or standards have been implemented, while providing evidence of direct or indirect effects of ACT interventions' impact on the enabling environment to promote the coal-to-clean transition.

### **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in three ways: (i) Type, (ii) Gender-Responsive vs. Gender-Blind, and (iii) National vs. Sectoral vs. Local. Further specifications are available for this indicator in the CCH, giving MDBs the option to specify the theme(s) covered by the policies.

MDBs should determine whether an ACT intervention affects a policy, a regulation, a code, or a standard (i.e., the *type*). This determination should be made in accordance with the policy ecosystem and terminology used in each country context. Due to this variation, it is expected that there may be some fluidity across these subcategories at the ACT investment program level.

It should be further determined whether an ACT-supported policy, regulation, code, or standard is genderresponsive or gender-blind in nature. *Gender-responsive policies*, regulations, codes, or standards take into consideration the differentiated needs of women and men, potential gender gaps, and actions needed to address them. *Gender-blind policies*, regulations, codes, or standards do not specifically take into consideration or address any of these issues. Examples of gender-responsive policies, regulations, codes, or standards relevant to ACT might include the following:

- Human resources policies that support gender equality or women's employment
- · Inclusion of safeguards against sexual exploitation and gender-based violence

Given the role of different entities in coal transition, policies could be at the national, sectoral, or local level, depending on the nature of the activities.

Additional disaggregation for this indicator may consider the themes that are covered by the policies. In addition to the suggested themes, MDBs are able to insert their own specifications.

Disaggregation is identified within the CCH reporting platform during the first year of reporting and is maintained throughout the lifetime of each project.

### Other Considerations:

Qualitative reporting is a critical aspect of ACT Core Indicator 1 to enhance the robustness of monitoring progress on coal transition policies, regulations, codes, and standards, and their related effects. The ACT M&R System may also capture complementary information through the use of RISE scores as part of the the country impact indicators (e.g., carbon pricing).

## Data Sources:

Policy documents, legislation, acts, laws, regulations, codes, standards, and related announcements.

### **References:**

See References.

### **PILLAR 1: GOVERNANCE**

## **ACT 2: Readiness**

ACT Core Indicator 2: Coal transition strategies adopted

Unit of Measurement: Number of coal transition strategies adopted (#)

**Disaggregation:** By Type; Gender-Responsive vs. Gender-Blind

**Reporting Scope and Frequency:** Reported annually as a cumulative achieved value against a cumulative target

**Alignment with CIF-Level Indicators:** Corollary to NPC indicator on sub-national budgeting processes supported

### **Overview:**

ACT Core Indicator 2 considers strategies directly linked to the coal-to-clean transition that are adopted by all stakeholders. Strategy-setting reflects the increased government and public readiness, appetite, and commitment to reduce coal dependence and is essential to coal phase-out. Strategies typically contain time-bound targets, which are usually accompanied by a comprehensive review of the current situation of the coal industry, and by an integrated assessment of all potential impacts and spillover effects on other industries or sectors of the economy and society.

### **Definitions:**

The indicator measures the number (#) of strategies, action plans, road maps, and related frameworks formally committed to by stakeholders (governmental and non-governmental entities, labor organizations, private enterprises, and civil society or community organizations) covering, but not limited to: energy and mining; just transition, social protection, and jobs; the environment (i.e., land reclamation); and gender responsiveness and social inclusion, to mitigate negative transition impacts and ensure women, men, and vulnerable groups equally benefit from opportunities. Where strategies are expected to deliver onward outcomes under Pillar 2 or 3 within a project's lifetime, these outcomes should be reflected via the relevant core indicators under such pillars.

### Methodological Guidance:

Key considerations for designing a coal transition strategy include assessing the current situation of the coal industry, setting targets, developing policy options, identifying key stakeholders, and setting a timeframe during which the strategy will be adopted.

*Baseline:* Identifying whether an ACT intervention affects the adoption of a coal transition strategy is the responsibility of the MDB at project inception. MDBs should apply this categorization in accordance with the policy ecosystem and terminology used in each country context.

*Expected Results*: Targets are set as the total number of strategies expected to be amended or adopted before the project reaches completion. Any strategy for which ACT provides direct support (e.g., technical assistance) qualifies under this indicator, regardless of the specific stage of policymaking/regulation during which ACT intervenes. Not all ACT projects may entail policy and regulatory interventions. In these cases, the expected

result for this indicator should be reported as zero (0) with clear justification provided on how the project scope is not relevant to addressing any enabling environment issues pertaining to coal-to-clean transition.

Achieved Results: To report on this indicator, MDBs are expected to tally the total number of strategies that have been amended or adopted until the project reaches completion. One adopted strategy may cover many aspects of the transition (e.g., energy targets, job creation, land restoration) or several strategies may run in parallel, sometimes with overlapping areas. Accounting for the number of strategies requires looking at the number of formal documents that have been approved and published.

MDBs are encouraged to complement this indicator with a qualitative assessment of how strategies have been developed and rationale or evidence regarding the direct or indirect effects the intervention may have on accelerated and just coal transition.

### **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in two ways: (i) Type and (ii) Gender-Responsive vs. Gender-Blind. Further specifications are available for this indicator in the CCH, giving MDBs the option to specify the theme(s) covered by the policies.

Gender-responsive strategies take into consideration the differentiated needs of women and men, potential gender gaps, and actions needed to address them. Gender-blind strategies do not specifically take into consideration or address any of these issues. Some examples of gender-responsive strategies relevant to ACT might include:

- Strategies that support gender equality and women's employment
- Inclusion of safeguards against sexual exploitation and gender-based violence

Disaggregation is identified within the CCH reporting platform during the first year of reporting and is maintained throughout the lifetime of each project.

### **Other Considerations:**

There could be an overlap between some of the policies, regulations, codes, or standards that fall under ACT Core Indicator 1 (Policies) and strategies that fall under ACT Core Indicator 2 (Strategies), as they can both be adopted at the national level. These will be taken into account when results are analyzed and reported at the CIF level for the ACT investment program.

### **Data Sources:**

Information can be based on MDB project results data or publicly issued documents by the relevant implementing organization or enterprise.

## **References:**

See References.

## PILLAR 2: PEOPLE

## ACT 3: Income Security for Employees of Subset Industries

**ACT Core Indicator 3:** Number and percentage of employees of retired coal plants/mines that have access to sustained income

**Unit of Measurement:** Number of persons (#); Percentage of persons (%)

**Disaggregation:** By Gender; By Vulnerable Groups; Permanent vs. Temporary; Type of Job

**Reporting Scope and Frequency:** Reported annually as a cumulative achieved value against a cumulative target

**Alignment with CIF-Level Indicators:** Feeds into CIF Impact Indicator 3 (Beneficiaries) and corollary to NPC, REI, FIP, and PPCR indicators

### **Overview:**

ACT Core Indicator 3 is central to the three-pillar approach of the ACT investment program, as it tracks the direct impacts of ACT interventions on the labor force of coal plants or mines targeted for retirement (in terms of income security). It measures the coverage of employee retention or redeployment plans for the workers who continue to be employed and the coverage of income support (in different forms) for those who are neither retained nor re-deployed. Taken together, these two aspects track sustained income. These approaches are essential during coal-to-clean transitions, wherein the labor force might be displaced, re-skilled or re-trained, or financially sustained until retirement. Sustained income ensures a just transition that is socially inclusive with equitably distributed impacts.

### **Definitions:**

The indicator includes employees displaced via the retirement or repurposing of coal assets, and relates to persons directly employed by the enterprises or agencies targeted by ACT interventions for decommissioning, discontinuation, or transition. The targets and results are tracked via two sub-indicators:

- Coal-sector employees retained or redeployed to new jobs (#, %)
- Non-retained and non-redeployed coal sector employees that receive income support (#, %)

For this indicator, sustained income represents either continued receipt of salaries by employees retained or redeployed to new jobs, or receipt of income support for non-retained and non-redeployed coal-sector employees.

For employees retained or redeployed, the indicator measures the number of persons gainfully employed under contractual and remuneration conditions equivalent to or surpassing their pre-project occupation.

For non-retained employees receiving income support, the following instruments may be considered: severance or other forms of termination payments; unemployment insurance; social assistance payments; early retirement incentives; or others.

ACT Core Indicator 3 feeds into CIF Impact Indicator 3 (Beneficiaries) and should be reported as an annual and lifetime estimate for each investment.

### **Methodological Guidance:**

The indicator reflects the sum of the number of employees retained or redeployed to new jobs, and those who are non-retained and non-redeployed who receive income support. For the percentage share, this sum should be divided by the total number of persons employed by the decommissioned, discontinued, or transitioned asset, enterprise, or agency at the time of project approval. For each sub-indicator, the relevant definition of employee (retained or redeployed versus non-retained and non-redeployed) should be considered and divided by the total number of employees.

The definition of *persons employed* is key to estimating values for this indicator and depends on each MDB's policies and procedures, which need to be disclosed. The definition may depend on the type of employment contract signed between the employer and the employees, and whether this contract is for permanent or temporary employment (e.g., construction phase or seasonal), full-time or part-time employment, or direct or subcontracted employment. The formality or informality of the employment may or may not be considered, depending on the chosen definition of employment, although in the case of non-retained and non-redeployed employees, income support might be considered for more ambitious interventions.

The indicator only looks at direct employment linked to the ACT intervention, meaning employment directly associated to a coal power plant, mines, and the coal sector. Indirect and induced employment are not included, as they would affect workers outside of the coal sector.

Information on general employment, income and benefits, and contract types, could be collected through firmlevel or sector-level surveys or employee data records.

*Baseline*: The baseline is expected to be zero (0) for both sub-indicators, assuming the shutting down of the coal power plant or mine is linked to the ACT intervention.

*Expected Results*: The target value for the number of employees is expected to be close to the total number of employees, based on the definition of employment used. As such, the percentage share of employees receiving sustained income is expected to be high.

Achieved Results: Results are reported on an annual basis, covering the period from January 1 to December 31 of the preceding year. All data sources should be cited and specified at time of reporting.

### **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in four ways: (i) Gender, (ii) Vulnerable Groups (such as youth and elderly persons, persons with disabilities, labor migrants, racial and ethnic minorities, etc.), (iii) Permanent vs. Temporary (i.e., construction phase), and (iv) Type of Job (managerial, technical, non-technical, administrative) whenever possible.

These disaggregation levels are defined by the MDBs. The aggregation of the different types of jobs to reach the suggested categorization can be done using the international standards on classifications of occupations defined by the International Labor Organization (ILO).

### **Other Considerations:**

While the focus is solely on the employees of the retired coal plants or mines, in some cases, an ACT-financed project may extend income-support measures to other groups indirectly affected by the coal power plant retirement. This includes workers in transportation, industry, professional and administrative services, and other businesses that depend on coal power plants. Communities near coal power plants may also be affected.

In cases where these workers are not captured within ACT core indicators, MDBs might define and include project-specific indicators, or if congruent, track these outcomes under the co-benefit indicators related to Just Transition (ACT Co-Benefit 2) or Vulnerable Groups (ACT Co-Benefit 4). Alternatively, these workers might also be considered in other analyses and studies on just transition, co-benefits, development impacts, gender, or social inclusion.<sup>12</sup>

MDBs may also consider looking at the temporality of the sustained income, i.e., temporary/time-bound or permanent.

### **Data Sources:**

Information can be based on MDB project results data or the coal sector enterprises of agencies involved in a project.

### **References:**

See References.

## PILLAR 2: PEOPLE

## ACT 4: Social Plans and Economic Regeneration Packages

**ACT Core Indicator 4:** Number of direct beneficiaries of implemented social plans and economic regeneration activities

Unit of Measurement: Number of persons (#)

Disaggregation: By Gender; By Vulnerable Persons; Type of Job (if possible)

**Reporting Scope and Frequency:** Reported annually as a cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: Feeds into CIF Impact Indicator 3 (Beneficiaries)

### **Overview:**

ACT Core Indicator 4 on the number of direct beneficiaries of implemented social plans and economic regeneration activities examines how the adverse socio-economic effects of the coal phase out are cushioned. It focuses on (re-)skilling and the creation of new livelihood activities at the economy level. Beneficiaries are drawn from those who have been affected by the coal-to-clean transition. Only the direct beneficiaries of plans and activities are tracked.

### **Definitions:**

This indicator measures the number of persons reached via ACT-supported local or national interventions aimed at equipping coal sector employees and community members with relevant skills for green and/or alternate jobs, and generating additional livelihood activities in the broader economy.

For social plans, the indicator measures the direct beneficiaries of implemented plans, including labor retrenchment packages, reskilling or re-training packages, and gender and local community action plans.

For economic regeneration actions, the indicator measures direct beneficiaries of programs or packages operationalized to create new sources of income for participants of sunset industries, including regeneration stimulus packages.

ACT Core Indicator 4 feeds into CIF Impact Indicator 3 (Beneficiaries) and should be reported as an annual and lifetime estimate for each investment.

### Methodological Guidance:

It is the responsibility of the MDBs to determine and define the direct beneficiaries of plans and activities, as well as the agents or structures responsible for administering relevant interventions (i.e., public, private, mixed). For example, in the case of education and training programs, these can be either institutional programs led by private or public agencies, on-the-job training led by the private sector, or various combinations thereof.

Beneficiaries may, for example, be defined as those participating in a training program. However, this may not necessarily imply employment immediately afterwards, as hiring can be a lengthy process, and some of the industries where re-skilled employees are expected to be employed may still be in the process of development

or expansion. Beneficiaries might be identified and defined during project preparation, as part of economic beneficiary analyses, or via similar analyses at the implementation stage. MDBs should define how, and on what bases calculations of beneficiaries are made. Underlying assumptions and detailed methodologies should be submitted to CIF as complementary information for this indicator.

Baseline: The baseline for this indicator should be set to zero (0).

*Expected Results:* Targets are set to equal the total number of direct beneficiaries to be reached over the life of the project. The MDBs should define how and on what basis calculations of beneficiaries are made. Underlying assumptions and detailed methodology should be submitted to the CIF as complementary information for this indicator. MDBs are further encouraged to report on ACT Optional Indicator 1 (see Box 2). All data sources should be cited and specified at the time of reporting.

Achieved Results: Results are reported on an annual basis, covering the period from January 1 to December 31 of the preceding year.

### **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in three ways: (i) Gender, (ii) Vulnerable Persons (such as youth and elderly persons, persons with disabilities, labor migrants, racial and ethnic minorities, etc.), and (iii) Type of Job (managerial, technical, non-technical, administrative).

MDBs are responsible for identifying the relevant disaggregation categories, but disaggregation by gender is mandatory. For type of job, occupations can be classified using international standards from the International Labor Organization (ILO).

### **Other Considerations:**

To measure this indicator, MDBs must establish a direct link between the ACT intervention and the social plans (i.e., labor retrenchment packages, reskilling or re-training packages, or gender and local community action plans) and the economic regeneration activities associated with the emergence of sunset industries. In other words, the social plans and economic regenerations activities tackled need to be implemented, operationalized or deployed directly under the ACT project. If the plans and activities are still in the design or planning phase, then they might be considered under ACT Core Indicator 2 (Strategies).

### **Data Sources:**

Information can be based on MDB project results data or local or national governmental records if plans and packages are delivered by state agencies.

### **References:**

See References.

## BOX 2. ACT Optional Indicator 1 Related to ACT Core Indicator 4

• Volume of incomes generated from new economic activity (USD)

This indicator tracks impacts from local economic activities that are directly supported by ACT projects, either as new or expanded activities. It can be disaggregated by male-or female-owned businesses, and by businesses owned by vulnerable groups.

### **PILLAR 3: INFRASTRUCTURE**

## **ACT 5: Mitigation**

ACT Core Indicator 5: Greenhouse gas (GHG) emissions reduced or avoided

Unit of Measurement: Metric tons of CO, eq. per year (annual); Metric tons of CO, eq (cumulative)

Disaggregation: Direct vs. Indirect; Additional disaggregation by GHG scope is optional

**Reporting Scope and Frequency:** Reported annually as an annualized achieved value (rate) against both annual and lifetime targets; lifetime achieved values extrapolated/estimated<sup>13</sup>

**Alignment with CIF-Level Indicators:** Feeds into CIF Impact Indicator 1 (Mitigation) and corollary to NPC, REI, CTF, SREP and FIP indicators

### **Overview:**

This ACT core indicator measures the **net change in greenhouse gas (GHG) emissions reduced or avoided** due to ACT interventions over the lifetime of the investment. Reduced or avoided GHG emissions are a core objective of ACT, and they are expected to be achieved through decommissioning and closure of coal power plants and the increased share of renewable energy. GHG emissions reduced or avoided should be reported in terms of metric tons of carbon dioxide equivalent (MtCO<sub>2</sub>e) per year for annual targets and achievements, and metric tons of carbon dioxide equivalent (MtCO<sub>2</sub>e) for lifetime targets and cumulative achievements. Together, these metrics allow ACT to track both how much GHG emissions *rates* are changing due to the program (including related metrics, like the grid emissions factor) and the *total* level of mitigation that the program enables over time.

### **Definitions:**

*Greenhouse gases* (GHG) refer to gases in the earth's atmosphere that trap or release heat and contribute to maintaining an average temperature of the earth's surface. There are six main GHGs defined under the Kyoto Protocol: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), sulfur hexafluoride (SF<sub>6</sub>), hydro fluorocarbon (HFC), and per fluorocarbon (PFC). For reporting purposes, all GHGs are converted to their equivalent in CO<sub>2</sub>.

*Emissions*—combustion, process, or fugitive—refer to the release of GHGs into the atmosphere, typically due to anthropogenic, or human-led, activities over a defined period of time. For the purposes of this indicator, emissions are defined both on an annual basis (i.e., "annual emissions" or "emissions per year") and a cumulative basis (i.e., "cumulative emissions" or "lifetime emissions").

*Reduced* emissions refers to the process of diminishing or displacing existing emissions due to a new ACT intervention. In the context of ACT, this typically means that the power production of a pre-existing coal power plant connected to the grid is reduced or eliminated altogether, with the likely investment into a new variable renewable energy source to generate power in its place under the same ACT intervention.

Projects are encouraged to estimate GHG emissions reductions using a "whole of energy system" baseline analysis, which would differentiate between reductions due directly to deliverables supported by ACT investments (avoided emissions due to new installed RE capacity, carbon sequestration due to afforestation of reclaimed mines), and the catalytic effects of investments (e.g., onward effects of installed energy storage systems, negated transport or other auxiliary components of the coal-power generation that is repurposed) on annual production cycles, as compared to the approved reference scenario (i.e., counterfactual). *Avoided* emissions refers to the process of rendering obsolete the future emissions that would otherwise occur to meet comparable power demand in a counterfactual scenario<sup>14</sup> wherein the ACT intervention does not take place. For example, this might be in the form of continuing to operate coal power plants to generate electricity.

### Methodological Guidance:

CIF recognizes that MDBs have their own methodologies in place for estimating, monitoring, and reporting on project-level GHG emissions. MDBs should specify the methodology they have selected to use for each ACT project when reporting to CIF. Whenever possible, MDBs are encouraged to utilize the "IFI Guidelines for a Harmonised Approach to Greenhouse Gas Accounting" and other international standards (UNFCCC 2021). For instance, the IFI technical working group (TWG), which was established in 2012, comprises approximately 25 organizations, including UNFCCC, GCF, and GEF. The IFI TWG periodically releases new methodologies, such as harmonized GHG accounting methodologies for renewable energy (2019), default grid factors (2022), and energy efficiency (2023).<sup>15</sup>

The following steps provide general guidance on the approach that projects can expect to take at different phases of the project cycle.

*Baseline*<sup>16</sup>: First, each project should identify its assessment boundary, which is the physical delineation or geographical area that includes significant emissions sources and emissions sources that will be significantly affected by the planned project. This might be the entire grid network, targeted communities for off-grid, or another well-defined area where ACT is poised to intervene.

Sequentially, targets for ACT Core Indicator 8 (Installed capacity of renewable energy) may be calculated before establishing expected results for ACT Core Indicator 5, since these inputs can help inform GHG accounting methodologies. Grid-level studies, feasibility studies, and ACT country investment plans can also be used to map out the current grid emissions factor, sources of emissions, and targeted deficiencies in grid services that limit the emissions reduction potential of existing renewables before ACT intervention. In cases where the proposed interventions do not involve the co-location or direct installation of renewable energy generation assets, a theory of change and accompanying quantitative methodology are critical for articulating the causal pathway(s) linking renewable energy integration interventions and activity-level emissions and estimating the value of the targeted GHG emissions reduced or avoided.

*Expected Results:* ACT projects should establish both an *annual target* of emissions expected to be reduced or avoided by the project completion date (i.e., annual net emissions reduced or avoided during the first year of operations) and a *lifetime target* of emissions expected to be reduced or avoided over the economic lifespan of the ACT-supported assets. These target values should be established and reported at the MDB Board approval stage (see Section 5). While specific methodologies applied to ACT projects may vary, in general, the following steps should be undertaken:

- Determine the reference scenario (also known as the "baseline emissions" or "business-as-usual" scenario) based on the emissions profile for the grid or assessment area and a reasonable expectation of what would happen in the absence of an ACT project over the same two target periods (i.e., by project completion and lifetime).<sup>17</sup>
- 2. Identify which activities contributing to the emissions are targeted by an ACT intervention and determine the grid emissions factors or other relevant emissions factor(s).
- 3. Estimate the change in activity-level data resulting from the ACT intervention(s).

- 4. Multiply the emissions factor for the activity by the new activity-level data to estimate the net change in GHG emissions in MtCO<sub>2</sub> eq.
- 5. For greenhouse gases other than CO<sub>2</sub>, multiply the value by the Global Warming Potential (GWP) coefficient to convert to CO<sub>2</sub> eq. (For CO<sub>2</sub>, the coefficient = 1).
- 6. For lifetime estimates, multiply the annualized net reduction/avoidance of GHG emissions achieved by project completion by the economic lifetime of the asset.<sup>18</sup>

### **GHG emissions** = Activity data x emissions factor x GWP coefficient (per unit of time)

For reporting purposes, all assumptions on reference scenarios, changes in activity levels or fuel consumption, and emissions factors need to be clearly explained with methodology and data sources cited during the first year of reporting in the CCH (and updated if any changes occur thereafter).

*Achieved Results:* To monitor the real reduction or avoidance of GHG emissions due to ACT interventions, projects should begin reporting annualized results (i.e., metric tons reduced/avoided per year) on an annual basis. Achievements are expected as of the first year that coal plants close or become decommissioned or repurposed, renewable energy generation assets become operational, or grid-level RE outputs are increased due to enhanced integration. Projects should rely on real operational data on energy generation in MWh and other measurable changes to the grid (or assessment area) following ACT intervention to confirm or revise the estimated activity-level data used prior to ACT intervention. This can then be applied to the emissions factor, also updated if necessary, to report on achieved results. Annual results should be reported until the project completion period. To report cumulative lifetime achieved results of the project,<sup>19</sup> the final year of emission reductions or avoidance are extrapolated through the economic lifetime of the asset(s) unless ongoing monitoring of achieved results is feasible.

### **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in one way: Direct vs. Indirect.

MDBs are invited to further disaggregate by the scope of emissions, if feasible.

*Direct vs. Indirect Emissions:* All projects are required to identify at project approval whether the targeted GHG emissions to be reduced or avoided due to ACT are direct or indirect in nature. The terms "direct" and "indirect" in this context refer to a theory-based approach to determining causality and the proximity of effects from ACT interventions. This is distinct from the notions of direct or indirect cited in the GHG emissions scopes, which relate to direct control over assets by an investee and associated supply or value chains.

- An example of direct GHG emissions reduced/avoided is when an ACT project finances the closure of a coal power plant that is to be replaced with renewable energy generation.
- An example of indirect GHG emissions reduced/avoided is when an ACT project finances the repurposing of a coal plant with retrofit technologies, which would make the new building or site more energy efficient, thus reducing the associated emissions while the energy source remains the same.

*Scope of Emissions (optional):* International standards for GHG accounting increasingly rely on differentiating scopes of emissions, as defined in the GHG Protocol.<sup>20</sup> In general, the scope of emissions refers to the level of control that a company or plant operator can exercise over activities that produce GHG emissions as a result of the project intervention. Based on guidance from the IFI Technical Working Group on GHG Accounting (UNFCCC 2021, 5), GHG accounting scopes are defined as follows:

- Scope 1: Direct GHG emissions from sources that are owned or controlled by the investee (i.e., ACT plant/ grid operator or private company) and affected by the investment project
- Scope 2: Indirect GHG emissions from energy sources not owned or controlled by the investee but directly utilized by the investment project (e.g., emissions associated with electricity, heating, or cooling purchased for the investee activities)
- Scope 3: Other indirect GHG emissions from sources that are upstream or downstream of a value chain and not owned or controlled by the investee or private company

It is likely that most monitoring and reporting for ACT Core Indicator 5 will correspond to Scope 1 emissions.

### **Other Considerations:**

Prioritization of GHGs: Reporting of GHGs should focus on  $CO_2$  and  $CH_4$  (as converted to  $CO_2$  eq). Other GHGs, such as  $N_2O$ , HFCs, and  $SF_6$ , can be considered when their contribution to overall levels of  $CO_2$  emissions is expected to be significant.

### **Data Sources:**

Grid-level studies and analyses, feasibility studies, technology and country-specific activity data and default emissions factors, power system operational data, organization-level GHG data, project-level activity data and (grid) emissions factors

### **References:**

See References.

## **PILLAR 3: INFRASTRUCTURE**

## ACT 6: Co-Finance

ACT Core Indicator 6: Volume of co-finance leveraged

Unit of Measurement: USD

Disaggregation: Source of Co-Financing; Mitigation vs. Adaptation (Or Both or Other)

**Reporting Scope and Frequency:** Reported annually as an annual and cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: Feeds into CIF Impact Indicator 4 (Co-Finance)

### Overview:

This ACT core indicator measures the amount of direct financing leveraged (i.e., co-financing) from both public and private sources as part of the ACT investment program. The concessionality of ACT resources is designed, in part, to crowd in additional resources from both implementing MDBs and other sources of co-financing. This combination of catalytic ACT financing and other resources forms the full financial package for each ACT project. The amount of co-financing that actually materializes is tracked in USD over the course of ACT investment program implementation to demonstrate the total amount of climate financing enabled through the program over time. ACT Core Indicator 6 also directly feeds into CIF Impact Indicator 4, since leveraging co-financing is a common objective of CIF across multiple programs.

### **Definitions:**

*Volume of co-finance* refers to the total amount of resources mobilized separately from ACT funding that is integrated into the financial package for a project being implemented as part of the program. Co-finance may come from the MDBs, governments, the private sector, bilateral agencies, and other actors.

*Leveraged* refers to the mobilization process of non-ACT resources for the financial package of projects implemented as part of the program. Although the concessionality of ACT funding is intended to catalyze the mobilization of additional resources, for the purposes of this indicator, leveraging refers to all co-financing sources.

### **Methodological Guidance:**

Baseline: N/A

*Expected Results:* Setting the target for the total estimated volume of co-financing takes place as part of the project origination and appraisal process (see Section 5). An initial estimate (in USD) should be included as part of each project proposal submitted to the CTF Trust Fund Committee. If another currency is used for the operation, the currency conversion rate should be clearly communicated along with the converted amount(s) in USD. Co-financing targets should be updated, finalized, and reported at the MDB Board approval stage for each project (see Section 5).

Achieved Results: While MDBs may adhere to different methodologies to report and track achieved co-financing, each MDB should inform the CIF Administrative Unit of its preferred reporting methodology and apply the methodology consistently to all projects in its ACT portfolio. In general, it is preferable for achieved co-financing

to be reported annually based on actual disbursement over the course of project implementation. MDBs are strongly encouraged to draw from joint-MDB frameworks, such as the "Reference Guide by Joint-MDBs on Private Capital Investment Mobilization," to promote harmonized reporting on climate finance (Section 7).

### **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in two ways: (i) Source of Co-Financing and (ii) Mitigation vs. Adaptation (or both or other).

CIF utilizes five main categories for sources of co-financing to which ACT adheres for this indicator: *MDBs, government, the private sector, bilateral agencies, and other actors.* 

All co-finance reported that qualifies as climate finance should be tagged as either *mitigation or adaptation finance*, in line with MDBs' Paris Alignment assessments of project financing and the methodology used in the "Joint Report on MDBs' Climate Finance" (see **References**). Although most co-financing in ACT is expected to contribute to mitigation finance, any amounts considered by MDBs as adaptation finance should also be tagged when reporting on ACT Core Indicator 6. Any amount of co-financing counted as both mitigation and adaptation financing should be reported as such. Any co-financing amount that does not qualify as climate finance should also be specified when reporting.

### **Other Considerations:**

For private sector projects, confidential co-financing information can be reported as a confidential result in the "Uploaded Documents - Co-Benefits" section of the CCH and formally marked as "Confidential." The document will then only be visible to members of the CIF Administrative Unit and the MDB responsible for the project.

### **Data Sources:**

Financial data in MDB project proposals, appraisal documents, supervision, and completion reports.

References: See References.

## **PILLAR 3: INFRASTRUCTURE**

## **ACT 7: Coal Capacity Accelerated for Retirement**

ACT Core Indicator 7: Capacity of existing coal power/heat generation assets accelerated for retirement

Unit of Measurement: MW or MWGJ

Disaggregation: By Type of Asset (electricity vs. heat)

**Reporting Scope and Frequency:** Reported annually as an annual and cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: N/A

### Overview:

This indicator captures coal power plant decommissioning through the existing capacity of coal assets accelerated for retirement due to ACT interventions. It tracks the total capacity of electricity and heat plants retired prior to the completion of the full lifetime of the asset, as well as cases where an asset's retirement date is brought forward due to ACT project interventions.

### **Definitions:**

*Installed capacity*, measured in megawatts (MW), refers to the maximum amount of electricity that a power plant can produce under specific conditions determined by the manufacturer. It is usually higher than the actual average amount of energy a power plant produces, which may be affected by factors such as the sudden unavailability of the fuel source, curtailment, or repairs and maintenance.

For assets or parts of assets specifically utilized for heat generation, installed capacity should be measured in megawatts gigajoules.

### **Methodological Guidance:**

This indicator requires information on two key variables: the installed capacity of the coal power plant at the time of decommissioning, and an estimate and related validation of the full lifetime of the asset, both of which should be determined by the MDB.

The installed capacity of a coal power plant is defined as the nameplate capacity of the plant.

The operating lifetime of a coal power plant may vary based on a range of factors but typically has a maximum value of 50 years, an average value of 40 years in advanced economies, and an average value of 25 years in emerging markets and developing economies (Yiyun Cui *et al.*, 2019; IEA, 2021). The lifetime may depend on the machinery used, the mining equipment (in cases where a mine and coal plant are co-located), and the operating capacity (i.e., capacity factor), among other considerations. The capacity factor of a coal power plant usually oscillates at around 60 percent, depending on seasonality and the age of the asset. The operating life of an asset is generally estimated prior to it becoming operational.

*Baseline*: The baseline is estimated to be zero (0), as the indicator only considers the capacity of existing coal power or heat generation that will be accelerated for retirement due to an ACT intervention.

*Expected Results*: The target value of the total capacity to be retired by a project should be determined by the MDBs. It depends on the project and relevant studies estimating how much capacity of existing coal power or heat generation will be reduced over time.

Achieved Results: Results are reported annually, covering the period from January 1 to December 31 of the preceding year. In some cases, the achieved result may equal the full capacity of the existing power plant by a particular date. In other cases, countries might apply a phase approach instead of a full decommissioning. This depends on the duration of the project and on a variety of exogenous drivers, such as electricity and heat demand profiles and the related replacment of generation previously fueled by coal. Coal generation is often used as a base load capacity; it may not be exclusively replaced by non-dispatchable RE without other alternatives or without the addition of battery storage.

### **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in one way: Type of Asset (electricity vs. heat). The electricity sector represents cases where coal is combusted as an asset to generate electricity at high scale. The heat generation sector represents cases where coal is burned in furnaces to provide heating at a smaller scale, such as for residential and commercial buildings. Coal usage is predominantly in the electricity sector.

# Other Considerations:

N/A

### **Data Sources:**

Information for the targeted installed capacity may be based on MDB project results data or the operational data of the power plant involved in the project.

References: See References.

### **PILLAR 3: INFRASTRUCTURE**

## **ACT 8: Repowering**

ACT Core Indicator 8: Installed capacity of renewable energy

Unit of Measurement: MW

Disaggregation: By Type of RE; On-Grid vs. Off-Grid

**Reporting Scope and Frequency:** Reported annually as a cumulative achieved value against two targets (cumulative at project completion and lifetime)

Alignment with CIF-Level Indicators: Corollary to REI Core Indicator 2

### **Overview:**

ACT Core Indicator 8 measures the installed and operationalized generation capacity of renewable energy projects developed as a result of ACT interventions. Installed capacity measures the potential energy production from a project. This may refer to either greenfield renewable energy assets developed by ACT to replace retired coal capacities, or brownfield renewable energy assets repurposing some or all of the infrastructure of decommissioned coal plants. This indicator is measured in terms of MW available to the grid cumulatively.

### **Definitions:**

*Renewable energy (RE)* is energy derived from natural sources that are replenished at a higher rate than they are consumed. They usually have a low or zero-carbon footprint. Examples include solar power, wind power, bioenergy, hydro, tidal, and geothermal.

*Installed capacity of renewable energy (RE)* refers to the maximum power generating capacity that a renewable energy power plant can produce under normal conditions. Installed capacity, measured in megawatts (MW), is also sometimes referred to as "nameplate capacity."

### **Methodological Guidance:**

For this indicator, the renewable energy installed capacity estimated should be directly replacing the coal-fired generation that has been reduced or ceased by an ACT intervention. It may or may not be located on the same site as the coal power plant for which it is replacing generation capacity, depending on renewable energy source availability, land type, and climate, among other factors.

*Baseline:* During project design, the grid network or assessment boundary must be identified and clearly defined by the MDB. The total installed capacity of the current power system (a non-zero value) is then determined as an input to the baseline value for this indicator and recalibrated to zero (0) for the purposes of ACT M&R. In some cases, this information may already be available from the ACT investment plan, diagnostics, or other recent grid studies.

*Expected Results:* The target value for installed capacity in MW is estimated using data collected as part of the due diligence work conducted through feasibility studies during the appraisal phase of the project and reported at MDB approval (see Section 5). For cases of direct installation of solar or wind assets, for example,

this target value can be clearly established as the nameplate capacity of the plant. However, for other types of ACT interventions, MDBs should rely on the project's theory of change to articulate how the interventions are expected to lead to increased installed capacity of renewable energy available to the grid. The target value(s) should be provided using a suitable quantitative methodology in line with this theory. In addition, as relevant, MDBs are encouraged to establish two targets for this indicator: the first as a target at project closure, and the second as a lifetime target (i.e., additional RE installed capacity expected to be enabled after project closure due to ACT interventions).

*Achieved Results:* Results are reported annually, covering the period from January 1 to December 31 of the preceding year. Annual results refer to new or additional capacity of RE installed during the reporting period, as evidenced through direct installation, technology-and country-specific data, or other relevant operational data. Cumulative results cover all new or additional capacity installed over a project's implementation period. Although some projects may also be able to estimate a lifetime target beyond project closure, achieved results should only be reported as real installed capacity.<sup>21</sup> All data sources should be cited and specified at the time of reporting.

### **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in two ways: (i) Type of RE and (ii) On-Grid vs. Off-Grid.

Examples of different types of RE are wind energy, solar energy, hydro, tidal, bioenergy and geothermal. Ongrid or off-grid refers to whether the generation plant or project is connected to a local distribution network. If it is, then the installed capacity is *on-grid*. This is usually the case for large solar generation plants, such as concentrated solar power (CSP), wind farms or parks, or of distributed generation solar photovoltaics (PV). If it is not, it is *off-grid*. An example of off-grid generation is a solar mini-grid project.

The disaggregation should be identified within the CCH reporting platform during the first year of reporting and is maintained throughout the lifetime of each project.

### Other Considerations:

N/A

### **Data Sources:**

Grid-level studies and analyses, national or sub-national feasibility studies, technology and country-specific data, power system operational data.

References: See References.

## **PILLAR 3: INFRASTRUCTURE**

## **ACT 9: Coal Abatement**

ACT Core Indicator 9: Amount of coal diverted

Unit of Measurement: Mt

Disaggregation: By Coal Industry Sector (power plants vs. industrial companies vs. district heating systems)

**Reporting Scope and Frequency:** Reported annually as an annual and cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: N/A

### **Overview:**

ACT Core Indicator 9 estimates the amount of coal diverted by examining the quantity of coal that would have continued to be combusted had the ACT intervention not taken place. This indicator looks specifically at the physical units of coal used in electricity or heat generation.

### **Definitions:**

This indicator measures the total reduction in the volume of coal combusted (measured in metric tons) due to the accelerated retirement of existing coal assets by ACT interventions. It is directly related to voided fuel consumption values of the coal asset capacity tracked via ACT Core Indicator 7.

Where ACT project activities are directly responsible for the abatement or negation of already planned coal capacity additions (tracked via ACT Optional Indicator 2 as highlighted in Box 3), the volume of coal diverted is directly related to the capacity of the particular assets not developed.

### **Methodological Guidance:**

To measure the metric tons of coal diverted in power generation, several parameters need to be determined, including whether the coal plant decommissioning is progressive or immediate (i.e., the electricity generated is phased out over time or shut down all at once with no transitory phase). In the latter case, the calculation of the metric tons of coal diverted can likely be found within a plant's annual operational reports or within its coal purchase agreements. However, in cases where the purchase agreement states an obligatory amount of coal to be purchased that may or may not subsequently be combusted, the metric tons stated could be an overestimation of the actual amount of coal diverted (considering that the diverted coal would be combusted in the counterfactual scenario).

Under scenarios of a phased decommissioning, the total amount of coal diverted can be calculated backwards by looking at the estimated average annual generation of the voided capacity addition, multiplied by the expected lifetime of the asset. This calculation computes the deduction of how much coal would have been needed, had the coal-fired generation continued its due course without progressive decommissioning.

The two metrics that need to be determined in the "progressive decommissioning" scenario are the operating lifetime and the average annual generation of the coal power plant. The operating lifetime of a coal power plant

should be set as per MDB guidelines. It varies by region. The maximum lifetime a coal plant can reach is about 50 years, but on average, it is 40 years in advanced economies and 25 years in emerging markets and developing economies (Yiyun Cui et al., 2019; IEA, 2021). The operating lifetime of a coal power plant depends on the machinery used, the mining equipment, and at what capacity it is operating (i.e., capacity factor), among other considerations. As the coal power plants targeted in ACT are already built and operating, their lifetime should have already been estimated when they first became operational.

Estimating the average annual generation of the coal power plant, if not readily available, requires information on the total installed capacity (MW) of the plant and its capacity factor. The capacity factor of a coal power plant usually oscillates around 60 percent, depending on seasonality and whether it is at the beginning or end of its operating years.

Once the average annual generation of the voided capacity addition and the expected lifetime of the coal power plant are known, the volume of coal (in metric tons) can be estimated. On average, it is estimated that 1.12 pounds (or 0.0005 metric ton) of coal can generate approximately one kilowatt-hour of electricity<sup>22</sup>. However, this number may vary depending on the efficiency factor of each generation unit (i.e., heat ratio), as it accounts for technical differences between older and newer generation units, as well as units have been retrofitted.

*Baseline*: The baseline is estimated to be zero (0), as the indicator only considers the amount of coal diverted following an ACT intervention.

*Expected Results:* The target value for the amount of coal diverted should be set by MDBs in accordance with the selected method and approach. It requires a deep assessment of the use of coal across the different sectors of the economy to estimate how much coal is being diverted at the aggregate level. In cases of power generation with a fixed shutdown date of the coal plant and no "transitory" phase to progressively reduce coal-fired generation, the target value should be the total amount of metric tons combusted for electricity generation, as per the sales and purchase agreement. In cases of progressive decommissioning, the target value should consider the progress expected over multiple years, and what can be achieved by the end of the project, depending on the completeness of the plant shutdown at that time. Optional lifetime targets (beyond project completion) can also be reported if estimates are available from MDBs.

Achieved Results: Results are reported annually, covering the period from January 1 to December 31 of the preceding year. Achieved results partly depend on the decommissioning of the coal power plant and the electricity generation sector. For fixed shutdown cases, the achieved value is expected to increase from the baseline zero (0) to its target over a single year due to the plant shutdown. For progressive decommissioning, achieved results are expected to accrue more gradually. Beyond the energy generation sector, coal is also used in many other economic sectors. For example, these other sectors may be affected by the closure of coal mines under an ACT intervention if sector activities depended on the mine.

### **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in one way: Coal Industry Sector (power plants vs. industrial companies vs. district heating systems). Power plants use coal to generate electricity. Industrial companies use coal and coal byproducts for the production of concrete, paper, and steel (indirect use of coal coke). District heating systems rely on coal-fired furnaces to heat spaces.

### **Other Considerations:**

One approach that MDBs could consider is to examine what happens to the volume of coal being diverted from power plants, such as whether it continues to be mined or ends up being used for alternative purposes. MDBs might also consider systemic dynamics related to the source(s) of energy replacing the diverted coal vis-à-vis evolving energy demand.

### **Data Sources:**

Information can be based on MDB project results data or the operational data of the power plant involved in the project.

### **References:**

See References.

## BOX 3. ACT Optional Indicator 2 Related to ACT Core Indicator 9

• New coal capacity addition abated/negated (MW)

This indicator measures the expected/future addition of coal capacity replaced with renewable energy capacity.

### **PILLAR 3: INFRASTRUCTURE**

## ACT 10: Mine Closure, Reclamation

ACT Core Indicator 10: Mine area reclaimed and reforested or restored

Unit of Measurement: Ha

Disaggregation: N/A

**Reporting Scope and Frequency:** Reported annually as an annual and cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: Corollary to NPC, FIP and PPCR indicators

### **Overview:**

The closure of coal power plants is likely to affect coal-related supply and value chains beyond the plants themselves, in many cases leading to the closure of coal mines. After a transitional remediation phase, the land that was previously used for mining can subsequently be reclaimed and either reforested or otherwise restored to its natural environment.

The reclamation and reforestation or restoration of the mine area is key to the coal-to-clean transition. While this transition comes with considerable job losses, it has the potential to create employment and enhance wildlife. Such positive spillover effects may be a function of the income generated from new economic activities (ACT Optional Indicator 1), ecosystems protected and strengthened (ACT Optional Indicator 3), and related ecosystem services generated or protected (ACT Optional Indicator 4), all of which are associated with ACT Core Indicator 10 (see Box 4).

### **Definitions:**

This indicator measures the hectarage of discontinued coal mines that are reforested, afforested, or restored to natural conditions, including reestablishment of soil or ecosystem qualities prior to mining. The land areas covered include areas where coal mine operations have been discontinued as a direct result of ACT projects retiring coal generation assets or otherwise engaging with coal mine phase out.

The first step before reclamation and afforestation or reforestation is remediation. The *remediation phase* consists of investigating and cleaning up hazardous materials to decontaminate the land for new uses. It requires collecting soil and ground water samples to investigate and document any contamination, followed by developing a cleanup plan. The cleanup plan may vary, depending on the future use of the land. In some cases, low levels of contamination might remain, restricting the future site's activities. Any level of contamination not remediated is documented and disclosed in legal notices.

Following remediation but before the land can be used for planting trees or restoration, it needs to be reclaimed. *Reclamation* is the combined process through which adverse environmental effects of surface mining are minimized and mined lands are returned to a beneficial end use. This end use could be an open space, wildlife habitat, agricultural field, or a residential or commercial development. This indicator specifically considers mine land that has been reforested or restored to natural conditions. It is also possible that mined land can be reclaimed, restored, and then used as an agricultural field. It is the responsibility of MDBs, per their procedures,

to determine if such a case can be considered under this indicator. Reclamation also includes practices to control erosion and sedimentation, stabilize slopes, replace topsoil, and revegetate with suitable plant species. This final step requires an assessment of the suitability of plants, which is based on soil minerality, climate, and other factors. Establishing a reclamation plan can be supported by a description of the post-mining topography, though in cases of more complex sites, post-mining topographic maps might be needed.

The last step is afforestation or reforestation. Both terms refer to the establishment of trees on non-treed land. *Reforestation* refers to the establishment of forests on land that had recent tree cover, whereas *afforestation* refers to land that did not have recent tree cover. The distinction depends on how long the mine had been operating, what was on the land prior to its operation, and what is considered a long time without trees (for afforestation). The terminology applied is at the discretion of the MDBs.

### **Methodological Guidance:**

Land contouring is essential to the measurement of this indicator. The methodology selected per ACT project should be justified and disclosed. Determining factors might include the permit area boundaries, mining boundaries, boundaries of cities and municipalities, property lines, existing watercourses, ponds, and haul roads. Identifying the definition and approach for land contouring is the responsibility of the MDBs.

*Baseline:* The baseline is estimated to be zero (0), as the indicator only considers the hectarage of mine land restored or reforested following a direct mine closure supported through an ACT intervention, or an indirect mine closure closely linked to an ACT intervention decommissioning a coal power plant.

*Expected Results:* The target value for the land area covered can be determined by the MDBs based on a defined methodology for estimating mine land contouring. If, for example, the land area reforested is smaller than the area reclaimed, MDBs should consider this in their chosen methodology.

Achieved Results: Results are reported annually, covering a period from January 1 - December 31 of the preceding year. The land area covered should only be considered as "achieved" upon completion of reforestation or restoration of the relevant hectarage. This may only materialize toward the end of the project, considering the multiple stages of work required to achieve results.

### **Disaggregation:**

N/A

### **Other Considerations:**

In the short term, the surface area of mine land reforested or restored is easy to estimate. In the long term, other indicators to consider include the improvement of air quality on and around the land area (thanks to the additional trees planted) and increased wildlife, especially endangered species.

If a project's objectives include restoration of biodiversity or ecosystem services, it is recommended to include ACT optional indicators, such as ACT Optional Indicator 3 (Coverage or scale of ecosystems protected and strengthened), ACT Optional Indicator 4 (Value of ecosystem services generated or protected), or any other relevant indicators capturing these aspects (see Box 4).

One additional consideration is to identify the actor(s) responsible for the various phases of land reclamation, restoration, and/or reforestation: the public sector, the private sector, or a mix of both.

### **Data Sources:**

Information for land area reclaimed can be based on MDB project results data.

### **References:**

See References.

## **BOX 4.** ACT Optional Indicators Related to ACT Core Indicator 10

• ACT Optional Indicator 1: Volume of incomes generated from new economic activity (USD)

This indicator tracks impacts from local economic activities that are directly supported by ACT projects, either as new or expanded activities.

- ACT Optional Indicator 3: Coverage/scale of ecosystems protected and strengthened (#)
- ACT Optional Indicator 4: Value of ecosystem services generated or protected (USD)

These two indicators are only relevant to projects that include land reclamation resulting in reforestation or environmental restoration.

## **PILLAR 3: INFRASTRUCTURE**

## ACT 11: Plant Closure, Repurposing

ACT Core Indicator 11: Annual energy savings

Unit of Measurement: GWh/yr or MWh/yr

Disaggregation: N/A

**Reporting Scope and Frequency:** Reported annually as an annual and cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: N/A

### Overview:

ACT Core Indicator 11 considers the energy savings benefits of repurposing or converting a coal power plant or coal mine by examining how energy efficient technologies can reduce energy consumption and increase annual energy savings in coal-to-clean settings. The conversion might be into a residential building, a commercial building, or an eco-industrial park, among other possibilities. To count as a result achieved under ACT Core Indicator 11, the new building or site should incorporate energy efficient technologies that are directly associated with an ACT intervention.

### **Definitions:**

This indicator is a measure of increased energy efficiency (GWh or MWh per year) as a result of ACT interventions that include energy savings objectives. These interventions might include, for example, the repurposing or conversion of coal power plants for non-generation uses, such as industrial parks with energy efficient technologies. Interventions could also include the redevelopment of a coal mining site after it has gone through the multiple stages of reclamation, remediation, and restoration (if required). In either case, the repurposing or conversion of the site into a residential building, commercial building, or eco-industrial park would typically occur due to the site not being suitable for new power generation.

Energy efficient technologies that can be adopted in residential buildings, commercial buildings, or other physical sites include: lighting, heating, ventilation and air conditioning systems (HVAC), refrigeration, building insulation, and controls (sensors, timers, dimming, automation, etc.).

Buildings should adhere to international standards, such as LEED or IFC's EDGE, with the goal of reducing GHG emissions through the use of energy efficient technologies.

### **Methodological Guidance:**

To measure the annual energy savings of the coal power plant conversion, a counterfactual is needed to estimate what the energy consumption of the converted plant would be in the absence of the ACT intervention. One way to estimate the counterfactual is by establishing a baseline for the same building, site, or industrial park without the energy efficient interventions under ACT. The baseline should be aligned with the respective country's energy efficient labelling and norms and based on an average from comparable buildings, sites, or industrial parks with no intervention. One way to assess the energy efficiency of a building is by hiring a company to conduct an energy audit. In some countries, these might even be compulsory or subsidized by the

government. The baseline could also come from an energy audit carried out in a building or site of similar size and usage. It is the responsibility of the MDBs, along with recipient countries, to establish the counterfactual based on national labelling and norms on energy efficiency.

There are different methodologies to estimate the energy consumption of a building. For example, the Energy Use Index (EUI) is defined as the energy consumption per unit conditioned floor area. Other determining variables include occupancy hours, weather, and occupancy. It is also possible to assess the consumption of each type of energy efficient technology individually against its counterfactual (e.g., CFL versus LED light bulbs). However, this requires access to more granular information about specific technologies adopted during the building or site construction phase (or later upgrades).

*Baseline*: The baseline should be set to zero (0), as without the ACT intervention, the energy efficient technologies would not have been adopted.

*Expected Results:* The target value for annual energy savings is the difference in energy consumption between the counterfactual and the intervention, i.e., between the energy consumption of the building or site without the ACT intervention of energy efficient technologies, and the energy consumption of the same building or site supported by ACT. The energy consumption and energy savings can either be measured in monetary value, based on the regular electricity bill, or in gigawatts per hour, based on the meter. Using the meter reading is ideal, since it can sometimes be challenging to deduce the exact energy consumption from a regular electricity bill (due to variations from time-of-use electricity pricing). It is, however, possible to estimate this value with some additional information about the time-of-use electricity rates and the energy consumption patterns of the residents, industries, or businesses.

Achieved Results: Results are reported annually, covering the period from January 1 to December 31 of the preceding year. Achieved results should reflect real savings in energy due to the adoption of energy efficient technologies under the ACT intervention, everything else held constant. They should be measured using the same approach stipulated per ACT project when estimating expected results (i.e., meter reading or electricity bill).

### **Disaggregation:**

N/A

### **Other Considerations:**

Annual energy savings from ACT interventions might be estimated at the beginning of a project and fixed over time (as the technologies would be installed during construction of the building or site), but savings can increase over time if upgrades or retrofits are carried out during project implementation.

Information on ACT Optional Indicator 5, which is closely related to ACT 11, is listed in Box 5.

### **Data Sources:**

Information can be based on MDB project results data or the operational data of the power plant involved in the project.

#### References: See References.

## **BOX 5.** ACT Optional Indicator 5 Related to ACT Core Indicator 11

• Value of coal assets reclaimed or repurposed (USD)

This indicator measures the economic value of assets reclaimed or repurposed for brownfield (e.g., repowering, industry) or greenfield (e.g., commercial, residential) usage, thereby reducing economic and financial costs of decommissioning.

# **3.4 ACT Co-Benefit Indicators (Category 4)**

In a global policy environment where every last dollar of climate finance matters, governments, policymakers, investors and their constituencies are increasingly interested in how scarce climate finance can achieve multiple co-benefit objectives. Funding must not only contribute toward Paris Agreement goals but also toward inclusive economic growth, SDGs, just transitions, and more. This approach further reflects the fact that MDBs, as both CIF delivery vehicles and development institutions, are already delivering blended finance operations that aim to achieve these multiple results objectives.

**Co-benefits refer to development outcomes, achieved as a result of ACT projects, that are not directly linked to ACT's main objective** of accelerating the transition from coal-powered to clean energy while supporting socio-economic goals and environmental remediation. Examples of co-benefits might include the reduction in atmospheric pollutants from mining and coal combustion activities, and the related health benefits to the wider population, or enhanced energy access due to the addition of advanced and renewable energy capacities. Overall, co-benefit indicators help demonstrate the wider development benefits of coal transition interventions and can be measured through both quantitative and qualitative means, including through modeling approaches (see Section 4.4).

Projects financed under ACT are required to identify at least one quantitative co-benefit indicator and integrate it into their project-level results framework prior to MDB Board approval. Co-benefit indicators can either be selected from the illustrative list in this toolkit or identified by the MDB. MDBs must also provide a qualitative assessment of the co-benefit(s) as part of their annual reporting to better demonstrate the development context of the quantitative result achieved.

The following section describes some example indicators for the co-benefits expected to be achieved through ACT projects, as set forth in the <u>ACT IRF</u>.

## **ACT Co-Benefit 1: Pollutants**

### ACT Co-Benefit 1 Indicator Example: Pollutants

**Unit of Measurement:** Atmospheric fine particulate matter, PM 2.5, concentrations per cubic meter (µg/m<sup>3</sup>); Metric tons of effluent discharge; USD equivalent of savings from avoided illness and premature mortality

**Disaggregation:** By Type (atmospheric vs. terrestrial vs. health)

**Reporting Scope and Frequency:** Varies by sub-indicator and adopted methodology

Alignment with CIF-Level Indicators: N/A

#### **Overview:**

This outcome is tracked via three sub-indicators:

- i. Atmospheric pollution: Decrease in particulate matters PM2.5 concentration, sulfur dioxide (SO<sub>2</sub>), and nitrogen oxide (NOx) resulting from voided coal combustion. These pollutants are particularly relevant when households or businesses use coal-fired furnaces for heating.
- ii. Terrestrial pollution: Reduction in volume of contaminants discharged from energy systems.
- iii. Health benefits: Value of avoided health costs and reduction of respiratory illnesses and premature mortality, both due to the reduction of atmospheric pollutants tracked within sub-indicator i.

### **Definitions:**

*PM 2.5* is a type of *atmospheric pollutant* resulting from hydrocarbon combustion and other factors. It is the leading atmospheric contaminant driving negative health impacts and is utilized as a proxy to measure total air pollution. Sulfur dioxide (SO<sub>2</sub>) and nitrogen oxide (NO<sub>x</sub>) also result from coal combustion.

*Terrestrial pollutants* are defined here as any untreated or unsafe contaminant effluence discharged from coal generation and mining assets.

*Health benefits* are defined as the value of avoided health costs and the reduction in respiratory illnesses and premature mortality resulting from the reduction of atmospheric pollutants.

### **Methodological Guidance:**

The reduction of atmospheric fine particulate matter, PM 2.5, can either be tracked by localized national data, where available, or via the publicly available WHO Air Ambient Air Pollution Monitor. The reduction of sulfur dioxide can be monitored in the ambient environment through U.V. fluorescence, semiconductors, and electrochemistry. Nitrogen oxide can be measured using a chemical reaction or sensor technology. It can be estimated through the Air Quality Index (AQI).

The reduction of effluent discharge can be estimated as the average annual volume of discharge recorded by a discontinued coal asset at the time of project approval, multiplied by the years of operation voided due to the retirement of the coal asset before the end of its expected lifetime.

The USD equivalent of savings from avoided illness and premature mortality can be estimated via the free, opensource BenMap modeling tool. It quantifies avoided health burden in the following manner:

### Cost of illness value = direct/tangible costs

### Willingness to pay value = direct + intangible personal costs

The latter part represents the estimated monetary value that persons would be willing to pay to avoid negative health impacts. The respiratory illnesses and premature mortality linked to PM 2.5 concentration in the air can be estimated using the HAPIT methodology.

### **Disaggregation**:

ACT Co-Benefit 1 should be disaggregated in one way: By Type (atmospheric vs. terrestrial vs. health).

### **Other Considerations:**

Some methodologies might require field work at the intervention dissemination sites to demonstrate pollution exposure before and after the intervention in a representative sample of households. This is the case for the HAPIT methodology.

### **Data Sources:**

Project-level tracking, local labor or employment databases, economic studies.

References: See References.

## **ACT Co-Benefit 2: Just Transition**

**ACT Co-Benefit 2 Indicator Examples:** Indicators or results analyses that relate to social inclusion or distributional impact dimensions of a just transition

Unit of Measurement: Varies highly; Difficult to measure with standardized indicators

**Disaggregation:** Varies highly; By Gender or Other Vulnerable Groups (whenever the "number of people" is measured)

Reporting Scope and Frequency: Reported as an annual and cumulative achieved value (or qualitative

result) against a cumulative target (or qualitative expected result); Significant potential for more targeted studies or analyses

**Alignment with CIF-Level Indicators:** Some indicators could feed into CIF Impact Indicator 3 (Beneficiaries) and corollary to NPC and REI co-benefit indicators

### **Overview:**

Just transition is a complex concept that applies a social and economic equity lens to the transformational change inputs, processes, and outcomes needed to address the climate crisis. Although there is no universally agreed-upon definition, one framework proposed through the CIF-sponsored Just Transition Initiative identifies *social inclusion* and *distributional impact* as two important dimensions to consider, along with the notion of *transformative intention* as a cross-cutting element. These dimensions are illustrated in Figure 3.

on: transformation	II: Narrow Transition Inclusive but focused approach	I: Systems Change Inclusive process and broad impact		
	<b>Social Inclusion:</b> recognizes, includes, and empowers a diverse range of stakeholders throughout transition process.	<b>Social Inclusion:</b> recognizes, includes, and empowers a diverse range of stakeholders throughout transition process.		
	<b>Distributional Impacts:</b> considers a narrow range of impacts for specific sectors and stakeholders.	<b>Distributional Impacts:</b> considers a broad range of impacts across sectors and stakeholders.		
	<b>Intention:</b> seeks transformation through inclusive and empowering processes.	Intention: seeks transformation through the overhaul of systems incompatible with sustainable development and social equity.		
al Inclusion				
	III: Incremental Reform Less inclusive and focused approach	IV: Top-Down Transition Less inclusive process but broad impact		
		Contal Inductory was guines and inductor		
	Social Inclusion: recognizes and includes select stakeholders in aspects of the transition process.	select stakeholders in aspects of the transition process.		
	Social Inclusion: recognizes and includes select stakeholders in aspects of the transition process. Distributional Impacts: considers a narrow range of impacts for specific sectors and stakeholders.	social inclusion: recognizes and includes select stakeholders in aspects of the transition process. Distributional Impacts: considers a broad range of impacts across sectors and stakeholders.		

Source: Reproduced from <a href="https://justtransitioninitiative.org/about-just-transitions/">https://justtransitioninitiative.org/about-just-transitions/</a>

### **Definitions:**

Just transition elements should be defined by each MDB in the context of the project.

### Methodological Guidance:

Potential just transition-related indicators should be selected with careful attention paid to the social inclusion or distributional impact context of each ACT project. Due to the complex, context-dependent nature of just transitions, results in this area may defy universal measurement approaches, such as standardized indicators. ACT projects are encouraged to focus on one aspect of just transitions, identify a related indicator or results measurement approach, and anchor this selection with an appropriate theoretical framework. Box 6 lists some examples of potential just transition-related indicators.

## **BOX 6.** Framework for Just Transitions

#### Social Inclusion:

Measuring meaningful engagement with and empowerment of relevant stakeholders (including labor, business, civil society, and different levels of government) at national, subnational, and local levels of government

- Categories of stakeholders involved (including percentage of labor and vulnerable community members relative to the project)
- Number of agreements reached with stakeholders in the context of the ACT investment program and just transition processes

#### **Distributional Impacts:**

Measuring a range of potential positive and negative impacts on workers and communities that require identification, tracking, and redress

- Potential social and economic development impacts identified and tracked during project development and implementation
- Potential impacts (beyond education and skills development) identified and mitigated during project implementation

Measuring ways to create, provide, or support access to sustainable and decent employment through a just transition lens

• Number of new job opportunities directly created that are sustainable and decent jobs

Measuring the proactive identification of existing and anticipated future skills and training gaps in the context of the coal-to-clean transition

- Number of people (men/women) trained for employment in the RE sector (or other sector)
- Number of people (men/women) in communities neighboring renewable energy integration infrastructure with improved livelihoods
- Number of workers or community members (men/women) who find employment (or achieve promotions) based on training provided by ACT projects

### **Disaggregation**:

Reporting on just transition-related indicators should be disaggregated in at least two ways: (i) Gender and (ii) Vulnerable Groups (whenever measuring the number of people). Other types of disaggregation should be applied at the discretion of MDBs.

### **Other Considerations:**

Just transition elements may be further assessed through evaluative approaches, studies, and learning activities. See the ACT <u>Maximizing Transformational Impact</u> toolkit for more detailed guidance.

### **Data Sources:**

Project-level tracking, local labor or employment databases, economic studies, social impact assessments, process data from stakeholder engagement activities.

### **References:**

See References.

## ACT Co-Benefit 3: Enhanced Energy Access

### ACT Co-Benefit 3 Indicator Example: Enhanced energy access

**Unit of Measurement:** Number (#) of women and men (converted from households, if necessary), businesses, and community services (four separate units of measurement)

**Disaggregation:** Direct vs. Indirect; By Gender; By Women-Headed Households and Women-Owned Businesses, where possible

**Reporting Scope and Frequency:** Reported annually as an annual and cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: Corollary to REI Core Indicator 7

### **Overview:**

This ACT co-benefit indicator measures new or enhanced energy access for households (women and men), businesses, and community services. The enhanced access must come from an increased share of renewable energy sources developed to replace decommissioned coal sources as a result of ACT interventions. The indicator can measure increased, more affordable, and/or more reliable access to clean energy. ACT Co-Benefit 3 feeds into CIF Impact Indicator 3 (Beneficiaries).

### **Definitions:**

For this indicator, *benefiting from improved access to electricity* is defined by MDBs based on the specific context of each project. According to the International Energy Agency (2020), some common aspects of energy access include the following:

- Household access to minimum level of electricity
- Household access to safe and more sustainable (i.e., minimum harmful effects on health and the environment as possible) cooking and heating fuels and stoves
- Access to modern energy that enables productive economic activity (e.g., mechanical power for agriculture, textile, and other industries)
- Access to modern energy for public services (e.g., electricity for health facilities, schools, and street lighting)

The Multi-Tier Framework for Energy Access (MTF) is an international standard that assigns a tier level of energy access to targeted households or communities by taking into consideration a range of energy access attributes. For example, Tier 1 refers to "limited access to small quantities of electricity for a few hours per day, enabling the household to use electric lighting and phone charging."<sup>23</sup> If using the MTF, *enhanced* refers to any upgrade from a lower tier of energy access to a higher one (e.g., Tier 0 to Tier 1, or Tier 2 to Tier 4). Figure 4 illustrates the key criteria required to reach each tier of energy access (i.e., horizontal axis) in relation to each attribute (i.e., vertical axis).

FIGURE 4. Multi-Tier Framework for Measuring Access to Electricity										
ATTRIBUTES		TIER 0	TIER 1	TIER 2	TIER 3	TIER 4	TIER 5			
Capacity	Power capacity ratings (W or daily Wh)	Less than 3 W	At Least 3 W	At Least 50 W	At Least 200 W	At Least 800 W	At Least 2 kW			
		Less than 12 Wh	At Least 12 Wh	At Least 200 Wh	At Least 1 kWh	At Least 3.4 kWh	At Least 8.2 kWh			
	Services		Lighting of 1,000 Imhr per day	Electrical lighting, air circulation, television, and phone charging are possible						
Availability	Daily Availability	Less than 4 hours	At least 4 hours		At least 8 hours	At least 16 hours	At least 23 hours			
	Evening Availability	Less than 1 hour	At least 1 hour	At least 2 hours	At least 3 hours	At least 4 hours				
Reliability		More th	an 14 disruptions p	er week	At most 14 disruptions per week or at most 3 disruptions per week with total duration of more than 2 hours	(>3 to 14 disruptions / week) or < disruptions / week with > 2 hours of outage	At most 3 disruptions per week with total duration of less than 2 hours			
Quality		Household ex	periences voltage p	Voltage problems do not affect the use of desired appliances						
Affordability		Cost of a standar per year is mo		d consumption package of 365 kWh s than 5% of household income						
Formality		No bill payments n	nade for the use of	Bill is paid to the utility, prepaid card seller, or authorized representative						
Health and Safety		Serious or fatal ac	cidents due to elec	Absence of past accidents						

#### Source: Reproduced from https://mtfenergyaccess.esmap.org/methodology/electricity

For ACT, electricity access typically refers to circumstances where solar, wind, or other renewables have been installed or replaced previous coal-generated energy through the ACT investment program, and resulted in enhanced electricity access to households, businesses, and/or communities.

Modern energy services refer to affordable, reliable, and sustainable energy services that meet the needs of households and businesses. Renewable sources like solar and wind have the potential to provide these services to households and businesses in a variety of circumstances. For example, modern energy services that can be specifically powered by off-grid rooftop solar PV systems might include the following:

- Lighting: LED lights in homes and businesses
- Heating and cooling: Solar thermal systems heating and cooling in homes and businesses
- Cooking: Electric cookstoves for clean cooking
- Water pumping: Solar-Powered water pumps used to extract water from wells to provide clean drinking water to communities
- Telecommunications: Solar-powered cell towers and internet connectivity in remote areas

ACT Co-Benefit Indicator 3 measures the total number of men, women, households, businesses, and communities benefiting from modern energy services. The indicator does not measure the number of modern energy services added to a household, business, or community service.

## **Methodological Guidance:**

*Baseline:* During project design, an assessment area must be identified by the MDB and the level of energy access within the assessment area established using a suitable methodology. The total number of households (women/men), businesses, and community services (a non-zero value) is then determined as an input to the baseline value for this indicator and recalibrated to zero (0) for the purposes of ACT M&R. In some cases, this information may already be available from the ACT investment plan, diagnostics, or other recent grid studies.

If feasible, energy access should be established using a multi-tier framework for energy access rather than a binary approach. Data from ESMAP's MTF, RISE scores, the multi-dimensional energy poverty index, SDG-7 sub-indicator, or other national energy statistics are all good sources of information to report on energy access.

*Expected Results:* The target value(s) for households, businesses, and other community services (four separate units of measurement) with enhanced access to electricity or modern energy services are estimated using data collected as part of the due diligence work conducted during the appraisal phase of the project. If a project is reporting on businesses or community services in particular, additional information should be provided on the nature and definition of these units within the context of the project reporting.<sup>24</sup> Overall, the target(s) should be provided in line with the project-level theory of change on how ACT interventions are expected to affect energy access and include a suitable quantitative methodology.

Achieved Results: Results are reported annually, covering the period from January 1 to December 31 of the preceding year. They should reflect observed net changes in the energy access rate for the assessment area, as evidenced by primary data from household surveys or operational data from utilities. Cumulative results cover all new women, men, businesses, or other community services with improved access to electricity or other modern energy services over the project implementation period.

If the MTF approach is used, achieved improvements should count any upgrade from a lower tier to a higher one (e.g., Tier 0 to Tier 1 or Tier 2 to Tier 4). A household's tier status is defined in relation to each of the attributes in the MTF (i.e., capacity, availability, reliability, quality, affordability, formality, health, and safety). The overall tier status is measured by applying the lowest tier obtained for any of the attributes (see more on MTF in the References).

All data sources should be cited, and the methodology specified at the time of reporting.

## **Disaggregation:**

Apart from the four sub-units of measurement that are already incorporated in the measurement units of the indicator, monitoring and reporting for this indicator must be disaggregated in two ways (and three if possible): (i) Direct vs. Indirect, (ii) By Gender, and (iii) By Women-Headed Households and Women-Owned Businesses, if possible.

*Direct energy access* refers to households, businesses, or other community services that have improved access to electricity as a result of improved electricity production from renewable energy sources directly enabled by ACT project intervention(s). Examples include the following:

- New grid connections from an ACT intervention
- Businesses receiving improved access to electricity as a result of grid connection improvements
- Households provided with more reliable electricity as a result of projects integrating additional clean energy sources into the grid

*Indirect energy access* refers to households, businesses, or other community services that have improved access to electricity as a secondary or follow-on effect from ACT projects' direct interventions. Examples include the following:

- Capacity building projects to foster policy changes that enable enhanced energy access
- Enhancing the resiliency of existing grid connections as a knock-on effect from ACT interventions

*Gender* disaggregation (i.e., the number of men vs. women) is required for all projects that specifically monitor households with improved access to electricity or other modern energy services. This disaggregation is fully incorporated in the measurement units of the indicator.

Disaggregating by the number of *women-headed households*<sup>25</sup> and *women-owned businesses* is strongly encouraged for all projects that monitor improvements in access to electricity or modern energy services at the household and business level, respectively.

## **Other Considerations:**

*Converting households to women and men:* When energy access data available are reported in terms of households, the values should be converted to the number of men and women and the methodology for making this conversation cited during the first year of reporting. CIF suggests using country data (or sub-national data, if possible) on the average number of people per household, as made available by sources like the UN's Population Division.<sup>26</sup>

*Other national energy access metrics*: As a complement to the information tracked in ACT Co-Benefit 3, the country-driven proxy impact reporting window of the ACT M&R System is positioned to capture metrics, such as national RISE scores, national MTF rates, and national off-grid access rates. This may be particularly suitable to project contexts where robust primary data collection (e.g., household surveys) is not possible at the relative scale of the project.

## **Data Sources:**

In addition to MDB project results, household surveys, and other national or sub-national energy statistics, number of people and businesses with improved access to electricity can be found through the World Bank ESMAP MTF data, SE4ALL Global Tracking Framework, and operational data from utilities.

## **References:**

See References.

## ACT Co-Benefit 4: Gender- and Vulnerable Groups-Specific Co-Benefits (and Other Co-Benefits)

**ACT Co-Benefit 4 Indicator Example:** MDBs may propose any other co-benefit indicator that tracks social, economic, or environmental results beyond the scope of ACT's primary objectives. One applicable example could be co-benefits specific to gender or vulnerable groups due to ACT project interventions.

Unit of Measurement: Number of persons reached (#)

**Disaggregation:** By Gender; By Vulnerable Groups or Persons

**Reporting Scope and Frequency:** Reported as an annual and cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: Feeds into CIF Impact Indicator 3 (Beneficiaries)

## **Overview:**

This example indicator measures the persons reached via ACT project activities that directly target women or vulnerable social groups for inclusion/development co-benefits.

ACT Co-Benefit 4 should be reported as an annual and lifetime estimate for each investment. It feeds into CIF Impact Indicator 3 (Beneficiaries).

## **Definitions:**

People supported might include beneficiaries of the following illustrative activities:

- Improved employment opportunities in the renewable energy sector or science, technology, engineering, and math (STEM) skills development
- Livelihood and skills development, entrepreneurship training, and credit access
- Gender-specific financial products, especially for productive-use applications
- Gender-specific design measures in energy-related services or outreach
- Institutional measures, such as policy, planning and budgeting support, inclusive human resources policies, or other policies aiming to reduce inequality, including in procurement practices, actions against gender-based violence, and measures, such as subsidies, to reduce connection fees for vulnerable groups like women-headed households
- Other measures designed to reduce gender and inequality gaps in the sector/sub-sector targeted by ACT interventions

## **Methodological Guidance:**

Gender-responsive aspects can be studied in more detail through targeted research, evaluations, and case studies. These activities can better assess the program's impacts in reducing gender imbalances and expanding inclusion, including the relevance of interventions, women's access to the labor force, and the viability of women-owned enterprises in economic regeneration programs. Studies might focus on either or both of the following phases:

- **a. Coal plant or coal mine retirement/re-purposing phase:** Gender and social policy and strategy preparedness assessment, including mapping of: i) institutional linkages to Ministry of Women's Affairs or equivalent, gender focal points in line ministries (including in Social Protection and Labor, and Education ministries, as well as Environment, and Energy); ii) expected poverty impacts of the transition, including social and gender-based care burdens for workers affected directly and indirectly by the energy transition; and iii) policy mandates and measures to ensure gender equality outcomes in skills development and workforce transition.
- **b. Post-coal regional transformation phase:** Social protection assessment of readiness and completeness of short and long-term social assistance programs, active labor market programs, and education and reskilling programs targeting jobs of the future, including gender assessments of gaps between women and men in education, skills, employment, and participation rates in new or similar jobs-related programs; and measures to reduce gender imbalances in the impact of proposed interventions.

## **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in two ways: (i) Gender and (ii) Vulnerable Groups or Persons (such as youth or elderly persons, persons with disabilities, labor migrants, racial or ethnic minorities, etc.).

## **Other Considerations:**

Health and other development co-benefits may be further assessed qualitatively and quantitatively using a variety of other indicators.

## **Data Sources:**

Information can be based on MDB project results data or data from organizations or agencies hosting or implementing ACT-related interventions.

## 3.5 ACT Optional Indicators (Category 5)

ACT optional indicators are monitored and reported at the **project level**, based on MDBs' own M&E systems. They are intended to capture probable results expected to be achieved through the ACT investment program and may be useful for MDBs to incorporate in their project-level results frameworks on a project-by-project basis (although this is not required). CIF will analyze the project results frameworks for all ACT projects at MDB Board approval phase and identify which, if any, ACT optional indicators are reflected in the MDB-approved project results framework. Upon agreement from the MDB, the selected optional indicator(s) are uploaded to the CCH alongside the core indicators for results reporting.

Optional indicators are reported by **MDBs** on an annual basis using the information already available in their own project-level M&E systems. Projects that have not incorporated any of the ACT optional indicators do not require any further action during annual reporting.

Some ACT optional indicators are situated at the outcome level and are closely linked to certain ACT core indicators (i.e., ACT 4, ACT 9, ACT 10, and ACT 11) in terms of the results area that they aim to capture (see Section 3.3). However, not all ACT core indicators have corresponding optional indicators. Most ACT optional indicators are situated at the output level, as they relate to the short-term intervention results of discrete projects.

## **BOX 7.** ACT Optional Indicators

## OUTCOME LEVEL:

ACT Optional 1: Volume of incomes generated from new economic activity (USD), related to ACT 4 and ACT 10 ACT Optional 2: New coal capacity addition abated/negated (MW), related to ACT 9 ACT Optional 3: Coverage/scale of ecosystems protected and strengthened (Ha), related to ACT 10 ACT Optional 4: Value of ecosystem services generated or protected (USD), related to ACT 10 ACT Optional 5: Value of coal assets reclaimed or repurposed (USD), related to ACT 11

## **OUTPUT LEVEL:**

ACT Optional 6: Number of persons re-skilled/retrained (#)

**ACT Optional 7:** Number of programs deployed/implemented to minimize environmental and social losses from coal transitions (#)

ACT Optional 8: Number of programs designed to minimize environmental and social losses from coal transitions (#)

**ACT Optional 9:** Number of roadmaps, action plans, assessments, and/or related due diligence completed on minimizing environmental and social losses from coal transitions (#)

ACT Optional 10: Number of communications plans designed and rolled out (#)

**ACT Optional 11:** Number of persons consulted via local/multi-stakeholder consultations regarding project impacts and related economic and social regeneration strategies (#)

**ACT Optional 12:** Number of local/multistakeholder consultations regarding project impacts and related economic and social regeneration strategies (#)

## **3.6 ACT Project-Specific Indicators (Category 6)**

The ACT M&R System is designed to track **project-specific indicators** selected by the MDBs to monitor the goals, outcomes, and outputs of individual ACT projects, based on their approved project-level results frameworks. Unlike optional indicators, CIF does not provide any suggested list of project-specific indicators. These indicators are entirely driven by the MDBs in a decentralized fashion. The CIF Administrative Unit's role must review all ACT projects' MDB-approved results frameworks to identify, harmonize, and capture commonly reported indicators that can complement the results reported through the core indicators and other indicator categories. The approach also helps to highlight notable achievements from individual projects as part of the annual results reporting process.

The **MDBs** should supply the CIF Administrative Unit with the full project-level results frameworks of individual ACT projects at MDB Board approval. The most recently available progress reports or implementation status reports generated by the MDBs through their own project supervision protocol should also be submitted during each annual reporting period.

Identification and analysis of commonly reported indicators may take place at various stages of the program's lifetime, as new projects come onboard and the effectiveness of capturing results via the core indicators is iteratively reassessed.

## 3.7 Energy Storage Indicators (Category 7)

Energy storage indicators are monitored and reported at the **project level**, based on MDBs' own M&E systems. **They must be integrated into project-level results frameworks for all ACT-funded projects with an energy storage component.** These two indicators on energy rating and power rating of storage systems are borrowed from **CIF's Global Energy Storage Program (GESP) M&R System**. They are straightforward to measure and are specifically selected to allow results to be aggregated and learning to flow between CIF's GESP and the ACT investment program. If an ACT project does not include an energy storage component, it is not required to report any information under Category 7.

Energy storage indicators are the reporting responsibility of **MDBs** on an annual basis.

## **GESP 1: Energy Rating**

GESP Indicator 1: Energy rating of storage systems installed

Unit of Measurement: MWh

**Disaggregation:** Storage Technology Type (thermal, mechanical, electrochemical); Location on the Energy Value Chain (generation, transmission, distribution, stationary end-use, mobile end-use); Distributed vs. Utility-Scale

**Reporting Scope and Frequency:** Reported annually as an annual and cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: Aligns with GESP Indicator 1

## **Overview:**

This indicator tracks the **energy rating** of deployed battery or other energy storage systems in ACT projects, as measured in **MWh**. It is intended to demonstrate the total increase in energy storage capacity deployed across all ACT projects with an energy storage component and is designed to be aggregated with energy storage results from other CIF programs, notably GESP. Energy Storage Indicator 1 is required for all ACT projects with an energy storage storage component.

## **Definitions:**

The *energy rating* of an energy storage system indicates the maximum amount of energy that can be stored in the battery or storage system. It is the product of the power rating in MW and the discharge duration at this power rating, where power rating is the maximum power at which the energy storage system can operate. See Energy Storage Indicator 2 for more on power rating. In some settings, the terminology energy storage capacity is used interchangeably with energy rating.

## **Methodological Guidance:**

In general, the following formula applies:

## Energy rating = Power rating (Energy Storage Indicator 2) x Duration of energy storage discharge at the rated power in number of hours

Baseline: N/A

*Expected Results*: Energy ratings should be estimated based on country or technology-specific standards expected within the targeted energy system. This specification is typically well known in advance of deploying an energy storage system.

Achieved Results: For annual monitoring and reporting, this indicator should report on the energy rating of a battery or energy storage system rendered operational during the 12-month reporting period. Optional annual operating data on actual delivery of energy from storage should be shared over time, as available.

## **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in three ways: (i) Storage Technology Type, (ii) Location on the Energy Value Chain, and (iii) Distributed Storage vs. Utility-Scale Applications.

The storage technology *type* refers to thermal, mechanical, or electrochemical.

The *location* on the energy value chain refers to generation, transmission, distribution, stationary end use, or mobile end use.

*Distributed storage* refers to systems installed in end-user facilities, such as public services, industries, households, or businesses (e.g., mini-grids, off-grid systems, and electric vehicles). *Utility-scale applications* typically refer to the grid network.

## **Other Considerations:**

When feasible, MDBs should report additional data on the total measured vs. expected discharge and duration of energy storage operations at rated power (and below rated power) over a given year. The product of measured duration and rated power equals delivered energy at rated power, which can be compared against the energy rating of the storage system. Note that for storage systems that provide various rated energy values as a function of discharge power, this measurement is conducted at each discharge power. This can also be used to calculate the project-specific energy-to-power ratio, which can be compared with the ratios of other ACT energy storage projects in a learning context.

## **Data Sources:**

Country-level data, technological specifications of battery or energy storage systems.

## **References:**

See References.

## **GESP 2: Power Rating**

GESP Indicator 2: Power rating of storage systems installed

#### Unit of Measurement: MW

**Disaggregation:** Storage Technology Type (thermal, mechanical, electrochemical); Location on the Energy Value Chain (generation, transmission, distribution, stationary end-use, mobile end-use); Distributed vs. Utility-Scale

**Reporting Scope and Frequency:** Reported annually as an annual and cumulative achieved value against a cumulative target

Alignment with CIF-Level Indicators: Aligns with GESP Indicator 2

#### **Overview:**

This indicator tracks the **power rating** of deployed battery or other energy storage systems in ACT projects, as measured in **MW**. It is intended to demonstrate the total increase in power capacity deployed across all ACT projects with an energy storage component and is designed to be aggregated with energy storage results from other CIF programs, notably GESP. Energy Storage Indicator 2 is required for all ACT projects with an energy storage component.

## **Definitions:**

The *power rating* indicates how much power can flow into or out of the energy storage system continuously, i.e., a measure of the maximum continuous power output capacity. In some settings, the terminology "power capacity" and "rated power" are used interchangeably with "power rating."

## Methodological Guidance:

Baseline: N/A

*Expected Results:* Power ratings should be estimated based on country or technology-specific standards expected within the targeted energy system. This specification is typically well known in advance of deploying an energy storage system.

*Achieved Results:* For annual monitoring and reporting, this indicator should report on the power rating of a battery or energy storage system rendered operational during the 12-month reporting period.

## **Disaggregation**:

Monitoring and reporting for this indicator must be disaggregated in three ways: (i) Storage Technology Type, (ii) Location on the Energy Value Chain, and (iii) Distributed Storage vs. Utility-Scale Applications.

The storage technology type refers to thermal, mechanical, or electrochemical.

The *location* on the energy value chain refers to generation, transmission, distribution, stationary end use, or mobile end use.

*Distributed storage* refers to systems installed in end-user facilities, such as public services, industries, households, or businesses (e.g., mini-grids, off-grid systems, and electric vehicles). *Utility-scale* applications typically refer to the grid network.

## Other Considerations:

N/A

## Data Sources:

Country-level data, technological specifications of battery or energy storage systems.

## **References:**

See References.



# **4.** OTHER KEY FEATURES OF ACT M&R AND RESULTS

ACT uses multiple, complementary approaches to monitor, evaluate, generate evidence, and learn from aspects of the program that are not easily captured through indicators. Many of these approaches are based on targeted and demand-driven research, analytics, and/or stakeholder engagement activities, which various teams in the CIF Administrative Unit oversee in close coordination with MDBs.

## 4.1 Multi-Stakeholder Review Mechanism for Investment Plans

Multi-stakeholder review mechanisms are an important tool for ACT recipient countries to utilize as part of their ACT M&R approach. They enable recipient countries to self-assess progress made on their investment plans with a diverse group of ACT stakeholders. Mechanisms include national workshops, South-South learning events, joint discussion of progress on the ACT country impact indicators, or other modalities. CIF encourages countries to deploy this flexible mechanism at least three times over the course of the investment plan's implementation period (approximately at baseline, mid-term, and end-line of the full investment plan). CIF also aims to support recipient countries to implement the mechanism, in coordination with MDBs, on a demand-driven basis. Approaches may be customized per country and/or combined with other evaluative approaches and learning-oriented activities, such as those described in ACT's <u>Maximizing Transformational Impact</u> toolkit.

Multi-stakeholder review mechanisms should also be inclusive, with equitable participation of men and women, representation from civil society organizations (including organizations representing women), and participation from other marginalized social groups. The content discussed through this mechanism should take into account the differentiated impacts of ACT projects on men vs. women and marginalized social groups, as well as stakeholder differences in needs and expectations of ACT by gender and other social groups. Gender and social inclusion should be considered cross-cutting themes to be addressed throughout workshop discussions (or otherwise in the content of the selected mechanism).

## 4.2 Signals and Dimensions of Transformational Change

If feasible, recipient countries and MDBs are encouraged to incorporate the signals and dimensions of transformational change, including just transition elements, into aspects of their monitoring and reporting on ACT results. This can take place during the implementation of the multi-stakeholder review mechanism (see Section 4.1), as part of narrative reporting (see Section 4.6), or through other avenues. A comprehensive description of transformational change is available in the ACT <u>Maximizing Transformational Impact</u> toolkit.

## 4.3 Gender and Social Inclusion Results and Analytics

ACT results related to gender and social inclusion are captured through an array of mechanisms that collectively build a body of evidence on progress toward the objectives of CIF's <u>Gender Action Plan</u>.

First, within the ACT M&R System, all indicators measuring the "number of people" are required to be gender disaggregated. This enables CIF Administrative Unit and MDBs to better track projects' contribution toward reducing gender gaps, to assess potential gender-differentiated outcomes, and to monitor the overall distribution of results achieved over time.

Second, MDBs have the option to include gender- and social inclusion-related indicators as part of their cobenefits reporting (see Section 3.4). This could be as a part of the social inclusion dimension using a just transition lens or as a separate gender-related indicator proposed by the project and identified by the MDB to be monitored at CIF level over time.

Third, the CIF Gender Team and MDBs review the full project results frameworks of ACT projects at MDB Board approval with the aim to identify gender- and social inclusion-related indicators. Based on this exercise, the indicators identified are extracted and entered into the CCH Gender module for CIF to track and analyze ACT's annual progress on the CIF *Gender Action Plan(s)* throughout program implementation. The indicators should be linked to any gender gaps identified in the gender analysis and project activities designed to address those gaps. The reporting is carried out through the Gender Module of the CCH portal. The CCH Gender Module also records information on analyses of gender gaps and gender-focused project activities.

Encouraging projects to develop a gender action plan built on the social inclusion and gender analyses undertaken at the design stage can be an effective strategy for MDBs to monitor gender-related results and ensure that gender-related considerations are explicitly embedded in project design and implementation. ACT projects should select gender indicators for which information is likely to be available and affordable to collect, using various data sources and methodologies to set baseline and target values for both gender-disaggregated and gender-specific indicators. This approach promotes the inclusion of such indicators in projects' results framework, in turn, enabling the CIF-level approach to extract and track such information.

In addition to collecting quantitative data points, qualitative approaches at the project level are also critical tools to analyze the gender issues affecting projects. ACT projects will often need to capture gender-related information through focus groups, in-depth interviews, key informant interviews, and other qualitative methods. Teams should be prepared to adjust project implementation if monitoring reveals that women, men, boys, and girls do not benefit equally or as expected from activities or if there are harmful effects on women, men, boys, or girls. Project teams are also encouraged to report on lessons learned on gender reported in project progress and completion reports, as well as to explore opportunities for more in-depth studies on the gendered impact of the projects. For example, mixed-method evaluations are typically more effective at capturing gender-related results, such as changes in norms, attitudes, and behaviors resulting from women and girls' economic empowerment.

In addition, Women Led Coal Transition Grant Mechanism (WOLCOT) is set up under ACT to go beyond regular gender mainstreaming and test bold, innovative "business unusual" models that directly support local communities and organizations working on the rights of women and other excluded groups. WOLCOT aims to foster women's climate leadership and effective participation in the design and implementation of coal-to-clean transition strategies and plans. Activities under WOLCOT are expected to contribute in particular to ACT Core Indicator 1 (Number of policies, regulations, codes, or standards that have been amended or adopted) and

ACT Core Indicator 4 (Number of direct beneficiaries of implemented social plans and economic regeneration activities). Further reporting for WOLCOT grants is also required, as set out in the WOLCOT results framework.

The CIF Gender Team is available to support MDBs and country teams based on demand and to provide targeted technical support on gender equality and social inclusion issues, such as inputs to analytical products exploring gender gaps, assessment of gender results, and capacity building events. In addition, the team facilitates meetings of the CIF Gender Focal Points Working Group to discuss challenges and opportunities related to gender integration in ACT and enable peer support.

Finally, ACT recipient countries are encouraged to incorporate deeper dive analyses of gender and social inclusion issues as part of their multi-stakeholder review mechanism for investment plans conducted around the beginning, mid-term, and end of country investment plan implementation (see Section 4.1).

## 4.4 Modeling

The CIF Administrative Unit utilizes economic modeling tools, such as the Joint Impact Model (JIM),<sup>27</sup> Employment Factors, and the International Jobs and Economic Development Impacts (I-JEDI) model to estimate the larger social and economic impacts of its investments. For energy investments, CIF mostly employs the JIM model, which yields estimations of the direct, indirect, and supply chain impacts of investments on jobs, as well as economic value addition from project construction, operation, and via the forward effects of additional power generated in the investee economies.

Further model enhancements led by CIF aim to enhance the granularity and accuracy of estimates and expand knowledge on distributive impacts and the quality of jobs created. They focus on the following:

- Direct and Backward Effects (i.e., improving the ex-ante estimation of direct and backward supply-chain and induced effects)
- Forward Effects (i.e., improving estimates of power-enabling or forward effects)
- Distributive Impacts (i.e., investigating opportunities to calculate distributive impacts)

The work differentiates impacts related to *technology types* (i.e., onshore wind, offshore wind, solar PV, CSP, large hydro, small hydro, green hydrogen, biomass, ocean, storage, etc.), *the location of investments on the energy value chain* (i.e., generation vs. transmission vs. distribution), and *utility-scale vs. distributed applications* (i.e., grid, off-grid, mini-grid, rooftop solar, and other distributed solutions). It increasingly considers the treatment of life-of-project analyses and construction vs. operational phases of renewable energy investments.

The expansion of modeling foci and tools also explores metrics for health co-benefits (see Section 3.4), such as impacts from reduced atmospheric pollutants associated with fossil-fuel emissions, the quantification of avoided health burdens, and benefits from preventing premature mortality. These areas of modeling help strengthen the collective understanding of development outcomes linked to CIF's energy sector financing, while providing potential metrics for similar investment types (such as those expected in ACT).

Based on demand, MDBs and recipient countries are encouraged to exploit modeling tools—including through coordination and collaboration with the CIF Administrative Unit—to enrich their estimations of total expected results from ACT projects.

## 4.5 Sustainable Development Goals (SDGs)

The CIF Administrative Unit catalogs ACT through the lens of the SDGs by mapping each ACT project to the SDGs that relate to its objectives and expected outcomes. These include SDG 1: No Poverty, SDG 5: Gender Equality, SDG 7: Affordable and Clean Energy, SDG 8: Decent Work and Economic Growth, SDG 9: Industry, Innovation and Infrastructure, and SDG 13: Climate Action. This enables the program to estimate how much of its total financing is contributing toward these SDG objectives, and as implementation progresses, to triangulate achieved results with the related SDGs.

## 4.6 Narrative Reporting

MDB project implementation narrative reporting is an important aspect of the ACT M&R System. In addition to the narrative reporting that complements quantitative data for some of the core indicators (e.g., ACT Core Indicators 1 and 2), MDBs should submit their own recent supervision reports (redacted where necessary) to the CIF Administrative Unit alongside their annual submission of quantitative results data. The ACT M&R System makes further use of MDB operational reporting in the CCH that MDBs already undertake as part of CIF's portfolio management function (i.e., qualitative reporting on implementation updates). These types of narrative data help strengthen interim monitoring at the portfolio level before longer-term outcomes and impacts can be realized.

ACT recipient countries are encouraged to share narrative reporting at the Investment Plan level with the CIF Administrative Unit on an annual basis, or when feasible. This can include national reports and other documents related to ACT that are already being produced by the country (which can be uploaded directly to the CCH), as well as direct text inputs to the CCH alongside recipient country reporting on country impact indicators.

## 4.7 Program Evaluation

Per the <u>CIF MEL Policy and Guidance</u> document, the program evaluation function is separate from – and complementary to – the ACT M&R System. In general, the CIF-wide Evaluation and Learning (E&L) Initiative covers the ACT investment program alongside other CIF programs. Three different modalities are expected to be used to conduct ACT-related evaluations and studies: (i) Commissioning of independent evaluation firms or individuals, in line with CIF procurement policies; (ii) CIF Administrative Unit-led evaluative studies; and (iii) CIF partner-led studies, including from MDBs and recipient countries (CIF 2022, 10-13 and 19-21).

An ACT investment program-level mid-term evaluation is expected to occur approximately five to seven years into the program's implementation, when deemed appropriate and subject to approval from ACT's governing TFC. A program level, end-of-term evaluation is expected to occur approximately 8-12 years into the program's implementation, also when deemed appropriate and subject to approval from ACT's governing Trust Fund Committee.

Results data and other information generated through the ACT M&R System are expected to help build an evidence base that can be used for and as part of ACT-related evaluations and studies.

## 4.8 Capacity Building and Learning

Support for ACT M&R-related capacity building is available upon demand from the CIF Administrative Unit, in close coordination with MDBs. For instance, ACT recipient countries can undertake the multi-stakeholder

review mechanisms for investment plans (see Section 4.1) without any CIF Administrative Unit involvement, with limited CIF Administrative Unit involvement, or direct CIF guidance and capacity building support for investment plan review. This mechanism is also an opportunity for a broad range of local stakeholders to strengthen their awareness and build capacity in M&R for coal-to-clean transition, in addition to the country focal point and project implementation teams who are typically involved in the M&R process.

Additional analytics and learning activities related to ACT results are expected to occur through a variety of channels over the implementation lifetime of the program. These might include aspects related to gender, stakeholder engagement, development impacts, just transition, thematic or sub-sectoral deep dives, project delivery case studies, or other activities. Such activities are selected on a demand-driven basis in close coordination with MDBs.





# **5.** REPORTING DEFINITIONS AND GUIDELINES

## 5.1 Reporting Definitions

The ACT M&R System sets targets and tracks results based on the whole of projects implemented. As a result of ACT refers to the effects of interventions and activities funded by ACT, as well as those leveraged by the co-financing reported in ACT Core Indicator 6. Typically, this refers to singular projects or programs structured through blended finance (CIF + MDB + other potential co-finance).

The expected *reporting closure date* is the date when the MDB expects final, end-line results data points to become available for all approved project indicators. This can vary per MDB and may occur at financial closure, around physical completion of project implementation, or upon submission of a project completion report. MDBs may have different terminology and parameters for establishing this date. The date can also vary between public and private sector operations and can be modified if projects are extended, restructured, or terminated.

The *reporting year* for CIF refers to project performance from January 1 to December 31 of the year before results are submitted. In general, ACT results are submitted by March 15 of the following calendar year from the reporting year, although in some cases, the period reported may differ between MDBs, which have different cutoff dates for their internal results reporting. The ACT M&R System provides flexibility for MDBs' respective reporting protocols while striving for coherent CIF-level reporting to the greatest extent possible.

*Stakeholders* refer to parties with an interest in a project, including government authorities, the private sector, utilities, civil society organizations, and other groups at local and country level.

## 5.2 Baselines, Expected Results, and Achieved Results

Reporting quantitative *baselines* is not necessary for ACT indicators since these values are implicitly set at zero (0). This is because these indicators each measure an increase in activities "as a result of ACT interventions." Nonetheless, MDBs may need to conduct their own baseline assessments that will feed into these and other aspects of the ACT M&R System, such as intermediary input calculations for GHG accounting, qualitative reporting, and certain project-specific and co-benefits indicators (e.g., energy access and employment figures). The *baseline year* for ACT projects is the year of MDB Board Approval.

*Expected results* refer to the intended results to be achieved by a project by its end-line and are interchangeably referred to as *targets*. The ACT M&R System does not track annual or mid-term targets. Targets are proposed in project proposal documents at the time of CIF Trust Fund Committee funding approval and are verified or modified at the time of MDB Board approval, alongside the reporting of any additional indicators and targets for project-specific and co-benefit indicators. MDBs and the CIF Administrative Unit jointly track targets via the CCH. In most cases, the standard target year refers to the year of project closure.<sup>28</sup>

Achieved results are submitted by MDBs via the CCH during the annual results reporting period. They are submitted by March 15 of each calendar year and should cover the preceding reporting year (i.e., January 1– December 31). Data from MDBs' project-level monitoring systems must be used to report actual, observed results, rather than projections or ex-ante estimates.

All documents containing the evidence base for reported results are auditable. These should be uploaded to the CCH under the Supporting Documents tab in the Results section. If a document is marked as *confidential*, only members of the reporting MDB and members of the CIF Administrative Unit can view it.

## 5.3 Data Entry and Validation

For each project, MDBs must fill in the CCH sections covering ACT core indicators. MDBs should also report data for the relevant co-benefit indicator(s) and all other indicators agreed to be reported for the corresponding projects, as established at MDB Board approval. A list of these indicators will be pre-populated for each reporting period after they are identified and entered into the CCH system during the first year that a project reports.

If a project is co-funded by two MDBs, the MDBs must agree which one will report on the project to the CIF Administrative Unit. Each project can only have one report (to avoid double-counting project results). If each MDB invests in and implements distinct components of a project, and if each MDB reports only on the components that are directly relevant to their investment, the risk of double counting is avoided. However, in such an instance, the relevant components and targets should be clearly delineated, communicated formally to CIF, and remain congruent with the total targets at the project level.

Project leads within MDBs and MDBs' CIF coordination focal points should review and validate the data before uploading the annual results to the CCH.

The CIF Administrative Unit is responsible for communicating the annual results reporting deadline to all MDBs during each reporting period. Results data should be submitted by March 15 of each calendar year for the results achieved during the previous year, i.e., the reporting year.

## 5.4 Outreach and Stakeholder Engagement

MDBs and ACT project teams are encouraged to invite stakeholders in the ACT recipient country to review the annual results of the program before sharing the annual results with the CIF Administrative Unit.

Results can also be disseminated, discussed, and shared through targeted stakeholder engagement activities, such as the multi-stakeholder investment plan review mechanism, CIF-sponsored learning forums, in-country renewable energy events, or other platforms.

## 5.5 Timing of Results Achieved

Given the nature of ACT projects and the fact that all eleven of the ACT core indicators are outcome indicators, significant progress may only occur once projects have reached a mature stage of implementation or are completed.

Projects no longer need to report annual results once they have reached completion and have submitted their final results in the CCH, along with a copy of the MDB's project completion report.<sup>29</sup> Cumulative achieved results will be deemed final at this time. For annual achieved results (e.g., annual GHG emissions reductions) the CIF Administrative Unit will continue to use the final year's result as an annual proxy for future reporting years unless otherwise notified by MDBs.



Detailed guidelines on accessing the CCH and its general usage are presented within the *CCH Results User Guide*, which is available upon request. MDB personnel responsible for results reporting tasks should take the following key steps.<sup>30</sup>

## **Step 1: Identifying Indicators and Entering Targets for ACT Projects**

*Timeline:* Upon MDB Board approval for both public and private sector projects; no later than the first results reporting period to follow the project's MDB Board approval.

*Procedure:* First, MDBs should provide the CIF M&R Team with the full project results framework, as approved in the project appraisal document (i.e., project design document)<sup>31</sup> at MDB Board approval. Both MDB and CIF M&R teams should review the results framework for each ACT project, consult, and agree on the full list of indicators that are applicable to the ACT M&R System (see Section 2.2).

Once this has been completed, MDBs are responsible for entering the agreed-upon indicators and their targets into the CCH.

- Users should go to the "Project Portfolio" section of the CCH, identify the project, scroll over the far-left column, and click on "Update Project."
- Users should next, identify the "Results" section in the task bar on the left-hand side and click on "Targets." After clicking on the "Targets" link, the user is navigated to the "Targets" screen, as shown in Figure 5.

FIGURE 5. Entering Targets in the CCH					
Targets at MDB Approval				^	
				Add new row: 🛨	
Indicator *	Breakdown *	Units *	Annual Target	•	
Tons of GHG emissions $x \lor$	NA	x V Tons of CO2	x v	•	
Lifetime Target *	Comments				
	Comments				

- Users can add indicators per category ("Core Indicator," "Co-Benefit Indicator," "Optional Indicator," "Project-Specific Indicator," and "Energy Storage Indicator" as relevant) and target values on the screen. The "Core Indicator" section is first, followed by the other indicator categories. These indicators can be selected via the dropdown function or entered manually if the indicator identified is not already reflected in the dropdown list.
- Users can enter multiple targets by clicking the "+" sign on the right side of each indicator line.
- Each indicator's required disaggregation populates in the CCH structure once the indicator is selected. Users should select the appropriate disaggregation and populate all targets/sub-targets accordingly.
- When prompted, users should provide additional text or information on the methodology used.
- Users can enter co-benefit indicators and targets in the lower section of the page, as well as indicators from the other categories.
- Users must click "Save" at the bottom of the page once all the targets have been added, and the data entered will be submitted in the system (see Figure 6).
- Co-financing data are automatically transferred from the "Financials" tab.

FIGURE 6. Targets Entered in the CCH				
Targets at MDB Approval			^	
			Add new row: 🚹	
Indicator *	Breakdown *	Units *	Annual Target *	
Tons of GHG emissions $x \lor$	NA x V	Tons of CO2 x $\lor$	106,541.00	
Lifetime Target *	Comments			
2,130,820.00	Comments			
	<u></u>			

*Changing Targets*: Targets cannot be modified after results have been reported unless a formal restructuring has occurred. If this is the case, MDBs must notify the CIF Administrative Unit of the change, provide the necessary rationale, and submit the relevant documentation validating the rationale, methodology, and new target value(s). The numbers will be changed by the CCH administrator.

## **Step 2: Entering Achieved Results for ACT Projects**

*Timeline:* Results must be submitted on an annual basis during the first quarter of the calendar year (i.e., January–March). The submission should cover the annual results achieved during the reporting period from January 1 to December 31 of the previous calendar year, regardless of differing fiscal years among MDBs. Exact reporting deadlines are communicated by the CIF Administrative Unit and may shift over time (in line with the timing of CIF TFC meetings). At the time of publication, the annual reporting deadline for MDBs is March 15.

## Procedure:

- Each year, MDBs should go to the "Project Portfolio" section of the CCH, identify the project to be reported on, and click on "Update Project."
- Users should identify the "Results" section in the task bar on the left-hand side and click on "Achieved Results." After clicking on the "Achieved Results" link under the Results section, the user is navigated to the "Achieved Results" screen as shown in Figure 7.
- The "Achieved Results" screen is available for data entry during the first part of each calendar year. At other times, the screen is in "View Only" mode.
- The core indicators and all related fields are automatically populated from the "Targets" screen to the "Achieved Results" screen.<sup>32</sup> Users are not able to enter new indicators on this screen.
- Users have the option to enter values in either the "Annual" or "Cumulative Results" field; the CCH will automatically calculate the values for the other field.<sup>33</sup>
- Users should enter results for all fields per core indicator: both total and disaggregated achieved results.
- Each core indicator line has the option to add comments in case further explanation is required for an achieved result reported.
- Some indicators may prompt the user to enter additional information on the related qualitative results, methodology, or other related information.
- Users must click "Save" at the bottom of the page once all achieved results have been added, and the data entered will be submitted in the system.

## FIGURE 7. Entering Achieved Results in the CCH

Achieved Results					^
Reporting Year	Indicator	Breakdown	Units	Annual Target	
2023	Tons of GHG emissions	NA	Tons of CO2	106,541.00	
Lifetime Target	reduced or avoided Annual Results	Cummulative Results	Comments		
2,130,820.00			Comments		
Reporting Year	Indicator	Breakdown	Units	Lifetime Target	
2023	Installed capacity as a	Total	MW	38.00	
Annual Results	Cummulative Results	Comments			
••]		Comments			

- Users should follow the same procedure for reporting achieved results on co-benefit indicators, optional indicators, project-specific, and energy storage indicators.
- These indicators are also automatically populated based on the information entered in the "Targets" tab at MDB Board approval. Users only need to enter the achieved results values for the corresponding reporting year.
- Qualitative results or explanation must be provided for the selected co-benefit indicator(s) and can be provided for other indicators on an optional basis.
- Users must click "Save" after each round of entering new data or text in the CCH.

*Changing Achieved Results:* Previous years' results cannot be modified after results have been reported unless a formal restructuring has occurred or a documented error has been identified. If this is the case, MDBs must notify the CIF Administrative Unit of the change, provide the necessary rationale, and reference the relevant formal documentation validating the rationale, as well as the new result value. The numbers will be changed by the CCH administrator. In the case of a reporting error identified from a previous reporting year, the values are corrected during the reporting year when they have been identified.

## **Step 3: Uploading Documents**

Procedure:

- The "Uploaded Documents" link on the left-hand side of the page navigates to the screen, as shown in Figure 8.
- During the first year of reporting, MDBs should upload the full project results framework.
- During subsequent reporting years, MDBs should upload the most recently available document(s) with key updates on the project's implementation status and results, such as implementation status/supervision reports, mid-term reviews, and implementation restructuring documents.
- Since this function is open-ended, MDBs also have the option to upload other relevant documents in this section (e.g., methodological notes, explanatory documents, results highlights and communications products, recent case studies, etc.)

During the final year of reporting, MDBs should upload the project completion report<sup>34</sup> and confirm with CIF that achieved results are final.<sup>35</sup> Once this has occurred, the MDB is no longer required to submit annual results reporting updates on that project.

FIGURE 8. Uploaded Documents Screen in the CCH					
Upload Documents					
Uploaded Documents					
Document name	Comments	Document Type			
EER - Rapport de supervision PDM-HYDRO- mai 2020.docx	<b>P</b>	Progress / Supervision report			

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## ENDNOTES

- One exception relates to the deployment of energy storage systems. ACT projects with energy storage components must report on energy rating and power rating, since energy storage is an important result area for CIF already standardized in the Global Energy Storage Program (GESP).
- 2 This toolkit does not cover all aspects reflected in The ACT Integrated Results Framework. Instead, it focuses on operationalizing the core monitoring and reporting functions of the integrated results management approach. Other evaluation, learning, and gender aspects are described in more detail in additional documents. They are cross-referenced throughout this toolkit to the extent possible.
- 3 ACT is expected to support both programs with sub-projects and standalone projects. For the sake of editorial clarity, this toolkit henceforth only refers to "projects," which should be understood implicitly to encompass different kinds of ACT investments.
- 4 And all other CIF M&R systems for new programming areas (but not in CIF's PPCR, FIP, CTF, SREP programs).

- 5 For more information on ESMAP, see: <u>https://www.esmap.org/</u>. For more information on RISE scores, see: <u>https://rise.esmap. org/</u>. For more information on MTF, see: <u>https://www.esmap. org/mtf\_multi-tier\_framework\_ for\_energy\_access.</u>
- 6 For more information on the World Bank's Living Standards Measurement Study, see: <u>https://</u> <u>www.worldbank.org/en/</u> <u>programs/lsms</u>
- 7 In the form of the ACT Operational and Results Report.
- 8 As MDBs' respective information disclosure policies allow.
- 9 As MDBs' respective information disclosure policies allow.
- 10 As MDBs' respective information disclosure policies allow.
- 11 As MDBs' respective information disclosure policies allow.
- 12 Acceleration Coal Transition Investment Program: Integrated Results Framework. Washington DC: CIF.
- 13 For example, over 20, 25, or 30 years

- 14 A counterfactual is an estimation of what would occur in the absence of an intervention in this context. The counterfactual is typically the same as the business-as-usual emissions trajectory.
- 15 For IFI technical working group's list of harmonized GHG accounting standards and guidelines, see <u>https:// unfccc.int/climate-action/</u> <u>sectoral-engagement/ifis-</u> <u>harmonization-of-standards-</u> <u>for-ghg-accounting/ifi-twg-list-</u> <u>of-methodologies</u>
- 16 "Baseline" here refers to the M&E sense of the term (i.e., the defined situation before a project is implemented). To avoid confusion, the term "reference scenario" is used to refer to the current and anticipated GHG emissions levels in the absence of a project (which is sometimes referred to as "baseline emissions" in the GHG accounting literature).
- 17 Projects should take into consideration both "reduced" GHG emissions based on the early retirement or closure of coal power plant generation as new renewable energy capacity comes online, and "avoided" GHG emissions based on the preclusion of new coal power generation that would come online in the absence of the ACTsupported coal transition.

- 18 Alternatively, this can be computed based on a longerterm, dynamic reference scenario covering the full economic lifespan of the ACT-supported asset(s).
- 19 CIF is responsible for extrapolating future achieved results following project closure, or as agreed with the MDBs per project.

## 20 See <a href="https://ghgprotocol.org/">https://ghgprotocol.org/</a>

- 21 It is likely that projects will not be able to report additional achieved installed capacity toward the lifetime target beyond their closure date. However, in some cases, additional national/ grid-level studies, IP-level monitoring, or evaluations conducted beyond the scope of project-level M&R could provide this information. The lifetime target is nonetheless a useful proxy estimate for how much total installed capacity the interventions are expected to enable over longer periods of time (i.e., expected contribution, not attribution). It will not be used for accountability purposes.
- 22 This estimate comes from "Electric Power Annual" data for the US for the year 2021 from the US Energy Information Administration official webpage.
- 23 <u>https://mtfenergyaccess.esmap.</u> <u>org/methodology/electricity.</u>
- 24 As opposed to the number of women and men, which are universal units of measurements.

25 It should be noted that ACT Co-Benefit Indicator 3 does not directly measure households and, therefore, cannot disaggregate by the number of womenheaded households. However, MDBs are encouraged to provide this information whenever such household-level data are available before being converted to the number of women and men.

## 26 See <u>https://population.un.org/</u> household/#/countries/840

## 27 See <u>https://www.</u> jointimpactmodel.org/

- 28 Some indicators also have lifetime targets that extend beyond the project closure date. Investment plans may also have target years that go beyond the implementation period of projects.
- 29 As MDB's informational disclosure policies allow.
- 30 Development of the CCH module and guidance for ACT recipient country focal points is forthcoming.
- 31 Terminology for this document varies across MDBs.
- 32 At the time of publication, it has not yet been determined whether core indicators and other ACT indicator categories will have separate sub-headings in the "Results" section for entering achieved results.

- 33 This function provides flexibility to MDBs to report achieved values based on the latest validated data they have available through their own M&R systems. In some cases, a validated value may be cumulative, and in other cases, it may be annual. In the case of a discrepancy, validated cumulative values should take priority over annual values. The CCH will calculate the annualized value as a proxy, and the discrepancy will be corrected as of the following reporting year.
- 34 As MDBs' respective information disclosure policies allow.
- 35 From a results perspective, which may not be the same timing as the project's financial closure date.

## THE CLIMATE INVESTMENT FUNDS

The Climate Investment Funds (CIF) is one of the largest multilateral climate funds in the world. It was established in 2008 to mobilize finance for lowcarbon, climate-resilient development at scale in developing countries. 15 contributor countries have pledged over US\$11 billion to the funds. To date CIF committed capital has mobilized more than \$64 billion in additional financing, particularly from the private sector, over 70 countries. CIF's large-scale, low-cost, long-term financing lowers the risk and cost of climate financing. It tests new business models, builds track records in unproven markets, and boosts investor confidence to unlock additional sources of finance. Recognizing the urgency of CIF's mission, the G7 confirmed its commitment to provide up to \$2 billion in additional resources for CIF in 2021.



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