



# **Revision History**

Revision	Revision	Date	Change	Comment	Approved by
Number					
Rev 01	Page 3, paragraph 9  Page 7, table  Page 9, Figure 2  Page 11, table CIF Integrated Results Framework – Renewable Energy Integration Program  Page 31, Annex: REI Program Theory of Change	May 2023	Text revised to reflect the approved new CIF Impact Statement as per CIF Theory of Change	The joint CTF and SCF Trust Fund Committees approved the CIF Theory of Change by mail on June 7, 2022	SCF Trust Fund Committee

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#### 1. Introduction and Scope

1. This document presents an **integrated results framework** for CIF's Renewable Energy Integration Program (REI). Its core function is to outline the program's results chain – from program-level outputs, outcomes, and impacts to CIF-level impacts – based on the anticipated scope of investment activities eligible under the program's funding window, the overall program design, and the theory of change. Unlike previous approaches to results frameworks in climate finance, this integrated results framework presents a comprehensive view of the program's expected results by fully incorporating elements related to: (i) evaluation and learning; (ii) transformational change; (iii) gender and social inclusion; (iv) just transition; (v) SDGs; and (vi) development impacts/co-benefits; in addition to the fundamental program results and corresponding indicators. Its objective is to structure and consolidate the main results REI expects to achieve across CIF's action areas through a holistic, multi-level, multi-dimensional approach.

#### 2. Background and Rationale

- 2. The REI Integrated Results Framework builds upon CIF's previous experience designing and implementing results frameworks for the CTF, SREP, FIP, and PPCR programs. Importantly, each of CIF's first-generation programs features its own programmatic monitoring and reporting system, encompassing its own set of core indicators and its own reporting protocol. Over time, these programmatic monitoring and reporting systems have been further refined and adjusted for improved relevance, feasibility, and coherence. The monitoring and reporting systems have come to rely increasingly on MDBs' own project-level monitoring and reporting systems, for example, as a means to better harvest data from the M&R systems that MDBs already operate rather than imposing parallel CIF M&R systems on top of them. Yet, there has also been a growing need to capture CIF-level results across programs (e.g., GHG emissions reduced, adaptation impacts, beneficiaries reached), which CIF's first-generation programmatic monitoring and reporting frameworks have not fully enabled.<sup>1</sup>
- 3. CIF launched the Evaluation and Learning Initiative in 2015, several years after rolling out the programmatic results frameworks and monitoring and reporting systems. The CIF Evaluation and Learning Initiative was established to help fulfill CIF's mandate as a learning laboratory by delivering a range of strategic and demand-driven evaluations and learning activities timed to take stock of CIF's progress to date and to inform decision-making at fund, program, country, and investment levels. The initiative identifies strategic lessons across CIF's portfolio and enables learning that is timely and relevant to current and future climate investments. Chief among CIF's evaluation and learning activities has been the initiative's work to develop, promote, and operationalize the concept of "transformational change" in climate finance as an anchor to CIF's main mission objective.

<sup>&</sup>lt;sup>1</sup> Except on an ad hoc basis as an analytical exercise

<sup>&</sup>lt;sup>2</sup> Beyond CIF, this work further complements and supports the commitments made in IPCC reports, the SDGs, other climate funds, and partner MDBs to achieve transformational change through climate action.

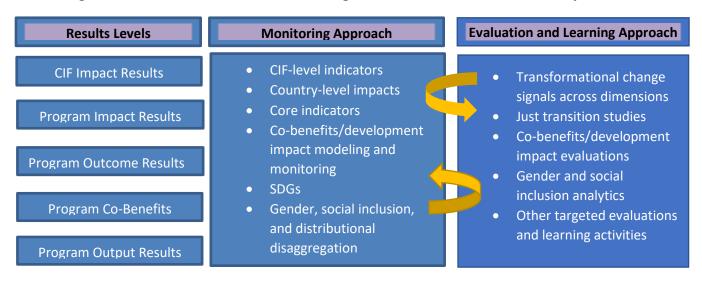
- 4. Simultaneously, CIF has continued to increase its level of ambition related to gender and social inclusion elements since the funds were first established. CIF approved a Gender Policy in 2018 to serve as a governance framework for CIF gender integration across programs, and most recently, adopted the CIF Gender Action Plan Phase 3 (FY21-24), which strives to further mainstream gender in CIF policy and programming for enhanced gender outcomes across the portfolio. Alongside other aspects, the CIF Gender Action Plan Phase 3 establishes CIF's ultimate gender-transformative impact objective to improve women's asset, voice, and resilient livelihood status through gender-responsive institutions and markets and sets a list of CIF gender indicators relevant to current and future investments. With these commitments comes the need for more and better-quality social data including disaggregation of results by gender, youth, Indigenous Peoples, ethnic minorities, persons with disabilities, and other vulnerable groups as well as a more gender-responsive approach to framing program results on the whole.
- 5. CIF's results-related concepts, methods, and metrics have also evolved substantially over recent years. As the climate crisis deepens and the international community's time to act shortens, CIF continues to prioritize new and innovative ways to enhance our collective understanding of the catalytic potential of climate finance across multiple dimensions. Whether by ensuring that Post-Paris transitions are procedurally just, socially inclusive, and equitably distributed; by aligning analyses of results achieved with the 2030 Sustainable Development Agenda and other social and economic development co-benefits; or by modeling the potential of future investments before they take place, CIF positions results at the core of its business model and stands committed to innovation, real-time learning, and multi-stakeholder engagement for results management.
- 6. The evolution of CIF's approach to results management over recent years is now culminating in the adoption of an integrated CIF Monitoring, Evaluation, and Learning (MEL) Policy. The CIF MEL Policy, which is being developed in tandem with the integrated results frameworks, is designed to: (a) bridge the results management approach taken for first-generation CIF programs with the needs of CIF's newest programming areas, and (b) better integrate CIF's monitoring, evaluation, and learning components across programs via a more strategic, unified, and holistic approach. The REI Integrated Results Framework strives to operationalize these objectives within REI's program design in an innovative manner.

# 3. Key Concepts and Features of CIF's Integrated Results Frameworks

7. With so many areas of CIF's work critically intersecting in the results arena, the REI Integrated Results Framework enables REI to incorporate multiple results dimensions related to monitoring, evaluation, learning, gender, and other key areas within a single framework.

8. At each result level in the framework, one or more result statements are presented in the far left-hand column.<sup>3</sup> A **monitoring approach** for the result statement is presented in the next column, while a corresponding **evaluation and learning approach** is presented in the right-hand column. 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 features, such as gender, social inclusion, and just transition components, are integrated throughout the framework in both the "monitoring" and "evaluation and learning" columns. Together, the integrated results framework comprehensively structures both the multi-dimensional results expected to be achieved through the program and how CIF's overall 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.

Figure 1: Structural Overview of CIF's Integrated Results Frameworks and Key Features



9. Like the results frameworks from CIF's first generation, the REI Integrated Results Framework is primarily oriented to the program level. However, it also includes an umbrella CIF impact level that applies uniformly to all CIF programs. At its core, the REI program contributes to the highest-level CIF impact statement: "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." The program impact level is designed to focus primarily on how REI contributes to country-level and investment plan-specific results, such as progress on NDCs and national/sectoral development objectives, whereas the program outcome level captures the core outcome areas that REI projects intend to achieve, the program co-benefits level captures other social and economic development outcome areas beyond CIF's core climate objectives, and the program output level helps guide the direct provision of goods and services expected through the program.

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Each result statement directly mirrors the program's theory of change (see annex) and is intended to correspond to both the "Monitoring Approach" and the "Evaluation and Learning Approach" columns, which are adjacent to it.

#### 4. Monitoring Approach

- 10. The REI Integrated Results Framework creates a shared vision and blueprint for the program's approach to monitoring and reporting results, which, as for previous CIF programs, will be based on a program-specific monitoring and reporting system. The REI M&R System will help track progress and assess the results of investments over the program's lifespan; it will be fully developed in a toolkit following adoption of the integrated results framework. Nonetheless, several fundamental features of REI's monitoring approach are established within this document:
  - a. CIF-level indicators are presented for the first time to provide a framework for aggregable, high-level results applicable not only within specific CIF programs but also across CIF programs. These indicators are required by all new CIF investments, as relevant, and may flow upwards from core indicators reported at the program level (e.g., GHG emissions reduced through renewable energy integration interventions (REI program outcome) will feed directly into the total GHG emissions reduced or avoided (CIF-level impact)).
  - b. Program-level impacts focus on alignment with pre-existing NDCs, national and sectoral development priorities, and other available statistics at the Investment Plan and/or country level. This aspect of monitoring and reporting is country-driven and may be adapted significantly to meet the needs, demands, and interests of each CIF recipient country. It will be the responsibility of CIF recipient country focal point teams together with CIF and in some cases may be combined strategically with relevant evaluation and learning approaches.
  - c. Core indicators are identified within the program outcome level of the document. These indicators form the crux of the monitoring approach for each CIF program. They reflect the main outcome areas of interest to the program that are broadly applicable across projects. MDBs will be responsible for incorporating all relevant core indicators into the M&R systems of individual REI projects and must report progress on their results to CIF on an annual basis. Specific definitions, reporting procedures, and technical guidance not covered in the integrated results framework will be further elaborated within the forthcoming REI M&R Toolkit.
  - d. Co-benefits and development impacts beyond climate mitigation and adaptation are fully incorporated within the program's monitoring framework. This is in line with the principle that each dollar of climate finance invested through MDBs is intended to serve as a catalyst for a range of sector-specific development co-benefits and social and economic development impacts alongside its role in achieving climate objectives. REI projects must select at least one co-benefit indicator among the options provided and report on its progress as part of the annual CIF monitoring and reporting requirements.

- e. Optional indicators are incorporated at both program outcome and output levels in the document. They reflect important potential outcome and output areas of the program, but they are less likely to be either directly relevant or systematically measurable across a broad range of REI projects. MDBs are encouraged to consider their inclusion within project-level M&R systems if relevant and to report any available results to CIF over time. REI outputs are represented in the REI Integrated Results Framework to present a comprehensive view of the program's results chain and to promote measurement harmonization amongst projects whenever possible. However, the optional output indicators are not a key aspect of CIF's overall monitoring approach.
- f. MDBs' project logframes are required to be shared with CIF for each REI project following MDB approval.<sup>4</sup> This will allow CIF to fill critical data gaps related to overall results, evaluations, and/or studies by using data from MDBs' pre-existing M&R systems rather than imposing additional indicators. After MDB project approval, CIF will simply collect the relevant results updates to indicators in MDBs' logframes as made available through MDBs' own implementation supervision reports, mid-term reviews, project completion reports, or related documents.
- g. Sustainable Development Goals (SDGs) are aligned to each result statement, where appropriate. While REI projects will not specifically report on SDG outcomes, the alignment of REI results areas with SDGs will allow for further monitoring and analysis of REI's overall contributions toward the 2030 Sustainable Development Agenda and its global goals.
- h. Gender equality and social inclusion, while also relevant across multiple levels and dimensions of the integrated results framework, are specifically integrated within REI's monitoring approach. REI investments are required to report disaggregated data by gender, youth, Indigenous Peoples, ethnic minorities, persons with disabilities, and other vulnerable groups whenever possible.

#### 5. Evaluation and Learning Approach

11. Embedding an evaluation and learning approach directly into the results framework for REI highlights the operational relevance and applicability of CIF's evaluation and learning activities across the program cycle, including during program design and inception. It also seeks to strengthen the robustness of REI's multi-level, multi-dimensional results by strategically filling methodological and content gaps not easily captured through monitoring activities alone. Several fundamental features of REI's evaluation and learning approach are reflected within this document:

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<sup>&</sup>lt;sup>4</sup> The CIF will follow each MDB's policies, procedures, and confidentiality requirements with regards to all REI project logframes. Terminology of MDB documents may also vary.

- a. Transformational change, as concept and mission, is positioned at the center of CIF's highest level impact objective. The concept was developed iteratively through CIF's multi-stakeholder Transformational Change Learning Partnership and has come to be defined as: "fundamental change in systems relevant to climate action with large-scale positive impacts that shift and accelerate the trajectory of progress towards climate neutral, inclusive, resilient and sustainable development pathways." 5
- b. Rather than measuring linear results pathways through indicators, the concept of transformational change relies on the identification of signals across its various dimensions. Transformational change encompasses complex systems (i.e., ecological, social, economic, technical, etc.) as its primary unit of analysis and is therefore reflected in context-specific evaluation and learning approaches at CIF impact and program impact results levels in the integrated results framework.
- c. A just transition<sup>6</sup> lens underscores how the relative risks and benefits of transformational change processes and effects are optimally and ethically managed in terms of social inclusion and distributional impacts. Elements of a just transition are incorporated within the transformational change components at CIF impact and program impact results levels in the integrated results framework. Just transition is further included as a specific REI program co-benefit. Where targeted vulnerable subpopulations or geographies are identified in REI investments using a just transition lens, the corresponding monitoring data should also be disaggregated accordingly.
- d. Many gender-related results, such as transformative gender impacts and sector outcomes (e.g., the impact of off-grid access on women's labor/time use, share of women working in the renewable energy sector, quality of women's participation in decision-making forums, etc.) are reflected at CIF impact, program impact, and program outcome levels. These results areas may require a variety of tailor-made evaluation and learning approaches to enhance understanding of REI's gender impact beyond sex-disaggregated monitoring data.
- e. Other targeted evaluations or learning activities will become relevant to REI over time to help fill strategic knowledge gaps or respond to Trust Fund Committee members' changing needs and priority areas. The integrated results framework allows space for new approaches, innovations, and results dimensions to come onboard as the program evolves.

<sup>&</sup>lt;sup>5</sup> (Transformational Change Concepts, May 2021, <a href="https://www.climateinvestmentfunds.org/sites/cif">https://www.climateinvestmentfunds.org/sites/cif</a> enc/files/knowledge-documents/tclp workshop updated to concepts may2021.pdf).

<sup>&</sup>lt;sup>6</sup> https://climateinvestmentfunds.org/topics/just-transition

## 6. Description of Results Levels for REI

- 12. The results levels for REI are designed to closely mirror the REI Theory of Change, which incorporates both REI-specific features (e.g., renewable energy integration interventions) and aspects of the wider CIF business model (e.g., mobilized public and private capital, fostered innovation, investment planning, multi-MDB delivery of programmatic approach, etc.).
- 13. The following table presents an overview of the results statements within the REI Integrated Results Framework and a summary of the corresponding monitoring, evaluation, and learning (MEL) approach:

Results Level	Summary of MEL Approach
CIF Impact: 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
<b>REI Impact:</b> Flexibility of energy systems for smooth integration of higher shares of variable renewable energy generation into the grid and increase in off-grid access to renewable energy is enabled.	Country-driven approach based on REI investment plans, NDCs, national development priorities, and macro-level proxy reporting on the renewable energy sector
REI Outcomes:  (A) Increased penetration of variable renewable energy into power systems and maximized renewable energy potential of countries  (B) Improved policies, plans, and institutional capabilities  (C) Mobilized public and private capital  (D) Increased renewable energy access  (E) Reduced total system cost  (F) Fostered renewable energy innovation	Core indicators reported by MDBs on all REI projects with CIF aggregation of results at REI portfolio level;  Targeted evaluation, learning, and gender approaches
<b>REI Co-Benefits:</b> Social and economic development cobenefits	At least one co-benefit reported by MDBs per REI project;

<sup>&</sup>lt;sup>7</sup> Refer to Annex for REI Theory of Change

	Additional analytics, evaluation, and learning activities led by CIF
REI Outputs:	Provides a broad framework
(A) Improved market design and systems	of results outputs expected
(B) Improved demand-supply management	under REI that can be
(C) Deployment of energy storage systems	incorporated into project-
(D) End-use electrification solutions	level M&E frameworks by
(E) Deployment of renewable mini and off-grid solutions	MDBs as relevant;8
	More limited evaluation,
	learning, and gender activities

- 14. At the CIF impact level, the REI Integrated Results Framework further reflects the CIF Theory of Change, covering both primary climate objectives (i.e., net-zero emissions and climate-resilient development) and complex systems change (i.e., inclusive transformational change). The former will largely be captured through CIF-level indicators in the monitoring approach, such as GHG emissions reduced or avoided, and the number of people, area of land, and physical assets benefiting from a CIF-supported climate resilience mechanism. The latter will involve a range of tools and methods targeted to specific country, sector, systemic, and thematic contexts, such as the analysis of signals that transformational change is (or is not) occurring and bespoke formative and summative evaluations.
- 15. The following diagram illustrates how results information from CIF programs and projects flow upward via both "monitoring" and "evaluation and learning" channels toward CIF's highest level impact objective.

<sup>8</sup> One exception relates to the deployment of energy storage systems. REI projects with energy storage components must report on energy rating and power rating as core indicators, since energy storage is an important result area for CIF already standardized in the Global Energy Storage Program (GESP).

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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 **Ambitious Climate Primary Climate** Finance: **Objectives: Complex Systems:** Direct and catalytic Net-zero emissions and Accelerated climate financing for adaptive, climate-resilient transformational change eligible CIF recipient development countries Social and Economic Development Lens: Just and socially inclusive Co-finance leveraged **Transformational Change:** GHG emissions reduced or fundamental change in avoided Climate financing impacts will systems relevant to climate be assessed through Strengthened climate action with large-scale positive programmatic monitoring and resilience of people, land, and impacts that shift and reporting systems, evaluative, physical assets accelerate the trajectory of and learning-based approaches progress towards climate Direct and indirect neutral, inclusive, resilient, and beneficiaries (by gender and sustainable development distributional impact) pathways Core Indicators related to CIF-Signals of transformational level impacts will be assessed change - and a just transition through programmatic will be assessed through both monitoring and reporting evaluative and learning-based systems approaches across dimensions CIF Programs and Projects

Figure 2: Overview of Integrated Results at the CIF Impact Level

#### 7. Roles and Responsibilities

- 16. Results management is a shared value and responsibility held across the CIF ecosystem from fund to field level.
- 17. Within the CIF Administrative Unit, the monitoring and reporting team is primarily responsible for the design, implementation, and oversight of CIF's monitoring approach, including the annual reporting process for each CIF program, results data management, and analysis. They also lead strategic enhancements of results analysis among other dimensions reflected in the integrated results framework, such as CIF contributions to SDGs, social and economic development co-benefits, impact modeling, project delivery case studies, project-

level impact evaluations, and related knowledge development.

- 18. The **evaluation and learning** team is primarily responsible for managing and implementing strategic, thematic, and program evaluations; leading a wide range of demand-driven knowledge and research studies; driving strategic learning partnerships and facilitated learning processes, and developing practical, context-specific resources for decision-makers and practitioners to translate existing evidence into applied learning. In the context of the REI Integrated Results Framework, they also oversee aspects of the integrated results framework related to transformational change, development impacts, and just transition elements.
- 19. CIF's **gender** team is an available resource for technical support on integrating gender equality and social inclusion issues into future REI projects. They are responsible for monitoring progress on CIF's Gender Action Plans and providing feedback to stakeholders on sex-disaggregated results data. They also co-manage gender-related evaluation and learning activities in coordination with the evaluation and learning team.
- 20. MDBs are the primary agents of results management at project level. They are responsible for ensuring the incorporation of all core indicators and at least one co-benefit indicator into project-level results frameworks, establishing their targets, and reporting updates of achieved values to CIF during the annual reporting period. MDBs help coordinate evaluation and learning activities relevant to their projects, share relevant MEL information produced for their CIF-funded projects, and support countries and private sector implementers with results management as needed.
- 21. CIF's **Trust Fund Committees** are the primary audience of annual results reports, which inform them of program progress, gaps, and achievements over time. Contributor and recipient country committee members are also the consumers of high-level strategic and program-level evaluations, as well as other types of evaluations, learning activities, and knowledge products.
- 22. Recipient country focal points<sup>9</sup> and other in-country actors have a crucial role in adapting the integrated results framework to their own country's context and needs. Program focal points lead program-level impact monitoring at the national level and ensure that a strategic results perspective is integrated in CIF's programmatic activities, such as in diagnostics and investment planning. They are both clients and agents of evaluation and learning activities. Other civil society stakeholders, CIF observers, and beneficiaries are invited to actively review and inform CIF's accountability for results through the TFC membership functions, regular involvement in evaluation and learning activities, and other roles.

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<sup>&</sup>lt;sup>9</sup> Per CIF program

#### 8. Integrated Results Framework

# CIF INTEGRATED RESULTS FRAMEWORK – RENEWABLE ENERGY INTEGRATION PROGRAM CIF IMPACT

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

		MON	NITORING A	APPROACH		EVALUATION AND LEARNING APPROACH				
RESULT STATEMENT	INDICATORS	BASE- LINE	MEANS OF VERIFI- CATION	TARGET (DATE)	NOTES AND SDG ALIGNMENT	KEY AREAS				
CIF-LEVEL I	CIF-LEVEL IMPACTS									
Accelerated transformational change and climate financing that enable progress toward net-zero emissions and adaptive, climateresilient development pathways, in a just and socially inclusive manner	CIF 1. Mitigation: GHG emissions reduced or avoided (mt CO <sub>2</sub> eq)	TBD  (with reference scenario establishe d)	Annual and lifetime reporting by projects and/or countries		This is a CIF impact-level indicator that must be reported as an annual and lifetime estimate of each investment. Core indicator 1 below will feed this indicator for REI.  Disaggregation: Direct vs. indirect reduction of GHG emissions, based on an approved methodology per MDB  Projects are encouraged	Transformational Change: CIF aims to drive transformational change 10 across all funded programs and activities. Broadly defined, transformational change is a deep and fundamental change in a system's form, function, or processes. In the context of the climate crisis, this refers to the many profound, rapid changes in social, economic, and technical systems needed to achieve net zero greenhouse gas emissions, increase social inclusion, manage distributional impacts, enhance resilience and adaptation to climate change, and reduce stress on finite natural systems.  Signals of transformational change will be assessed through both evaluative and learning-based approaches across dimensions. 11 Unlike indicators, signals mark				

Transformational change is defined as "fundamental change in systems relevant to climate action with large-scale positive impacts that shift and accelerate the trajectory of progress towards climate neutral, inclusive, resilient, and sustainable development pathways (Transformational Change Concepts, May 2021, <a href="https://www.climateinvestmentfunds.org/sites/cif\_enc/files/knowledge-documents/tclp\_workshop\_updated\_tc\_concepts\_may2021.pdf">https://www.climateinvestmentfunds.org/sites/cif\_enc/files/knowledge-documents/tclp\_workshop\_updated\_tc\_concepts\_may2021.pdf</a>).

<sup>&</sup>lt;sup>11</sup> The five dimensions of transformational change include relevance, systemic change, scale, speed, and adaptive sustainability. Signals – which can be advanced or emerging – offer an alternative conceptual framework for recognizing and capturing transformational change through the programmatic lifecycle

				to estimate GHG emissions reductions using a "whole of energy system" baseline analysis, which would differentiate between new renewable energy generation from REI investments and the catalytic effects of other investments (energy storage, grid management technologies, grid interconnections) on annual production cycles, as compared to the approved reference scenario, i.e., counterfactual.	multiple levels of complex systems dynamics based on mixed-methods data collection and analysis of CIF contributions toward transformational change in-situ. As these signals are highly context-specific, they will be proposed, defined, tracked, and reported on according to each IP's unique context analysis and theory of change, and using a range of methodological approaches. Disaggregated data collection to capture impacts on women, youth, migrants, Indigenous Peoples, and local communities, as well as persons with disabilities is encouraged. Ongoing learning and adaptive approaches, including the identification and tracking of new and emerging signals as programs and contexts evolve, is also encouraged.  This impact area will be measured through CIF-driven evaluation and learning activities, which will not be the direct responsibility of MDBs for annual reporting.
CIF 2. Adaptation: Strengthened climate resilience of land (ha), people (#), and physical assets (\$) through a CIF- supported adaptation mechanism	TBD	TBD	TBD	REI is not expected to have significant adaptation benefits but will report on this CIF-level impact area when relevant. Additional guidance will be developed separately from this IRF.	

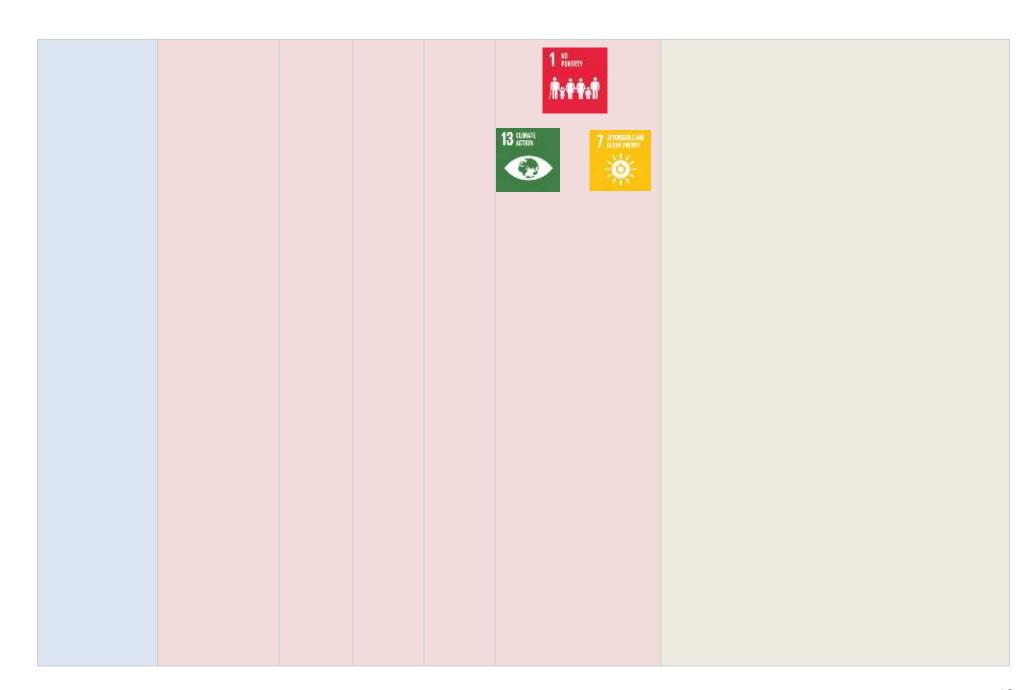
CIF 3.  Beneficiaries:  Number of women and men benefiting from CIF investments	TBD	This is a CIF impact-level indicator that must be reported on at mid-term and completion of each investment. Total beneficiaries should accumulate from more specific indicators lower in the results framework, which measure specific types of benefits (e.g., climate-related vs. socio-economic).  Disaggregation: Direct vs. indirect beneficiaries (to be defined by CIF and MDBs)  By gender (mandatory)  Whenever possible, by age demographic and vulnerability (i.e., excluded or disadvantaged groups, ethnic, religious, and racial minorities, female-headed households, Indigenous Peoples and local communities, migrants, youth, and persons with disabilities). Qualifying groups as identified within each IP/project.	Gender-Transformative Impacts: The CIF Gender Program outlines (i) improved asset position, (ii) voice, and (iii) resilient livelihoods of women through gender-responsive institutions and markets as its key impact objective. These aspects are to be assessed through evaluative and learning-based approaches, as relevant to the REI program, and in combination with other monitoring data.  Areas for further analysis include: mechanisms through which women and their organizations are represented in decision-making on renewable energy generation; share of women working in the energy sector; and the impact of off-grid access on women's labor/time use.

			Proportion of which receiving direct climate vs. socio-economic benefits	
CIF 4. Co- Finance: Volume of co-finance leveraged (USD)	TBD	TBD	Total non-CIF resources leveraged in REI projects. Core indicator 6 below will feed this indicator for REI.  Disaggregation: Source of co-financing (MDB, Government, Private Sector, Bilateral, and Other)	New and additional climate finance mobilized: Beyond the immediate co-financing CIF leverages, CIF aims to plays a role as a market catalyst by contributing to the creation of markets and driving non-concessional financing through replication of CIF investments, technologies and innovations, regulatory improvements, and other areas. Evaluation and/or learning approaches may be employed to better understand CIF's contributing role in market systems transformation and volumes of follow-on green financing in CIF-supported markets. Data might also be sourced through national/local market reports and other third-party data aggregators (e.g., IRENA, BNEF, etc.)

Program Theory of Change: If CIF improves market design and system operations, provides enabling technologies and infrastructure, and develops new business models, countries will increase renewable energy penetration in their energy mix, achieve a more flexible and decentralized energy system, improve policies and capabilities, mobilize capital, increase renewable energy access, reduce systems costs, and foster renewable energy innovation, which will all contribute toward CIF's transformative impact.

		MON	NITORING A	APPROACH	EVALUATION AND LEARNING APPROACH		
RESULT STATEMENT	INDICATORS	BASE- LINE	MEANS OF VERIFI- CATION		NOTES AND SDG ALIGNMENT	KEY AREAS	
REI PROGRAM-LEVEL IMPACTS							

REI PROGR	AM-LEVEL IN	1PACTS				
Flexibility of energy systems for smooth integration of higher shares of variable renewable energy generation into the grid and increase in offgrid access to renewable energy is enabled	REI Impact Proxies: National RISE Scores (ESMAP)  National MTF rates (ESMAP) / SE4All Global Tracking Framework (GTF)  Share of renewable energy generation in supported countries' grid- connected energy systems (%)  National off-grid access (%)  Energy security/flexibility ratings	Country- level analyses from IPs and project appraisals (non- zero)	National statistics, macro- level indicator s, World Bank (or other MDB) country data	Varies per country	Program-level impacts focus on alignment with NDCs and related climate policy mechanisms, national and sectoral development priorities, and available statistics at the Investment Plan and/or country level.  This aspect of monitoring and reporting is country-driven and will be tailored to the needs, demands, and interests of each CIF recipient country.  MDBs will not be responsible for program-level impact reporting. All core indicators are situated at the CIF program outcome level.	Signals of transformational change: Signals of transformational change at the program level will focus on more narrowly bounded aspects of energy systems transformation than in the section above (i.e., CIF-level impact). They might cover dimensions of systems transformation that are more closely tied to individual REI recipient countries, Investment Plans and/or project-level impacts. Specific definitions and methodologies are to be determined.  Gender and just transition elements: The program impact-level allows space for further evaluations, assessments, and other approaches to take place as the program evolves in these areas. These activities may be tailored to specific recipient countries or applied more broadly across the program.



		MOM	NITORING A	APPROACH		EVALUATION AND LEARNING APPROACH					
RESULT STATEMENT	INDICATORS	BASE- LINE	MEANS OF VERIFI- CATION	TARGET (DATE)	NOTES AND SDG ALIGNMENT	KEY AREAS					
<b>REI PROGR</b>	REI PROGRAM-LEVEL OUTCOMES										
A. Increased penetration of variable renewable energy into power systems and maximized renewable energy potential of countries	REI CORE 1 (= CIF 1). Mitigation: GHG emissions reduced or avoided (t CO <sub>2</sub> eq) – direct/indirect	0 (with reference scenario establishe d)	Annual and lifetime estimates by projects		This indicator feeds into CIF Impact 1 (Mitigation) and should be reported as direct vs. indirect reductions (per MDB-approved methodologies) with evidence provided.	MDBs are encouraged to undertake "whole of energy systems" analyses as baselines during the Investment Plans and project appraisal process and to fully incorporate monitoring, evaluation, and learning aspects into such analyses. Integrated, energy systems-levels analyses can be used to build a theoretical model and reference scenario for how specific renewable energy grid and off-grid integration interventions will affect multiple results areas: renewable energy installation and grid interconnection, annual production, GHG emissions reductions, and changes in energy access. Both estimated and real operational data can also then be consolidated effectively to report across these multiple indicators. Additional guidance on whole of energy systems analyses will follow separately from this IRF.  CIF's targeted evaluations and/or sector studies to fill strategic knowledge gaps: Moving down the results chain, the monitoring function becomes increasingly important to capture program outcomes and outputs, whereas the evaluation and learning function will complement core indicators by filling strategic knowledge gaps. Evaluation and learning activities will be selected based on overall stakeholder demand, evidence gaps, and cross-learning opportunities.					

REI CORE 2. Installed Capacity: Installed capacity of variable renewable energy available to the grid (MW) – direct/indirect	0	MDB project results data	Estimated capacity from renewables (e.g., solar and wind energy) installed, operationalized, and integrated into power grids each year (or commissioned off-grid) as a result of REI interventions  Disaggregation: Renewable energy type (solar, wind, hydro, geothermal, etc.)  Direct vs. indirect capacity (MDB-approved methodology)  Grid-connected vs. off-grid/distributed energy supply
REI CORE 3. Renewable Energy Production: Annual renewable energy output (MWh)	0	MDB project results/ utilities data	Measured by applying the methodology used for REI CORE 2 in combination with annual production data  Disaggregation: Renewable energy type (solar, wind, hydro, geothermal, etc.)  Direct vs. indirect production (MDB-approved methodology)

			Grid-connected vs. off-grid/distributed energy supply
REI CORE 4. Grie Services: Increas in available grid services and improvements (# (#)	TBD	MDB project results/ utilities data	Disaggregation: Type, volume, and assets (as established by each MDB)
OPTIONAL: Increase in grid interconnections to accommodate higher shares of VRE (#)	LBD	MDB project results/ utilities data	To be reported annually based on the number of new national or regional grid interconnections over a 12-month reporting period
OPTIONAL: Reduced curtailment (% o MW)	or TBD	MDB project results/ utilities data	Curtailment occurs when VRE output must be reduced because of the inflexibility of the systems, or because VRE generation exceeds the demand. <sup>12</sup>
OPTIONAL: Reduced loss of load (% or MW)	TBD	MDB project results/	Loss of load occurs when the supply cannot match the demand and energy

<sup>12</sup> IRENA (2018), Power System Flexibility for the Energy Transition, Part 2: IRENA FlexTool methodology, International Renewable Energy Agency, Abu Dhabi.

			utilities data	must go unserved. <sup>13</sup>	
	OPTIONAL: Reduced reserve inadequacy (% or MW)	TBD	MDB project results/ utilities data	Reserve inadequacy occurs when the reserve requirement cannot be met.14	
	OPTIONAL: Reduction in unplanned energy system outages (#)	TBD	MDB project results/ utilities data	Number of unplanned outages per month/year, due to the successful installation or implementation of solutions for grid flexibility.	
B. Improved policies, plans, and institutional capabilities	REI CORE 5. Policies: Number of policies, regulations, codes, or standards related to renewable energy integration that have been amended or adopted (#)	0	MDB project results/ country data	Policies, regulations, codes, or standards might apply directly to the renewable energy sector and related technologies in targeted markets, or to the financial sector.  Projects with no policy component should report a target of 0.  Reporting should also include the extent to which adopted policies	Changes in policies, plans, and institutional capabilities may also be incorporated in <b>analyses of signals of transformational change</b> , which contribute toward the fundamental systems change described above. For example, specific policy analysis might help support the overall understanding of coherence across international and national policies (i.e., relevance) and linkages between national policy and institutional capacity (i.e., scale).

<sup>&</sup>lt;sup>13</sup> Ibid.

<sup>&</sup>lt;sup>14</sup> Ibid.

				are <b>gender-responsive</b> , e.g., HR policies in energy utilities; policies that support gender equality/women's employment; inclusion of safeguards against sexual exploitation and genderbased violence, etc.	
C. Mobilized public and private capital	REI CORE 6 (= CIF 4). Co-Finance: Volume of co- finance leveraged (USD)	0	MDB project financial data	Total of non-CIF resources leveraged in REI projects. Reporting on this indicator feeds directly into CIF Impact 4 (Co-Finance).  Disaggregation: Source of co-financing (MDB, Government, Private Sector, Bilateral, and	
D. Increased renewable energy access	REI CORE 7. Renewable Energy Access: Number of women and men, businesses, and community services benefiting from improved access to	0	MDB project results, World Bank MTF data (ESMAP), SE4All Global Tracking Frame-	This indicator measures improved renewable energy access as a result of the program, based on an approved methodology per MDB. Countries and MDBs are encouraged to draw from and apply the MTF and/or GTF (ESMAP) where feasible.  Estimations can be	Gender-responsive aspects of energy access can be studied in more detail through targeted research, evaluations, and/or case studies. Examples of relevant issues include: impact on women-owned businesses/firm users; impact on community services specifically catering to women; and women's awareness and ability to use electricity access for productive purposes.

electricity and/or other modern energy services – direct/indirect (# of people)	work (GTF), and/or other national energy statistics	converted from household data where necessary.  Disaggregation: Direct vs. indirect, based on an approved methodology by each MDB  By gender (mandatory), businesses, and community services  Female-headed households, womenowned businesses, and gender-relevant community services (where possible) (# and %)	
OPTIONAL: Increase in duration of planned household energy access per day (hours/day)	MDB project 0 results/ utilities data	Increase in average daily hours of energy availability	

E. Reduced total system cost	REI CORE 8. System Costs: Reduced total energy system cost (USD)	TBD	TBD	Cost reductions due to the successful installation or implementation of solutions for grid flexibility vs. the baseline case of "business as usual," based on an approved methodology from countries/MDBs.	
F. Fostered renewable energy innovation	REI CORE 9 (= CCV 1). Innovation: Number of innovative <sup>15</sup> businesses, entrepreneurs, technologies, and other ventures demonstrating a strengthened climate- responsive business model	TBD	MDB project results data	This indicator measures the extent to which businesses, entrepreneurs, technologies, and other ventures with a climateresponsive business model have strengthened their overall business development. This may refer to evidence of advances from ideation to prototyping, R&D, pilot testing, and entry to market, or scaling-up, depending on a business, entrepreneur, technology, or venture's maturity at baseline.  Indicators under this outcome will seek to align with the CIF Climate	Further evaluative and learning-based activities aiming to improve the understanding of REI's innovation and entrepreneurship aspects may be applied in coordination with the MEL approach for the CIF Climate Ventures (CCV) window.

<sup>&</sup>lt;sup>15</sup> Refer to the CIF Climate Ventures Proposal for a more precise definition of innovation in the context of the CIF: climateinvestmentfunds.org/sites/cif\_enc/files/meeting-documents/scf\_tfc.15\_inf.4\_cif\_climate\_ventures\_proposal.pdf; MDBs will also have some flexibility to define innovation as appropriate to their own country and market contexts when reporting on this indicator. For example, an established business model moving into a new market context might be considered as innovative, if relevant.

OPTIONAL: (=CCV 2): Number of innovative products, services, technologies, and processes that have entered a new market context	TBD project results data	This indicator is intended to measure the commercialization of innovative products, services, technologies, and processes. These should be defined similarly as for REI CORE 9.  It is required for projects receiving CCV support and optional for all other REI projects.	
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<sup>&</sup>lt;sup>16</sup> The CCVs will not be standalone CIF programs; rather, they will follow a model similar to the Clean Technology Fund's Dedicated Private Sector Programs (DPSP), in that they are proposed to exist as dedicated funding windows under each respective program under the CIF Strategic Climate Fund (SCF) – Global Climate Action Programs. As such, the CCVs will be fully aligned with the CIF's new strategic programming on renewable energy integration, climate-smart cities, low-carbon industry, nature, people, and climate and are designed to systematically address the key barriers to climate innovation in developing countries.

		MON	NITORING A	APPROACH		EVALUATION AND LEARNING APPROACH
RESULT STATEMENT	INDICATORS	BASE- LINE	MEANS OF VERIFI- CATION	TARGET (DATE)	NOTES AND SDG ALIGNMENT	KEY AREAS
<b>REI PROGR</b>	AM-LEVEL CO	)-BENEI	FITS			
Social and Economic Development Co- Benefits	CO-BENEFIT 1. Employment and Livelihoods: Jobs created – direct and indirect	0	MDB project results data / CIF modeling		MDBs will only need to report on one co-benefit indicator per REI project and can select among a range of options or propose another relevant co-benefit.  Disaggregation: Direct vs. indirect  By gender (mandatory) and vulnerable groups  By type of job	Quality and distribution of jobs: Through both just transition and gender-responsive approaches, further evaluative and learning-oriented analyses may center on the types of jobs created (and lost), and which subpopulations are gaining (and losing) employment opportunities. For example, this might include generating evidence on decent jobs created and plans for addressing jobs lost through skills development and economic diversification activities. Alternatively, it might include analyses of women's access to medium- and high-skilled green jobs, STEM-education and vocational training, and school-to-work transitions.  Modeling: Indirect job creation, such as induced employment along the supply chain, may be estimated using modeling techniques alongside projects' reporting of direct job creation.
	CO-BENEFIT 2. Just Transition: Social Inclusion and Distributional Impacts	N/A	N/A	N/A	N/A	Just transition-framed analyses may examine the enhancement of social inclusion processes and procedures, such as stakeholder engagement at local and national levels, the extent to which vulnerable groups in impacted areas have been represented, gender inclusion, and the scope of social partners involved, i.e., government, labor, business, civil society, race, etc.  Distributional impacts, which already form a pivotal aspect of Co-Benefit 1, may also be furthered examined along other evaluative lines or with additional focus on specific sub-populations, such as ethnic, religious, and racial minorities, female-headed households, Indigenous

CO-BENEFIT 3. Policy and Planning: Coherence across sectors	N/A	N/A	N/A	N/A	People and local communities, migrants, youth, and persons with disabilities.  Approaches may consider the degree of alignment between NDCs, national policy, and REI Investment Plans.  They may further consider the extent to which other sectors have been consulted during the development of the REI Investment Plans.
OTHER	TBD	TBD	TBD	TBD	

		MOM	NITORING A	APPROACH		EVALUATION AND LEARNING APPROACH
RESULT STATEMENT	INDICATORS	BASE- LINE	MEANS OF VERIFI- CATION	TARGET (DATE)	NOTES AND SDG ALIGNMENT	KEY AREAS
<b>REI PROG</b> E	RAM-LEVEL O	UTPUTS	3			
A. Improved	OPTIONAL: Number of policies, regulations, codes, or standards supported to enhance the enabling environment for renewable energy uptake (#)	0	MDB project results / country data		Designed to address policy or regulatory barriers to renewable energy uptake and subsequent actions taken by local/national governments to increase future investments in renewable energy.  This indicator includes all policies supported, whether they are adopted (REI CORE 5) or not.	<b>Specific evaluation and learning</b> activities may support output-level learning and assessment. Monitoring data from the output level may also feed into the evidence base for transformational change signals and other higher-level analyses related to REI.
market design and systems	OPTIONAL: Number of technical/financial analyses completed to enhance the enabling environment for RE uptake (#)	0	MDB project results/ operation s data		This includes sectoral or market modelling, analyses, pricing methodologies, country diagnostics, studies, net billing schemes, poverty and social impact assessments (looking at accessibility, affordability and targeting of subsidies) and related technical assistance deliverables used to inform policy, regulatory change, and/or investment designs.	

	OPTIONAL: Number of persons trained on issues related to renewable energy markets and systems (#)	0	MDB project results data	This indicator will feed into CIF 3 (total number of beneficiaries) where relevant. <u>Disaggregation:</u> By gender	Gender trainings: While CIF will not track all types of trainings directly, projects are encouraged to also measure trainings designed to address particular gender considerations, such as women's awareness of productive use applications and trainings focused on providing women green skills that enable them to access medium and high-skilled green jobs.
B. Improved demand-supply management	OPTIONAL: Number of supply management technologies, infrastructure, or other solutions deployed	0	MDB project results data	This might include new and smart grids, innovative schemes for enabling renewable energy supply, grid interconnection infrastructure, new technologies for real-time grid management, or other solutions.  Disaggregation: Type of solution	
8	OPTIONAL: Number of demand management technologies, infrastructure, or other solutions deployed	0	MDB project results data	This could include advanced metering systems, wireless network control, demand-side management, energy efficiency measures, or other solutions. <u>Disaggregation</u> : Type of solution	
C. Deployment of energy storage systems	GESP 1. Energy Rating: Energy rating (MWh) of storage systems installed	0	MDB project results data/technical	This indicator corresponds to GESP-Specific Indicator 1 in the GESP M&R System and should only be reported by REI projects with energy storage components.  Disaggregation: By type of	

			specificat ions	technology (i.e., thermal, mechanical, electrochemical)  By location on the energy value chain (generation, transmission, distribution, stationary end use, mobile end use)  Distributed storage vs. utility-scale applications	
	GESP 2. Power Rating: Power rating (MW) of storage systems installed	0	MDB project results data/technical specificat ions	This indicator corresponds to GESP-Specific Indicator 2 in the GESP M&R System and should only be reported by REI projects with energy storage components.  Disaggregation: should follow the format of the above indicator.	
	OPTIONAL: Number of energy storage systems installed	0	MDB project results data	<u>Disaggregation:</u> should follow the format of the above two indicators.	
D. Fred us-	OPTIONAL: Number of end- use electrification solutions deployed	0	MDB project results data	<u>Disaggregation:</u> Type of solution	
D. End-use electrification solutions	OPTIONAL: Number of women and men reached with new end-use electrification solutions	0	MDB project results data	If reported, this indicator should feed into CIF 3 (Beneficiaries) and/or REI CORE 7 (energy access). <u>Disaggregation</u> : By gender (mandatory)	

				Type of social/community infrastructure reached
	OPTIONAL: Number of businesses reached with new end-use electrification solutions	0	MDB project results data	If reported, this indicator should feed into CIF 3 (Beneficiaries) and/or REI CORE 7 (energy access). <u>Disaggregation</u> : womenowned enterprises
	OPTIONAL: Reduction in number of outages due to new end- use electrification solutions	0	MDB project results/ utilities data	If reported, this indicator should be a corollary to outages reported for Outcome A.  Disaggregation: Type of social/community infrastructure reached
E. Deployment of renewable mini and off-grid solutions	OPTIONAL: Number of renewable mini and off-grids solutions installed	0	MDB project results data	This might include technologies, infrastructure, or other solutions.  Disaggregation: By type

## **Annex: REI Program Theory of Change**

#### **CIF Renewable Energy Integration Program Theory of Change**

If CIF improves market design and system operations, provides enabling technologies and infrastructure, and develops new business models, countries will increase renewable energy penetration in their energy mix, achieve a more flexible and decentralized energy system, improve policies and capabilities mobilize capital, increase renewable energy access, reduce systems costs and foster renewable energy innovation, which will all contribute toward CIF's transformative impact.

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 Flexibility of energy systems for smooth integration of higher shares of variable renewable energy generation into the grid and increase in off-grid access to renewable energy is enabled Increased penetration of variable renewable Improved policies, energy into power Mobilized public and Increased renewable Reduced total system Fostered renewable plans, and institutional systems & maximized private capital energy access cost energy innovation capabilities RE potential of countries Deployment of Deployment of energy Improved demand-Improved market design End-use electrification renewable mini and offstorage systems and systems supply management solutions grid solutions Market design and Electrification and New technologies and Enabling technologies Enabling infrastructure system operations demand management business models Scaled-up, flexible, and Consideration of Multi-MDB technical Large-scale, predictable Dedicated climate Country-led, systems transformation expertise and coherent concessional finance finance for driving programmatic, coordinated climate and social inclusion at intervention for public and private innovation participatory approach the outset action packages sector interventions



#### The Climate Investment Funds

The Climate Investment Funds (CIF) were established in 2008 to mobilize resources and trigger investments for low carbon, climate resilient development in select middle and low income countries. To date, 14 contributor countries have pledged funds to CIF that have been channeled for mitigation and adaptation interventions at an unprecedented scale in 72 recipient countries. The CIF is the largest active climate finance mechanism in the world.

#### THE CLIMATE INVESTMENT FUNDS

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