



JOBS AND ECONOMIC VALUE ADDED (EVA) VIA THE CLEAN TECHNOLOGY FUND (CTF)

Modeled Estimates and Summary Analysis

// June 2025

RESULTS & IMPACT //

**Modeling Brief: Social and
Economic Development Impacts of
Climate Investments (SEDICI)**

CIF Program: CTF

TOPICS

- Jobs and Economic Value Added
- Development Impacts
- Clean Technology

CIF's Clean Technology Fund (CTF) was designed to support the uptake and scaling of low-carbon technologies in developing economies, channeling targeted, low-cost financing for first-mover, scaled-up, and high-impact projects in the renewable energy, energy efficiency, green industry, and sustainable transport sectors. As of December 31, 2024, the CTF investment portfolio carries 135 approved projects, representing a total of USD 40.9 billion in financing (USD 4.8 billion from own-account and USD 36.9 billion from public, private, and multilateral agency co-financing).



Implemented by CIF's six partner multilateral development banks (MDBs), national CTF investment plans, and their constituent projects, are oriented toward the CTF's goal of supporting countries in establishing transformed, low-carbon economies. The delivery of this goal is measured annually, at project level, via the CTF's five core and mandatory indicators:

- 1 | Tons of greenhouse gas (GHG) emissions reduced or avoided (*tCO₂eq*)
- 2 | Volume of direct finance leveraged through CTF funding (*USD, disaggregated by public and private finance*)
- 3 | Installed capacity of renewable energy (*MW*)
- 4 | Number of additional passengers using low-carbon public transport (*#, disaggregated by men and women if feasible*)
- 5 | Annual energy savings as a result of CTF interventions (*GWh*)

Alongside these core climate outcomes, the portfolio delivers a broader spectrum of development co-benefits. These contribute to the goals of the CTF and MDBs to (i) reduce poverty by enhancing economic growth and improving services for the poor; and (ii) provide local and regional environmental benefits, such as improved air and water quality, and strengthened biodiversity. With the CTF portfolio showing increased maturity, there has been growing demand from both donor and recipient partners to take stock of CIF's and the CTF's wider and onward effects on countries, markets, people, and the environment.

1. THE SOCIAL AND ECONOMIC DEVELOPMENT IMPACTS OF CLIMATE INVESTMENTS (SEDICI)

CIF’s flagship Social and Economic Development Impacts of Climate Investments (SEDICI) workstream focuses on mapping and measuring development impacts, classified into four impact areas: economic, social, environmental, and market-establishing. SEDICI also analyzes the crosscutting effects of development impacts on outcomes related to gender, vulnerable persons, and local stakeholders.

Based on a detailed review of all approved CIF projects, over 40 potential impact pathways and development outcomes were identified. These were then scaled according to their prevalence and priority within project objectives and results targets and utilized to inform subsequent economic modeling approaches that quantified the priority impact areas.

TABLE 1. Development Impact Areas and Categories

4 IMPACT AREAS	SOCIAL IMPACTS are experienced by people or communities	ECONOMIC IMPACTS contribute to economic growth	ENVIRONMENTAL IMPACTS conserve or protect natural resources	MARKET IMPACTS contribute to sectoral or systemic improvements
	← Gender dimensions of development impacts →			
10 IMPACT CATEGORIES	1. Health and Safety	3. Employment opportunities	5. Water	8. Energy sector security and resilience
	2. Livelihoods, wealth, and quality of life	4. Economic value added (GDP)	6. Ecosystem and biodiversity	9. Competitiveness and industrial development
			7. Agricultural productivity	10. Inclusiveness and energy justice

1.1. The Joint Impact Model (JIM)

To quantify its portfolio-level economic impacts, CIF utilizes the Joint Impact Model (JIM), which integrates labor productivity multipliers with social accounting matrices (i.e., input-output (IO) models), alongside other key parameters and considerations, to map and measure economic interactions across an economy. The model estimates the direct, indirect, and induced employment effects, as well as the direct, indirect, and induced economic value added from the investment

portfolio. It also captures the forward effects of additional power generated by investee operations.

CIF currently sits on the Development Panel of the JIM and leads the model’s Energy Impacts Workstream, which focuses on enhancing the granularity and robustness of modeling estimates related to power sector investments, including differentiating by energy generation technology type(s); investment strata (generation, distribution, transmission); and generation locus (grid connected, mini-grid, off-grid, etc.).

1.2. Summary Findings: Jobs

Modeled estimates utilizing the JIM, based on data as of December 31, 2023, yield that **the CTF portfolio contributed to a total of 6,528,924 person-years of employment.**¹ Of these, 2,753,037 constitute direct employment (of which only 7% is estimated as female employment); 1,431,522 constitute induced employment (of which 33% is female employment, 26%

is formal, and 74% is informal); and 1,781,435 constitute induced supply chain jobs (of which 30% is female employment, 32% is formal, and 68% is informal).

The forward effects of additional renewable energy generated by CTF projects contribute to a further 562,928 person-years of employment (of which 29% is female employment, 22% is formal, and 78% is informal).

FIGURE 1. Estimated Employment Supported (by gender)

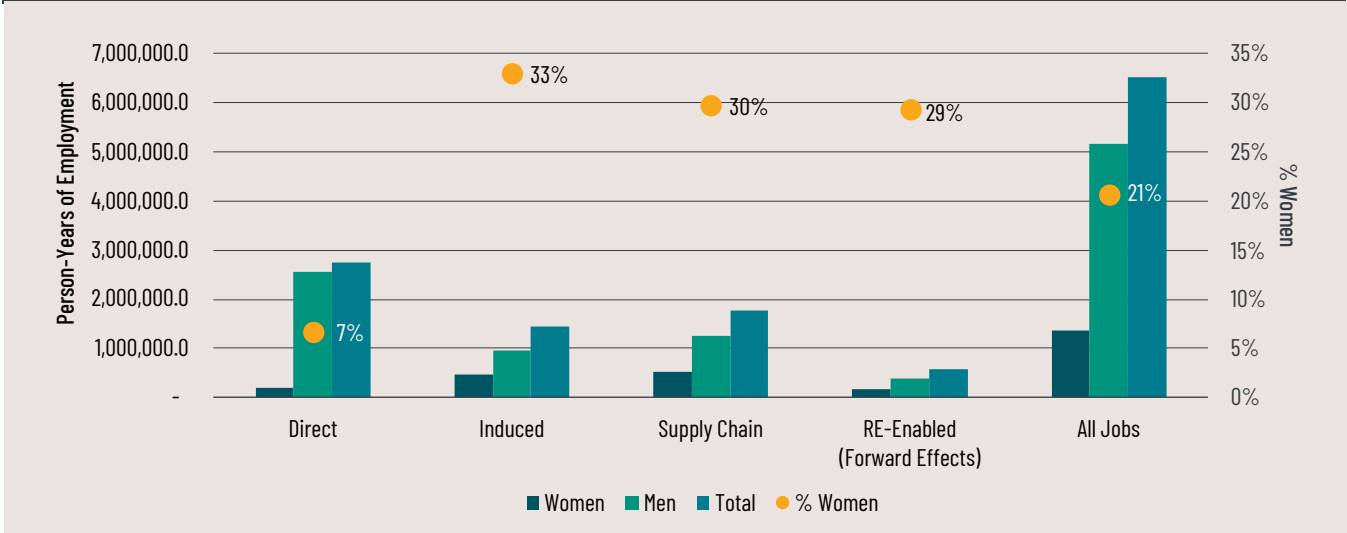
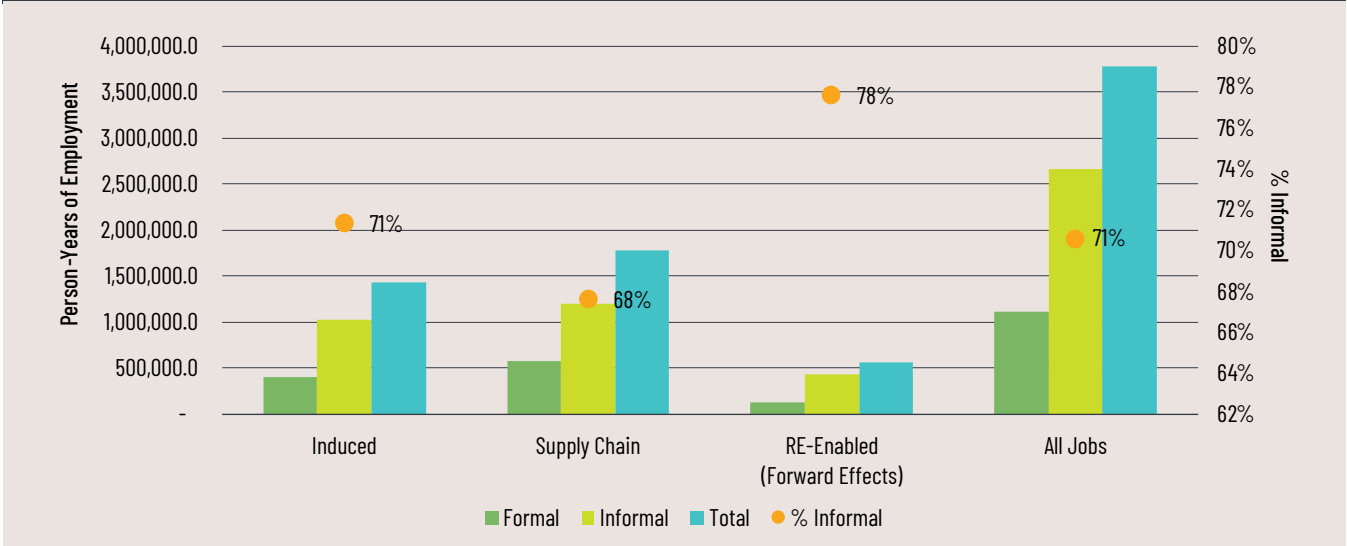


FIGURE 2. Estimated Employment Supported (by employment type)



¹ **Person-year:** One person-year (or job-year) of employment is a unit that stands for one person employed full-time for one year, or two people for half a year, etc. It is often used for manufacturing, installation, and construction employment, which may be temporary in nature, but it may also be used for permanent employment.

FIGURE 3. Estimated Employment Supported (by region)



1.3. Summary Findings: Economic Value Added (EVA)

Modeling estimates of the economic value-added generated by the CTF portfolio amounts to USD 46.4 billion, of which USD 22.0 billion is direct, USD 20.0 billion is via supply chains, and USD 4.4 billion results from the forward effects of additional power generated by CTF-supported projects.

FIGURE 4. CTF Financing (by region)

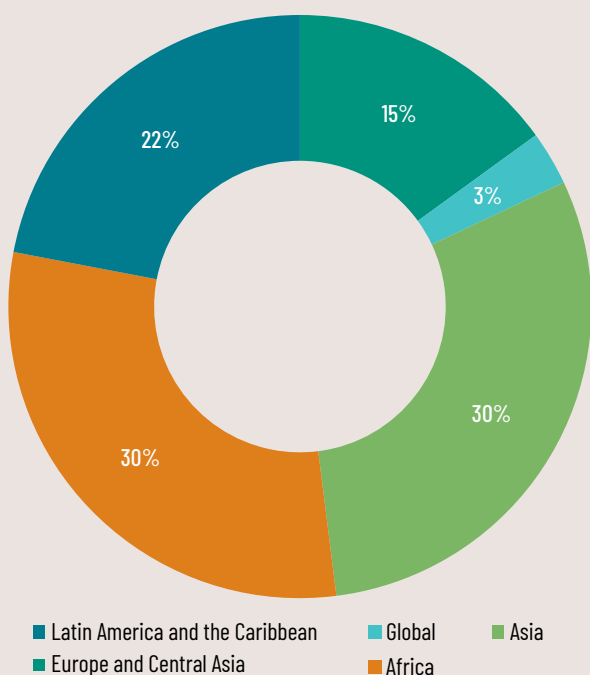
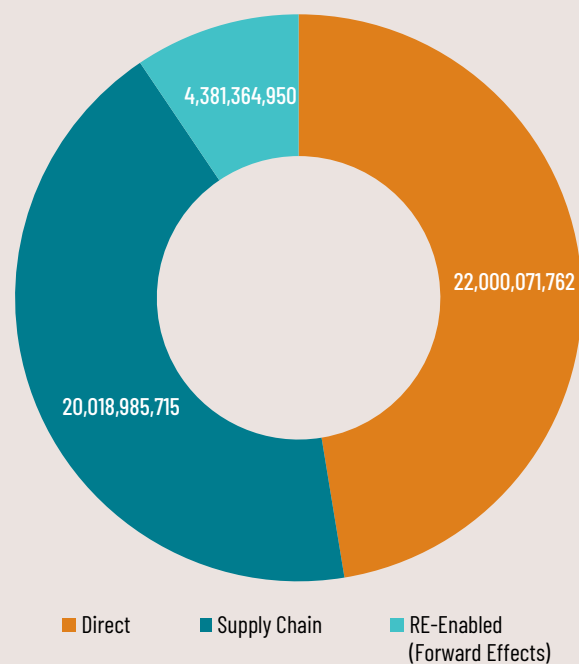


FIGURE 5. Economic Value Added (US\$)





The over \$12 billion CIF is the pioneer multilateral climate fund, mobilizing low-cost finance for energy transitions and sustainable development in more than 80 countries. Established in 2008, the CIF delivers funding exclusively through six AAA-rated multilateral development banks. In a world first, in 2025, the CIF accessed capital markets to unlock private sector capital through the CIF Capital Markets Mechanism (CCMM).

The CIF's high-quality funding mobilizes over \$8 in co-financing for every \$1 invested. This lowers risk and enables first-of-their-kind investments in clean energy, industry decarbonization, resilience and nature-based solutions. Our approach empowers developing countries, promotes just transitions and accelerates transformational change.

Learn more on cif.org

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