

CLEER: Tools to Assess Energy, GHG, and Cost Savings from Energy Efficiency Programs

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RALI - Resources to Advance LEDS Implementation

- Supports technically rigorous development and implementation of Low Emission Development Strategies or LEDS
- Focus on providing tools and technical assistance to USAID and developing country partners

Scaling Clean Energy to Achieve Climate Commitments

- One critical reason for transforming to clean energy is to **reduce carbon emissions**.
- RALI has designed a set of **free, online** tools that can help quickly assess:
 - what combination of initiatives will achieve targets,
 - what gaps remain
 - The relative impact of a portfolio of options
- Which can help you
 - engage with **stakeholders**,
 - set **expectations**, and
 - understand **what role energy efficiency** and other clean energy investments play in your long term climate strategies

CLEER options for Energy Efficiency



CLEAN ENERGY EMISSION REDUCTION TOOL

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Welcome to the USAID Clean Energy Emission Reduction (CLEER) Tool

USAID Clean Energy Emission Reduction (CLEER) Tool

The CLEER Tool is a user-friendly calculator based on internationally-accepted methodologies, enabling users to calculate emissions reduced or avoided from clean energy activities. The tool helps users to:

- estimate, track, and report greenhouse gases (GHGs) reduced or avoided from clean energy,
- estimate and project the amount of energy generated or saved from clean energy activities,
- identify high-impact activities with cost-effective GHG reductions,
- evaluate the emissions reduction potential of planned activities and possible alternatives, and
- estimate projected GHG emissions reduced or avoided to 2030.

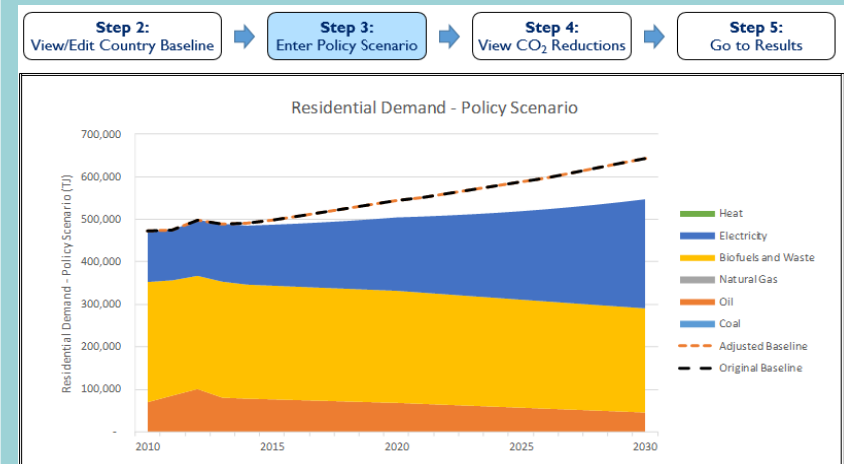
CLEER uses up-to-date methodologies and emissions factors from the IPCC, the GHG protocol, and other internationally-accepted guidance for estimating GHG emissions and reductions.

The CLEER tool was developed by the USAID Resources to Advance LEEDS Implementation (RALI) Project, in cooperation with the USAID Global Climate Change Office (GCC). USAID works with partner countries to establish the foundations for low emission energy systems, with a focus on helping countries build enabling environments that can attract and sustain private investment in clean energy. Clean energy activities promote the use of renewable energy and energy efficiency technologies, build human and institutional capacity, and improve the enabling environment for clean energy investment and deployment. This work seeks to reduce or avoid GHG emissions, while promoting sustainable human and economic development.

Get Started with the CLEER Tool

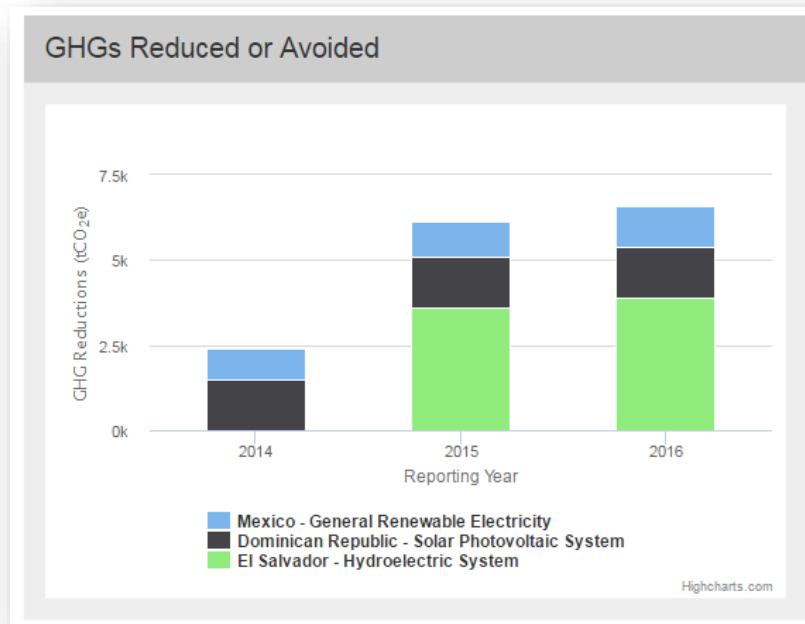
Reporting GHG Emission Redu...
Reporting with the CLEER Tool

Clean Energy Emission Reduction (CLEER) Tool



Country Energy Projection (CEP) Model

Why the CLEER Tool?



The Tool reduces the burden of calculating the **energy, GHG, and cost impacts** of clean energy activities by providing a simple-to-use calculator based on internationally-accepted methodologies.

Clean Energy Indonesia

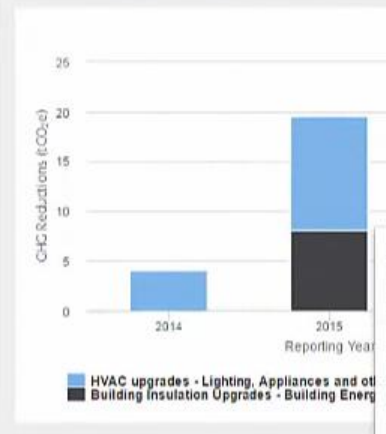
★ Owner

Project Details

Operating Unit:	Training Group
Project ID:	1234
Project Number:	1234
Project Value (USD):	\$0.00
Period of Performance:	2014 - 2020
Currency (if applicable):	USD
Description:	
Owners:	Super Admin
Contributors:	None

Edit Project
Delete Project

GHGs Reduced or Avoided



Reporting Year	HVAC upgrades - Lighting, Appliances and other Equipment Efficiency	Building Insulation Upgrades - Building Energy Efficiency
2014	4	0
2015	12	8

Add an Action associated with the Project that yields a single clean energy result (e.g., renewable energy or energy efficiency)

Actions 2

+ Add Action

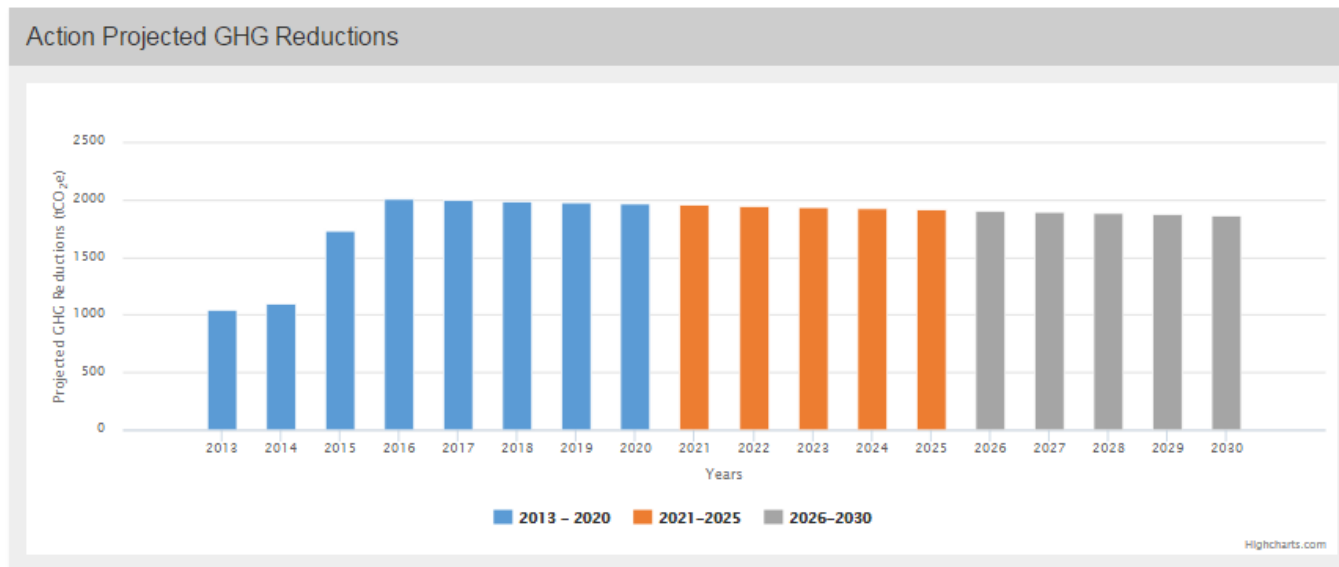
Action Name	Country	Technology Type	
Building Insulation Upgrades	Indonesia	Building Energy Efficiency	View
HVAC upgrades	Indonesia	Lighting, Appliances and other Equipment Efficiency	View

Showing 1 to 2 of 2 entries

Previous 1 Next

CLEER Tool Uses

- **Estimate** energy impacts, GHGs reduced or avoided, and cost savings from existing energy efficiency projects
- **Compare** the potential reductions for planned projects using the Projections feature
- **Track** data and visualize trends



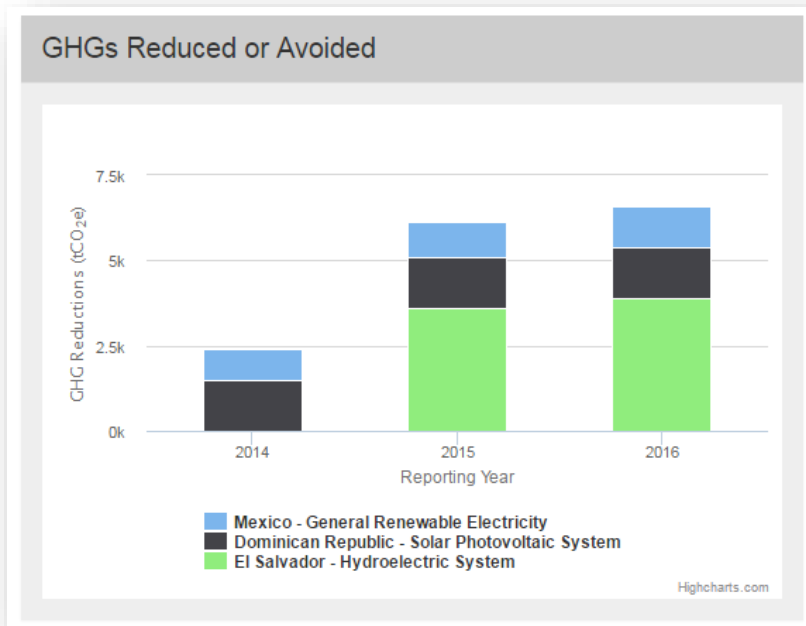
CLEER Tool Uses

- **Collaborate** with all project stakeholders
- **Report** findings easily



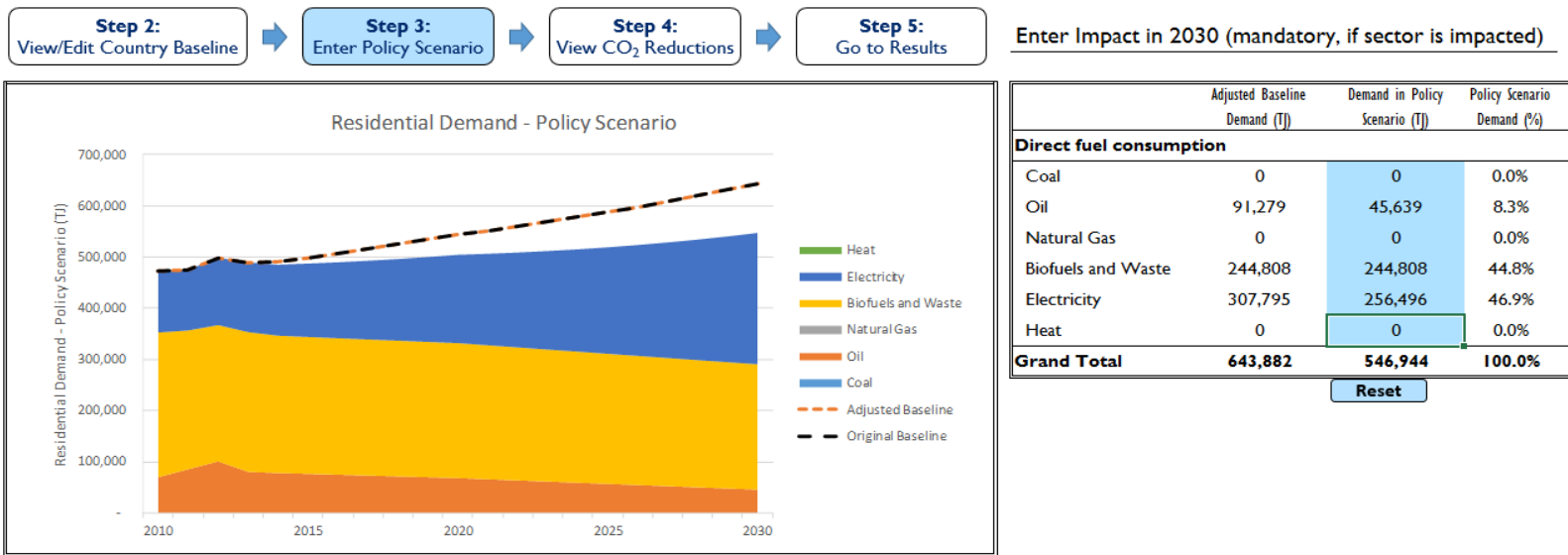
Benefits of using the CLEER Tool

- **Monitor, evaluate, and verify** energy impacts and GHG reductions of clean energy programs (direct and indirect)
- **Identify high-impact activities** with cost-effective energy reductions
- **Assess the reduction potential** of planned activities or alternatives
- **Improve communication** on the impacts of energy efficiency programs
- **Evaluate cost savings** of energy efficiency programs



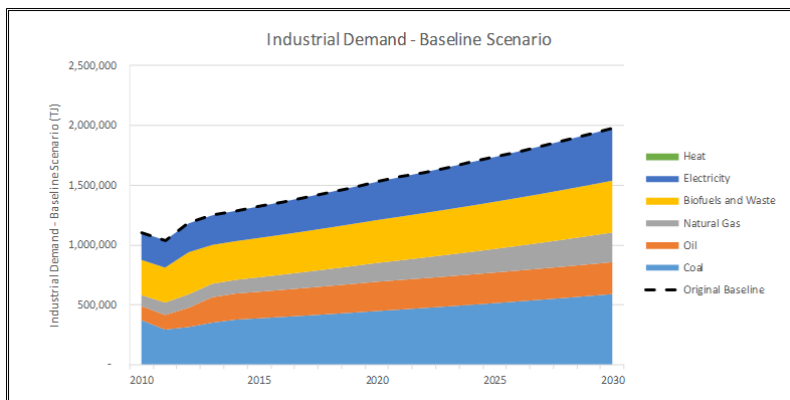
The CEP Model

- CEP Model is a tool designed to:
 - Estimate **GHG impacts** from national sector-level policies
 - Assess impacts from **national level actions**
 - Assess impacts for **large-scale measures**.
 - Help **quality control** on GHG and Energy impacts



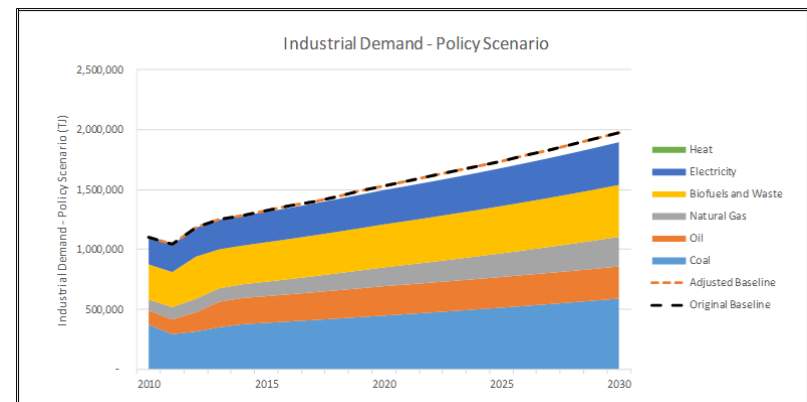
CEP Model: Basic Usage

1. The CEP Model provides **baseline scenario** energy supply and demand projections

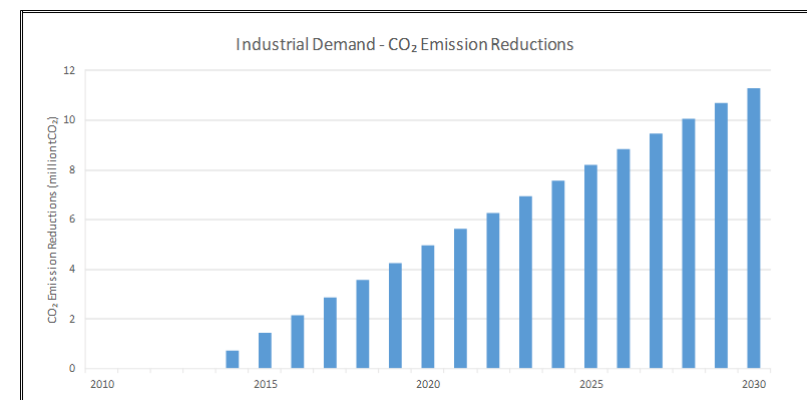


2. The users choose to **use the default** or **develop own** country-specific energy scenarios

3. The users develop **alternative policy scenarios** that may include energy efficiency programs



4. The tool estimates **projected CO₂ impacts** under these scenarios



Examples of CEP Model Uses

- Energy Efficiency targeted policies
 - Example: Reduce energy consumption by 58,694 GWh in 2031 (Thailand NDC)
- Fuel switching in a given sector
 - Example: Increase the share of biofuels to meet 10% of the demand for transport fuels (Laos)
- Target setting for policy experts and energy planners
 - Policy experts and energy planners can use the CEP Model to set targets for their programs.
- NDCs analysis
 - Helps governments and planners estimate GHG impacts of various NDC targets, and plan on how to achieve by looking at baseline projections and alternative scenarios
- Many more...

For more information, contact



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