

Promoting Renewable Energies and Energy Efficiency in Central America (Phase III)

Background

Central America is at crossroads. As the economies of, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama expand, regional use of fossil fuels, transportation and electricity generation is on the rise. These developments come at the price of rising greenhouse gas emissions, worsening air and water pollution, and significant health and societal costs. Hence, Central American countries have committed themselves to sustainable energy development.

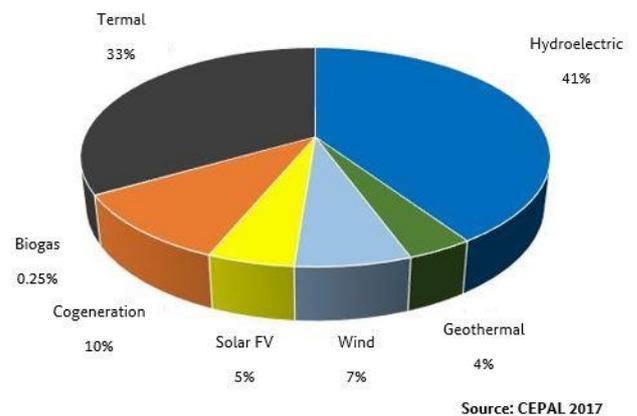
The Economic Commission for Latin America and the Caribbean (ECLAC) reports that the percentage of renewables in regional electricity generation, particularly from wind and solar energy, increased from 1.28% in 2010 to almost 10% in 2017. The region as a frontrunner in hydropower and geothermal energy is exploring its potential for expanding these technologies in a more sustainable manner. For example, Costa Rica, which its largest source of energy is hydro, is leading the world in its ambition to be “carbon neutral” by 2021.

While Central America’s renewable energy systems continue to develop, there are important legal and regulatory challenges to address. Government and energy sector supporters will need to update regional and national regulations and power grid management instruments.

Throughout Central America, energy efficiency initiatives are increasing. Different countries have made progress in promoting energy efficiency by implementing policies and programs in the public and private sectors. In addition, regional stakeholders have proposed eight Central American Technical Regulations (RTCAs). By thoughtfully developing and implementing policy changes, supporters can contribute to the success of renewable energy and energy efficiency initiatives in the region for years to come.

Program Name	Renewable Energies and Energy Efficiency in Central America (4E)
Directorate	The Federal Ministry for Economic Cooperation and Development (BMZ)
Member Countries	Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua y Panama
Implementation	German Agency for International Cooperation (GIZ)
Duration	2018-2020

Central America: Installed Capacity by Energy Source



Objective

From 2018 – 2020, the energy efficiency measures and the integration of variable renewable energy sources (VRE) into the electric system in Central America have improved.

Procedure

The Program “Promoting Renewable Energies and Energy Efficiency in Central America (4E)” is commissioned by the German Ministry of Economic Cooperation and Development (BMZ). The Program is currently in its 3rd phase (2018-2020) and can build upon ten-year experience in the region. Through targeted activities with partners, it continues to strengthen institutions and disseminate best practices, including those previously implemented by GIZ and regional partners. The program further promotes regional information exchanges and focuses on cooperation with the private sector to successfully incorporate renewable energy generation into the regional electric system as well as to scale-up energy efficiency measures.



Activities

- Promoting energy efficiency:** The 4E program aims to reduce energy consumption in Central America by promoting energy efficiency measures. The project works in selected technical areas, such as lighting, refrigeration, and air conditioning, and supports innovative developments, e.g. in green buildings and electromobility.
- Grid integration of VRE:** In order to contribute to a secure and stable operation of the Regional Electric System (SER), while at the same time integrating a greater amount of variable renewable energy into the regional grid system, the 4E program supports the Regional Operator Entity (EOR), as well as the Electric Interconnection Regulatory Commission (CRIE) to improve regulation.
- Capacity building:** The project supports the region in providing and facilitating access to relevant 4E information and focuses on capacity building in renewable energy and energy efficiency for relevant regional stakeholders from the energy sector.
- Digitalization:** Recognizing enormous opportunities that digital solutions could bring to grid integration and energy efficiency, 4E program, in collaboration with SICA and the Regional Committee of Central America and the Caribbean of the Regional Energy Integration Commission (CECACIER), has set-up a process to leverage digitalization in the energy sector in Central America with regards to operations, regulation and innovation.

Partners

The General Secretariat of the Central American Integration System, through the Energy Coordination Unit (UCE-SICA) is the main counterpart of 4E.

The program also partners with regional organizations and their platforms, energy ministries and equivalent agencies, energy distributors, industry groups and associations, private businesses, and professional training organizations.

Lead (Program level):	Tanja Gabriele Faller, Regional Director
Telephone:	(+503) 2121 5145
Email:	tanja.faller@giz.de

Published by: Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH
Programa Fomento de la Geotermia en Centroamérica

Address: Agency GIZ San Salvador
Bulevar Orden de Malta, Casa de la Cooperación Alemana, Urbanización Santa Elena, La Libertad, El Salvador, C.A.
T +503 2121-5145
F +503 2121-5101
www.giz.de / www.sica.int/energias4e/

As at: February 2019

Imprint by: Team Promoting Renewable Energies and Energy Efficiency in Central America- GIZ

Design by: Team Promoting Renewable Energies and Energy Efficiency in Central America- GIZ

Photo credits:

Photograph 1: Regional Coordination Center for Energy Transactions in El Salvador ©EOR

Photograph 2: Visit to consumer defense air conditioners. GIZ is responsible for the content of this publication.

Photograph 3: Use of a thermographic camera during training in a supermarket in El Salvador. GIZ is responsible for the content of this publication.

Photograph 4: Electromobility launch in El Salvador Chancellery ©DELSUR

On behalf of Federal Ministry for Economic Cooperation and Development (BMZ)

In cooperation with :

