





Digital Readiness of Central America's Energy Sector

SITUATION:

The Central American countries have committed themselves to a sustainable energy development. The region produces over 70% of renewable energy for electricity supply and – as a frontrunner in hydropower and geothermal energy – it is exploring its potential for expanding these technologies in a sustainable manner. All countries are connected through a unique regional grid, the Central American Electrical Interconnection System (SIEPAC for its acronym in Spanish), which provides security and reliability of service.

OBJECTIVE:

Recognizing the tremendous opportunities that digital solutions could provide to the energy sector in the region, particularly in grid integration and energy efficiency, the "Renewable Energies and Energy Efficiency Program (4E) in Central America", commissioned by the Federal Ministry for Economic Cooperation and Development (BMZ) and in collaboration with its counterpart, the Central American Integration System (SICA) initiated a process to leverage digitalization in the energy sector in Central America.

APPROACH:

The "Digital Readiness Process" initiated in 2018 and consists of a series of activities and events. Central American stakeholders get to learn about digital opportunities in their respective field, exchange information with experts, receive advisory and eventually develop digital roadmaps and first prototypes using digital solutions.

Events included an introductory training on digitalization and blockchain for the energy sector in collaboration with the GIZ Blockchain Lab, a two-week study trip to Germany with high-level energy stakeholders from the region and a series of webinars conducted in collaboration with the Regional Committee of Central America and the Caribbean of the Regional Energy Integration Commission (CECACIER) on deep-dive topics, such as advanced analytics and Internet of Things (IoT).

A final step of the process is the development of a regional study, "Digital Readiness in the Central American Energy Sector: Benchmarking and Preparing for a Digital Future".







APPLIED DIGITAL TECHNOLOGY:

Introductory training on Big Data, blockchain and IoT for the energy sector in collaboration with the GIZ Blockchain Lab.

ACHIEVEMENTS THROUGH DIGITALIZATION:

The study, "Digital Readiness in the Central American Energy Sector: Benchmarking and Preparing for a Digital Future", conducted in collaboration with Roland Berger, focuses on the current conditions and the identification of digital opportunities in the energy sector of six Central American countries: Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama. It features input from almost 100 experts and data from extensive desk research. The outcome of the study was presented to relevant stakeholders from the energy value chain to address a vision and strategy for implementing digital technologies and to jointly develop country-specific roadmaps as recommendations.

As next steps, lessons learnt of the process will be shared with other regions and identified prototypes ("use cases") shall receive further support in their implementation.

DIGITALIZATION STUDY 2019/2020:



For more information on the study: Link

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