INVESTMENT PLAN FOR COSTA RICA

Climate Investment Fund

Renewable Energy Integration Program

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GOBIERNO DE COSTA RICA

CIF CLIMATE INVESTMENT FUNDS
Investing in the future

Costa Rica National Context

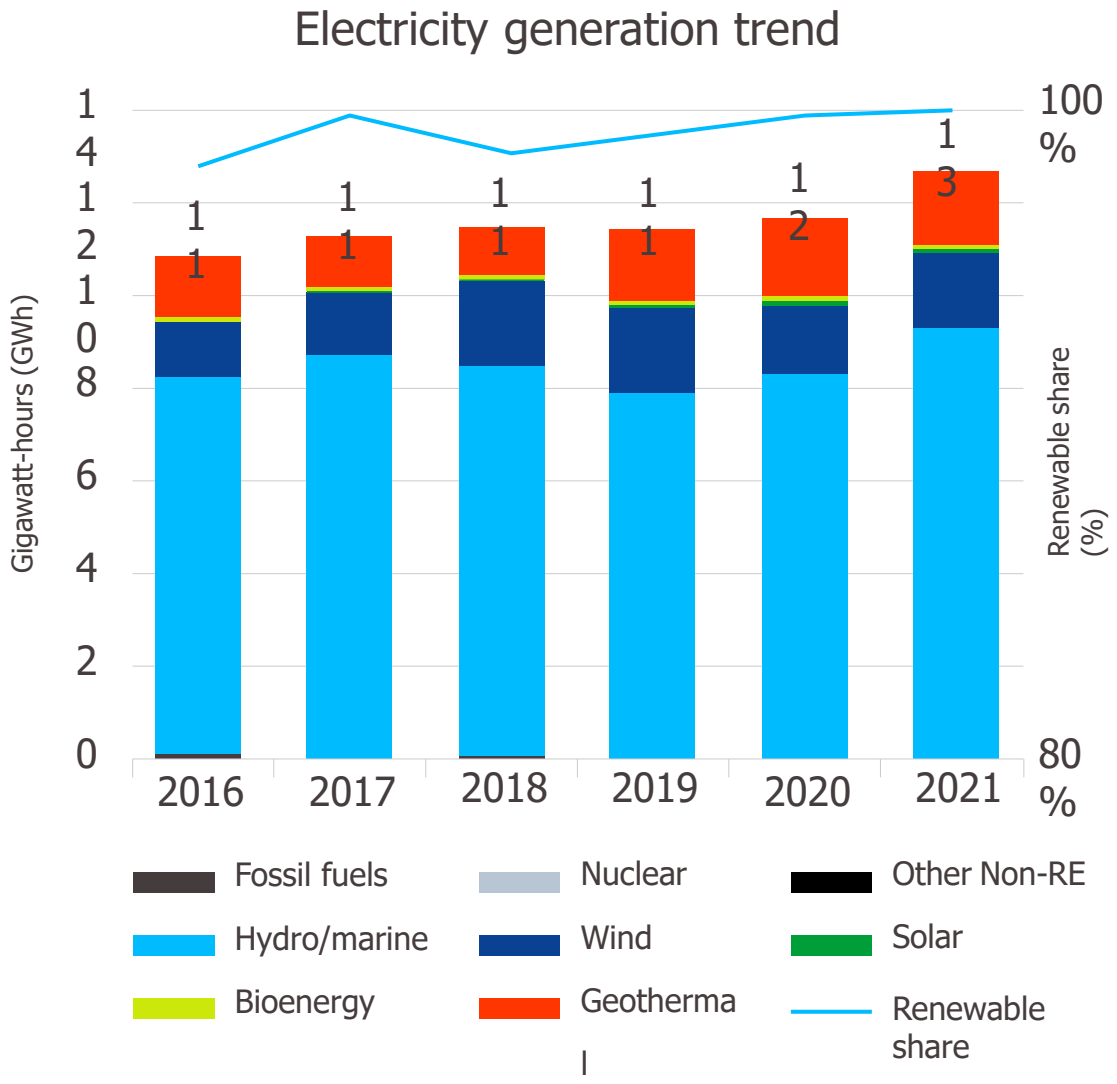
Country profile

Costa Rica is considered a small country with an area of 51,179 km2 and a population of 5.2 million people. It is classified as an upper-middle income. It is a tropical and subtropical country; dry season (December to April) and a rainy season (May to November).

Costa Rica is a country that:

- Produces 99% of its electricity from clean sources
- 99,5% of population have access to electricity.

Electricity Matrix in Costa Rica



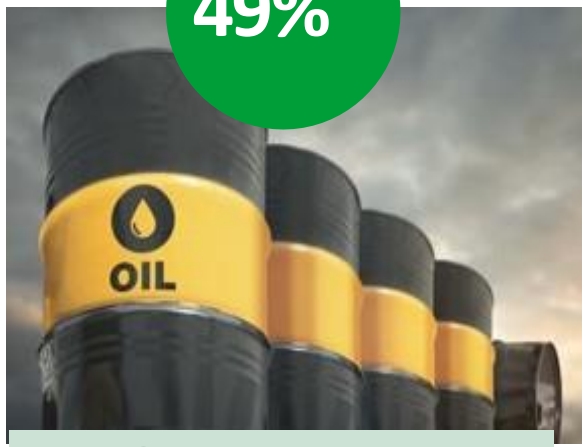
99% based on Renewable Energy

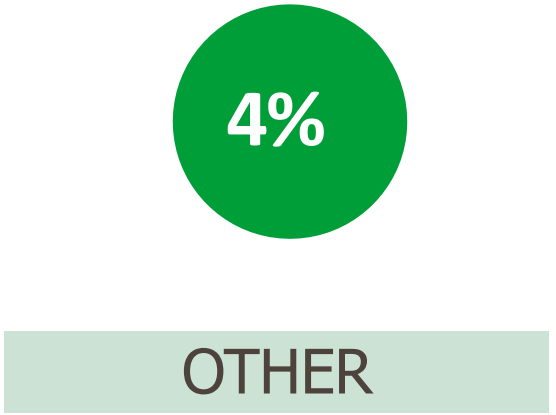
… and an important increase of Variable Renewable Energy (VRE) is expected for the next 10-20 years to cover the country future demand.

Energy Matrix in Costa Rica

Energy consumption in Costa Rica

Costa Rica faces significant challenges in terms of energy. The total energy matrix maintains its dependence on fossil fuels. Transport sector demands 54% of energy and generates 42% of total GHG, while the industrial sector emits 9% of GHG.

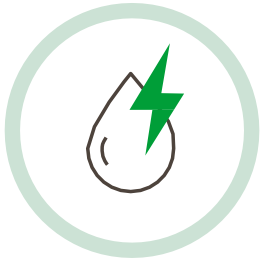




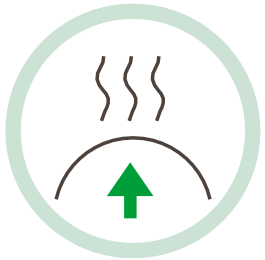
Country resources for Renewable Energy

Electric power generation sources in Costa Rica

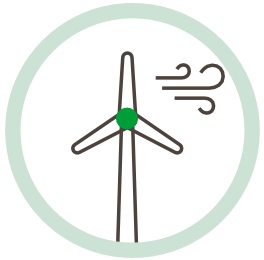
Costa Rica has potential to produce excess of electricity and develop new power plants for internal consumption.



HYDROELECTRIC

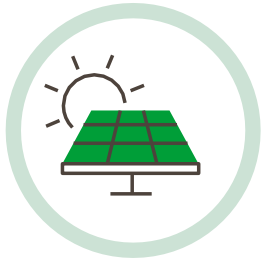


GEOTHERMAL



WIND

BIOMASS



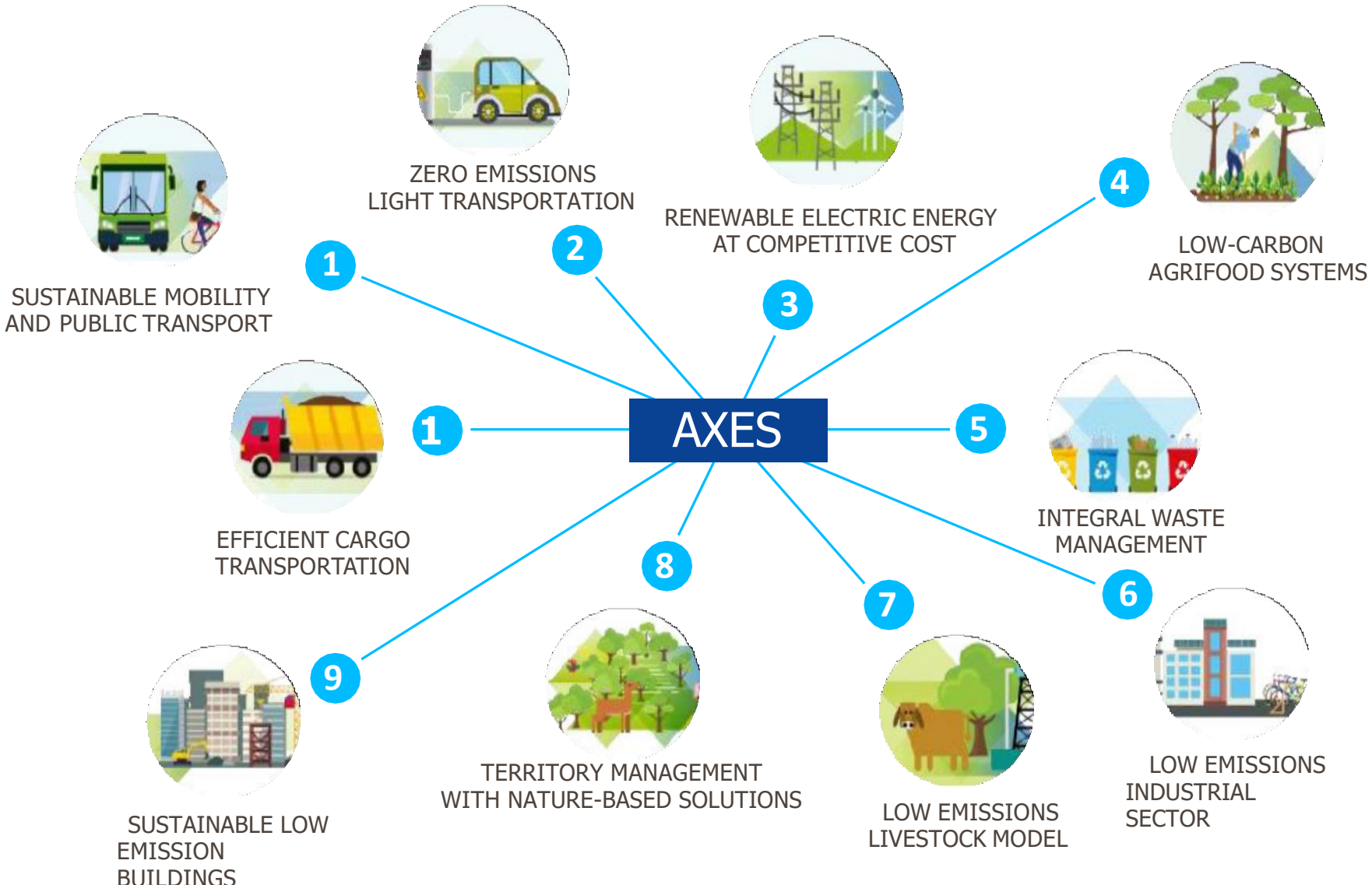
SOLAR

Costa Rica developed a comprehensive National Decarbonization Plan (PND)

Alignment to National Policies and Ambitions

Costa Rica counts on long-term energy planning studies and has a solid institutional governance established to design national policies for energy.

10 Decarbonization strategic axes



Decarbonization program ambitious and investments are daunting

2023 OCDE evaluation and recommendations:

Decarbonising transport is essential to meet climate mitigation goals and improve quality of life.

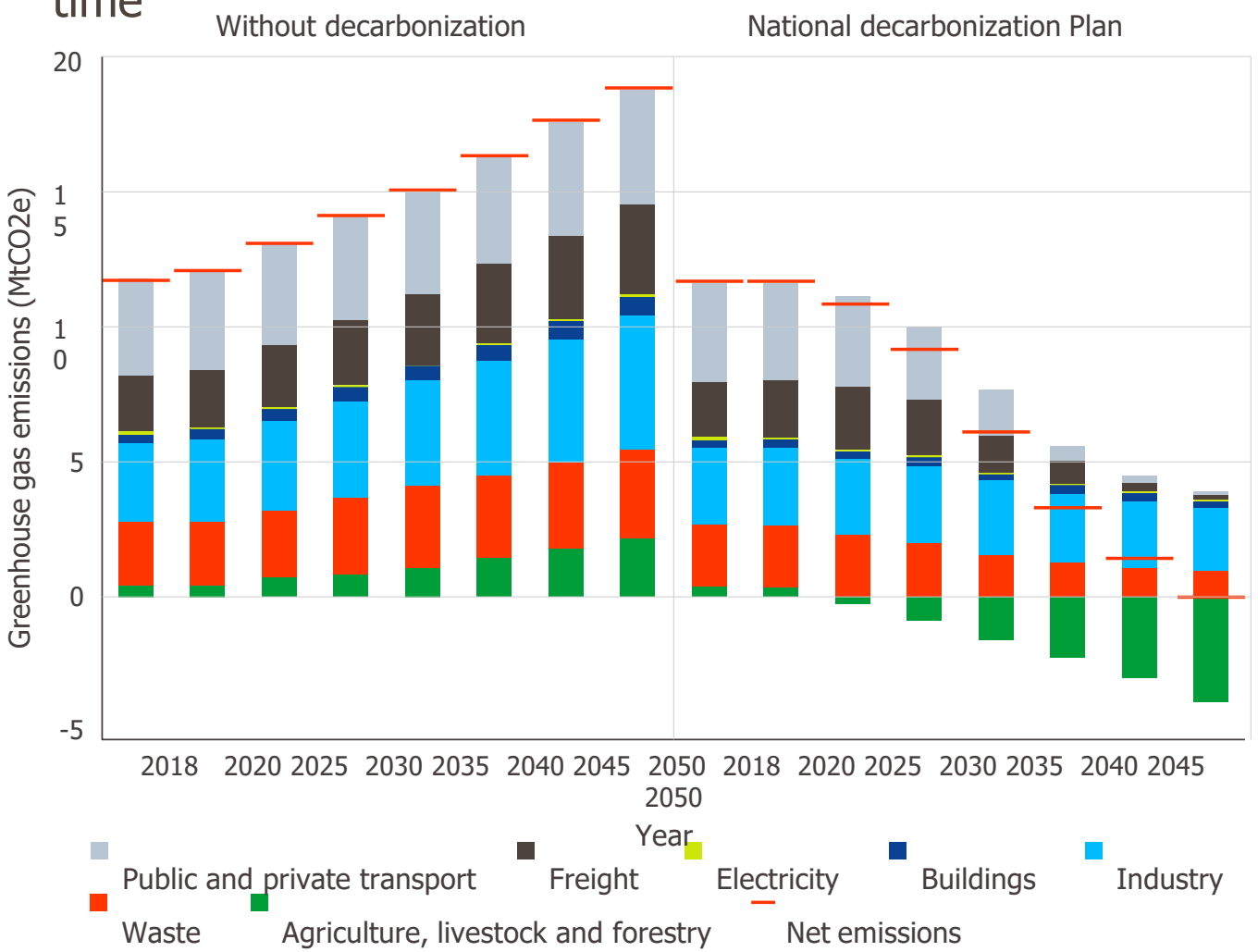
Further expanding and diversifying renewable electricity sources will be crucial to sustain the electrification of **transport, industry** and buildings, which is a pillar of the PND.

This requires **upgrading electricity grids and improving the operating eiciency of power systems**. Costa Rica has to advance in rolling out smart meters.

It calls for **engaging the private sector, mobilizing alternative sources of finance**, strictly enforcing regulations and providing adequate incentives.

How CIF can help Costa Rica's energy transition

Costa Rican Greenhouse Gas Emissions, by sector, over time



The CIF-REI financing and technical assistance will provide:

- Concessional financing to encourage a just and inclusive energy transition
- Adoption of new technologies and the enabling of new business models
- Leverage private sector participation, for greater integration of New Source of Renewable Energy
- Accelerate the decarbonization process of the Costa Rican economy

Costa Rica's CIF-REI Investment Plan

Summary of the Investment Plan (IP)

Support the decarbonization of the economy by accelerating the just energy transition, through **private sector participation**, in order to:

- ❑ Incorporating innovative technologies for the digitalization of electricity grids, enabling a greater integration of New Renewable Energy Sources (NRES) to the National Electric System.
- ❑ Reduce financial and technical barriers to the electrification of energy uses in transport and industry.
- ❑ Introducing value-added services to strengthen the relationship between the user and the grid, leading to a reduction in the cost of the service.

The IP has two components

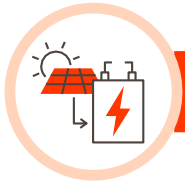
SMART GRIDS AND FLEXIBILIZATION OF THE NATIONAL ELECTRICITY SYSTEM

Aims to finance investments in projects to accelerate the process of digitalization, modernization, and automatization of electricity grids

ELECTRIFICATION OF ENERGY USES

Seeks to finance investments for the electrification of energy uses in public transportation with electric recharging stations and the replacement of industrial combustion equipment with electric alternatives.

Financing structure

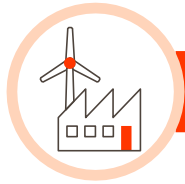


COMPONENT 1

Smart grids and flexibilization of the national electricity system

18.3 million USD CIF

+ 62.7 m USD (MDBs)
+ 154.15 m USD (Public and Private Sectors)



COMPONENT 2

Electrification of energy uses

48.7 million USD CIF

+ 57.3 m USD (MDBs)
+ 432.5 m USD (Public and Private Sectors)

USD 3.0 million in non-reimbursable technical assistance (NTA) for the components on mainstreaming gender and social inclusion approach

A total indicative of

70 MILLION USD from REI-CIF concessional resources

Which will leverage investments and financing

120 million USD – MDBs

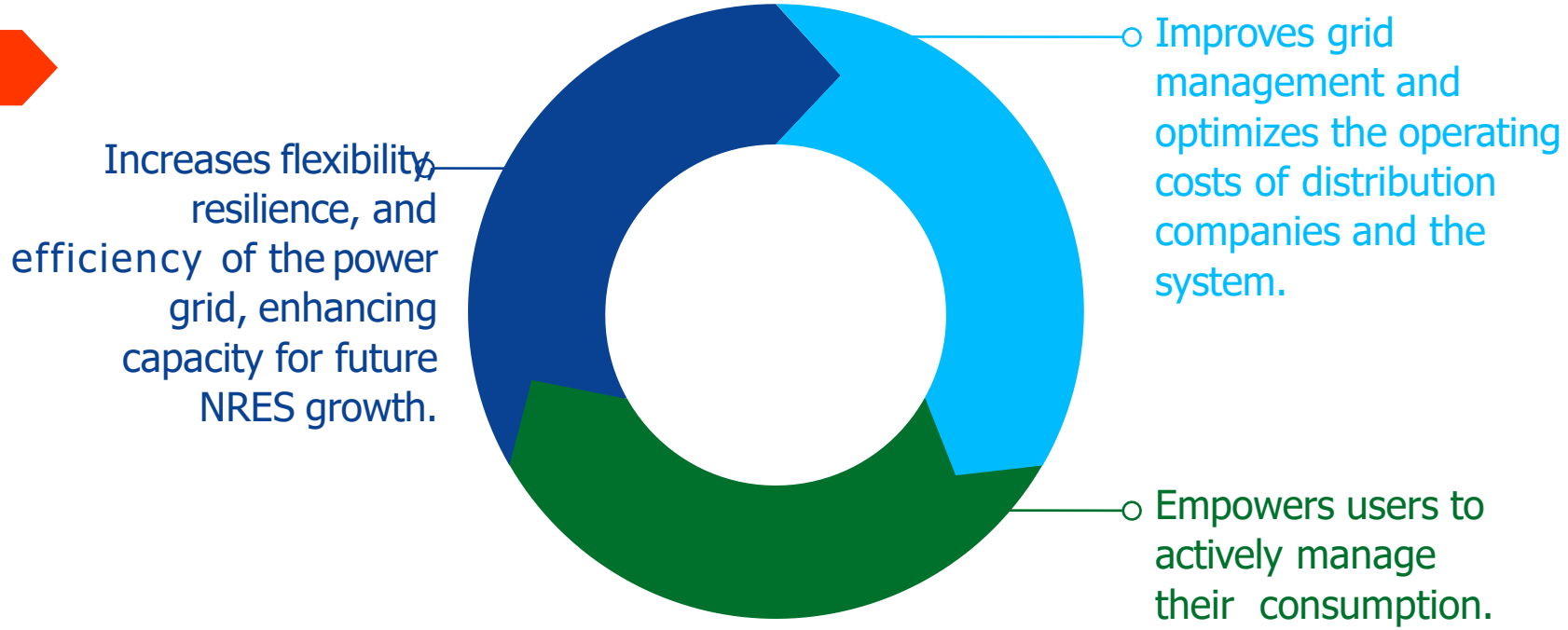
587 million USD – Public and Private Sector


Transformational Change

Transformational change (I)

COMPONENT

Installation of smart meters, network infrastructure, information, and communication systems



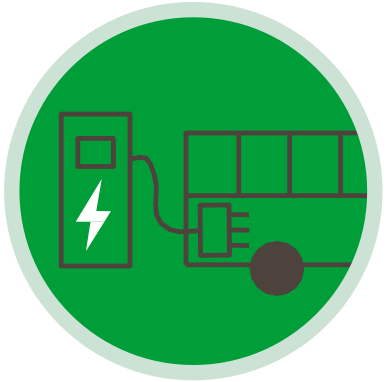
This will enable the prompt identification and management of grid events, minimize energy losses, optimize grid capacity, and provide distribution companies and consumers with detailed information on their consumption.

Transformational change (II)

COMPONENT 2

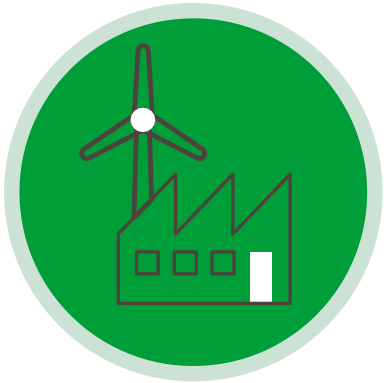
Charging stations for electric buses

Promotes the electrification of public transport enabled with the installation of charging stations and reduction on emissions.



Replacement of combustion equipment for electric

Accelerates the process of electrification of the industry with the replacement of combustion equipment and emissions



Summary of the plan: Expected Results

Increase Smart Metering Infrastructure

- ✓ Reach 67% (1,295,571 users) of smart meter coverage with the installation of 724,000 advanced metering system units.
- ✓ Reduce the cost of electricity service operation by USD 1.2 million annually through improved grid management resulting from advanced metering systems.

Acelerate the Electrification of Transport

- ✓ Provide charging infrastructure for 185 electric buses in the Greater Metropolitan Area (GAM), representing an additional annual demand of 21.3 GWh to be supplied with 36 MW of incremental renewable generation capacity.

Electrification of industry

- ✓ Replace combustion industrial equipment (boilers and heat pumps, among others) for electric ones with an annual demand of 19.2 GWh, requiring the addition of 35 MW in renewable generation capacity.

Reduction of GHG emissions

- ✓ Direct reduction of GHG emissions by avoiding the emission of 17,729 tons of carbon dioxide equivalent (tCO2e) per year due to the electrification of transport, electrification of industry and implementation of smart metering.

Gender diversity and social inclusion as part of our just transition

- Provide training on leadership and technical skills, especially in STEM areas.
- Promote women's participation in the labor force of non-traditional sectors such as energy and transport.
- Conduct targeted awareness campaign on the use of new meters and efficient energy use for women and other disadvantaged groups.
- Promote employment of women and train the trainers on the use of advanced metering infrastructure and customer service operations centers.
- Promote the participation of women and diverse groups in the operation and maintenance of electric buses.
- Incentivize companies to adopt gendered and inclusive human resources and procurement policies.

Final Remarks

We have the momentum for action!

The Costa Rica's IP is the result of a cooperative process between the Government of Costa Rica and both the Inter-American Development Bank and World Bank

The decarbonization of the economy requires the **concerted action of the public and private sectors, civil society, and development partners**.

The elimination of fossil fuel consumption through the electrification transportation and industry will **benefit the general population**.

Activities that will be financed or co-financed through the IP, will generate **long-term jobs** that will be an important indicator to be assed and monitored through project.

To support the decarbonization of the economy by accelerating the just energy transition, through **greater private sector participation**.

Thank you!

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