





OAXACA, OAX., FEBRUARY 2021.

Mexico suffers from the lack of electricity

Depending on natural gas as a fuel to generate electricity, most of it imported, cannot provide enough guarantees for Mexican people to count with this service

> Congregación Mariana Trinitaria through its Welfare Ecosystem, aims to contribute and increase the opportunities to have electricity for thousands of people who still do not have access to that service.

hat seemed to be just another blackout in the middle of February, ended up affecting 42 million customers of the Federal Electricity Commission (CFE) in 26 states in the Mexican Republic, with an economic loss of more than two thousand 700 million dollars.

The origin of this massive blackout was a winter storm in the South of the United States, which complicated the transportation of natural gas, and as a consequence, the generation of electricity in Mexico, which revealed the energetic dependency of the country.

This situation emphasizes a crisis that Mexico has always had, the lack of electricity for hundreds of thousands of people, which impedes them from having a decent life.

According to the Secretary of Energy, based on the most recent data from 2018, 28 million dollars of exportations of natural gas were used to generate 60 percent of the energy in Mexico, and imports reached seven thousand 320 million dollars, and 80 percent of those came from Texas.

This dependency shows that in the year 2000, 20 percent of the total electricity in Mexico was the result of natural gas, while in 2020 the number tripled. Over the last 10 years, seven out of 24 natural gas connections between Mexico and the USA started operations, being Texas the state with most connections, with a total of 15.



128,167.900 gigawatts-hour

Were produced in 2019 according to the Secretary



5,602.100 gigawatts-hour Were produced in nuclear power plants



14,141.400 gigawatts-hour Were produced in coal power plants



89,374.800 gigawatts-hour

Were produced in thermoelectric plants (oil, natural gas, coal, wood, and uranium)



15,479.100 gigawatts-hour Were produced in



gigawatts-hour

Were produced in geothermal electric plants



934.300 gigawatts-hora Were produced in **Eolic plants**

HOW IS ELECTRICIT PRODUCED IN



A denied right

Electricity coverage in Mexico is different in every source, according to the National Council of Evaluation of Social Development Policy (CONEVAL), 0.4 percent of the population do not have access to this service, which represents 500 thousand people.

On the other hand, the National Program of Development on Electricity 2018-2032, identified that in 2019, 1.5 percent of the population did not have electricity, which represented 1.8 million people.

"The use of electricity is necessary for almost all human activities. The availability of it is a basic requirement for development and the possibility of having a decent life. Electricity is as necessary as a suitable distribution of water" that was mentioned in the research 'Universal access to electricity', performed by the Deputies Chamber.

Additionally, electricity can provide hydric resources to big and small settlements with suitable measures on sanitation. Water and energy are indispensable to have sanitary conditions and to contribute to the optimization of food production, was also mentioned in that research.









CONEVAL mentions that Chihuahua, Durango and Nayarit have low availability of electricity for people in rural communities, however, regarding communities of indigenous language speakers, in Durango only 43 percent of them get that service, and in Chihuahua, only 59 per-

It is evident that electricity is just part of the problem, as 0.4 percent of Mexican population lacked electricity in their houses in the year 2018, but 11.7 percent of the population lived in paces where wood or charcoal were used to cook, and they did not have a chimney; while 10.5 percent of those houses did not have stoves either using gas or electricity. In addition to that, 7.3 percent of those did not have a restroom facilities.

CMT and energy

Congregación Mariana Trinitaria, A.C. (CMT) through its Welfare Ecosystem, in its network about electricity aims to increase the opportunities to have access to services of sustainable energy with the objective of improving the quality of life, especially in houses and communities in vulnerable situations, by means of the generation of electricity in small and medium scale, and the transference of saving equipment.

CMT is aware that nowadays there are communities with limited access to sources of energy, in some populations the use of vegetal charcoal to keep their inhabitants has negative impact not only on the environment, but also in the people's health. The lack of energy in some communities implies the reproduction of cycles of margination and poverty.

Components and CMT solutions

Sub-network Component

Sustainable technologies

Generation of

Ecotechnologies at home

Generation of individual energy

Small-scale energy

Integral solutions Heaters

 Solar stoves Pyrolytic stoves

Energy saving bulbs

Diesel generators

Solar panels

Biodigesters

Biogas Biomass

Mini hydraulic plants

• Plants to recycle solid urban wastes



TOWARDS ADVERSITY, SOCIAL FRATERNITY **EMBRACES A SPIRIT OF** CONSTRUCTIVE CHANGE

