

# RENEWABLE ENERGY

## Renewable Energy Development Program

Algeria intends to be an important player in the production of electricity from the photovoltaic and wind sectors by integrating biomass, cogeneration, geothermal and eventually thermal solar, under its renewable energy program.

These energy sectors will be the driving force for a sustainable economic development model. This is a real investment opportunity.

According to the initial forecast government program, 37% of installed capacity by 2030 and 27% of electricity generation for domestic consumption will be of renewable origin.

Algeria considers the solar energy, which is widespread on the territory as an opportunity and a lever for economic and social development, particularly through the establishment of industries that create wealth and jobs.

Moreover, several wind farm projects and the implementation of experimental biomass, geothermal and cogeneration projects are launched.

The sustainable and flexible energy model for 2030 and 2050 will be based on:

- the energy saving potential in all business sectors,
- the progressive integration of renewable energy into the energy mix,
- using all existing and exploitable energy potential such as nuclear power.

This new energy model will enable Algeria to move away from dependence on fossil fuels, ensure its economic and social development and finally leave a legacy for future generations.

The multi-annual program for the development of renewable energy and energy efficiency, adopted by the Government in February 2020, sets a target of 15,000 MW by 2035. This program will consider the existing potential and absorption capacity of the national electricity transmission and distribution network.

1,000MW of electricity from renewable sources is planned to be generated annually, as the first objective of the energy transition and renewable energy sector. Preparations for the launch of 1,000 MW of solar photovoltaic power plants are planned for 2021.

The other priority of the energy transition and renewable energy sector is the project to hybridize power plants in the south of the country that operate from conventional sources, including diesel, with solar photovoltaic production.

Algeria's strategy in this field aims to develop a genuine renewable energy industry, together with a training and knowledge-building program, which will eventually make it possible to employ local Algerian engineering, particularly in the field of engineering and project management.

The Renewable Energy Program, for the electricity needs of the national market, will create several thousand direct and indirect jobs.

## Energy efficiency action plan

Energy transition and energy efficiency are expected to play an important role in the national energy context, which is characterized by strong consumption growth driven by the domestic sector, with the construction of new housing, the construction of public utility infrastructure and the revival of industry.

According to the Ministry of Energy Transition and Renewable Energy, the energy efficiency policy aims to achieve 10% energy savings, which will result in 6 million tons of oil equivalent (45 million barrels of oil) that can be left for future generations.

Achieving this program through various actions and projects should, in the long term, foster the emergence of a sustainable market for energy efficiency in Algeria.

The economic and social impact of integrating the energy efficiency into the various business sectors is manifold. This integration improves the citizen's living environment but is also an appropriate response to energy conservation challenge with its involvement for the national economy, by creating jobs and wealth, as well as preserving the environment.

The program focuses on consumer sectors that have a significant impact on energy demand. These are mainly construction, transport, industry, and water resources.

The last edition of the World Economic Forum report in Davos (Switzerland), published in May 2020, revealed that Algeria ranked 83<sup>rd</sup> in the energy transition index, gaining 6 points compared to 2019. Thus, in 2020, Algeria achieved a score of 49.1 % in the Energy Transition Index (ETI), compared to 48% in 2019.

Integrating renewable energy into the national energy mix is a major challenge in the context of preserving fossil resources, diversifying electricity production, and contributing to sustainable development. Through the renewable energy development program mentioned above, these energies are at the heart of Algeria's energy and economic policies, including the development of large-scale photovoltaic and wind energy, the introduction of biomass (waste recovery), cogeneration and geothermal energy, and eventually the development of solar thermal energy.

The strategy for the development of renewable energy is backed up by the establishment of a National Research Program (PNR) in Renewable Energy whose main scientific objectives are

to evaluate renewable energy deposits and to control the processes of conversion, transformation, and storage of these energies and to develop the necessary know-how, from the study to the completion of the on-site installations.

Sources:

Ministry of Energy.

Ministry of Energy Transition and Renewable Energy.

Renewable Energy Development Center.

Comparative study prepared by the Euro-Mediterranean Forum of Institutes of Economic Sciences (FEMISE).