Country Report

CEREFE
المحافظة للطاقات المتجددة و الفعالية الطاقوية

ALGERIA

2025

Ghania AFFIF CHAOUCHE

PRENSENTATION PLAN

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- ❑Primary Energy Supply in Algeria
- ❑Final Energy Consumption
- ❑ Electricity Generation and Consumption
- ❑ National Renewable Energy Roadmap
- ❑ National Hydrogen Strategy

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COUNTRY PROFILE

Category	Data
Country Name	People's Democratic Republic of Algeria
Capital	Algiers
Official Languages	Arabic, Tamazight
Currency	Algerian Dinar (DZD)
Total Area	2.38 million km²
Climate	Mediterranean (North), Arid (South)
Population (2023 est.)	≈ 45 million
Number of Households	≈ 8.5 million

ECONOMIC INDICATORS

Indicator	Value (Latest Available)	Unit	Date/Period
GDP (Nominal)	$247.63 Billion	USD	Dec-23
GDP Growth (Annual)	0.042	Percent	Dec 2024 (Annual)
GDP Growth (Quarterly)	0.02	Percent	Sep-24
Exports	$12.176 Billion	USD Million	Mar-24
Imports	$11.194 Billion	USD Million	Mar-24
Crude Oil Production	920 BBL/D/1K	Barrels/Day	May-25

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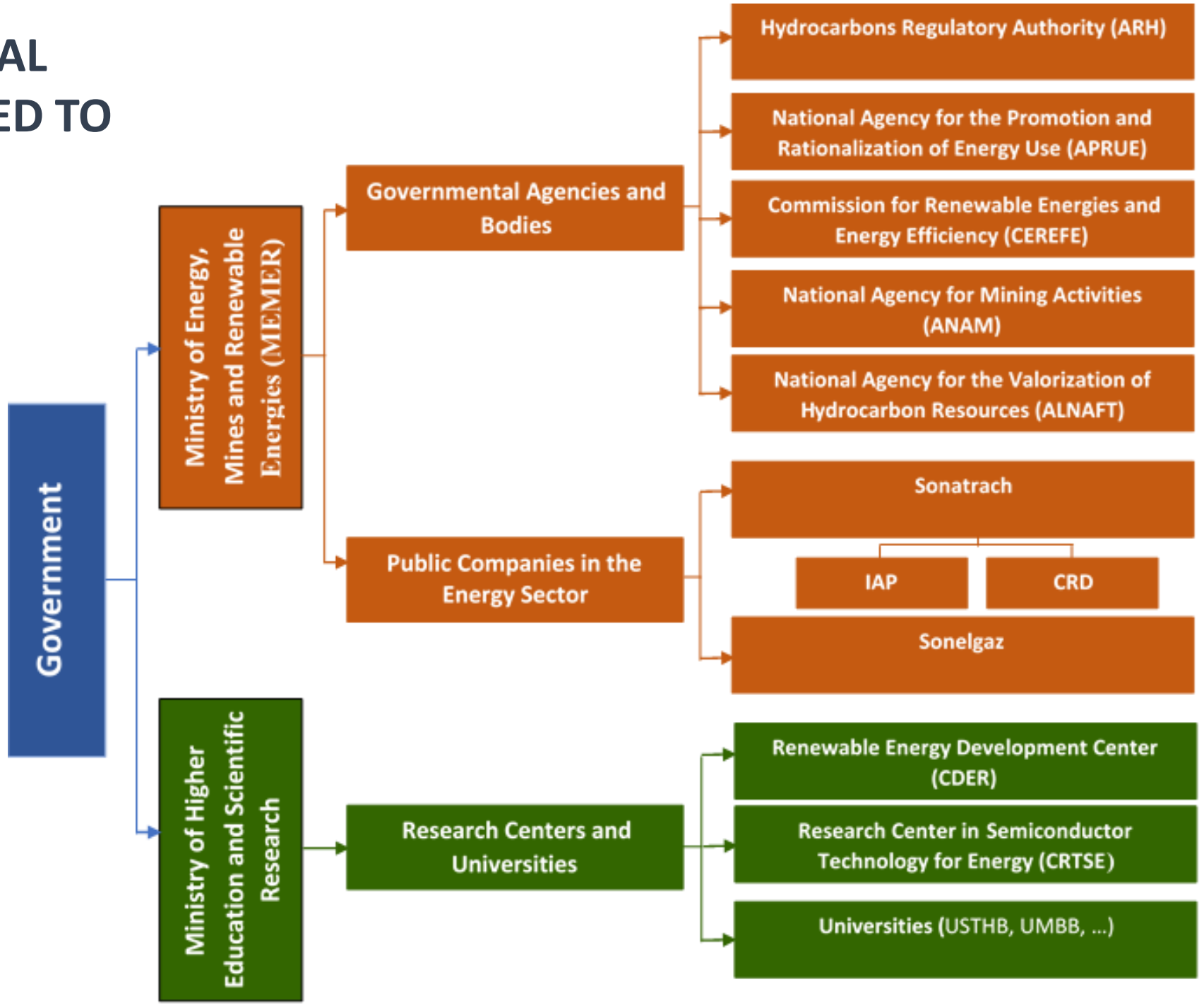
ORGANIZATIONAL STRUCTURE RELATED TO ENERGY



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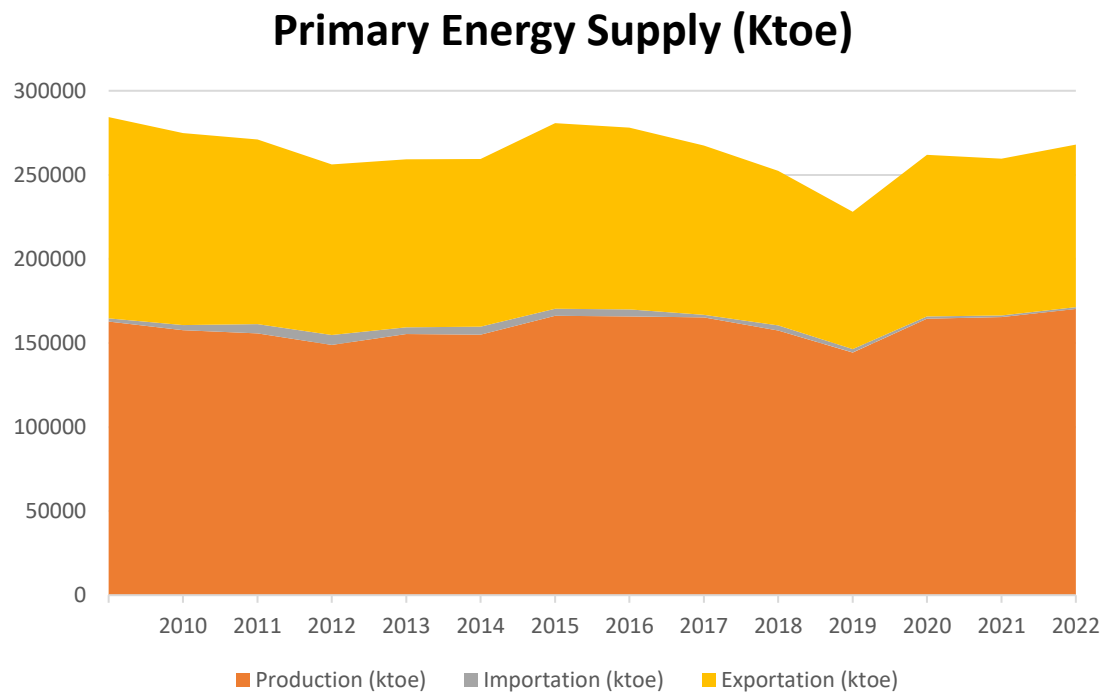
Primary Energy Supply in Algeria - 2022



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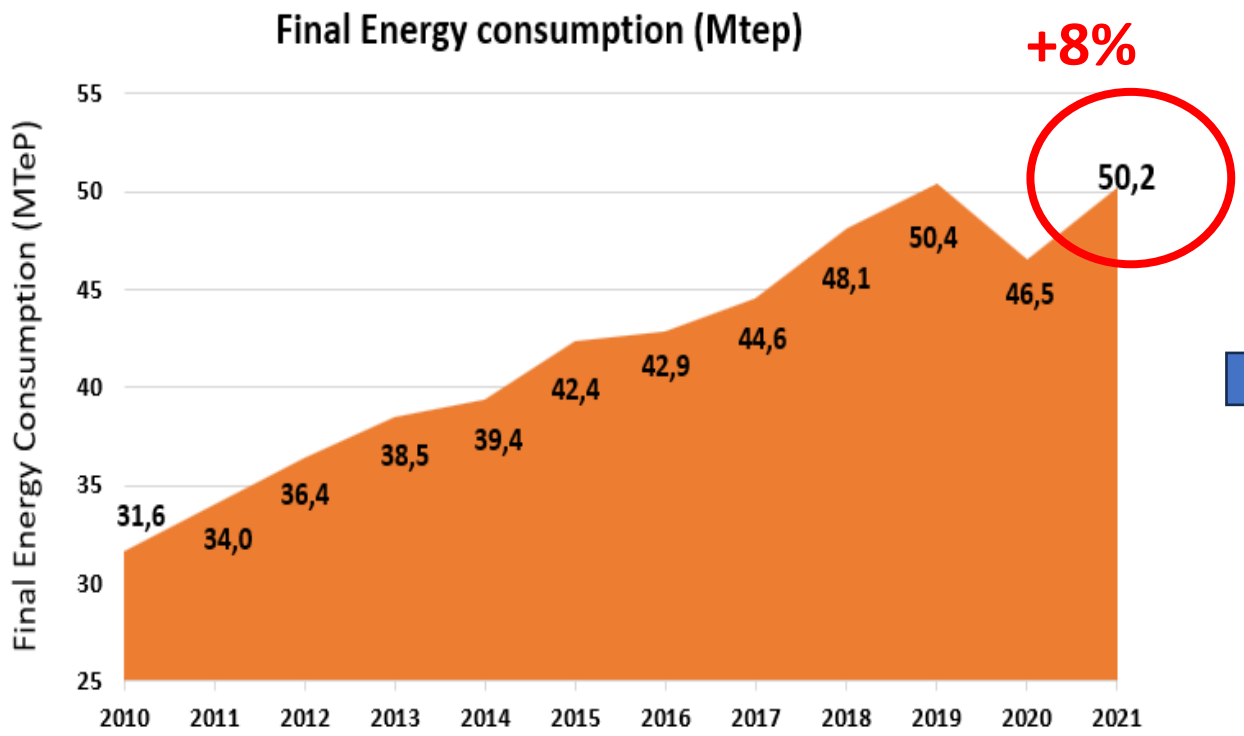
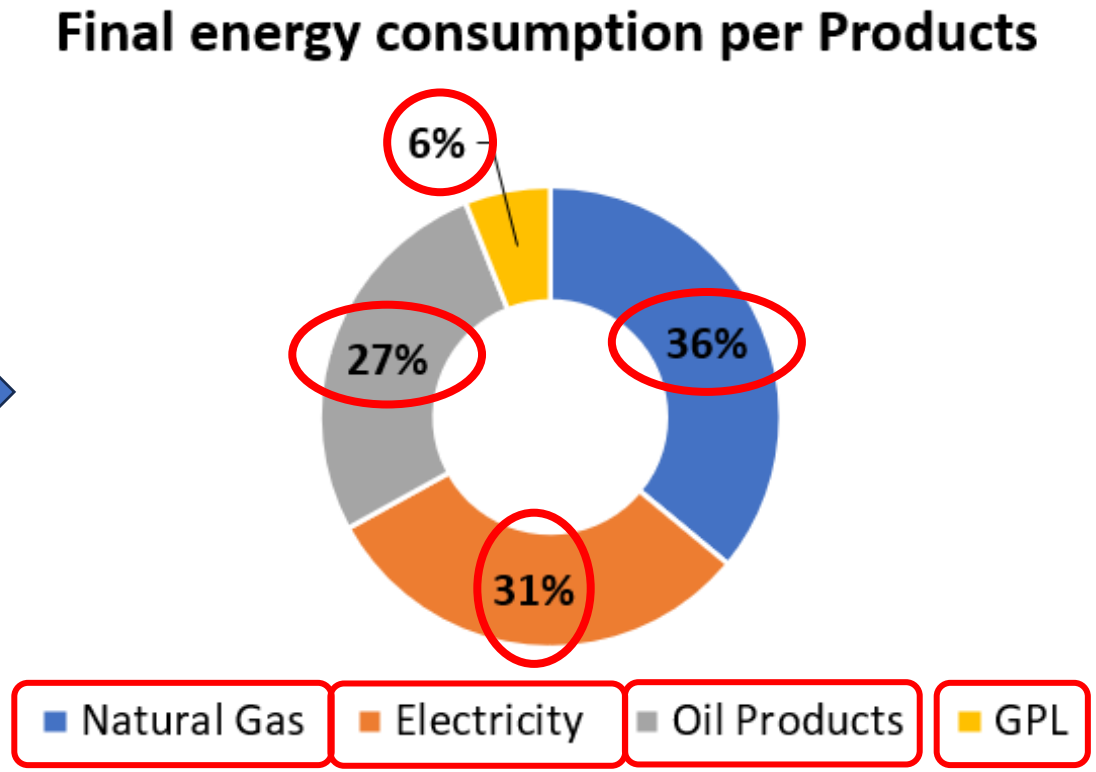
Final Energy Consumption in Algeria - 2021





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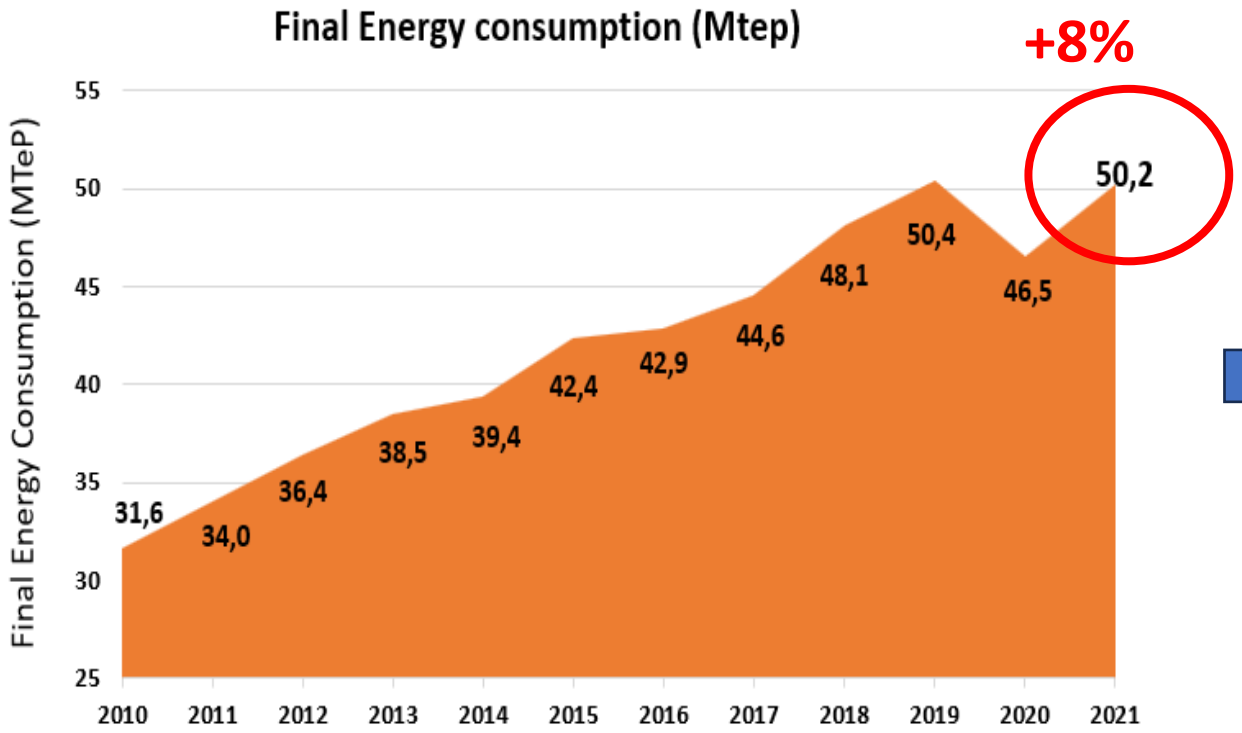

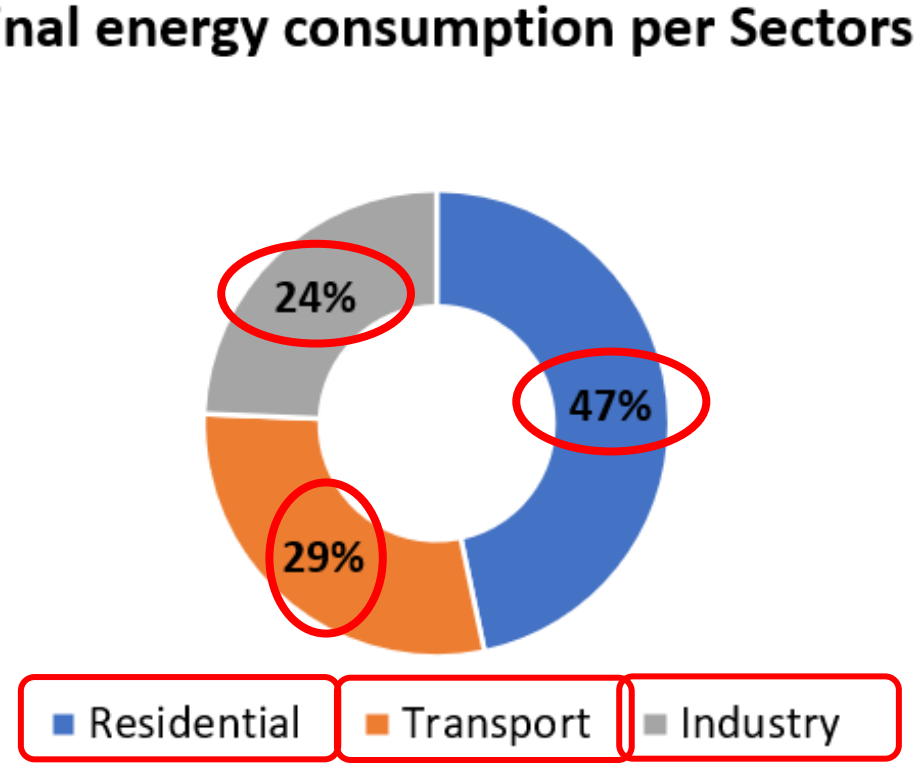

Electricity Generation & Consumption in Algeria

ELECTRICITY GENERATION AND INSTALLED CAPCITY

1) Total electricity **installed capacity** (up to 2022) : **25.77 GW**

Non-RE : **25.18 GW** ✚ RE : **589.7 MW**

2) Total electricity **generation** in 2021: **85.4 TWh**

Non-RE : **84.7 TWh** ✚ RE : **662 GWh**

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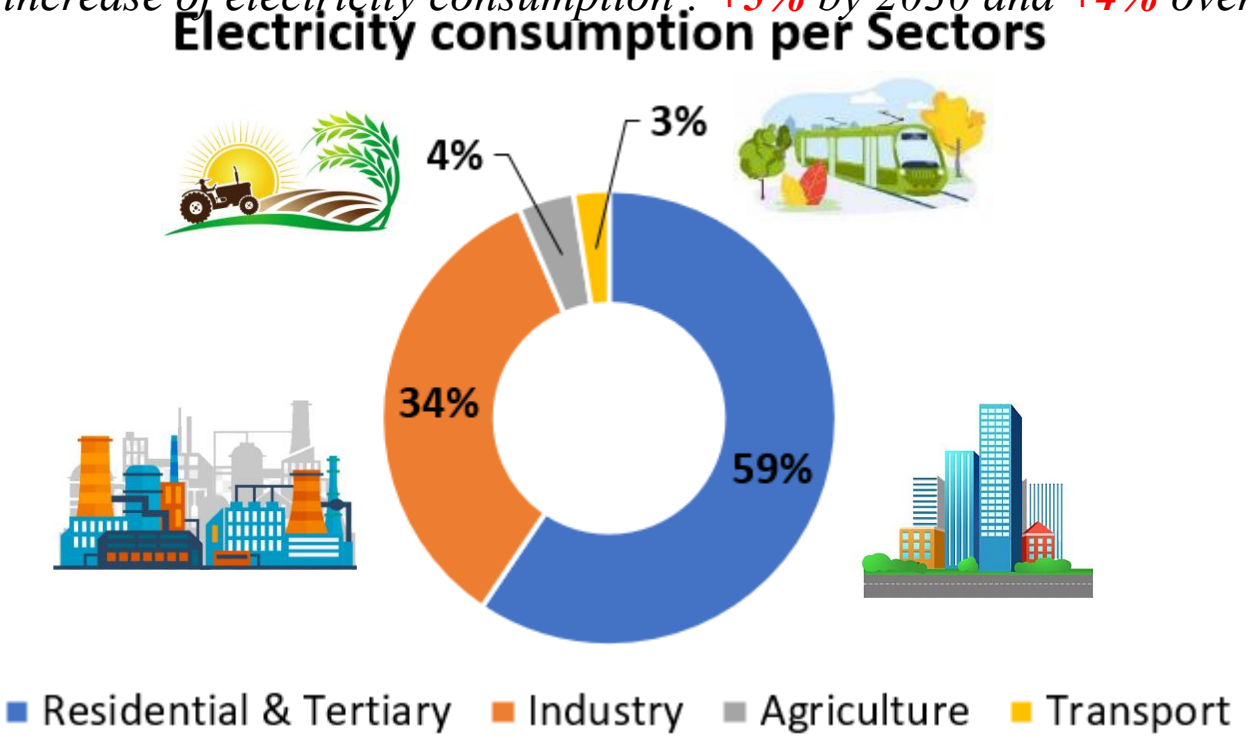
Electricity Generation & Consumption in Algeria

ELECTRICITY CONSUMPTION

- Total electricity consumption in 2021 : **63.44 TWh** (**+5.9%/year**)

NB: *Forecasted annual increase of electricity consumption : +5% by 2030 and +4% over the period 2030-2040.*



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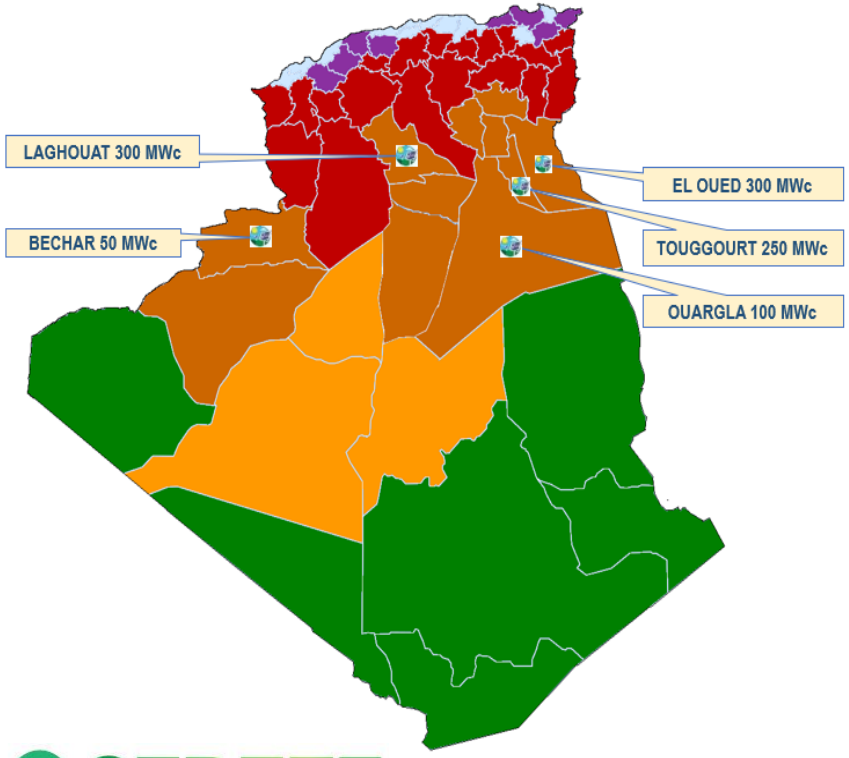
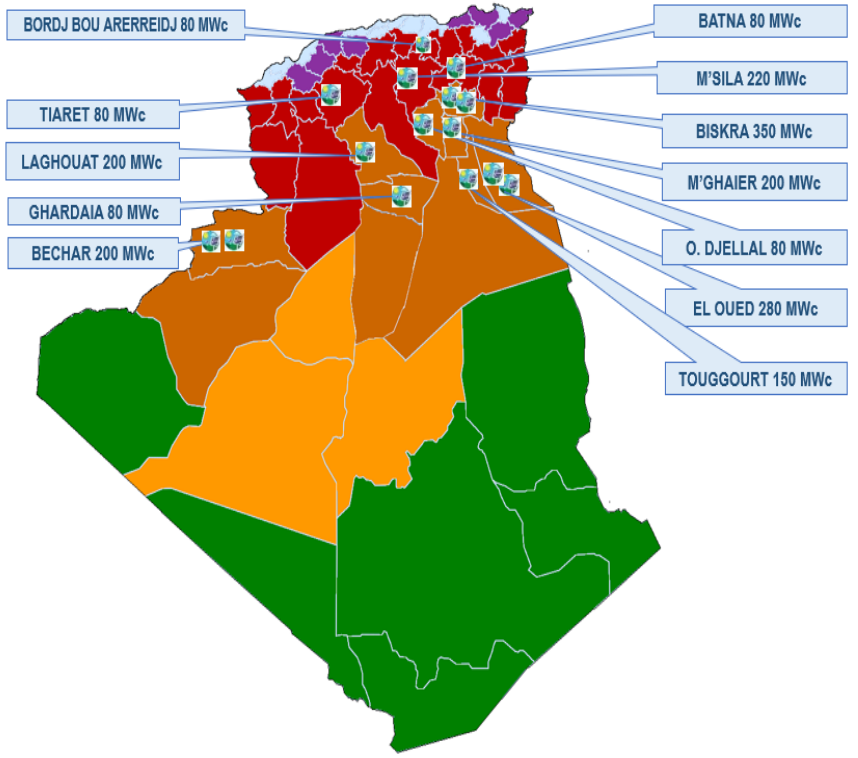
National Renewable Energy Roadmap

✓Government Plan (2021) → **By 2035: 15 GWp** *(large-scale photovoltaic solar power plants)*

2022 : 1 GWp



2023 : 2 GWp



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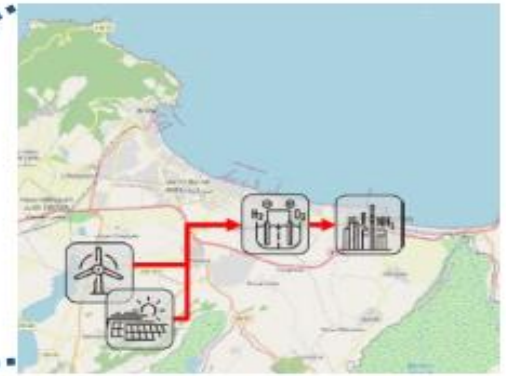
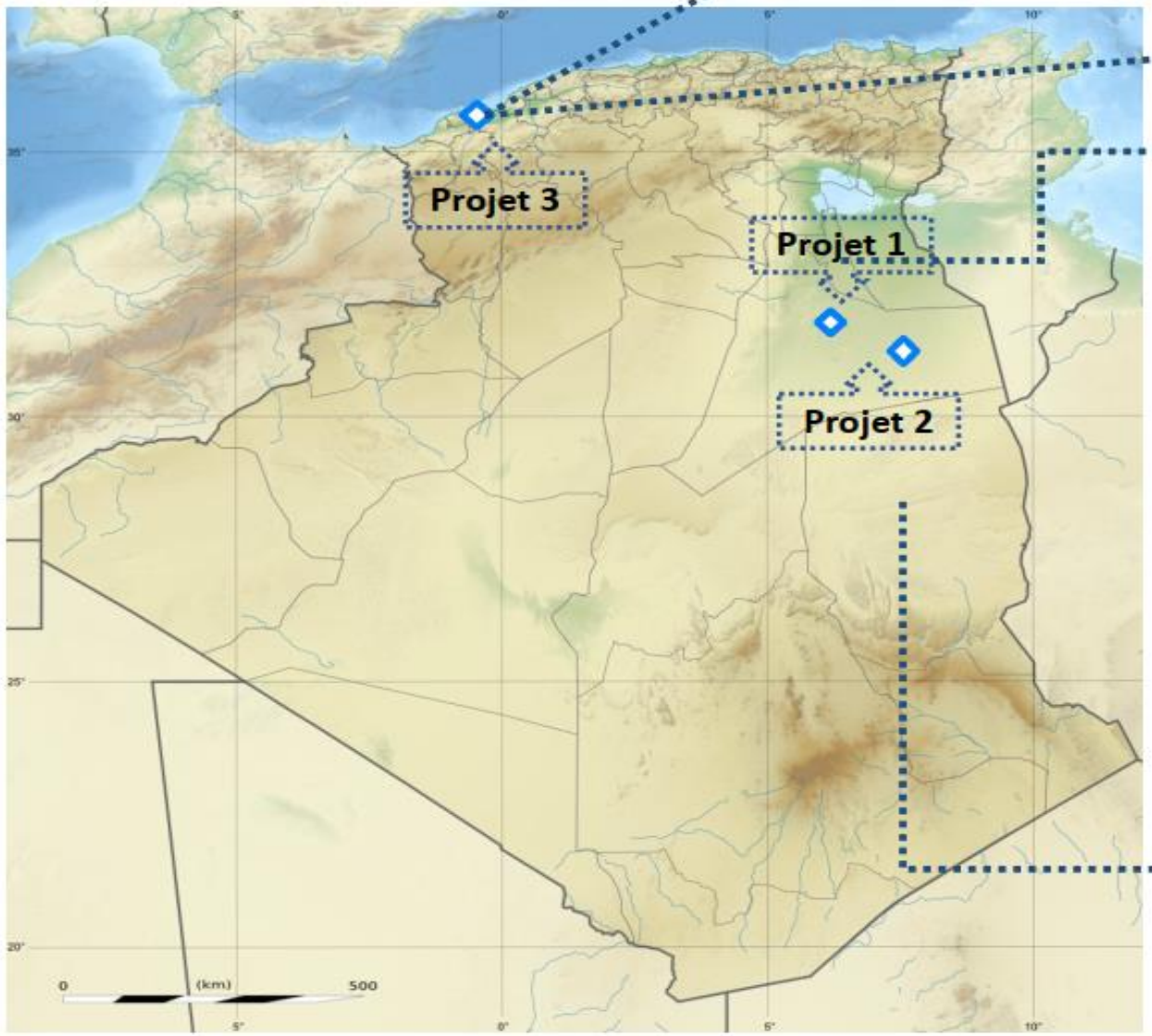
National Hydrogen Strategy

The national hydrogen **strategy** adopted by the Government (publication : End 2023) aims to:

- ❑ Diversification of the energy mix with clean and sustainable energy
- ❑ Technological mastery of the entire hydrogen value chain
- ❑ Creation of a Hub for the production and export of hydrogen
- ❑ Production of **40 TWh** by 2040 (10% of Market share of the EU H2 demand)



Arzew : 50 MW electrolyser
(70% PV and 30% wind)



Hassi Messaoud: 4 MW ALK electrolyser
8 MW PV/Wind power plant

Electrolyseur PEM de 2 MW
PV/Eolien de 4 MW

National Hydrogen Strategy

The roadmap for the development of Hydrogen will go through **three phases**:

By 2030	Development of “Green & Blue” hydrogen pilot projects
2030-2040	Industrialization of “Green or Blue” hydrogen projects
2040-2050	Deployment of “Green or Blue” hydrogen in industries that are difficult to electrify

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Major Challenges and Bottlenecks

- High Dependence on Fossil Fuels: Over 90% of energy production relies on oil and gas.
- Limited Private Investment: Renewable projects face funding issues due to low incentives.

Subjects I Would Especially Like to Learn (in Japan)

- Design and implementation of national energy policies in Japan.
- Energy modeling and scenario planning for long-term strategies.
- Effective policy instruments to support renewable energy development.
- Gain deeper understanding of Japan's reference renewable energy systems and how they are integrated nationally.
- Improve my leadership skills in renewable energy policy planning through exposure to Japanese methodologies.
- Benefit from Japan's experiences and best practices, and contribute to applying acquired knowledge in my country.

Expectation of My Supervisor

- Acquire practical insights during the training in Japan to contribute to Algeria’s energy transition.
- Strengthen our institution’s capacity in international energy cooperation.
- Apply learned concepts to national strategies on hydrogen and renewables.

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Thank you

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