

Renewable Energy and Climate Change Conference

Energy Policies in Tunisia Feasible Solutions for Energy Security

June 29, 2024
Tunis

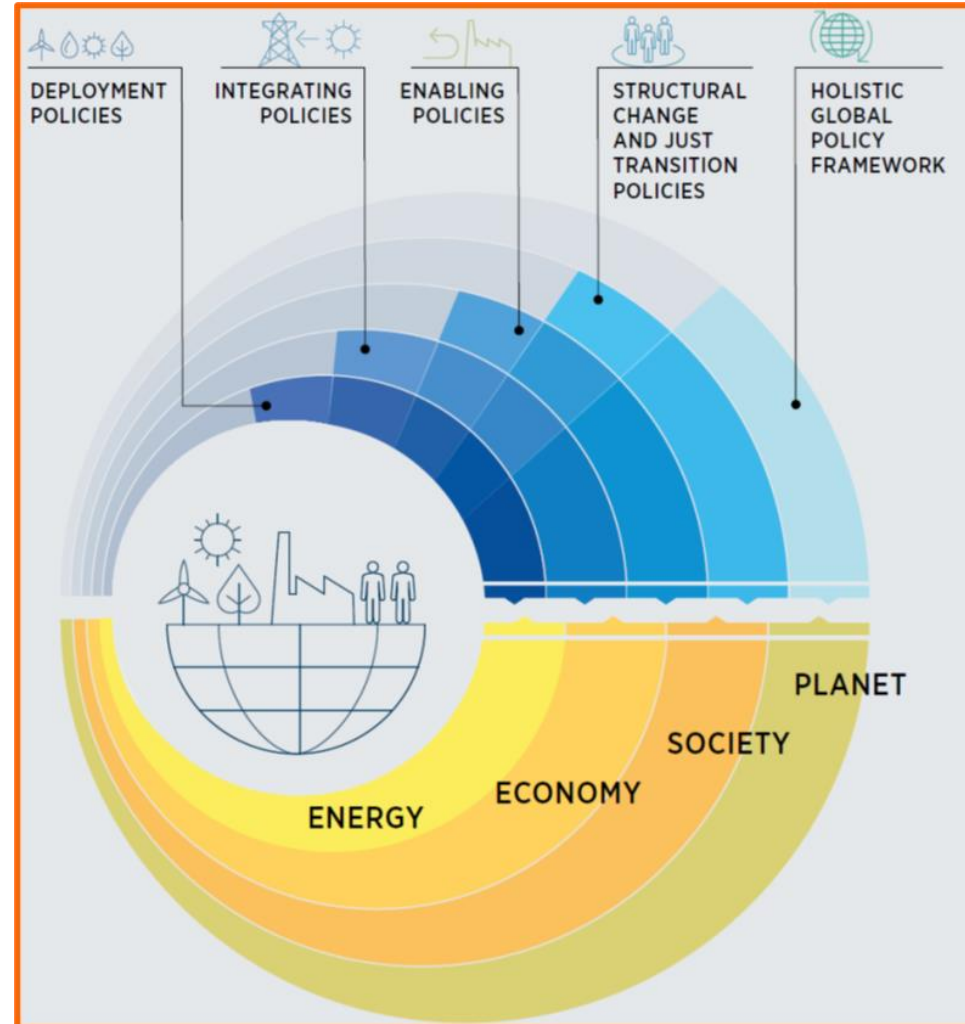
Elements of the Energy Policy Brief

➤ An overview of energy policy and its key figures

➤ Key messages in energy policy and its role in sustainable development

➤ Reforming the energy sector and accelerating the energy transition

➤ Energy is the fuel for sustainable development





An overview of energy policy and its key figures

Energy in Numbers: Energy Deficit

➤ **Energy deficit increased from year to year: In 2022:**

- ❖ the deficit in oil and gas reached 60% without counting the royalty on the transit of Algerian gas within the national resources,
- ❖ Tunisia imported 12% of electricity

➤ **A sharp decline in production:** In 2022, compared to 2021,

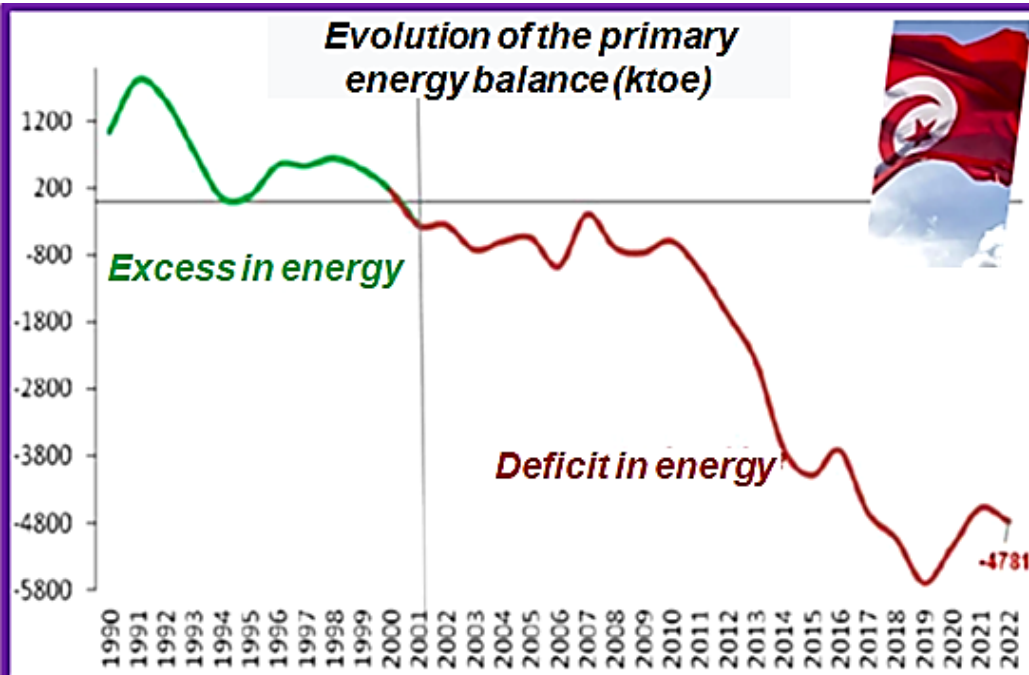
- ❖ the national production of crude oil decreased by 12% and,
- ❖ the natural decreased gas by 7%.

➤ **Increase in consumption:** In 2022, compared to 2021,

- ❖ the total demand for primary energy increased by 2%,
- ❖ a 5% increase in electricity consumption,
- ❖ a 0.8% increase in demand for petroleum products, and
- ❖ a 4% decrease in demand for natural gas.

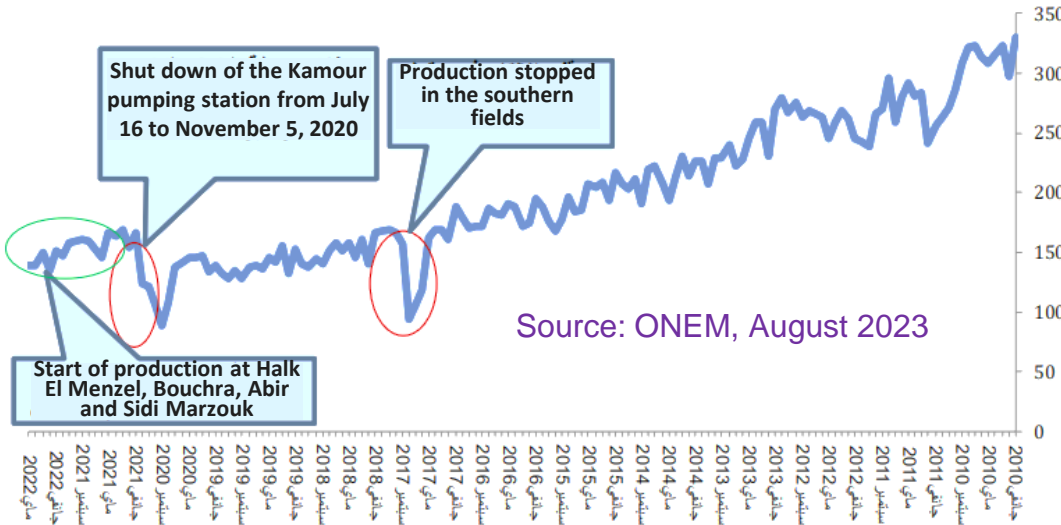
➤ **A very weak contribution of renewable energies to the current energy system:**

- ❖ 4% of electricity production, which in turn represents approximately 19% of final energy consumption.

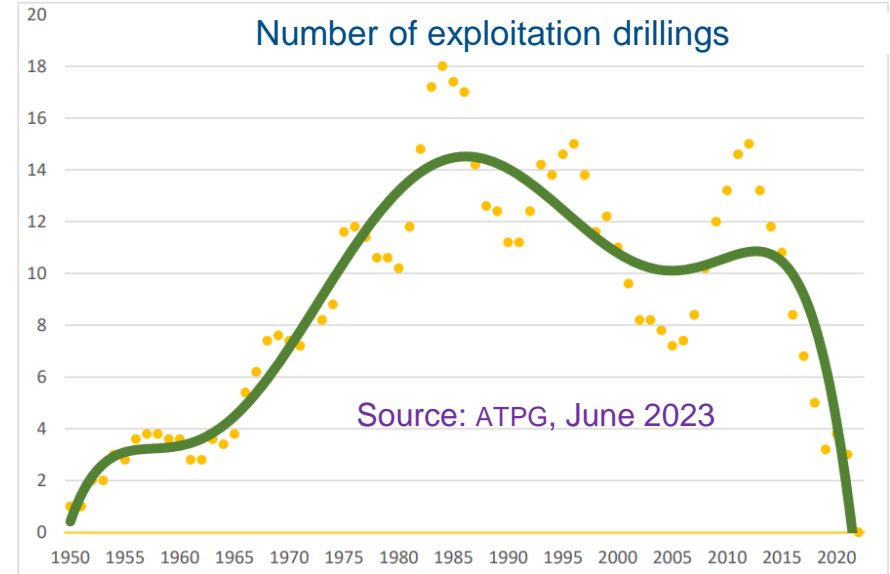


Energy in numbers: exploration and production

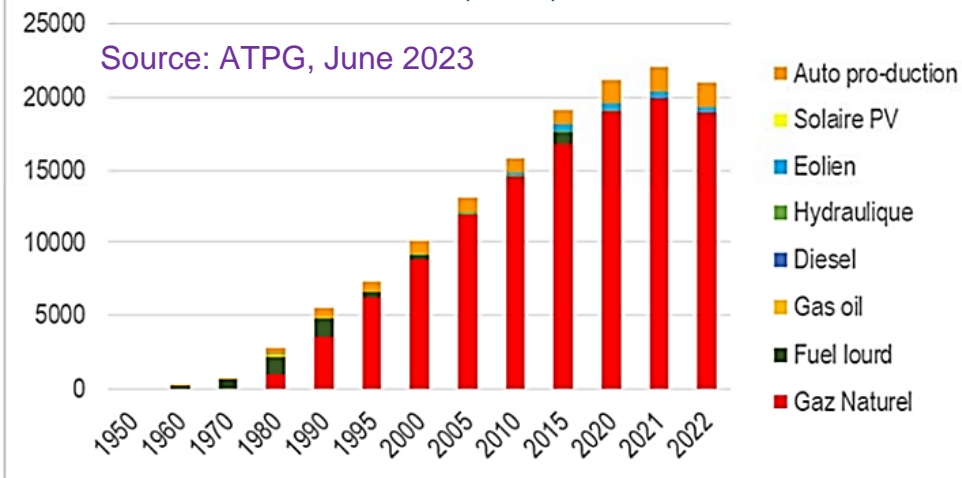
Monthly production of crude oil, (thousand tons)



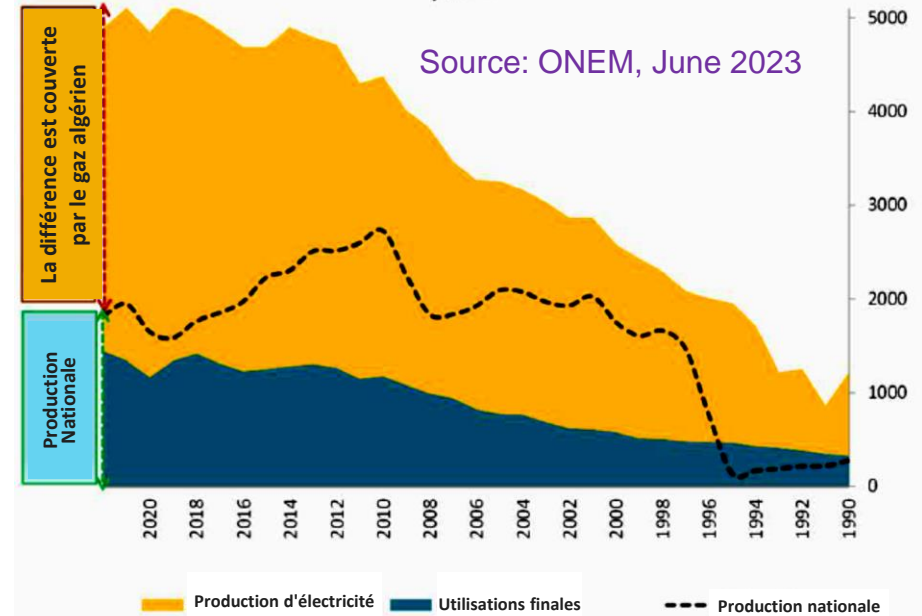
Number of exploitation drillings



Electricity production by form of primary energy (GWh)



Comparison between gas production and consumption 1990-2022 (in thousands of tons of net thermal capacity)



Main features of the energy strategy¹

- Effective management of primary energy demand (reducing demand by 30% in 2030 and 37% in 2035).
- Strengthening and accelerating the renewable energy program (contributing to electricity production by 35% by 2030 and 50% by 2035).
- Accelerating the energy efficiency program
- Developing sectorial integration of the electricity sector (enhancing network interconnection).
- Promoting oil and gas exploration and production
- Establishing a fair and effective energy subsidy system
- Creating favorable conditions for the development of **new energy technologies**: mainly **green hydrogen and its derivatives** (A green hydrogen strategy is currently being developed), but also electric transport, digitalization, smart grid, storage, decentralized electricity production...



Key messages in energy policy and its development role

Key messages in energy policy and its development role: **The energy transition is a priority**

- Declaring the **energy transition** a top social and economic priority.
- Embedding the energy transition implementation plan in the **National Program for Sustainable Development**, the **Energy Strategy**, and the **Climate Change Policy**.
- Reforming the **regulatory, institutional and governance framework** to encourage and accelerate the **production of renewable energies**.
- Removing obstacles that prevent the development of **renewable energy** projects and enhancing **production incentives**.
- Preparing the electrical system for **transportation electrification** requirements.
- Supporting academic-scientific-industrial cooperation in **clean energy technologies**.



Key messages in energy policy and its development role: **The role of oil and gas**



- Recognizing that oil and gas resources will remain essential for the foreseeable future.

- Promoting oil and gas exploration and developing a list of strategic geographical objectives (this will significantly reduce the energy deficit in the shortest time).



- Reforming energy subsidies to alleviate the macro-fiscal crisis and stimulate the clean energy transition, especially energy self-production and energy efficiency.

Key messages in energy policy and its development role: **Green hydrogen**

➤ Accelerating the development of the **national strategy for green hydrogen**, implementing model projects, and participating in regional and international cooperation.

➤ **Involving the private sector** in developing renewable energy and green hydrogen to enhance the chances of success of these programs.

➤ Reducing and addressing **water's energy footprint** (in extraction and conversion) and in large green hydrogen production programs.



Key messages in energy policy and its development role: **Regional development**



- Capitalizing on Tunisia's strategic geographical location as a center for international trade and international cooperation in the field of energy (including electricity) and green hydrogen.
- Coordinating policies at the regional level and adopting approaches that consolidate integration and cooperation between the countries of the region.
- Protecting the Mediterranean Sea from the negative effects of the widespread use of green hydrogen production and excessive exploitation.
- Reshaping relations with the European energy system by establishing and operating efficient and sustainable production capacity and transportation networks for clean energies and transporting green hydrogen across both shores of the Mediterranean.



Reforming the energy sector and accelerating the energy transition

Energy sector reform axes

ENERGY REFORM

- Requiring to draw up a clear and sustainable energy strategy
- Reviewing the legal systems and restructuring the energy sector
- Promoting investment in energy and energy transition (in renewable energies and fuels)
- Developing integrated programs to reform consumption systems and reduce the energy deficit






A plan to reform the system of hydrocarbon exploration and production

1. Development of the means of communication with concerned parties to improve the image of the sector to be **adopted as a development engine**.
2. Reconsideration of the **exploration system** to develop and valorize the national reserve.
3. Structural rehabilitation of the sector and its reform for the sake of greater **governance, efficiency and competitiveness**.
4. **Development of the national production** to reduce the growing energy deficit and support its efficiency and governance.
5. Improvement of the **competitiveness and marketing of the Tunisian destination**.

Key issues in energy transition

- 
- Accelerate the renewable energy agenda requires strong and effective governance and high capabilities
 - Launch an ambitious national program for self and decentralized electricity production
 - Digitizing the electricity system is essential for the success of the energy transition
 - How can companies contribute efficiently to the energy transition?
 - Develop an electric transportation strategy
 - Green hydrogen economy
 - Why was nuclear energy not included in energy policy?
 - Other important issues: energy subsidy reform, the issue of carbon pricing in climate change policy, and hedging in fuel prices.



Energy is the fuel for sustainable development

- The Water-Energy-Food-Ecosystems Nexus
- Potential for employment and economic growth
- The Energy-Digital Nexus

Potential economic impacts until 2030 of the energy transition²

According to the IMPACT economic study, investments consistent with the 1.5% target in sectors including clean energy generation, electricity grids, electric road transport and clean hydrogen could support more than 20 million jobs and add more than 4 % to global GDP by 2030.



²(Sizing the energy transition, The Economist, January 2022)



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Thank you for your attention