



## solar and wind power generation systems in Tunisia

What percentage of Tunisia's electricity is renewable? In 2022, only 3% of Tunisia's electricity is generated from renewables, including hydroelectric, solar, and wind energy. While STEG continues to resist private investment in the sector, Parliament's energy law encourages IPPs in renewable energy technologies. Can Tunisia become energy independent? Tunisia has the potential to become energy independent and to transform itself from an energy importer to an energy exporter. Renewable energy, often referred to as clean energy, comes from natural sources or processes that are constantly replenished such as sunlight and wind. Is Tunisia a viable wind energy source? Furthermore, Tunisia has the potential to implement viable wind energy projects that satisfy fundamental economical profitability (Georgiou et al., 2018). Moreover, the Tunisian authorities committed to expediting the development of wind energy sources since by finding instruments to encourage this expansion. Why is Tunisia a good place to study wind energy? Tunisia has the potential to promote research that can solve renewable and wind energy problems and prepare the skilled workforce for an expanded wind energy industry (Schäfer, 2018). What is a virtuous cycle of energy production in Tunisia? A virtuous cycle of green, affordable, and financially viable energy production.

I. The Tunisian Energy Landscape Tunisia relies on imported natural gas to meet the majority of its growing electricity needs, even though the country has a vast potential to generate renewable energy. Where is wind energy potential found in Tunisia? High wind energy potential are found in the northern part of Tunisia, but also in the central and southern regions. In northern and north-eastern areas, wind measurements revealed wind potential is significant for utility-scale wind farms implementation. In its contribution towards fighting climate change, Tunisia aims at reducing greenhouse gas emissions across all sectors through reducing carbon intensity in the country by 41 per cent in 2030, relative to 2010. Tunisia's push for renewable energy reflects significant progress through ambitious solar and wind projects, yet challenges such as regulatory hurdles, financing gaps, and grid infrastructure limitations continue to impede its full potential.

Green Energy Production in Tunisia: The World Bank Group

Nonetheless, Tunisia has abundant solar and wind energy resources, with an estimated production potential of 320 gigawatts (GW) compared to the current peak national demand of 10 GW. Renewable energy in Tunisia: GFSE Tunisia has significant potential for renewable energy, particularly wind and solar power. However, the country is still heavily dependent on fossil gas for electricity generation and is still heavily dependent on fossil gas for electricity generation.

Tunisia: Energy Development Plan to Decarbonise the Tunisia 1.5°C (T-1.5oC) scenario is designed to calculate the efforts and actions required to achieve the ambitious objective of a 100% renewable energy system and to illustrate the Tunisia In 2022, only 3% of Tunisia's electricity is generated from renewables, including hydroelectric, solar, and wind energy. While STEG continues to resist private investment in the sector, Prioritizing sustainable renewable energy systems in Driven by favorable incentives, supportive governmental policies, and mechanisms, solar and wind technologies have taken the lead in terms of the fastest-growing renewable energy.

ENERGY PROFILE Tunisia armonised System (HS). Capacity utilisation is calculated as annual generation divided by year-end capacity x 8,760h/year. Avoided emissions

