

Country Profile

COTE D'IVOIRE



31.9 million population (2024)



6% GDP growth rate (2024)



2.5 GW total installed capacity (Feb 2024)



40 MW installed solar capacity (2024)

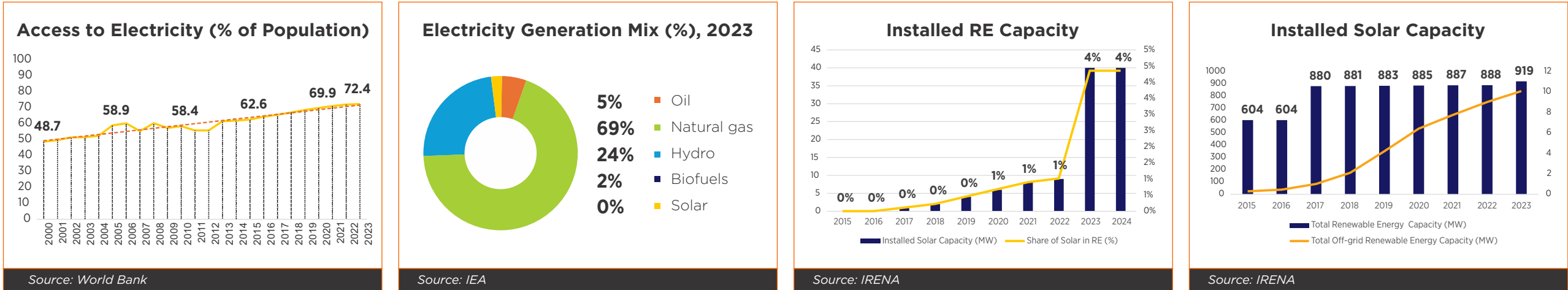


Pledged to reduce its greenhouse gas emissions by 28.25% by 2030



Targets 42% of electricity from RE by 2030





KEY CHALLENGES

- Power system dominated by gas and large hydropower, **limiting space for new renewables without parallel grid** and flexible generation expansion
- Rapid demand growth** pressures capacity, complicating integration of intermittent solar while maintaining reliability
- Transmission bottlenecks in solar-rich northern and central regions restrict evacuation to major load centers like Abidjan
- Limited local technical capacity** for O&M of utility-scale solar increases operational risks and need for extended support

POTENTIAL OPPORTUNITIES

- Strong solar irradiance supports both utility-scale and distributed PV development
- Government **targets 16–20% renewables (excluding large hydro) by 2030**, ensuring sustained demand for solar
- Competitive tenders and IPP projects** (e.g., Boundiali Solar PV, hybrid solar-battery) signal growing private-sector participation
- Industrial and commercial sectors (agro-processing, mining, manufacturing) **increasingly adopt rooftop** and behind-the-meter solar for cost savings and reliability
- Solar mini-grids and off-grid systems can accelerate rural electrification in northern and remote areas
- Ambition to become a regional power exporter** via WAPP creates long-term opportunities for solar integration into an interconnected market

ENERGY STORAGE AND GRID INTEGRATION

- Côte d'Ivoire recognizes the importance of battery storage for stabilizing a system that will increasingly host intermittent solar generation, and early BESS-linked solar projects are already being planned
- Hybrid solar-storage plants can help manage the country's evening demand peaks**, complement hydropower during low-water periods, and reduce reliance on thermal power
- Investments in transmission reinforcement—especially north-south corridors—are essential to ensure that solar generation from high-resource areas can be reliably transported to urban load centres
- Enhancements to SCADA systems, grid protection schemes and real-time monitoring tools will improve the system's ability to manage variable generation and reduce curtailment risks



Key Policies and Framework

- Côte d'Ivoire's **national energy strategy aligns with its 2030 climate goals**, emphasizing diversification of the generation mix and increased reliance on solar, wind and biomass.
- The government has established a regulatory framework that allows for IPP participation, structured bidding processes and long-term PPAs, improving transparency and investor confidence
- Recent renewable energy policies and plans encourage technology diversification and set targets for utility-scale solar, hybrid plants and distributed solar capacity**
- Tariff reforms and gradual cost-reflective measures aim to strengthen the financial sustainability of the national utility, thereby improving bankability for future renewable projects



Climate & Sustainability Commitments

- Côte d'Ivoire's NDC commits to significant emissions reductions by 2030, with the energy sector identified as a priority area for low-carbon transformation
- Scaling up solar power is central to the country's mitigation strategy**, as it directly displaces gas-based and oil-based generation and reduces long-term emissions intensity
- The country faces climate vulnerabilities such as irregular rainfall and rising temperatures, which make diversification beyond hydropower increasingly important for energy security
- RE expansion is closely tied to socio-economic goals, including rural electrification, agricultural productivity and the development of green jobs



Investment & Financing Landscape

- Major international financiers (**AfDB, World Bank, EU, KfW, IFC**) actively fund solar plants, grid upgrades, and enabling frameworks
- Growing private-sector interest from **Europe, Middle East, and Africa** as procurement becomes more transparent and credit-enhancement tools expand
- Boundiali Solar PV Project** showcases how blended finance can unlock large-scale solar investment
- Commercial banks remain cautious, but guarantees, concessional finance, and risk-sharing mechanisms are improving project bankability
- Local firms increasingly engaged in EPC, O&M, and ancillary services, though capacity-building remains critical
- Côte d'Ivoire's **WAPP integration and competitive tenders expected to diversify the pipeline** and attract larger private capital flows

Sources:

- Population: Population, total | Data
- GDP: GDP growth (annual %) | Data
- Installed Capacity: Country commercial guide

- Solar Capacity: Renewable Energy Statistics 2025
- Carbon Target: Contributing to enhance Côte d'Ivoire's commitment to climate change mitigation
- RE Target: Côte d'Ivoire's 42 percent RE target