



0.9 million population (2024)



3.5% GDP growth rate (2024)



393 MW total installed capacity (2024)



11 MW installed solar capacity (2024)

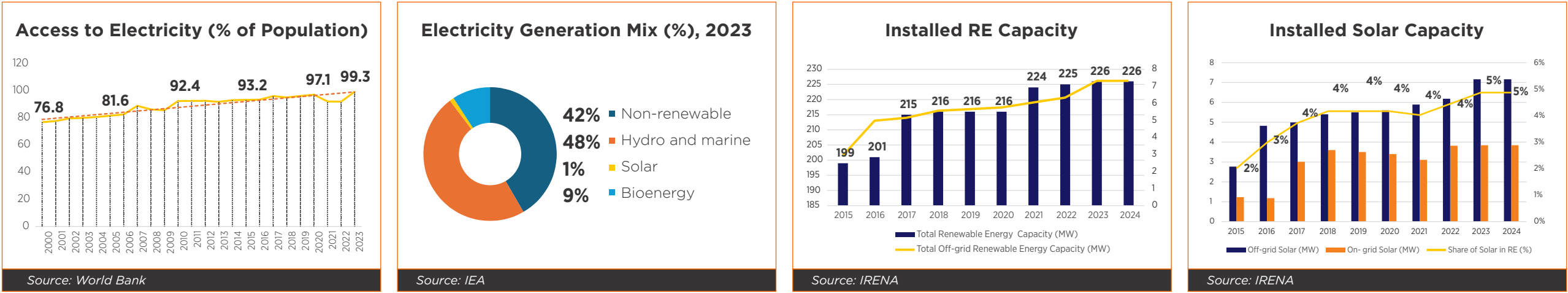


Targets 36% GHG emissions reduction below BAU by 2035



Targets 100% RE generation by 2030





KEY CHALLENGES

- **Diesel generation**—especially in outer islands—creates **exposure to fuel price volatility** and **transport issues**
- **Hydropower**, the main renewable source, is vulnerable to climate-driven **fluctuations** like droughts and extreme rainfall, straining supply-demand balance
- Fiji’s electricity system is fragmented, with many communities on remote islands, making grid extension costly and challenging

POTENTIAL OPPORTUNITIES

- Fiji has set **a clear national target of transitioning to nearly 100% renewable electricity by 2030**, creating strong long-term demand for solar, storage and hybrid energy solutions across the grid and off-grid areas
- **Solar photovoltaic systems offer a low-cost alternative to diesel on outer islands**, and hybrid mini-grids combining PV, battery storage and limited diesel backup can significantly improve reliability and reduce operating costs
- Utility-scale solar projects on Viti Levu can diversify the generation portfolio beyond hydropower, reducing risks associated with climate-induced variability in water resources
- Distributed solar on hotels, resorts, commercial buildings and public facilities provides a natural market segment due to Fiji’s strong tourism sector and the high value placed on sustainability by international visitors

ENERGY STORAGE AND GRID INTEGRATION

- **Fiji’s transmission network spans 11693 Km** (as of 2023) with voltages ranging from 415V to 132V across overhead and underground lines
- On Viti Levu, storage shifts daytime solar to evening peaks, reducing diesel use and covering hydropower shortfalls. Grid modernization—smart metering, automated protection, and advanced SCADA—is vital for higher solar penetration
- **Solar forecasting and demand management optimize hydropower dispatch and reduce operational stress.** A coordinated approach combining storage, grid upgrades, and efficiency measures can enable a near-fully renewable, stable system



Key Policies and Framework

- **National Energy Policy (2023–2030)** prioritizes renewables, efficiency, and resilient infrastructure for climate and development goals
- Regulatory framework supports renewable IPPs; procurement processes are being refined to attract private investment in utility-scale solar



Climate & Sustainability Commitments

- Fiji has committed to achieving near-**100% renewable electricity by 2030** as part of its NDC, positioning the energy sector as a central pillar of its climate mitigation efforts
- The country is highly vulnerable to cyclones, sea-level rise and climate-driven disruptions, making resilient renewable energy systems essential for adaptation and long-term sustainability
- Solar expansion reduces dependence on imported fuels, thereby cutting emissions and improving resilience to supply-chain disruptions during extreme weather events
- Fiji’s climate strategy emphasizes synergies between sustainable energy, tourism, public health and livelihoods, recognizing that clean power strengthens overall national resilience



Investment & Financing Landscape

- Fiji receives robust support from development partners such as the **Asian Development Bank, World Bank, Green Climate Fund and other bilateral agencies** that finance solar, storage and resilient infrastructure projects
- These institutions provide **concessional loans, grants and blended-finance structures** that make renewable energy projects financially viable despite Fiji’s small market size and climate-exposure risks
- Private-sector participation is growing, particularly in resort solar installations, C&I rooftop systems and mini-grid development supported by results-based financing and risk-mitigation facilities
- Local utilities and government agencies are increasingly partnering with international EPC contractors and technology providers to build utility-scale PV and battery projects