



# Powering Mauritius' Future Measuring a Credible Energy Transition

Building a metrics-based framework for a just, secure and investable energy transition in a small island economy

## Introduction

This study examines how Mauritius can turn its climate and energy pledges into a credible, measurable and financeable transition pathway. It focuses on the country's highly import-dependent energy system—where around four-fifths of electricity generation still comes from fuel oil and coal—and its commitment to cut greenhouse-gas emissions by 40 per cent relative to business as usual and reach 60 per cent renewable electricity with a coal phase-out by 2035 [UNFCCC 2021; UNFCCC 2024]. The analysis goes beyond headline targets to explore six dimensions of a successful transition: decarbonisation and climate alignment; energy security and resilience; affordability and fiscal sustainability; inclusion and just transition; governance and transparency; and innovation and digitalisation. It combines descriptive statistics and international benchmarking [IEA 2023; World Bank 2022], with a structured indicator design approach inspired by the World Energy Trilemma Index and the Energy Transition Index, adapted to the Mauritian context. Particular attention is paid to macro-fiscal constraints, institutional arrangements across CEB, URA, MARENA and EEMO, and the state of national data systems as documented in the first Biennial Transparency Report and CBIT programme. The result is a practical Energy Transition Scorecard and data architecture designed to be owned and updated by Mauritian authorities.

## Key Findings

1. **Mauritius remains structurally exposed to fossil fuel and climate risks.** Fossil fuels account for nearly 90 per cent of final energy use and about 80.8 per cent of electricity generation, leaving the country vulnerable to oil and coal price volatility, foreign-exchange shocks and climate-driven disruptions to imported supply [SACREEE 2022; Macrotrends 2024].
2. **Ambition has outpaced delivery on renewables and efficiency.** Despite a long-standing ambition to reach 60 per cent renewable electricity, the renewable share has hovered around the low-20s and fell to roughly 19.2 per cent in 2022 and about 18 per cent in 2024, while modern renewables in total final energy consumption have also declined from earlier peaks [Statistics Mauritius 2021; CARE Ratings Africa 2025].
3. **The transition challenge is multi-dimensional, not just a decarbonisation problem.** Analysis of international indices and domestic data shows relatively strong performance on environmental sustainability and universal access, but weaker scores on energy security, diversification and macro-fiscal resilience, underscoring the need to balance emissions, affordability and import dependence [World Energy Council 2024; WEF 2024].
4. **Fiscal space is constrained, but finance is not the primary bottleneck.** With public debt above 80 per cent of GDP and significant climate-related investment needs, Mauritius must manage transition spending carefully; yet expanding climate finance from MDBs and private investors suggests that the binding constraint is project credibility, bankability and sequencing rather than sheer capital availability [IMF 2024; Joint MDBs 2024].
5. **Data systems and institutional capacity are emerging as strategic constraints.** BTR1 and CBIT work highlight delays, gaps and fragmentation in GHG inventories and sectoral data, while the assessment of energy, social and fiscal datasets points to weak granularity and digital integration in several domains, especially emissions, social impacts and energy-related public finance [UNFCCC 2024; UNDP 2022].

6. **Existing institutions provide a strong base but coordination is uneven.** The creation of MARENA, EEMO and URA alongside CEB and MEPU has strengthened the architecture, yet responsibilities remain fragmented and there is no single, operational metric framework that joins up decarbonisation, security, equity, governance and innovation for Cabinet and boards.
7. **A simple, country-owned scorecard can materially improve decision-making.** The proposed Mauritius Energy Transition Scorecard—built around a dozen outcome indicators, targeted leading indicators and six composite dimension scores—offers a transparent way to align NDC implementation, macro-fiscal planning and sector regulation, while remaining feasible given current data systems.

## Recommendations

- **Establish a national Energy Transition Scorecard.** Create a small, annually updated scorecard anchored in six dimensions and 12–15 headline indicators, to be tabled in Parliament and before the boards of CEB, URA and MARENA, with public commentary on trends and risks.
- **Translate long-term targets into realistic interim pathways.** Define explicit 2027 and 2030 milestones for renewable penetration, emissions and efficiency consistent with NDC 3.0 and grid constraints, and align CEB's generation plans, procurement and network investments with these pathways.
- **Embed transition metrics in macro-fiscal and financial frameworks.** Integrate the fossil-fuel import bill, climate-related capital spending and IPP contingent liabilities into debt sustainability analyses and medium-term fiscal frameworks, and use the scorecard as the basis for policy-based lending, guarantees and blended-finance operations with MDBs and private banks.
- **Strengthen governance of IPPs, grid planning and tariffs.** Expand the use of transparent, competitive auctions for new renewable capacity; standardise PPAs and grid-connection rules; and align tariff decisions with affordability and equity indicators, complemented by targeted social protection for vulnerable households.
- **Invest in data, digital infrastructure and open access.** Upgrade the Energy Observatory and Statistics Mauritius as the central hubs for energy and emissions data; improve the timeliness and granularity of Energy Observatory outputs; roll out advanced metering and grid management systems; and develop an open energy-data portal to support analysis, transparency and investor due diligence.
- **Deepen the just transition and labour-market lens.** Develop indicators and monitoring systems for employment shifts, retraining, gender and youth participation in clean-energy jobs, and regional distribution of projects, so that coal phase-out, changes in bagasse economics and tariff reforms can be managed fairly.
- **Align international reporting with domestic management needs.** Use the structures created for BTRs, NDC tracking and CBIT to underpin domestic monitoring, ensuring that every indicator on the scorecard has a clear institutional “owner”, a data source and a defined reporting cycle, rather than treating international transparency as a parallel exercise.
- **Regularly review and refine the metric framework.** Commit to revisiting indicators, weights and targets at each NDC revision cycle, using new data, modelling and stakeholder feedback, while keeping the core structure stable enough to track progress over time.