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Enabling Environment for E-mobility in the Republic of Marshall Islands (RMI)

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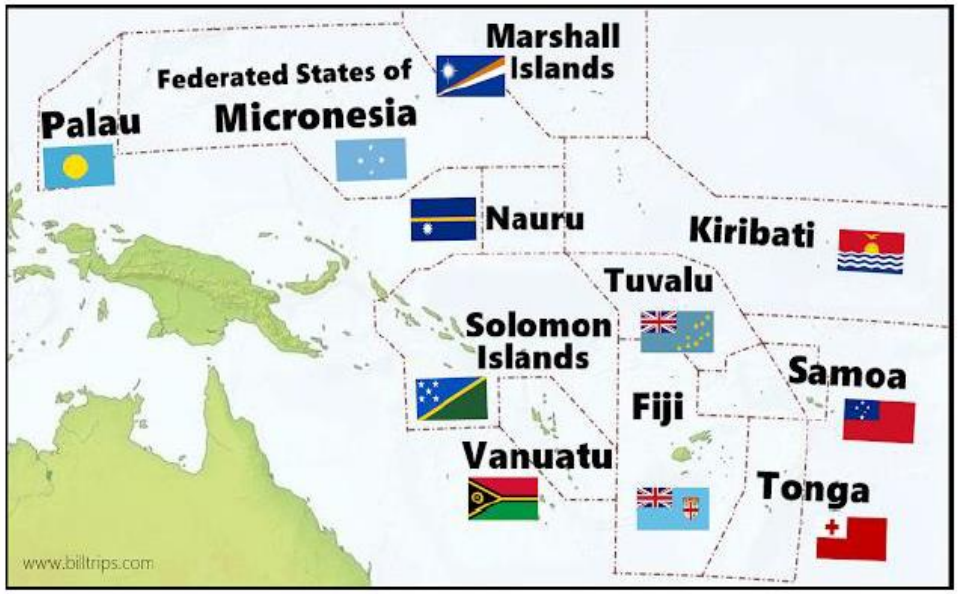
PICs Challenges in the Energy Sector

- PICs: 11 countries and other territories with total population of 2.3 million
- Heavily dependent on imported fossil fuel (diesel) for energy generation and transportation, leading to high electricity tariff
- Small islands – low demand, leading to small market
- Weak institutional capacity – small private sector, weak financial sector



EV Pilot in RMI under WB Project (2020–2022)

- Procured 4 Hyundai Kona EVs and partially installed 2 charging stations.
- Data collected from EV users; average efficiency: 12.59 kWh/100 km.
- GHG emissions reduced by ~7.5 tons CO_2; ~$5,000 in fuel cost savings.
- Lessons: EVs integrated smoothly, but charging infrastructure remains a bottleneck.
- Recommendation: Expand pilot, complete charger installation, and consider EV taxi program.

KGGTF Y 11 Grant (RMI E-mobility): Existing EV Fleet

- 2020: ~12–14 EVs (mostly used Nissan Leaf)
- 2022–2024 registrations show rising potential EV presence
- 2022: ~200 (BYD 69; Leaf 6; other BEVs 11; other CN brands 114)
- 2023: ~285 (BYD 135; Leaf 6; other BEVs 9; other CN brands 135)
- 2024: ~287 (BYD 122; Leaf 4; other BEVs 11; other CN brands 150)

BYD Dolphin EV


Volkswagen ID.4 EV


Nissan Leaf EV


Hyundai Ioniq 5 EV (NEO)

RMI E-mobility:Taxi Fleet Electrification

- ~3% of fleet but ~15–16% of corridor traffic (June 2025 counts)
- High mileage → outsized fuel/GHG savings; public visibility
- Operational fit with short distances and predictable charging
- EV import and market facilitation: Lower barriers to importing, financing, certifying, and servicing EVs while protecting consumers.

RMI E-mobility: Charging Strategy – Business-Linked Hubs

- 5-10 chargers, including at least 1-2 DCFC
- Co-locate with retail business (restaurant, café, grocery store).
- Visibility, Economies of scale
- Mirrors gas-station model
- Taxis as anchor users

RMI E-mobility: Short-Term Priorities (2025-2027)

1

Repair and commission all existing chargers; ensure network connectivity.

2

Launch a *Taxi-First EV Program* for 25–40 vehicles with grants or concessional loans.

3

Establish data-reporting protocols for fleet operators and agencies.

4

Begin local technician training for EV and charger maintenance.

RMI E-mobility: Medium-Term (2028-2032)

1

Expand imports through improved shipping arrangements and dealership capacity.

2

Implement differential registration fees favoring EV taxis while maintaining revenue neutrality.

3

Introduce time-of-use electricity tariffs to incentivize daytime solar charging.

4

Begin phased tariff realignment under the fiscal sustainability framework.

RMI E-mobility: Long-Term (2033 and Beyond)

1

Institutionalize EV policies and safety standards.

2

Scale up home and public charging through business partnerships (“charging pods”).

3

Integrate advanced technologies such as Vehicle-to-Home (V2H) and Vehicle-to-Grid (V2G) to optimize solar utilization and grid flexibility.


THANK YOU!