



Easter Island: Transport and Electricity Profile

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Workshop: Deep Transition and Integration of Power and Transport Systems(APEC project EWG 10 2018A)

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The island of Rapa Nui/Easter Island

Land area: 285 km²

Population: 7,750
(2017), avg.
household size: 3.8

Climate: Humid
subtropical.



UNESCO World Heritage Site

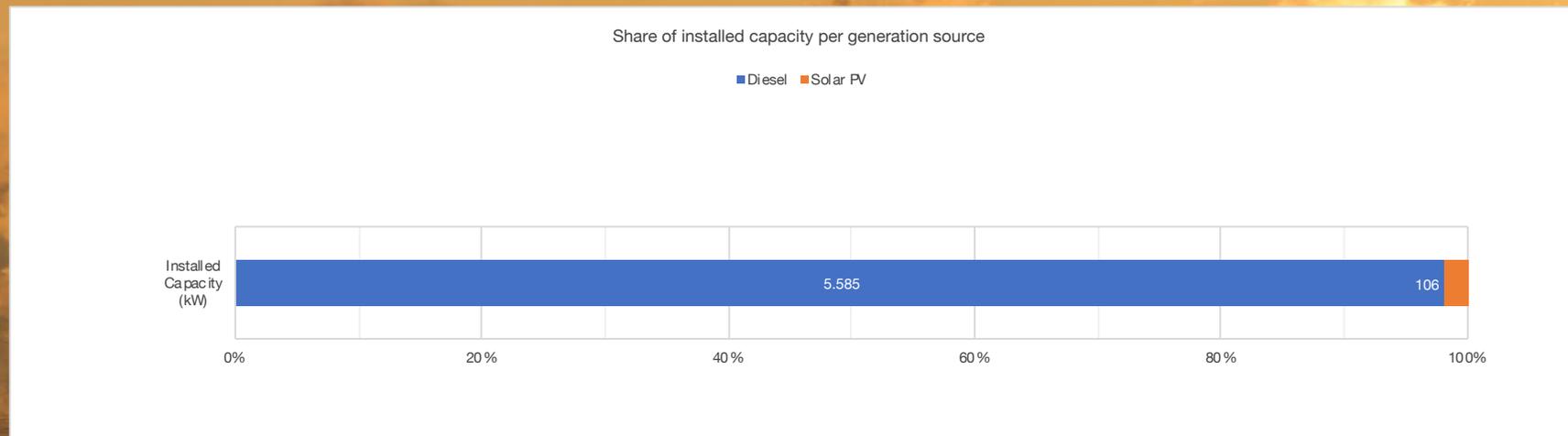


Primary economic activities: Tourism, local industry/manufacturing (for local demands only).

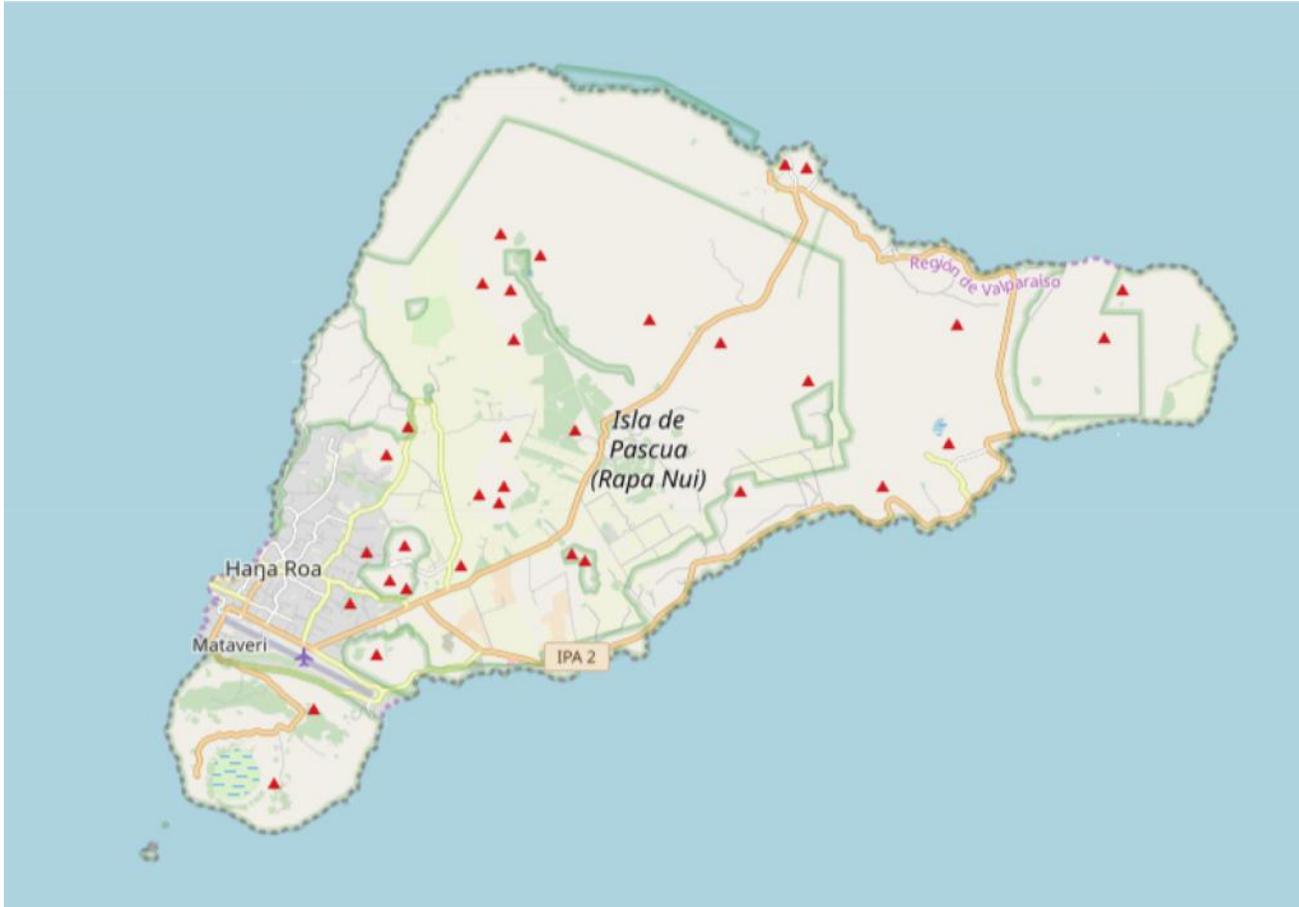
Income level: 29,466 USD per capita and year (2014).

Rapa Nui National park: a UNESCO World Heritage Site since 1995 managed by the Rapa Nui Ma'u Henua Indigenous community.

Easter Island: electricity profile



Easter Island, transport sector



Private vehicle fleet size:

3,155 vehicles, 723 motorcycles (2018)

Public vehicle fleet size: 0 buses or trams; other public vehicles, N/A.

Demand growth rate: 15.5% growth of registered vehicles (2018)

Motorization rate: 398 cars and 93 motorcycles per 1000 inhabitants

Transport modal split: Mobility is exclusively organized through private transportation. There is a privately organized, yet unregulated taxi system.

Policies & goals



Electricity:

- Chile's NDC: unconditionally reduce CO2 emissions per GDP unit by **30% below their 2007 levels by 2030**; more with international support
- Non-Conventional Renewable Energy Law requires
 - **5% of electricity to come from non-conventional renewable** energy sources
 - **10% in 2024**
 - not applicable to Easter Island due to small system

Transport:

- Chile's national electromobility strategy aims at **40% electric vehicles** on its roads and **100% of public transport** being electrified by 2050.
- Ministry of Transportation and Telecommunications aims to address the challenges arising in **Easter Island due to high motorization rate**

Main Stakeholders

Electricity

SASIPA has **sole responsibility** for electricity generation, transmission and distribution on the island. It maintains approximately 5.6 MW of diesel generation capacity. Energy planning and infrastructure development is made **in consultation with local, regional and national government bodies**

Transport

The transport sector of Easter Island is **largely unregulated**. The **Ministry of Transportation and Telecommunications** has ultimate responsibility for regulatory aspects of the transport system. All decisions related to development and lands must pass through the **Easter Island Development Commission (CODEIPA)** which is created by the 'Indigenous Law.'

Sectoral plans

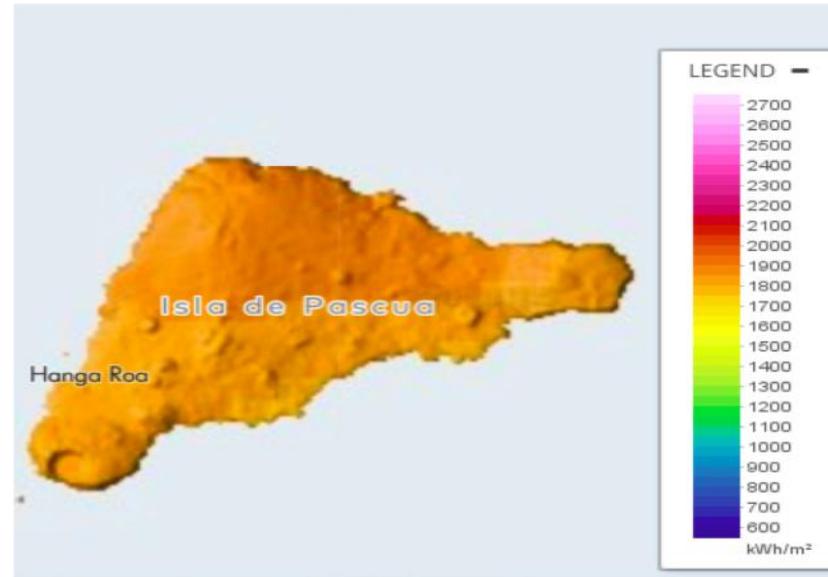
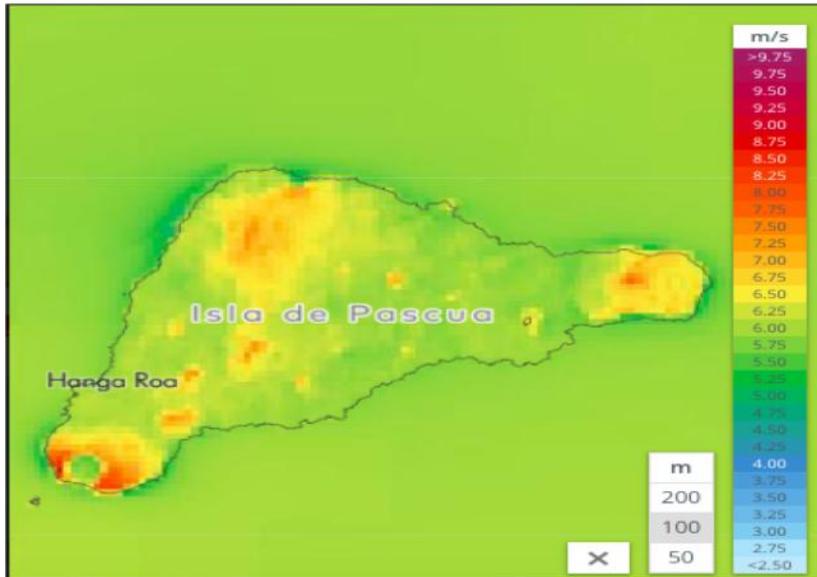


Four (4) renewable energy projects in planning and development on Easter Island:

1. 3 MW Solar PV power plant close to Mataverí Airport.
2. 106KW of PV capacity in Tama te Ra'a . Connected to the grid.
3. Non-grid-connected hybrid microgrid based on PV, diesel and batteries: 429 KW of PV capacity, 200 KW diesel generation capacity and 1,152 KWh of batteries.
4. PV project initiated in 2009 for Hanga Roa Hospital to cover 101 MWh annual demand. Yet to be implemented due to other construction priorities at the hospital.

The way forward..

- Despite several **PV** projects currently in planning, no current plans to take advantage of favorable **wind** conditions at multiple sites on the island.
- **Community resistance** to wind projects is a significant barrier.
- **Absence of clear plans** for sustainable transport transition a challenge but also an opportunity.
- **Electric car or scooters** sharing program could be an innovative high-impact solution.



Thank you for your attention!

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