

# ***Renewables 2023 Global Status Report collection***

## **Renewables in Energy Supply**

### **Oceania Factsheet**

#### **Key Headlines in 2022**

- Governments set renewable energy targets and implemented policies such as feed-in tariffs, tax incentives, and renewable energy portfolio standards at both the national and subnational level. These policies provide a framework for investment and development in the renewable energy sector. Among the Major announcements in 2022 that reshaped the policy landscape of renewables in Oceania is Australia's Climate Change Bill.
- Political leaders supported policies and initiatives that encouraged the development of community-based renewable energy projects.
- In terms of Energy security, renewable energy sources offered the potential to generate electricity, heating, and fuel domestically. Governments in Oceania recognised the strategic advantage of diversifying their energy mix and reducing reliance on imported fossil fuels.
- Investments in the renewable energy sector in Oceania in 2022 helped create jobs, stimulate local industries, and promote economic growth. The development of renewable energy infrastructure, such as solar and wind, provided avenues for both domestic and foreign investment. The Australian Government, as part of its 2022 Climate Change Law, committed AUD 102.2 million (USD 70 million) to the Community Solar Banks Initiative.
- In Asia-Oceania (excluding China and India), investment in renewables fell 7.7% to USD 53.7 billion in 2022, mainly driven by decreases in Japan and Republic of Korea, and by a decrease in wind power investment of 15.9%
- Australia led the region in renewables deployment across technologies and markets, notably geothermal, solar PV, and solar thermal heating.

#### **Key drivers**

- The declining costs of renewable energy technologies, such as solar and wind, acted as a significant driver for the transition to renewables.
- The transition to renewables offered an opportunity to enhance energy independence given the global energy crisis.
- Some countries in Oceania recognised the benefits of decentralised energy systems powered by renewable energy sources. These systems allowed for greater community ownership, resilience, and local control over energy production and distribution.
- To reduce emissions in the transport sector, political support for the development of EV charging infrastructure and incentives for EV adoption were put in place.

#### **Key challenges**

- Integrating renewable energy sources, into the existing power grid posed challenges for grid stability.
- The transition to renewables required significant infrastructure development (e.g., grid upgrades and charging infrastructure). Financing and coordinating these infrastructure projects are a challenge in the region.

## Technologies

### **Geothermal:**

- **New Zealand** boasted the fifth largest geothermal power capacity globally in 2022.

### **Hydrogen:**

- **Australia** had the largest number of renewable hydrogen plants worldwide as of 2022. The country is expected to be home to the lowest cost of renewable hydrogen production by 2050.

### **Solar PV:**

- **Australia** remained the largest market for solar PV in Oceania. The country added around 3.9 GW of installed capacity in 2022 expanding its potential to produce 30 GW of power.
- Electricity generation from solar PV rose around 20% to 34.3 TWh, contributing 14.7% of **Australia's** total electricity generation.
- Rooftop solar PV installations in Oceania occurred mainly in **Australia**. By the end of 2022, an estimated 3.4 million homes across the country would have installed rooftop solar systems.

### **Solar Thermal Heating:**

- **Australia** was the third largest market for unglazed solar thermal collectors, after the United States and Brazil.

### **Wind:**

- Victoria State (Australia) set new or increased targets for offshore wind capacity in 2022.