

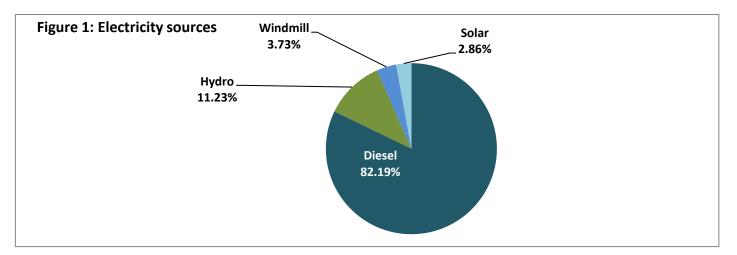
VANUATU MONTHLY ENERGY MARKET SNAPSHOT OF JUNE 2023

Overview of the Month

This report issued by the Utilities Regulatory Authority (the Authority) provides an electricity market update in Vanuatu for the month of June 2023 for electricity utilities that are regulated by the Authority. During the month, the energy market experienced an increase in renewable energy contribution from wind and solar energy compared to the previous month. This is a positive turnaround after several past months of limited to zero renewable energy output into the energy market. UNELCO Engie's monthly adjusted electricity tariff for the month further decreased by 1 %. It is over a month that VANPAWA Limited took over operations of the Tanna (Lenakel) and Malekula (Lakatoro) electricity concessions from the Department of Energy. Since May 2023, the new entrant into the energy market is showing promising signs of providing improved electricity service to its customers in Tanna and Malekula. VUI's tariff has decreased by 3% as a result of Government subsidy.

Electricity Source

Figure 1 below presents the overall market share of the different types of energy generation sources used by regulated utilities in Vanuatu during the reporting month. The main energy source was diesel combustion that contributed 82.19 % of the total electricity produced, followed by the. hydro plants at Santo and Maewo (Talise) with an aggregate total of 11.23 %, the windmills on Efate contributed 3.73% and the solar panels on Efate, Luganville, Lakatoro and Lenakel with an aggregate total share of 2.86%.



Electricity Generation by Area

The top part of Table 1 below shows the total energy production from all available energy sources and the total quantity of diesel used to generate electricity in each service area during the month. The bottom part of the table reveals the respective contributions in % from the available energy generation sources in each service area¹. Litres of diesel used for the Tanna and Malekula concession areas are estimated due to unavailability of data.

Table 1: Generation Mix by Electricity Grid

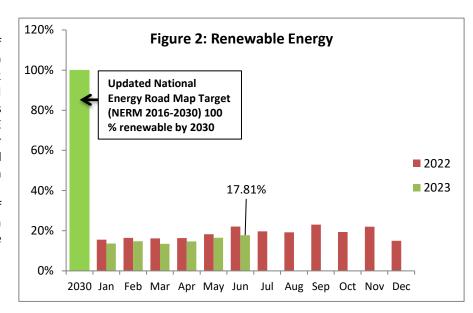
Jun-23	Port Vila	Luganville	Malekula- Lakatoro	Tanna	Ambae	Sola	Maewo	Malekula - Lorlow & Wintua	Port Olry
Total kWh Produced	5,470,086	1,089,778	125,702	121,553	12,964	6,996	5,913	2,087	15,495
Litres of diesel used	1,246,420	90,861	28,723	39,240	5,312	3,685	-	-	5,664
Diesel %	91.9%	28.3%	99.1%	100.0%	100.0%	100.0%	0.0%	0.0%	100.0%
Copra oil %	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Hydro %	0.0%	71.5%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Wind %	4.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Solar %	3.5%	0.2%	0.9%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%

¹ The Wintua and Lorlow (operated by the Winuta/ Lorlow Electrical Cooperative) data was also projected based on 2022 data. The Authority is working closely with the operator to provide updated monthly data going forward.

Renewable Energy Generation

Figure 2 on the right presents the portion of electricity generated from renewable energy (RE) sources² during the month in Vanuatu. The 2022 renewable energy contributions can be compared with the year-to-date (YTD) renewable proportions for 2023. The graph shows a decrease in RE contribution when comparing the month under review for this year to that of the previous year and it was due to the decrease in Windmill production during the month.

Figure 2 also provides an overview on the status of <u>'Vanuatu's renewable electricity generation'</u> in concession and mini-grid areas in comparison to the NERM's³ target.



Number of customers

Table 2 outlines number of customers in different electricity network in Vanuatu (See notes for more information).

Table 2: Customer numbers per electricity network area

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Apr-23											
Electricity Network	Port Vila	Luganville	Tanna*	Malekula*	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow		
Total active customers	16,767	3,769	1,380	1,232	304	196	111	98	125		
May-23											
Electricity Network	Port Vila	Luganville	Tanna*	Malekula*	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow		
Total active customers	16,805	3,779	1,380	1,232	315	199	109	93	125		
Jun-23											
Electricity Network	Port Vila	Luganville	Tanna*	Malekula*	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow		
Total active customers	16,805	3,803	1,369	1,217	317	199	111	95	125		

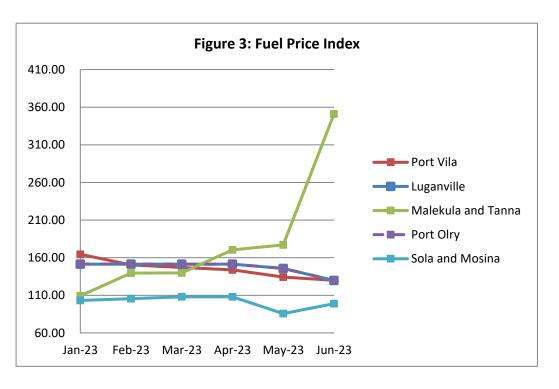
^{*}The Tanna, Malekula customer data in April are estimated because there was no available data provided to the URA for that month. Estimations were based on the last available data provided by the Department of Energy

Fuel cost index

Figure 3, on the right presents the movement in fuel price index in June 2023. It shows the price per liter of diesel and the evolution or movement of fuel price in 2023. The index point is updated to start 100 points in January 2020 to cater for electricity service areas that their operational data becomes available thereafter.

The drastic change in Tanna and Malekula Fuel index is due to the Authority getting actual data from VANPAWA Limited. The previous months 'fuel index was projected.

The Port Olry and Luganville Fuel price index are similar. This is because the fuel is purchased at the same price.



² Renewable sources include copra oil, hydro, solar and wind.

³ Update National Energy Road Map 2016 – 2030. The target by 2030 is 100% generation from renewable energy sources.

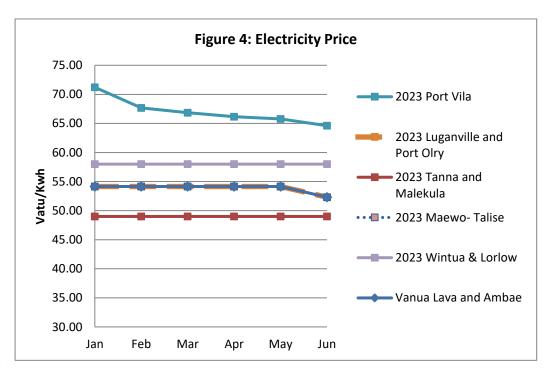
Electricity Price

UNELCO⁴ tariff for the month of June 2023 is 64.61 Vatu/kWh. VUI⁵, VANPAWA⁶ and the Wintua/Lorlow electrical Cooperative's⁷ applicable tariff in Vatu/kWh of the same month is 52.32, 49 and 58 respectively.

UNELCO's actual operational parameters for a reporting month are typically utilized to compute electricity tariff for the following month.

VUI's tariff has decreased to 52.32 VT/kWh being applicable from June 2023 to November 2023. The change was set by the Authority after VUI received a subsidy from the Vanuatu Government. The tariff is applicable to all service areas under VUI's Concession Deed.

VANPAWA Limited had taken over the operations of Tanna and Malekula since May 2023.

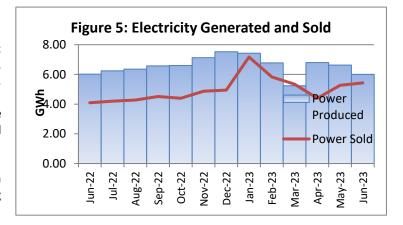


Total Electricity Generated and Sold.

Total power produced decreased by 9.46 % from preceding month; Comparing it with the equivalent month in previous calendar year, the total power generated also decreased by 12.1% from May 2022.

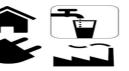
Total power sold during the month increased by 3.2% from the previous month. Similar trend of an increase of 14.1 % is observed for the same month in 2022.

Changes in power produced and sold are entirely dependent on electricity consumption and power losses during the reporting month.



The data utilized in creating this monthly energy snapshot does not include electricity production outside of a concession agreement or MOU.





About the Utilities Regulatory Authority (URA)

The URA is the independent economic regulator for water and electricity services in Vanuatu, established by the URA Act no. 11 of 2007 with amendments.

As part of its functions, the Commission is monitoring the provision of electricity and water by utility companies and public services, promoting access and the long-term interest of the customers.

Please call us if you have any question on (678) 23335 or visit our office at the Office of the Utilities Regulatory Authority, VNPF Compound, Corner Pierre Lamy & Andre Ballande Street, Port Vila, Vanuatu.

The URA welcomes suggestions and feedbacks from readers of this monthly energy snapshot report. Any readers desiring to seek clarity of this report are encouraged to seek clarity from the URA should they do not understand any part of this report.

⁴ Union Electrique du Vanuatu, << UNELCO Engie>>, supplies electricity in Port Vila

⁵ Vanuatu Utilities & Infrastructure Limited supplies electricity in Luganville and Port Olry (Santo), Sola & Mosina (Vanua Lava), Saratamata, Lolowai & Longana (Ambae) and Talise (Maewo).

⁶ VANPAWA Limited is a newly established electricity operator that supplies electricity in the Tanna and Malekula concessions since May 2023.

⁷ Wintua/Lorlow cooperative is operating the newly established Solar grid at Wintua and Lorlow in Malekula. For more information visit the Department of Energy's website (www.doe.gov.vu)