

VANUATU MONTHLY ENERGY MARKET SNAPSHOT OF JANUARY 2024

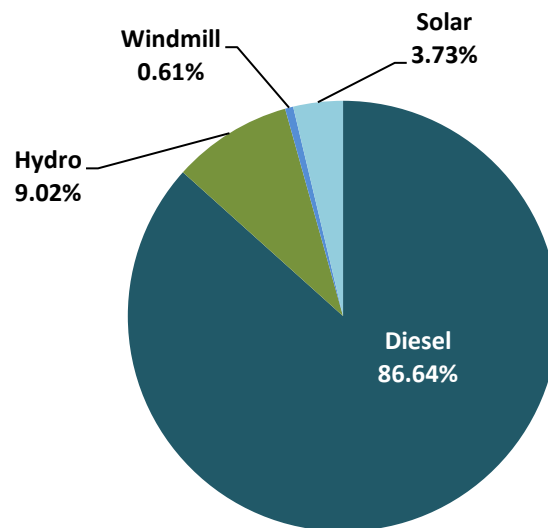
Overview of the Month

This report issued by the Utilities Regulatory Authority (the Authority) provides an electricity market update in Vanuatu for the month of January 2024 for electricity utilities that are regulated by the Authority. During the month, renewable energy contribution from wind energy further decreased compared to the previous month. The Malekula Brenwei hydro is still not operational since November 2023. However, power sold and produced during the month respectively increased compared from December 2023. Power generation during the month is mostly sourced from diesel.

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 86.64 % of the total electricity produced, followed by hydro plant on Santo (Sarakata) with a total of 9.02%, followed by solar panels on Efate, Luganville (Santo) and Wintua/Lorlow (Malekula) with an aggregate total share of 3.73% and windmills on Efate of 0.61%.

Figure 1: Electricity sources



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.

Table 1: Generation Mix by Electricity Grid

Jan-24	Efate	Luganville, Santo	Malekula-Lakatoro*	Tanna*	Ambae	Vanua Lava	Maewo	Lorlow & Wintua, Malekula	Port Olry, Santo
Total kWh Produced	5,755,452	1,173,433	108,980	129,171	15,419	6,372	7,131	5,684	15,483
Litres of diesel used	1,348,800	149,465	29,027	37,118	5,693	3,182	-	-	5,014
Diesel %	94.7%	43.6%	100.0%	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%	56.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Wind %	0.8%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Solar %	4.5%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%

*The Malekula (Lakatoro) Hydro contribution is nil as the hydro plant was not operating. This was confirmed by the Authority after a site visitation.

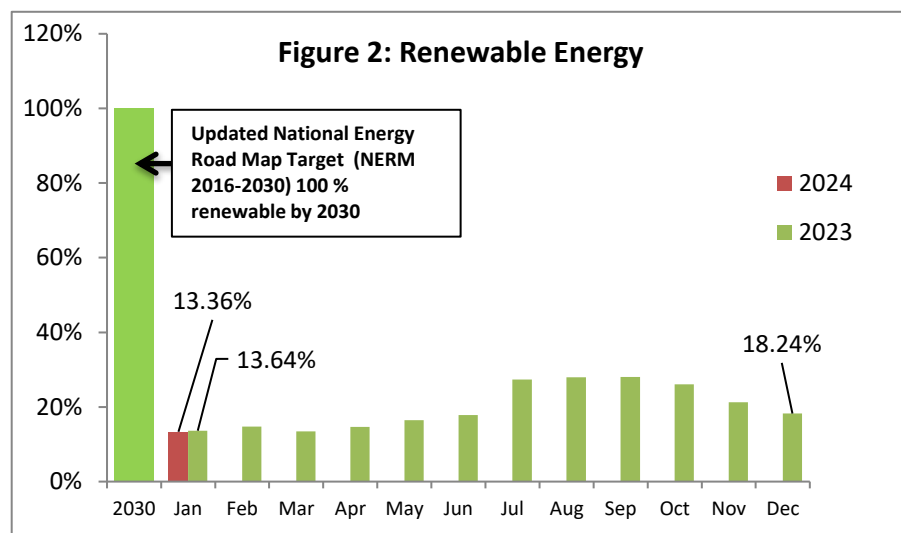
¹ The Wintua and Lorlow (operated by the Winuta/ Lorlow Electrical Cooperative) data was also projected based on 2022 data. The Authority is working closely with the operator to provide updated monthly data going forward.

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 2023 renewable energy contributions can be compared with the year-to-date (YTD) renewable proportions for 2024.

The graph shows RE contribution this month is 4.88% lower than December 2023 RE contribution. Similarly, RE contribution this month is slightly lower than in January 2023 by only 0.28%.

Figure 2 also provides an overview on the status of 'Vanuatu's renewable electricity generation' 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).

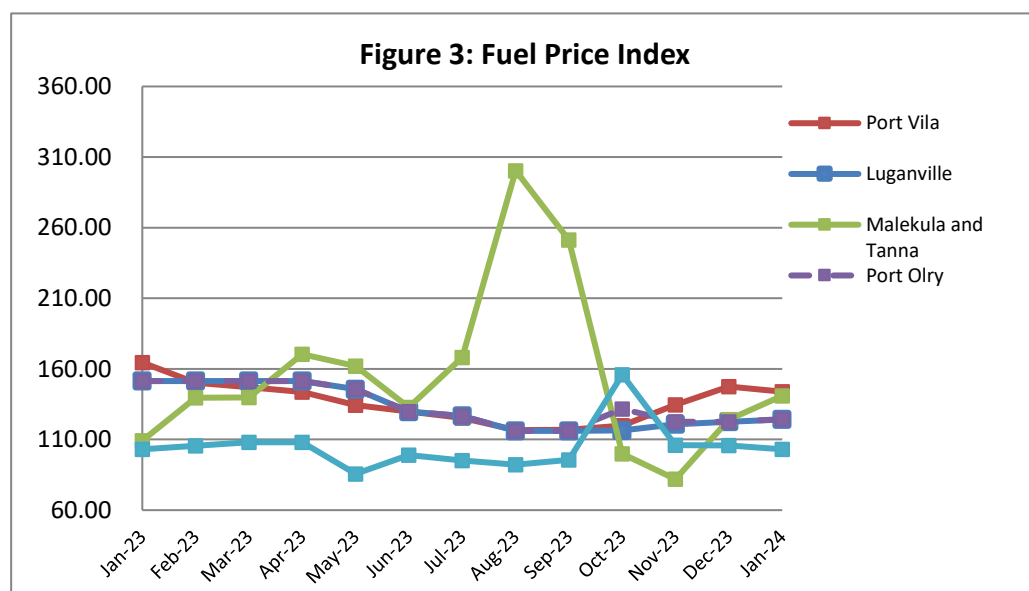
Table 2: Customer numbers per electricity network area

Nov-23									
Electricity Network	Port Vila	Luganville	Tanna*	Malekula*	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow*
Total active customers	12,625	3,738	1,194	1,004	321	208	121	105	125
Dec-23									
Electricity Network	Port Vila	Luganville	Tanna*	Malekula*	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow*
Total active customers	12,632	3,795	1,194	1,004	289	203	121	111	125
Jan-24									
Electricity Network	Port Vila	Luganville	Tanna	Malekula	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow
Total active customers	17,107	3,798	1,169	1,055	299	197	119	109	121

Fuel cost index

Figure 3, on the right presents the movement in fuel price index. It shows the price per liter of diesel and the evolution or movement of fuel price from January 2023 to the reporting month. 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.

In January 2024, fuel index for Port Vila, Malekula and Tanna is the same. Likewise, Port Olry and Luganville fuel price index are similar because fuel is sourced in Luganville and transported to Port Olry.



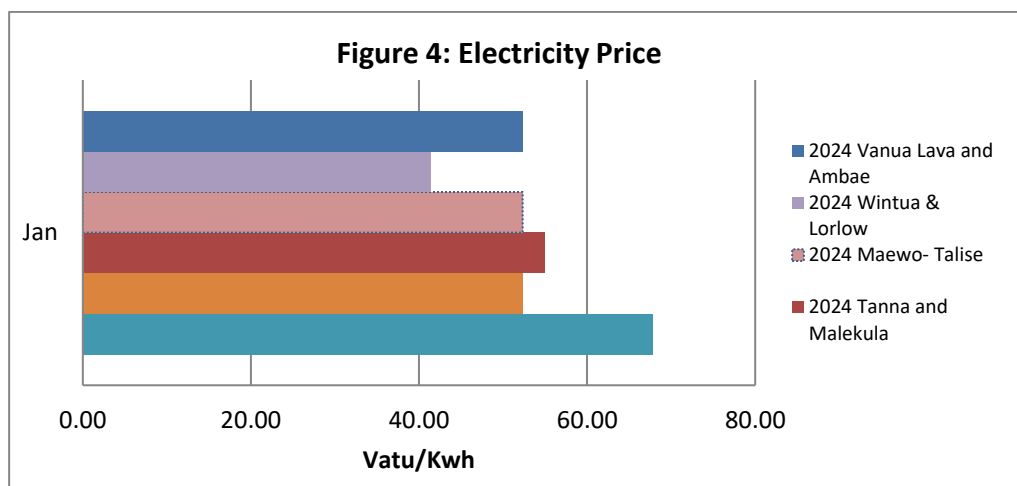
² Renewable sources include copra oil, hydro, solar and wind.

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 January 2024 is 67.74 Vatu/kWh. VUI⁵, VANPAWA⁶ and the Wintua/Lorlow electrical Cooperative's⁷ applicable tariff in Vatu/kWh of the same month is 52.32, 55.00 and 41.42 respectively.

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

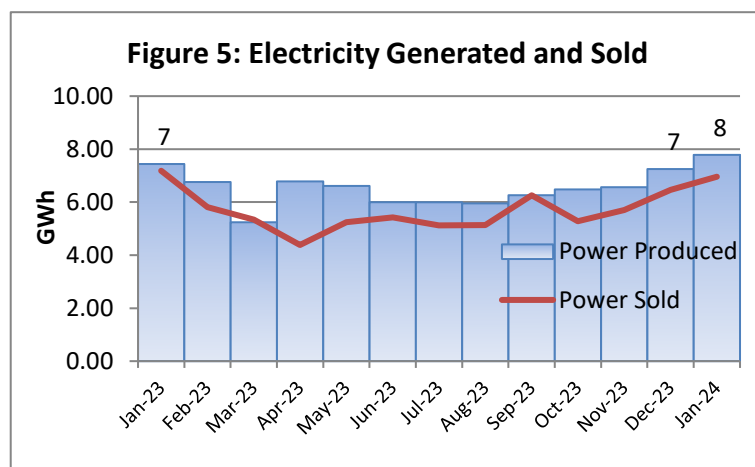


Total Electricity Generated and Sold.

Total power produced increased by 6.87% from preceding month; Comparing it with the equivalent month in previous calendar year, the total power generated also increased by 4.43%

Total power sold during the month increased by 7.10 % from the previous month. Comparing it with the same month in 2023 total power sold reduced by 3.23%.

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



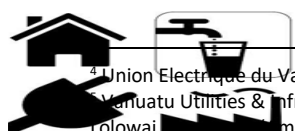
The data utilized in creating this monthly energy snapshot does not include electricity production outside of a concession agreement or MOU.



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.



⁴ Union Electrique du Vanuatu (UNELCO) supplies electricity in Port Vila.
⁵ Vanuatu Utilities & Infrastructure Limited (VUIL) supplies electricity in Luganville and Port Olney (Sanfel, Solu & Mosina, Lolowai, 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)

The URA welcomes suggestions and feedback from readers of this monthly energy snapshot report. Any readers desiring to seek clarification of this report are encouraged to contact the URA.