

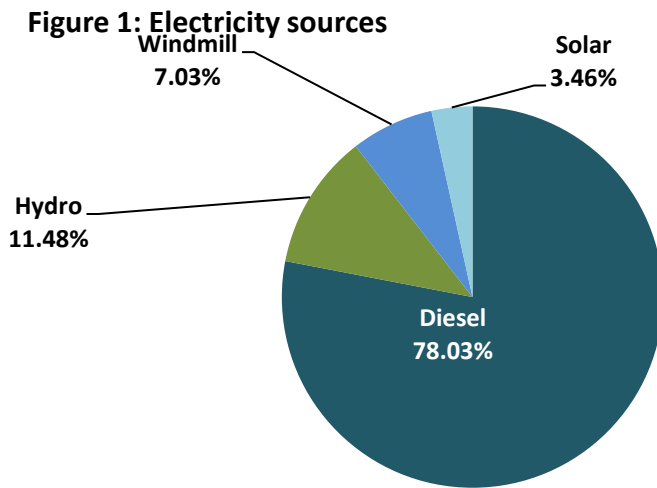
## VANUATU MONTHLY ENERGY MARKET SNAPSHOT OF NOVEMBER 2023

### Overview of the Month

This report issued by the Utilities Regulatory Authority (the Authority) provides update on the electricity market in Vanuatu for the month of November 2023 for electricity utilities that are regulated by the Authority. During the month, renewable energy contribution from wind energy decreased compared to the previous month of October 2023. The Malekula Brenwei hydro is confirmed to have ceased operations during the month due to technical issues as reported by VANPAWA and a on-site inspection by the Authority's staff. The monthly adjusted tariff for UNELCO increased following the increase of fuel price. Power sold and produced during the reporting month increased compared to October 2023.

### 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 78.03 % of the total electricity produced, followed by the hydro plants on Santo and Maewo (Talise) with an aggregate total of 11.48 %, the windmills on Efate contributed 7.03 %, and solar panels on Efate, Luganville, Lakatoro and Lenakel with an aggregate total share of 3.46 %.



### 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 area<sup>1</sup>.

**Table 1: Generation Mix by Electricity Grid**

Nov-23	Port Vila	Luganville	Malekula- Lakatoro*	Tanna*	Ambae	Sola	Maewo	Malekula - Lorlow & Wintua	Port Olry
Total kWh Produced	4,998,413	1,113,513	110,222	130,869	13,456	6,885	5,829	2,051	14,886
Litres of diesel used	1,070,860	121,212	6,945	37,528	5,123	3,157	-	-	5,296
Diesel %	86.7%	37.7%	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%	61.8%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Wind %	9.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Solar %	4.3%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%

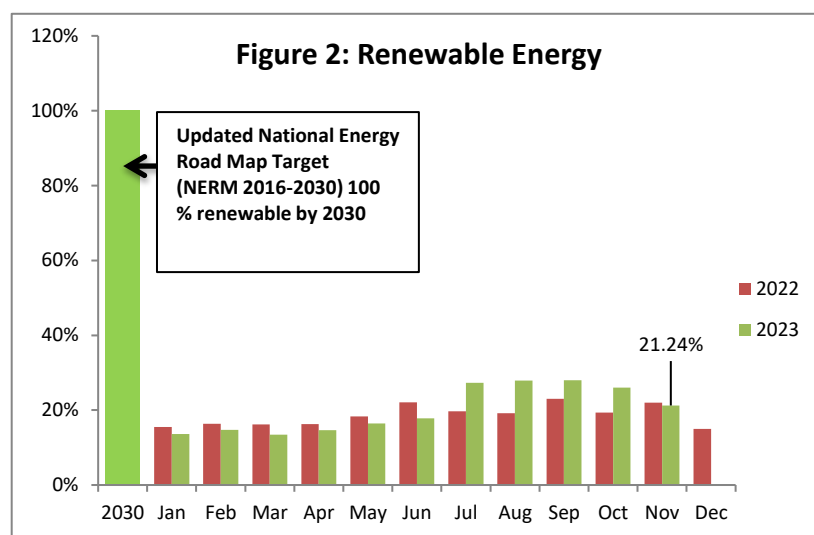
\*The Malekula (Lakatoro) Hydro contribution is nil as the hydro plant is currently not operating, which was confirmed by the Authority after an on site inspection. The Malekula- Lakatoro and Tanna kWh production and diesel amounts used is estimated due to unavailability of data to the Authority.

<sup>1</sup> The Wintua and Lorlow (operated by the Wintua/ 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) sources<sup>2</sup> 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 due to a drop in windmill production.

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's<sup>3</sup> target.



## Number of customers

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

**Table 2: Customer numbers per electricity network area**

Sep-23									
Electricity Network	Port Vila	Luganville	Tanna	Malekula	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow
Total active customers	12,567	3,740	1,356	1,032	308	207	123	104	125
Oct-23									
Electricity Network	Port Vila	Luganville	Tanna	Malekula	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow
Total active customers	12,587	3,781	1,194	1,004	313	212	126	106	125
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

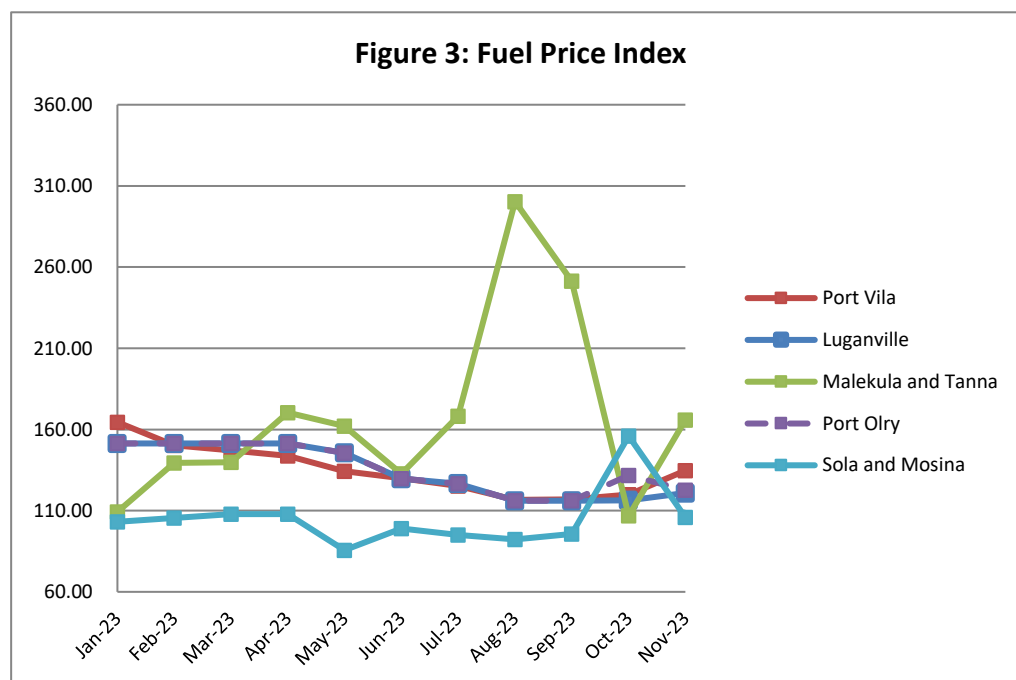
\*The Malekula – Lakatoro, Tanna and Wintua – Lorlow customer numbers remained constant, as latest data is currently unavailable.

## 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 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 after January 2020.

The increase in Tanna and Malekula Fuel index between July and September is due to the Authority getting actual data from VANPAWA Limited. The gradual decrease in October 2023 is due to the Brenwei hydro becoming fully operational then the increase during the month due to the hydro not operating during the month. Data for the two concession areas were estimated.

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



<sup>2</sup> Renewable sources include copra oil, hydro, solar and wind.

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

## Electricity Price

UNELCO<sup>4</sup> tariff for the month of November 2023 is 65.86 Vatu/kWh. VUI<sup>5</sup>, VANPAWA<sup>6</sup> and the Wintua/Lorlow electrical Cooperative's<sup>7</sup> applicable tariff in Vatu/kWh of the reporting month is 52.32, 64.89 and 41.42 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 January 2024. Due to a subsidy from the Vanuatu Government to VUI.

VANPAWA Limited had taken over the operations of Tanna and Malekula since May 2023 and a tariff of 64.89 VT/kWh was set by the Authority starting October 2023.

Wintua and Lorlow Tariff has decreased to 41.42 VT/kWh, and it was set by the Authority for a period of one year.

## Total Electricity Generated and Sold.

Total power produced increased by only 1.22 % in November 2023 from preceding month; Comparing it with the equivalent month in 2022, the total power generated decreased by 3.7 %.

Total power sold during the month increased by 7.9 % from the October 2023. Comparing it with the same month in 2022 total power sold increased by 19.9 %.

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

Figure 4: Electricity Price

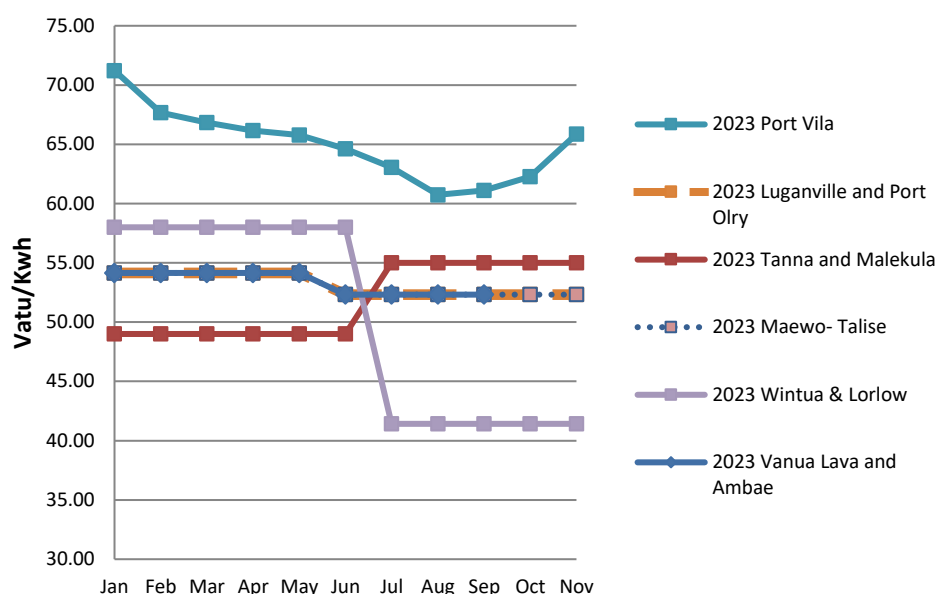
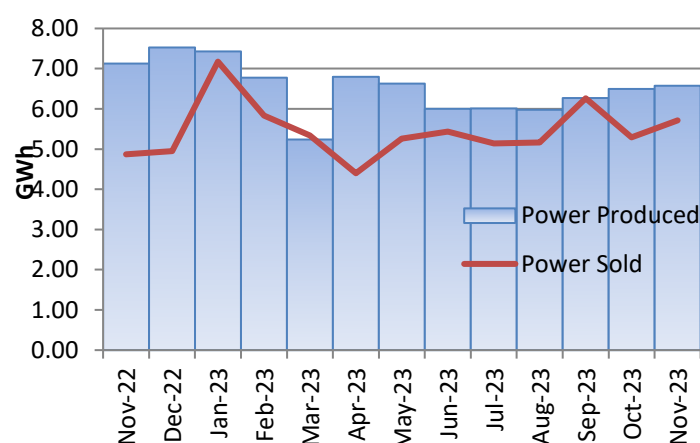


Figure 5: Electricity Generated and Sold



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

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

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

<sup>7</sup> 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](http://www.doe.gov.vu))

*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 feedback 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.