

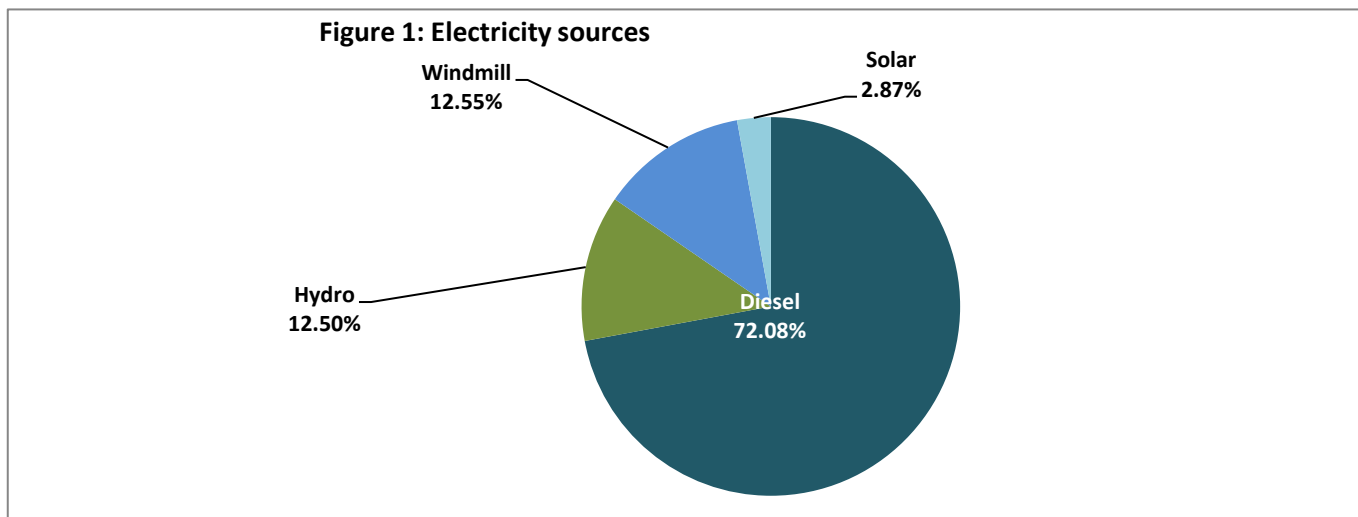
## VANUATU MONTHLY ENERGY MARKET SNAPSHOT OF AUGUST 2023

### 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 August 2023 for electricity utilities that are regulated by the Authority. During the month, the energy market experienced another increase in renewable energy contribution from wind energy compared to the previous month, bringing the energy contribution to its highest peak in 2022 and 2023. UNELCO Engie's monthly adjusted electricity tariff for the month decreased as depicted in Figure 4. The monthly changes of UNELCO tariff is mainly due to changes in fuel price, their positive correlation can be confirmed by the fuel index shown in Figure 3, UNELCO's fuel index and tariff has been decreasing since January 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 72.08 % of the total electricity produced, followed by the windmills on Efate contributed 12.55 %, hydro plants on Santo and Maewo (Talise) with an aggregate total of 12.50 %, and the solar panels on Efate, Luganville, Lakatoro and Lenakel with an aggregate total share of 2.87 %.



### 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>. 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**

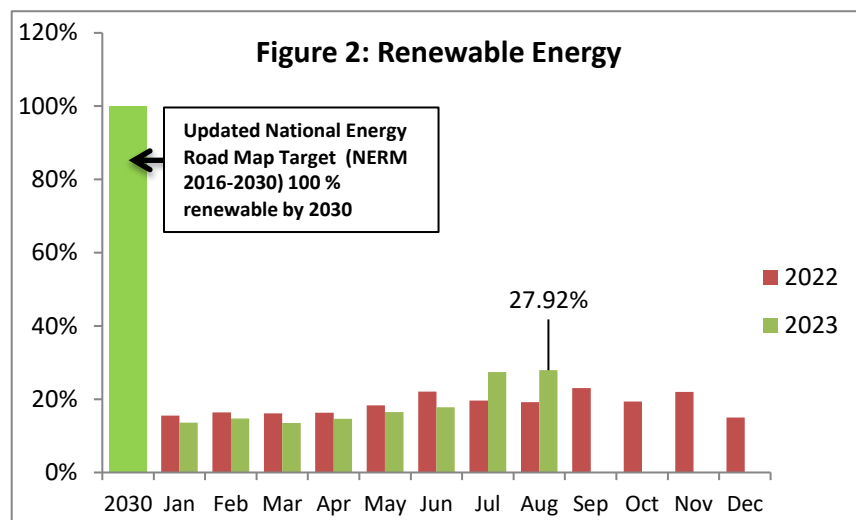
Aug-23	Port Vila	Luganville	Malekula- Lakatoro	Tanna	Ambae	Sola	Maewo	Malekula - Lorlow & Wintua	Port Olry
Total kWh Produced	4,718,258	1,028,949	115,449	131,355	12,520	6,047	5,920	1,935	14,703
Litres of diesel used	947,290	78,044	33,669	-	5,208	2,746	-	-	5,270
Diesel %	80.6%	25.6%	98.3%	100.0%	100.0%	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%	74.2%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%
Wind %	15.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Solar %	3.6%	0.1%	1.8%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%

<sup>1</sup> 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) 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 yet another peak in RE contribution this year including the contributions in the previous year. The increase was due to the increase in Windmill production and hydro during the month.

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

Table 2: Customer numbers per electricity network area

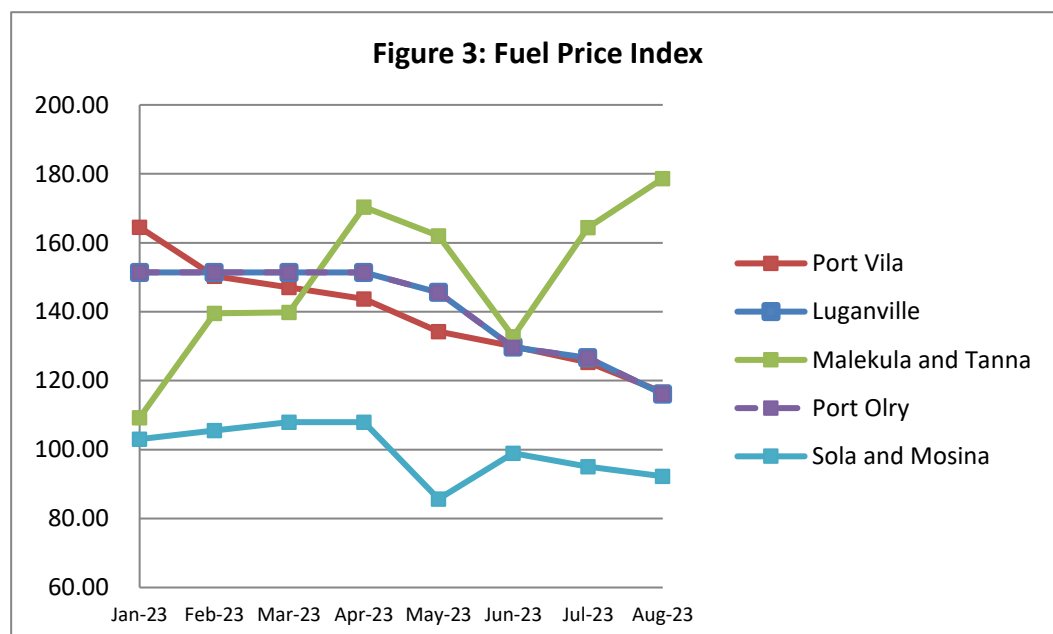
Jun-23									
Electricity Network	Port Vila	Luganville	Tanna*	Malekula*	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow
Total active customers	16,805	3,803	1,369	1,217	317	199	111	95	125
Jul-23									
Electricity Network	Port Vila	Luganville	Tanna*	Malekula*	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow
Total active customers	12,497	3,678	1,208	1,029	319	199	112	96	125
Aug-23									
Electricity Network	Port Vila	Luganville	Tanna*	Malekula*	Port Olry	Talise (Maewo)	Ambae	Vanua Lava	Wintua-Lorlow
Total active customers	12,528	3,703	1,159	1,028	321	199	114	97	125

## 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.



<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 August 2023 is 60.74 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 same month is 52.32, 55 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 December 2023. The change was set by the Authority after VUI received a subsidy from the Vanuatu Government.

VANPAWA Limited had taken over the operations of Tanna and Malekula since May 2023 and a tariff of 55 VT/kWh was set by the Authority starting July 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 decreased by 0.55 % from preceding month; Comparing it with the equivalent month in previous calendar year, the total power generated also decreased by 12.4 %.

Total power sold during the month increased by 0.4 % from the previous month. Comparing it with the same month in 2022 total power sold also increase by 8.4 %.

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

Figure 4: Electricity Price

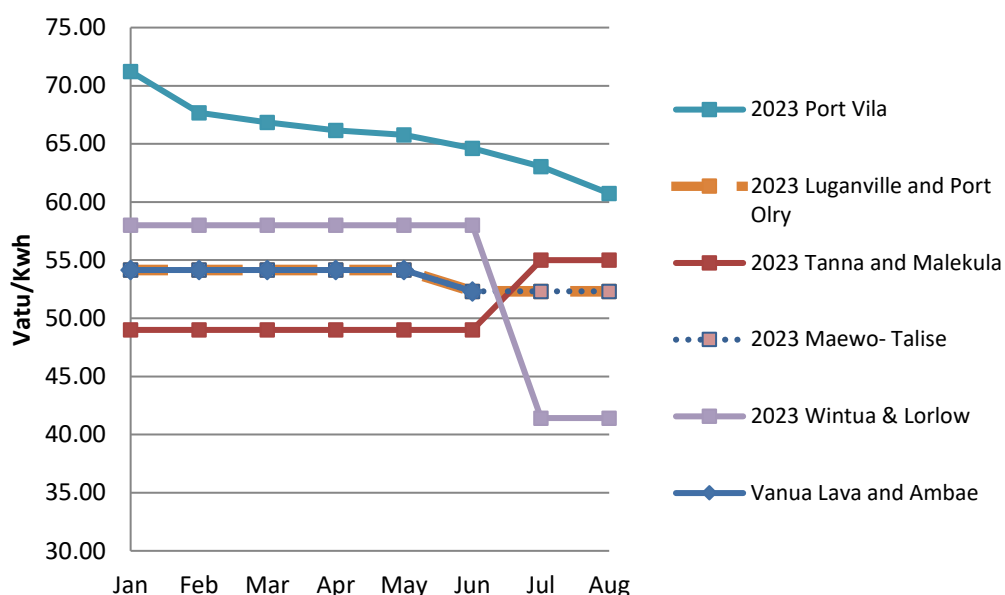
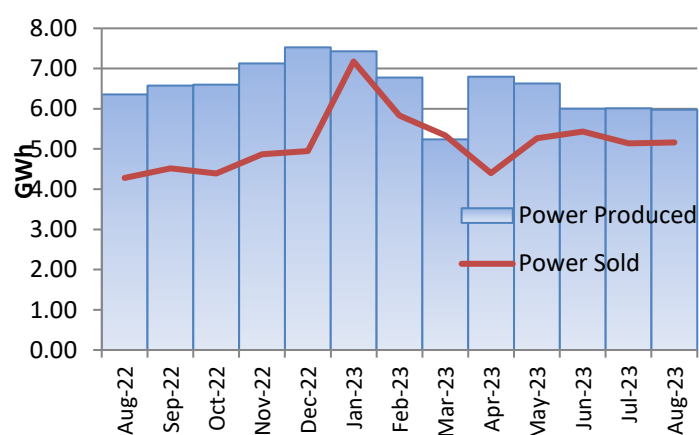


Figure 5: Electricity Generated and Sold



<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.*

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**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.