2017

2016

2018

Burundi



COUNTRY INDICATORS AND SDGS ■7.1.1 Access to electricity (% population) 7.3.1 Energy intensity GDP per capita —8.1.1 Real GDP growth rate •7.1.2 Access to clean cooking (% population) ■7.2.1 Renewable energy (% TFEC) 7.8 3% 7.8 100% 2% MJ/USD GDP 2021 PPP 80% 1% 7.7 83% 7.6 0% -0.8% 60% 7.6 0.9 40% 7.5 7.5 0.8 20% r 10% 7.4 -3% 202 7.4 , 2011 5018 5018 5020 20220% 2016 2017 2018 2019 2020 2021 2016 2017 2018 2019 2020 2021 11.6.2 Air particulate matter ($PM_{2.5}$) 7.b.1 Per capita renewable capacity 7.a.1 Public flows to renewables →WHO safe Urban Average Rural 140 7.0 5.9 35 120 6.0 28.0 30 USD millions 2019 25 W/ person 80 4.0 PM_{2.5} (µm/m³) 20 60 3.0 15 40 2.0 10 1.0 20 5

TOTAL ENERGY SUPPLY (TES)

2016 2017 2018 2019 2020 2021 2022

| Total Energy Supply (TES) | 2016 | 2021 |
|---------------------------|--------|--------|
| Non-renewable (TJ) | 6 662 | 11 111 |
| Renewable (TJ) | 56 460 | 56 350 |
| Total (TJ) | 63 122 | 67 462 |
| Renewable share (%) | 89 | 84 |

2019 2020 2021

| Growth in TES | 2016-21 | 2020-21 |
|-------------------|---------|---------|
| Non-renewable (%) | +66.8 | -0.8 |
| Renewable (%) | -0.2 | -0.2 |
| Total (%) | +6.9 | -0.3 |

| Primary energy trade | 2016 | 2021 |
|-----------------------------|---------|----------|
| Imports (TJ) | 6 997 | 11 256 |
| Exports (TJ) | 9 | 0 |
| Net trade (TJ) | - 6 988 | - 11 256 |
| | | |
| Imports (% of supply) | 11 | 17 |
| Exports (% of production) | 0 | 0 |
| Energy self-sufficiency (%) | 89 | 83 |

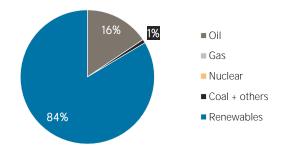
Total energy supply in 2021

2017

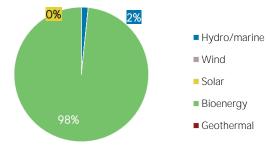
2018

2019

2016



Renewable energy supply in 2021



RENEWABLE ENERGY CONSUMPTION (TFEC)

Renewable TFEC trend ■ Electricity ■ Commercial heat ■ Bioenergy 60 ⁵⁷ 57 57 50 Petajonles (PJ) 40 30 20 10 2016 2017 2018 2019 2020 2021 Consumption by sector 2016 2021 Industry (TJ) 745 698 Transport (TJ) 0 0 Households (TJ) 48 453 48 575

Other (TJ)

7 417

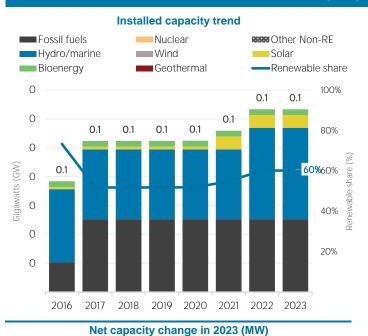
Renewable energy consumption in 2021 Geothermal Solar direct 98% 13% Industry Transport

Households

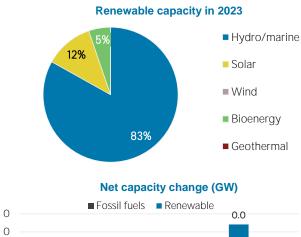
Other

ELECTRICITY CAPACITY

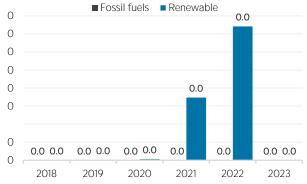
7 378

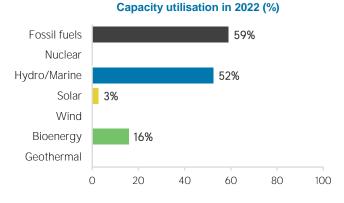






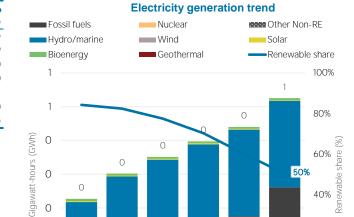
86%





ELECTRICITY GENERATION

| Generation in 2022 | GWh | % |
|--------------------|-----|-----|
| Non-renewable | 261 | 50 |
| Renewable | 264 | 50 |
| Hydro and marine | 256 | 49 |
| Solar | 2 | 0 |
| Wind | 0 | 0 |
| Bioenergy | 6 | 1 |
| Geothermal | 0 | 0 |
| Total | 525 | 100 |

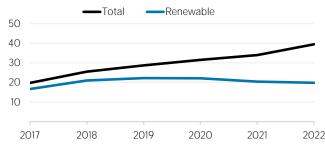


20%

0%

2022

Per capita electricity generation (kWh)





0

0

LATEST POLICIES, PROGRAMMES AND LEGISLATION

1 Decentralized Rural Electrification Strategy (2015-2017) 2015 2 Energy Strategy and Action Plan 2011 2011 3 Vision Burundi 2025 2011 4 National Adaptation Programme of Action (NAPA) 2005

5

0.2

2017

2018

2019

Avoided emissions based on tossil tuel mix used for power

2020

2021

ENERGY AND EMISSIONS CO₂ emissions by sector Elec. & heat generation CO₂ emissions in ■ Industrial Combustion ■ Transport ■ Elec. & heat ■ Processes Buildings ■ Fuel Exploitation ■ Agriculture ■Waste 0% 1 +78% ■ Coal + others 0.8 Mt CO2 Emissions 0.2 0.6 ■ Gas Mt CO₂ 0.4 ■ Oil 0.2 100% 2022 2017 2018 2019 2020 2021 Avoided emissions from renewable elec. & heat CO₂ emission factor for elec. & heat generation ■ Emitted CO2 RE Avoided CO2 BDI •••• Africa **--** • World 0.9 700 0.8 600 0.7 500 tCO2/GWh 0.6 400 0.5 298 300 0.4 0.3 200

2022

100

2017

2018

Calculated by dividing power sector emissions by elec. + heat gen.

2019

2020

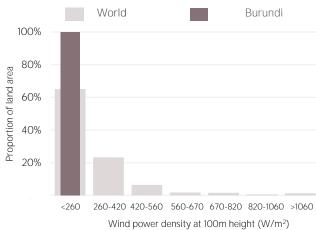
2021

2022

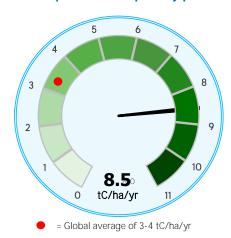
RENEWABLE RESOURCE POTENTIAL

Distribution of solar potential World Burundi 100% 80% Proportion of land area 60% 40% 20% <12 12 - 14 1.4 - 1.6 1.6 - 1.8 18 - 19 19 - 20 >20 Annual generation per unit of installed PV capacity (MWh/kWp)

Distribution of wind potential



Biomass potential: net primary production



Indicators of renewable resource potential

Solar PV: Solar resource potential has been divided into seven classes, each representing a range of annual PV output per unit of capacity (kWh/kWp/yr). The bar chart shows the proportion of a country's land area in each of these classes and the global distribution of land area across the classes (for comparison).

Onshore wind: Potential wind power density (W/m²) is shown in the seven classes used by NREL, measured at a height of 100m. The bar chart shows the distribution of the country's land area in each of these classes compared to the global distribution of wind resources. Areas in the third class or above are considered to be a good wind resource.

Biomass: Net primary production (NPP) is the amount of carbon fixed by plants and accumulated as biomass each year. It is a basic measure of biomass productivity. The chart shows the average NPP in the country (tC/ha/yr), compared to the global average NPP of 3-4 tonnes of carbon



Additional notes: Capacity per capita and public investments SDGs only apply to developing areas. Energy self-sufficiency has been defined as total primary energy production divided by total primary energy supply. Energy trade includes all commodities in Chapter 27 of the Harmonised System (H5). Capacity utilisation is calculated as annual generation divided by year-end capacity x 8,760h/year. Avoided emissions from renewable power is calculated as renewable generation divided by fossil fuel generation multiplied by reported emissions from the power sector. This assumes that, if renewable power did not exist, fossil fuels would be used in its place to generate the same amount of power and using the same mix of fossil fuels. In countries and years where no fossil fuel generation occurs, an average fossil fuel emission factor has been used to calculate the avoided emissions.

These profiles have been produced to provide an overview of developments in renewable energy in different countries and areas. The IRENA statistics team would welcome comments and feedback on its structure and content, which can be sent to statistics@irena.org.

Last updated on: 31 July, 2024



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