

# Solomon Islands

# SUSTAINABLE DEVELOPMENT GOAL 7: ENERGY INDICATORS (2018)

Renewable energy (% of TFEC)

48.5 Access to electricity (% of population)

66.0 Energy efficiency (MJ per \$1 of GDP)

4.9 Access to clean cooking (% of population)

9 Public flows renewables (2018 USD M)

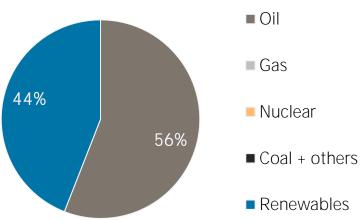
21.1 Per capita renewable capacity (W/person)

5.56

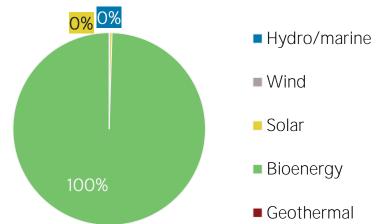
# TOTAL PRIMARY ENERGY SUPPLY (TPES)

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TPES	2013	2018
Non-renewable (TJ)	2 789	4 216
Renewable (TJ)	3 228	3 321
Total (TJ)	6 017	7 537
Renewable share (%)	54	44
Growth in TPES	2013-18	2017-18
Non-renewable (%)	+51.2	+1.9
Renewable (%)	+2.9	+1.5
Total (%)	+25.3	+1.8
Primary energy trade	2013	2018
Imports (TJ)	3 116	4 622
Exports (TJ)	0	0
Net trade (TJ)	- 3 116	- 4 622
Imports (% of supply)	52	61
Exports (% of production)	0	0
Energy self-sufficiency (%)	54	44
Net trade (USD million)	- 173	- 102
Net trade (% of GDP)	-13.5	-6.4

# Total primary energy supply in 2018



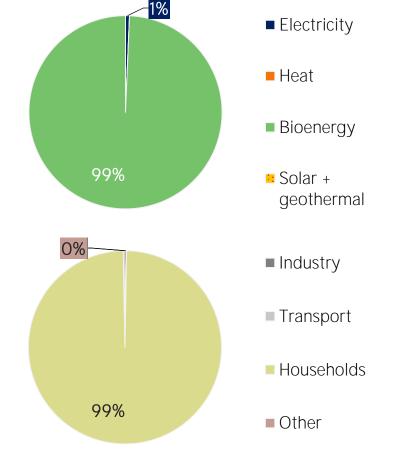
# Renewable energy supply in 2018



# RENEWABLE ENERGY CONSUMPTION

Consumption by source	2013	2018
Electricity (TJ)	18	22
Heat (TJ)	0	0
Bioenergy (TJ)	3 187	3 232
Solar + geothermal (TJ)	0	0
Total (TJ)	3 205	3 254
Electricity share (%)	1	1
Consumption growth	2013-18	2017-18
Renewable electricity (%)	+19.8	+7.6
Other renewables (%)	+1.4	+0.4
Total (%)	+1.5	+0.4
Consumption by sector	2013	2018
Industry (TJ)	7	9
Transport (TJ)	0	0
Households (TJ)	3 190	3 236
Other (TJ)	8	9
Other (13)	0	9
Renewable share of TFEC	41.8	48.5

#### Renewable energy consumption in 2018



# **ELECTRICITY CAPACITY AND GENERATION**

0.0

0.0

Capacity in 2020	MW	%
Non-renewable	64	95
	04	
Renewable	4	5
Hydro/marine	0	1
Solar	3	4
Wind	0	0
Bioenergy	1	1
Geothermal	0	0
Total	67	100
Total  Capacity change (%)	2015-20	2019-20
Capacity change (%)	2015-20	2019-20
Capacity change (%) Non-renewable	2015-20 + 31	2019-20
Capacity change (%) Non-renewable Renewable	2015-20 + 31 + 75	2019-20 0.0 0.0
Capacity change (%) Non-renewable Renewable Hydro/marine	2015-20 + 31 + 75 + 79	2019-20 0.0 0.0 0.0

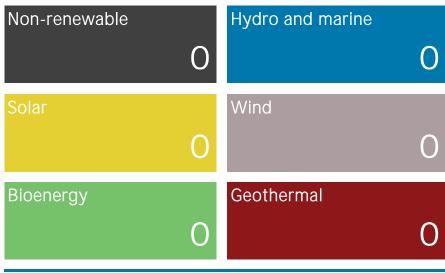
## Net capacity change in 2020 (MW)

0

+ 33

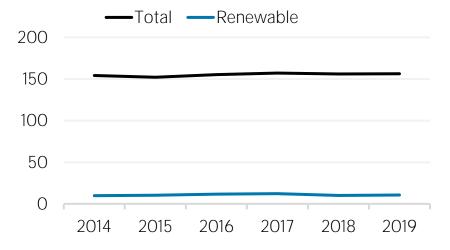
Geothermal

Total

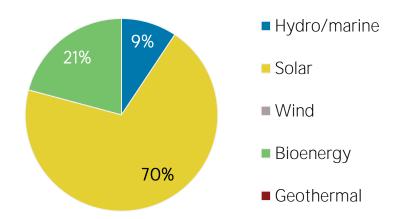


Generation in 2019	GWh	%
Non-renewable	98	93
Renewable	7	7
Hydro and marine	1	1
Solar	3	3
Wind	0	0
Bioenergy	3	3
Geothermal	0	0
Total	105	100

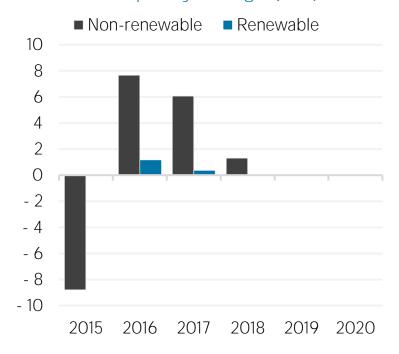
#### Per capita electricity generation (kWh)



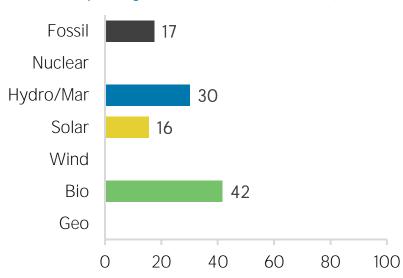
#### Renewable capacity in 2020



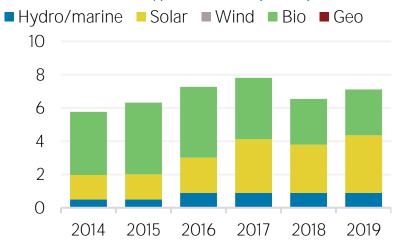
## Net capacity change (MW)



#### Capacity utilisation in 2019 (%)



#### Renewable generation (GWh)



## TARGETS, POLICIES AND MEASURES

Most immediate clean energy targets & NDCs

	year	target	
Renewable energy:			
Renewable electricity:	2020	50 %	
Renewable capacity:			
Renewable transport:			
Liquid Biofuel blending mandate:			
Other transport targets:			
Renewable heating/cooling:			
Renewable Hydropower	2025	- 104 768 tCO2 eq	
Off-grid renewable technologies:			

Energy efficiency (Energy):

Energy efficiency (Electricity):

#### Latest policies, programmes and legislation

1 Consumer Protection (Approved Standards for Restricted Electrical Products) Regulations 2016	2016
2 National Energy Policy	2007

#### References to sustainable energy in Nationally Determined Contribution (NDC)



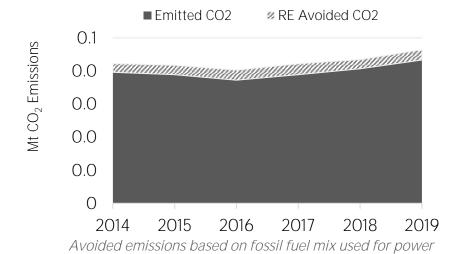
- Energy efficiency

#### **ENERGY AND EMISSIONS**

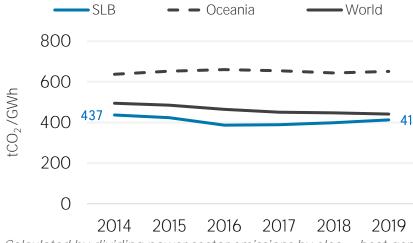




#### Avoided emissions from renewable elec. & heat



CO<sub>2</sub> emission factor for elec. & heat generation

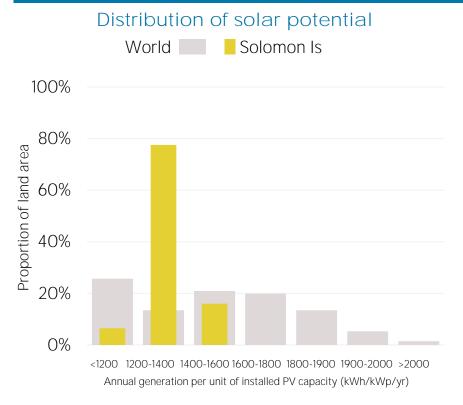


Calculated by dividing power sector emissions by elec. + heat gen.

#### RENEWABLE RESOURCE POTENTIAL

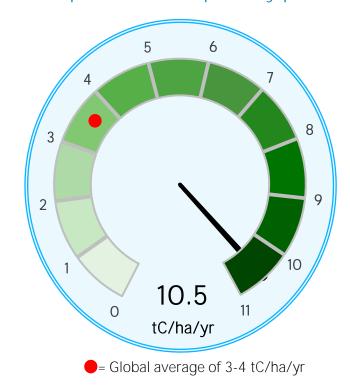
0%

<260



# Distribution of wind potential World Solomon Is 100% 80% 40% 20%

# Biomass potential: net primary production



#### Indicators of renewable resource potential

Wind power density at 100m height (W/m²)

420-560 560-670 670-820 820-1060 >1060

**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 per year.

Sources: IRENA statistics, plus data from the following sources: UN SDG Database (original sources: WHO; World Bank; IEA; IRENA; and UNSD); UN World Population Prospects; UNSD Energy Balances; UN COMTRADE; World Bank World Development Indicators; EDGAR; REN21 Global Status Report; IEA-IRENA Joint Policies and Measures Database; IRENA Global Atlas; and World Bank Global Solar Atlas and Global Wind Atlas.

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 (HS). 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**.

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IRENA Headquarters Masdar City P.O. Box 236, Abu Dhabi United Arab Emirates www.irena.org