

Lithuania

Sustainable Development Goal 7.2: Energy Indicators (2016)

Renewable energy (% of TFEC)	31.4	Access to electricity (% of population)	100.0
Energy efficiency (MJ per \$1 of GDP)	3.8	Access to clean cooking (% of population)	>95

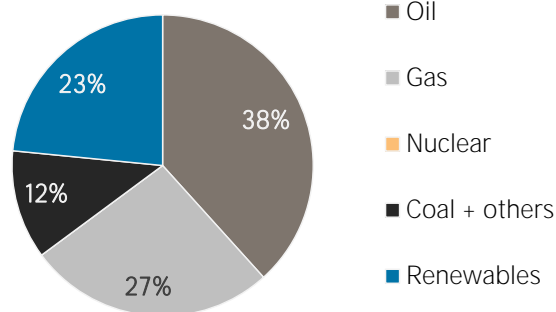
TOTAL PRIMARY ENERGY SUPPLY (TPES)

TPES	2011	2016
Non-renewable (TJ)	246 657	222 351
Renewable (TJ)	39 607	68 065
Total (TJ)	286 265	290 416
Renewable share (%)	14	23

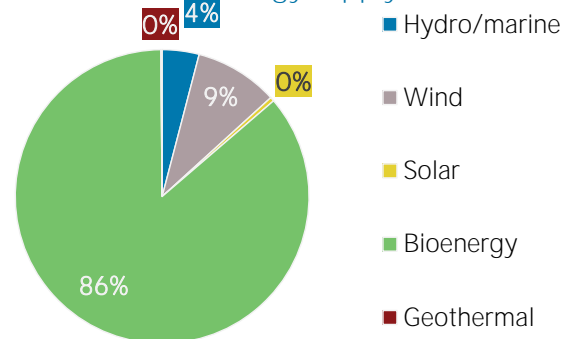
Growth in TPES	2011-16	2015-16
Non-renewable (%)	-9.9	-1.7
Renewable (%)	+71.8	+13.3
Total (%)	+1.5	+1.4

Primary energy trade	2011	2016
Imports (TJ)	589 744	619 693
Exports (TJ)	349 622	387 307
Net trade (TJ)	- 240 122	- 232 386
Imports (% of supply)	206	213
Exports (% of production)	648	560
Energy self-sufficiency (%)	19	24
Net trade (USD million)	- 3 373	- 1 166
Net trade (% of GDP)	-7.8	-2.7

Total primary energy supply in 2016



Renewable energy supply in 2016



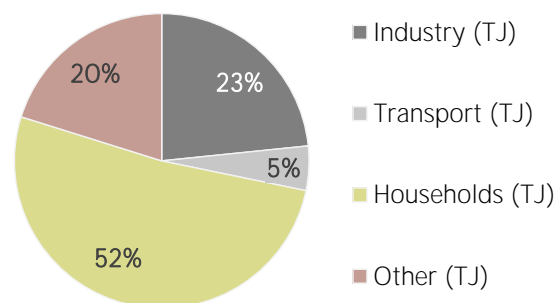
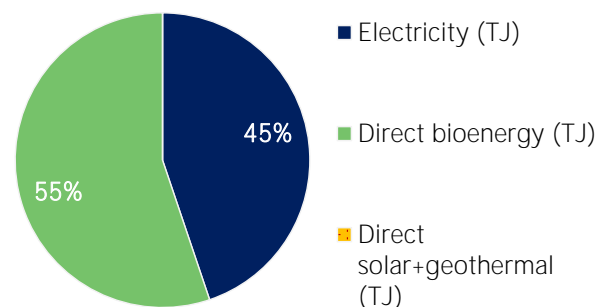
RENEWABLE ENERGY CONSUMPTION

Consumption by source	2011	2016
Electricity (TJ)	8 586	23 386
Direct bioenergy (TJ)	30 429	28 789
Direct solar+geothermal (TJ)	0	0
Total (TJ)	39 015	52 175
Electricity share (%)	22	45

Consumption growth	2011-16	2015-16
Renewable electricity (%)	+172.4	+42.9
Other renewables (%)	-5.4	-1.2
Total (%)	+33.7	+14.6

Consumption by sector	2011	2016
Industry (TJ)	5 990	12 198
Transport (TJ)	1 948	2 539
Households (TJ)	25 989	26 916
Other (TJ)	5 088	10 523
Renewable share of TFEC	22.7	31.4

Renewable energy consumption in 2016

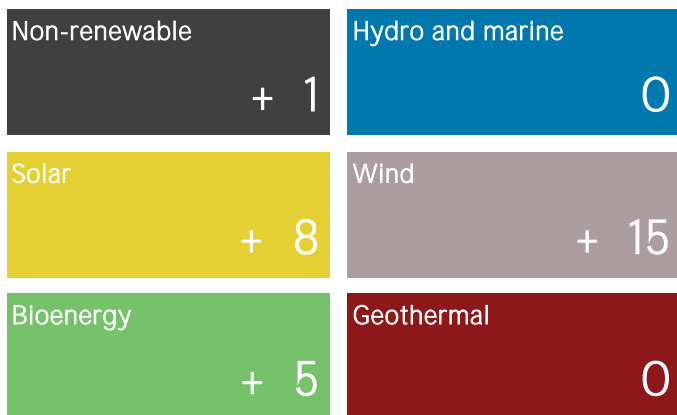


ELECTRICITY CAPACITY AND GENERATION

Capacity in 2018	MW	%
Non-renewable	2 539	76
Renewable	815	24
Hydro/marine	117	3
Solar	82	2
Wind	533	16
Bioenergy	83	2
Geothermal	0	0
Total	3 354	100

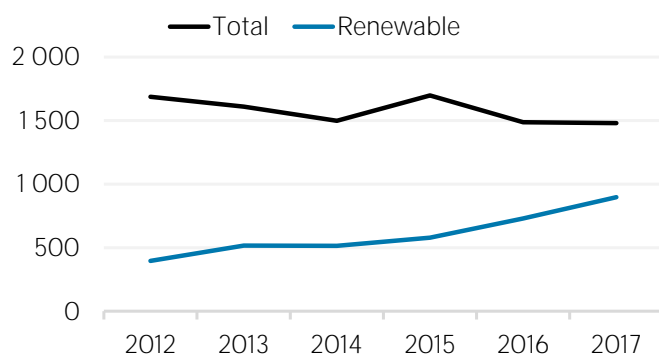
Capacity change (%)	2013-18	2017-18
Non-renewable	- 33	+ 0.0
Renewable	+ 55	+ 3.5
Hydro/marine	+ 1	0.0
Solar	+ 21	+ 11.2
Wind	+ 91	+ 2.9
Bioenergy	+ 30	+ 5.7
Geothermal	0	0.0
Total	- 22	+ 0.8

Net capacity change in 2018 (MW)

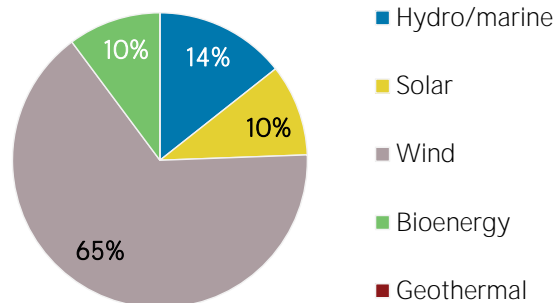


Generation in 2017	GWh	%
Non-renewable	1 649	39
Renewable	2 538	61
Hydro and marine	602	14
Solar	68	2
Wind	1 364	33
Bioenergy	504	12
Geothermal	0	0
Total	4 187	100

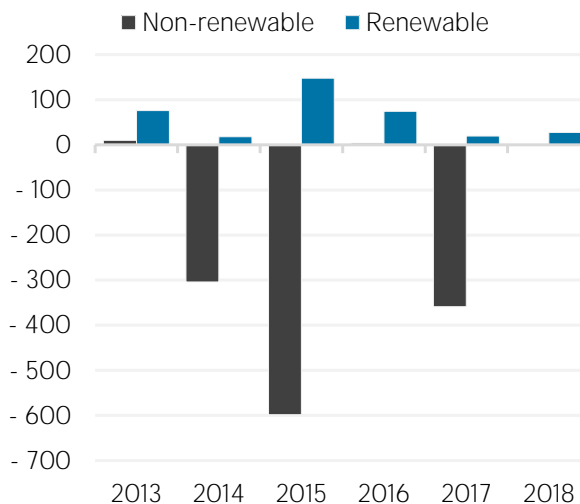
Per capita electricity generation (kWh)



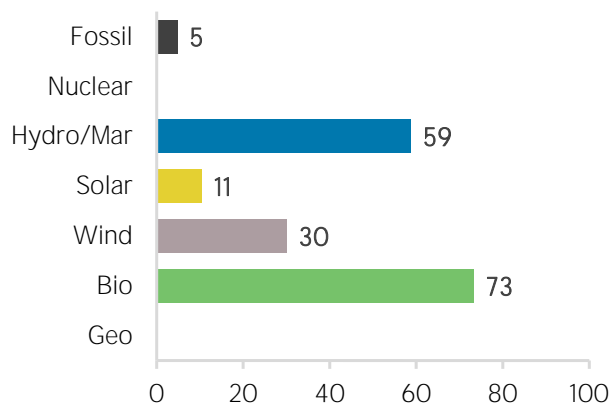
Renewable capacity in 2018



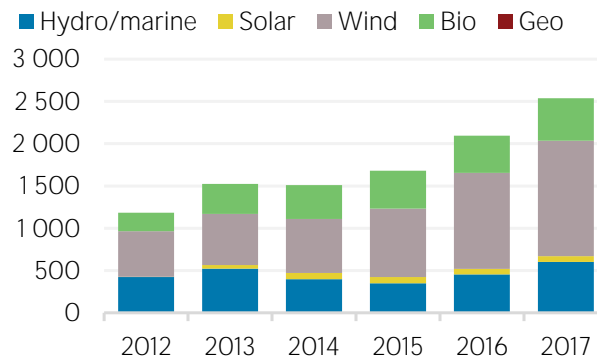
Net capacity change (MW)



Capacity utilisation in 2017 (%)



Renewable generation (GWh)



Most immediate clean energy targets & NDCs

	year	target	unit
Renewable energy:	2020	24	%
Renewable electricity:	2020	21	%
Renewable capacity:			
Renewable transport:	2020	10	%
Liquid Biofuel blending mandate:			
Other transport targets:			
Renewable heating/cooling:	2020	39	%
Renewable Hydropower			
Off-grid renewable technologies:			

Energy efficiency (Energy):

Energy efficiency (Electricity):

Latest policies, programmes and legislation

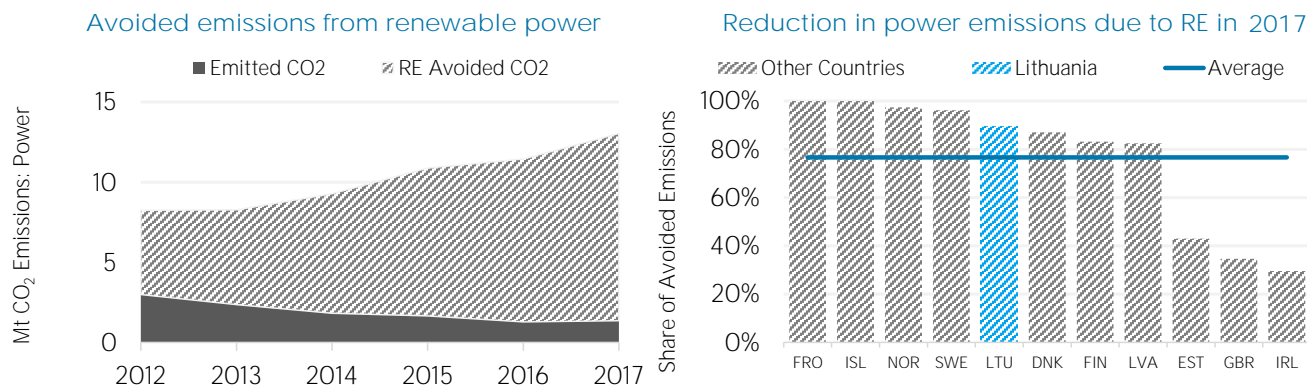
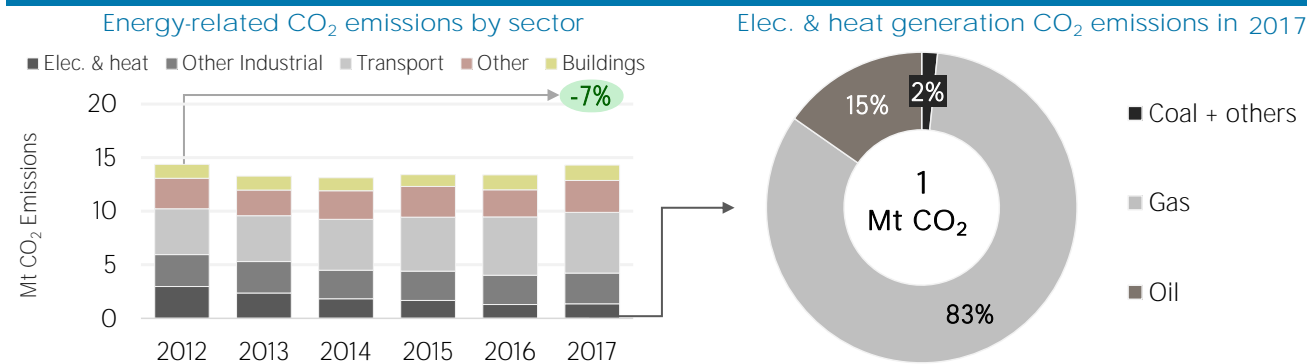
1	Feed-in Tariffs for Electricity Produced from Renewable Energy Sources (3rd quarter of 2015)	2015
2	National Energy Independence Strategy	2012
3	The promotion rules for the energy production from renewable energy sources	2012
4	Law on Energy from Renewable Sources	2011
5	National Renewable Action Plan (NREAP)	2010

References to sustainable energy in Nationally Determined Contribution (NDC)

- Renewable energy
 - electricity
 - transport
 - heating/cooling
- Energy efficiency

Conditional Unconditional unit

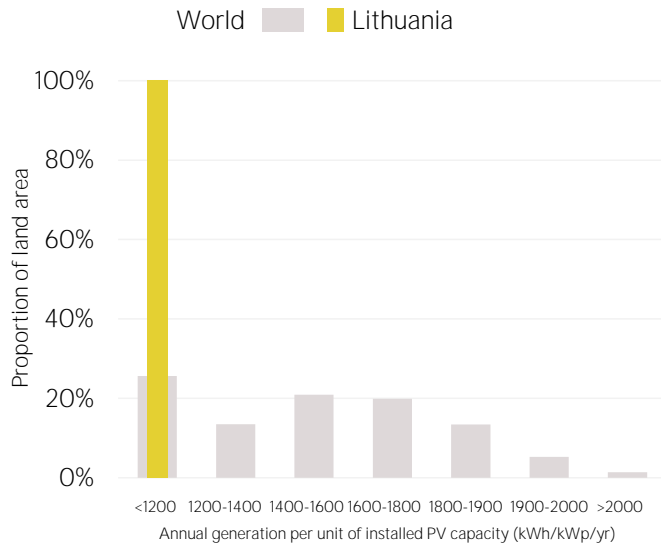
ENERGY AND EMISSIONS



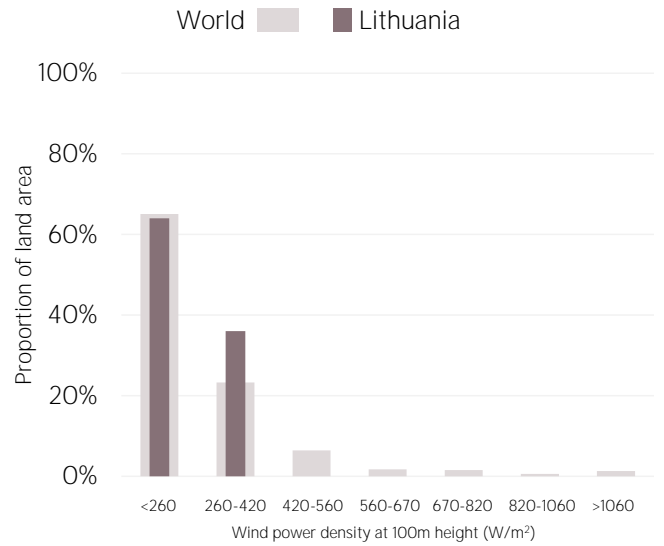
Avoided emissions based on fossil fuel mix used for power

Reduction is RE Avoided divided by sum of avoided and emitted

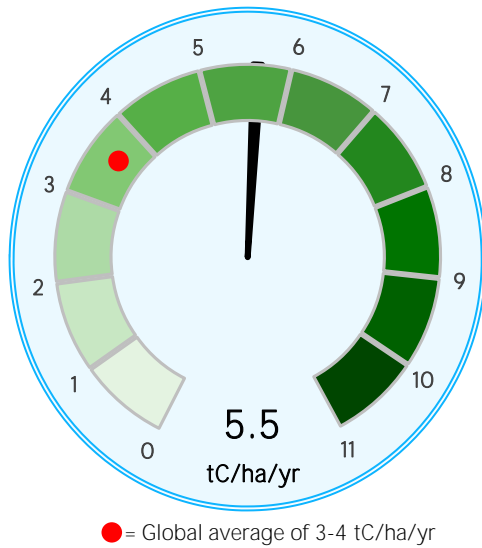
Distribution of solar potential



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/m^2) 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 Indicators Database (original sources: WHO; World Bank; IEA; IRENA; and UNSD); 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: Energy self-sufficiency has been defined as total primary energy production divided by total primary energy supply. The value of energy trade has been defined as including all commodities in Chapter 27 of the Harmonised System (HS). Capacity utilisation has been calculated as annual generation divided by capacity x 8,760. Avoided emissions from renewable power have been 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.

This note has been produced to provide policy makers with a brief overview of developments in renewable energy in a country. 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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