

Supported by:



Federal Ministry  
for Economic Affairs  
and Energy

on the basis of a decision  
by the German Bundestag

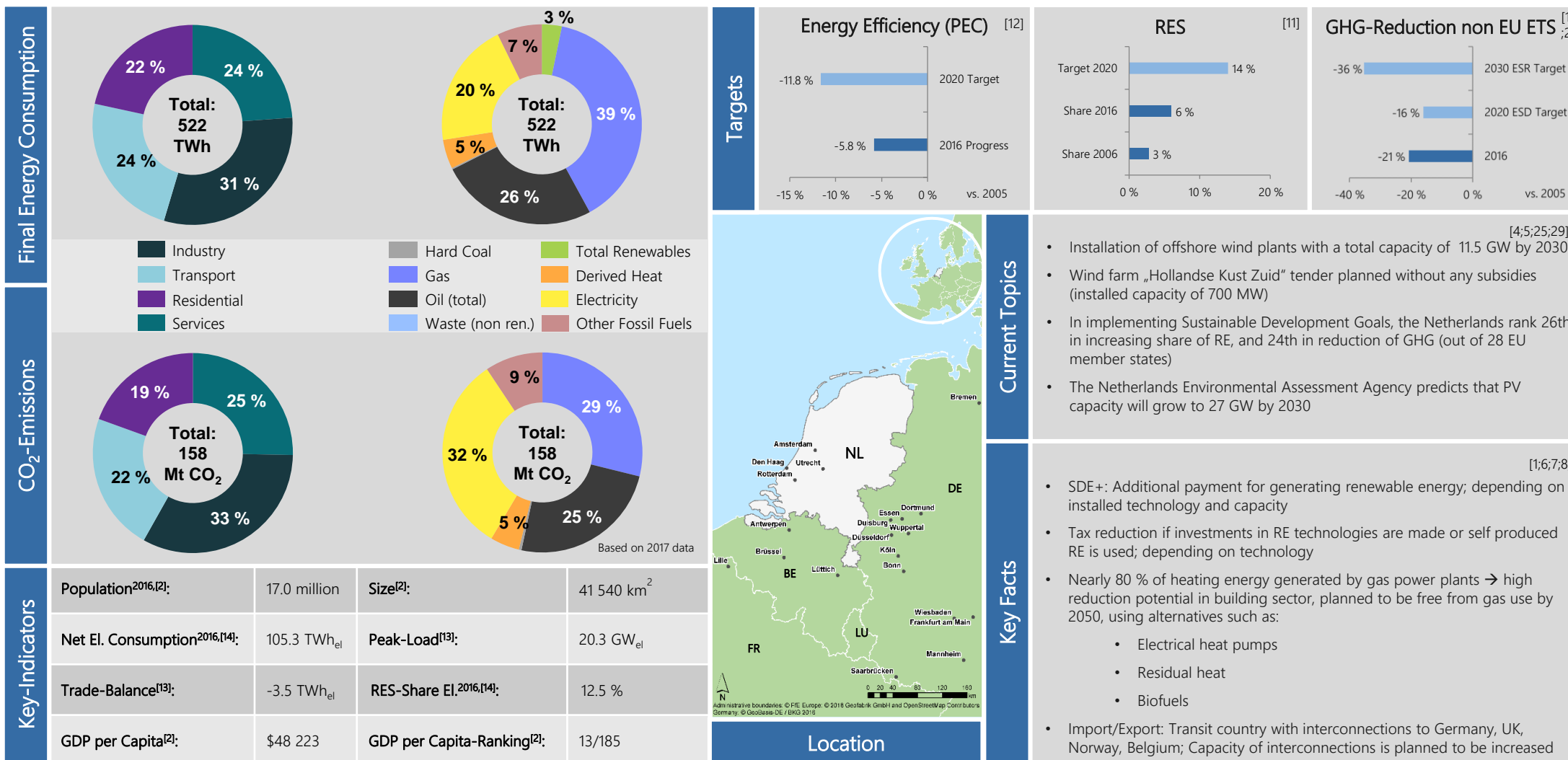


# Energy Country Profile The Netherlands

2020

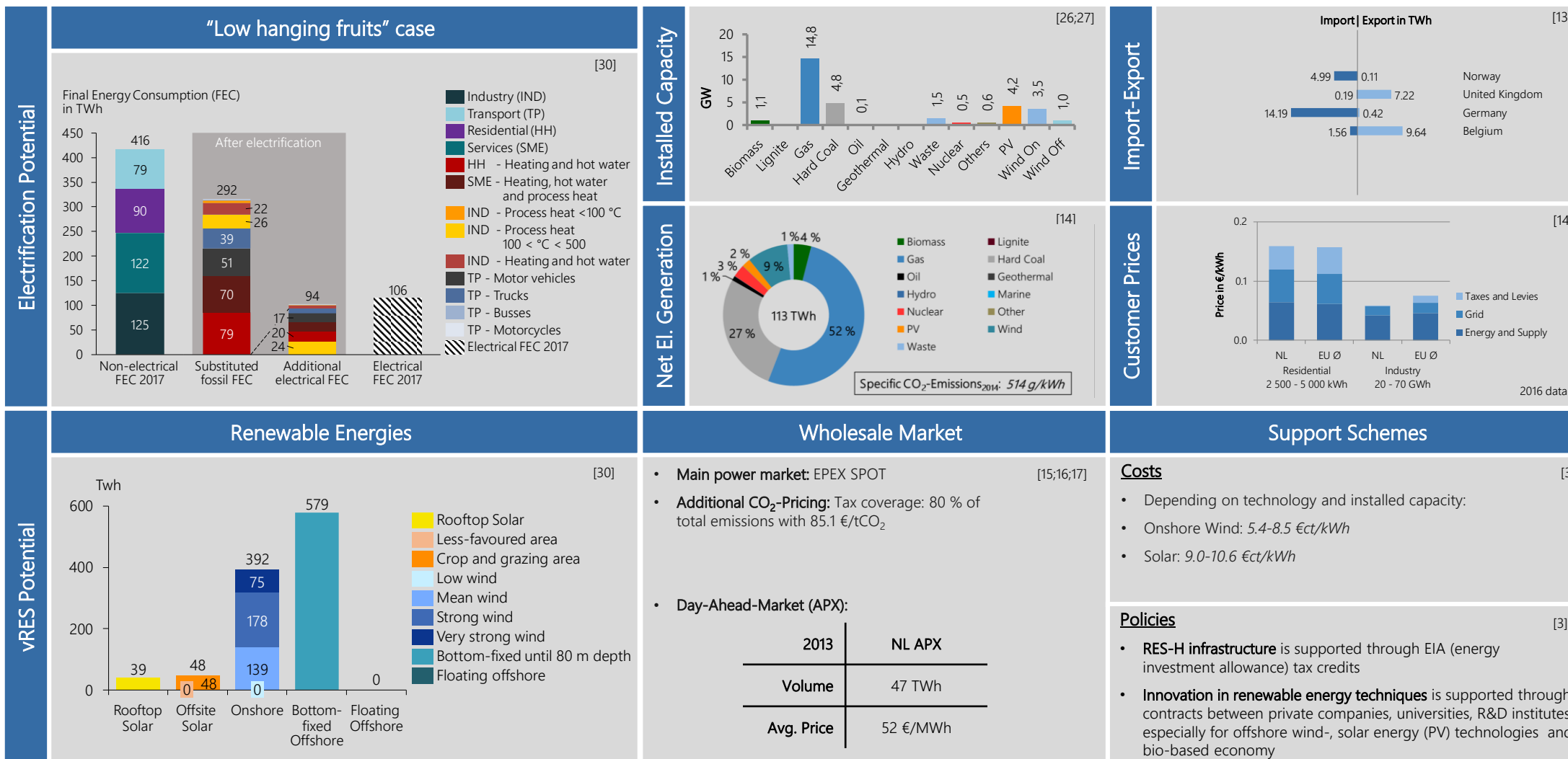


# The Netherlands at a Glance



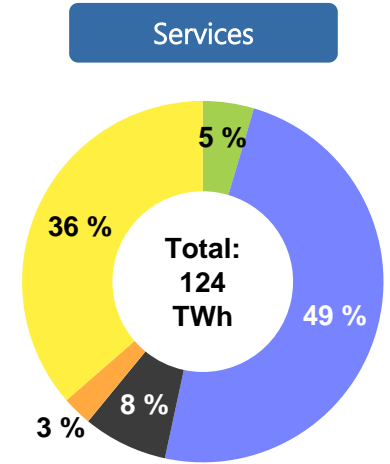
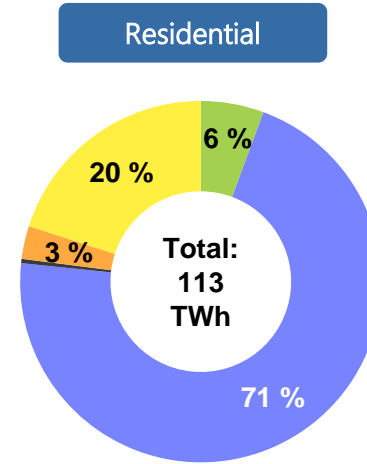
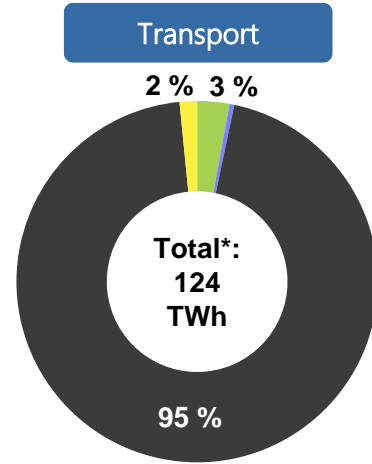
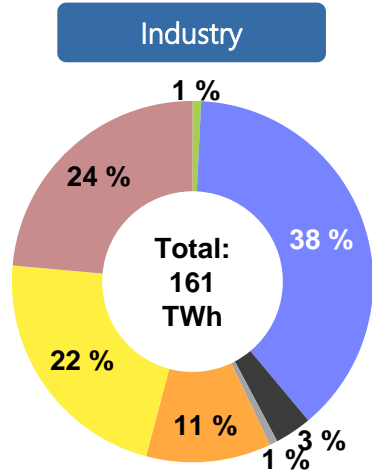
All evaluations based on the year 2017 if not mentioned otherwise.

# The Netherland's Electricity Sector

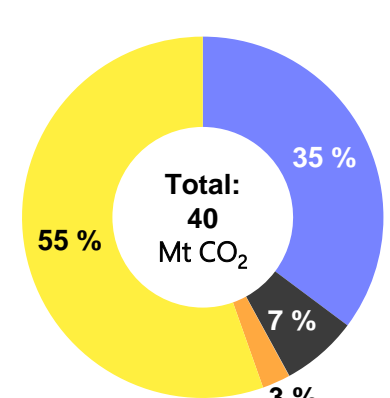
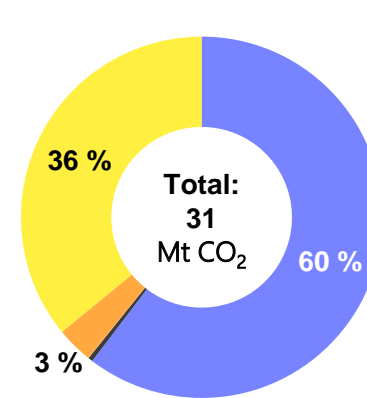
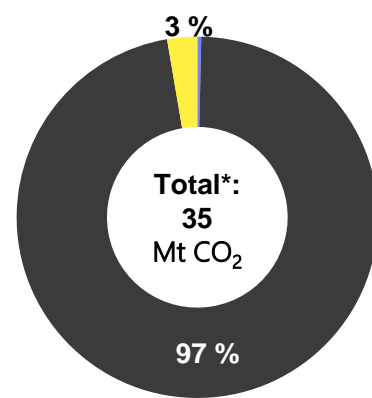
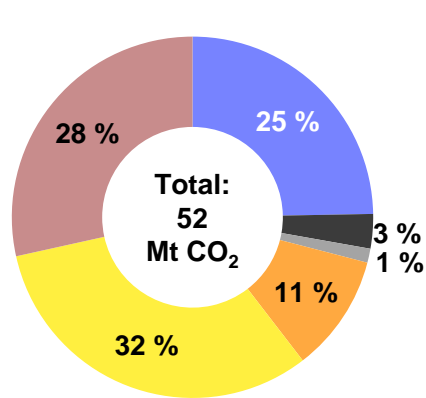


# The Netherland's Energy Consumption & Emissions by Sectors and Energy Carriers - 2017

Final Energy Consumption



CO<sub>2</sub> - Emissions



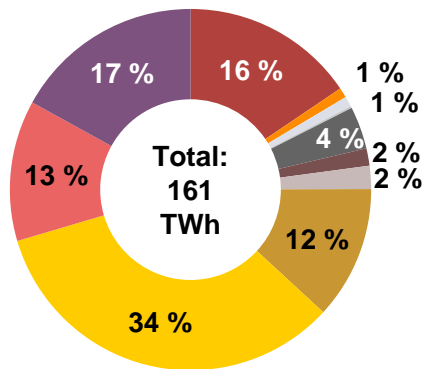
Hard Coal
  Oil (total)
  Gas
  Total Renewables
  Waste (non. ren.)
  Derived Heat
  Electricity
  Other Fossil Fuels

\*excluding international aviation

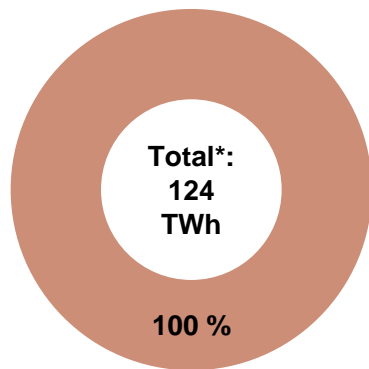
# The Netherland's Energy Consumption & Emissions by Application & Sector - 2017

Final Energy Consumption

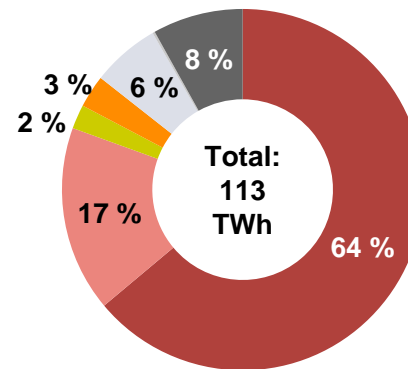
Industry



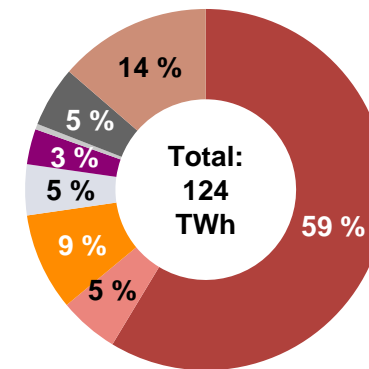
Transport



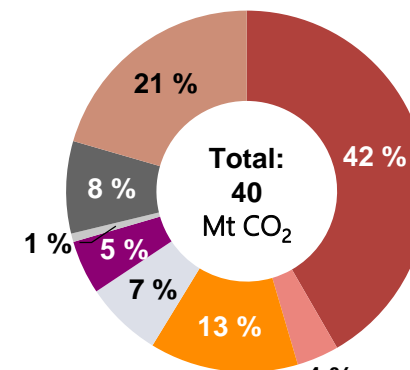
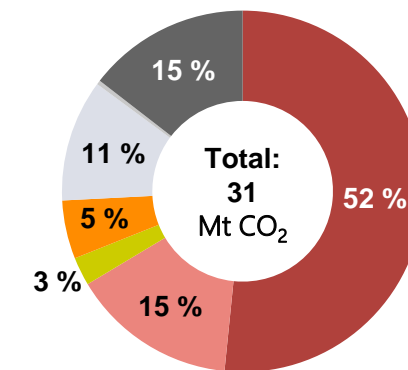
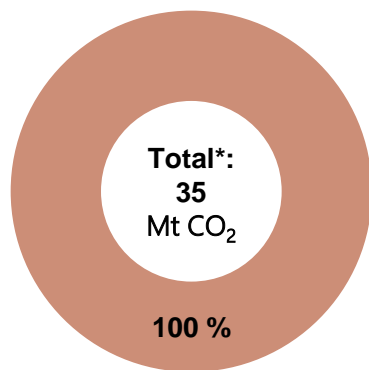
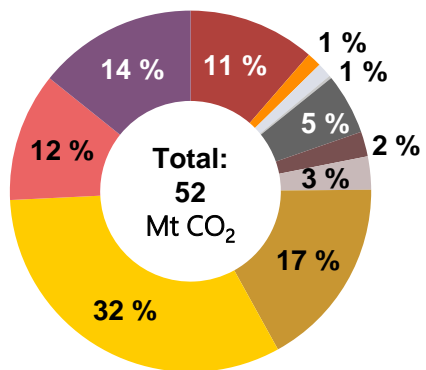
Residential



Services



CO<sub>2</sub> - Emissions



- Space Heating
- Process Heat 100 - 500 °C
- Process Heating < 100 °C
- Other Process Cold
- ICT
- Process Heating
- Cooking
- Pumps
- Warm Water
- Process Heat > 500 °C
- Other Mechanical Energy
- Mechanical Energy
- Lighting
- Compressed Air
- Climate Cold

\*excluding international aviation

# The Netherlands: Sources

## Institutions

Ministry of Economic Affairs and Climate Policy		<a href="https://www.government.nl/ministries/ministry-of-economic-affairs-and-climate-policy">https://www.government.nl/ministries/ministry-of-economic-affairs-and-climate-policy</a>
TSO Electricity	TenneT	<a href="https://www.tennet.eu/de/#&amp;panel1-1">https://www.tennet.eu/de/#&amp;panel1-1</a>
TSO Gas	Gasunie Transport Services	<a href="https://www.gasunietransportservices.nl/en">https://www.gasunietransportservices.nl/en</a>
Regulator	Authority for Consumers and Markets	<a href="https://www.acm.nl/en">https://www.acm.nl/en</a>

## Sources

[1] IEA (International Energy Agency) 2014, Energy Policies of IEA countries, The Netherlands Review 2014, <http://www.iea.org/publications/freepublications/publication/energy-policies-of-iea-countries---the-netherlands-2014-review.html>

[2] World Development Indicators, The World Bank, <https://data.worldbank.org/>

[3] Res legal, 2018, <http://www.res-legal.eu/en/search-by-country/netherlands/tools-list/c/netherlands/s/res-e/t/policy/sum/172/lpid/171/>

[4] Goals for Offshore Wind Energy, <http://www.energate-messenger.de/news/181979/niederlande-stecken-offshore-ziele-2030-ab>

[5] Netherlands Enterprise Agency, <https://english.rvo.nl/subsidies-programmes/sde/sde-offshore-wind-energy>

[6] Ministry of Economic Affairs: Renewable Heating and Cooling Policy of the Netherlands, [https://www.iea.org/media/workshops/2017/heatingcooling/deVries\\_NL.pdf](https://www.iea.org/media/workshops/2017/heatingcooling/deVries_NL.pdf)

[7] Res legal 2018, <http://www.res-legal.eu/search-by-country/netherlands/single/s/res-e/t/promotion/aid/premium-tariff-sde/lastp/171/>

[8] Netherlands Enterprise Agency, <https://english.rvo.nl/subsidies-programmes/energy-investment-allowance-eia>

[9] Overview of Energy Agreements, <https://www.government.nl/topics/renewable-energy/central-government-encourages-sustainable-energy>

[10] National Flag, <http://www.nationaflaggen.de/flaggen-europa.html>

[11] Eurostat, [http://ec.europa.eu/eurostat/statistics-explained/images/b/b7/Table\\_2-Share\\_of\\_energy\\_from\\_renewable\\_sources\\_in\\_gross\\_final\\_consumption\\_of\\_energy\\_2004-2016.png](http://ec.europa.eu/eurostat/statistics-explained/images/b/b7/Table_2-Share_of_energy_from_renewable_sources_in_gross_final_consumption_of_energy_2004-2016.png)

[12] European Environment Agency <https://www.eea.europa.eu/publications/trends-and-projections-in-europe-2018-climate-and-energy>

[13] ENTSO-E Transparency Platform, <https://transparency.entsoe.eu/>

[14] Eurostat Database, <http://ec.europa.eu/eurostat/de/data/database>

[15] EPEX Spot, <https://www.epxgroup.com/market-results/apx-power-nl/dashboard/>

[16] European Commission, Country Reports, [https://ec.europa.eu/energy/sites/ener/files/documents/2014\\_countryreports\\_netherlands.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/2014_countryreports_netherlands.pdf)

[17] OECD, Environmental Tax Profile, <https://www.oecd.org/tax/tax-policy/environmental-tax-profile-netherlands.pdf>

[18] European Commission - Eurostat, 2017, Energy statistics - supply, transformation and consumption: Complete energy balances - annual data - nrg\_110a: [http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg\\_110a&lang=en](http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=nrg_110a&lang=en)

[19] European Commission - Eurostat, 2017, Energy consumption in households: [http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy\\_consumption\\_in\\_households](http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_consumption_in_households)

[20] AG Energiebilanzen e.V., 2018, Energiebilanz der Bundesrepublik Deutschland 2016

[21] TEP Energy GmbH (TEP), University Utrecht ARMINES, 2017, Deliverable 3.1: Profile of heating and cooling demand in 2015: <http://www.heatroadmap.eu/output.php> Karlsruhe: Fraunhofer Institute for Systems and Innovation Research (ISI)

[22] Fraunhofer Institute for Systems and Innovation Research (ISI), Fraunhofer Institute for Solar Energy Systems (ISE), Institute for Resource Efficiency and Energy Strategies GmbH (IREES), ObservERTU Wien - Energy Economics Group (EEG), TEP Energy GmbH (TEP), European Commission (EC), 2016, Mapping and analyses of the current and future (2020 - 2030) heating/cooling fuel deployment (fossil/renewables) - Work package 1: Final energy consumption for the year 2012

[23] Institute for Global Environmental Strategies, 2006. IPCC Guidelines for National Greenhouse Gas Inventories - Energy - Stationary Combustion

[24] Fleiter, Tobias et al.: Mapping and analyses of the current and future (2020 - 2030) heating/cooling fuel deployment (fossil/renewables) - Work package 2: Data Annex 2 Industrial processes for publication

[25] Centraal Bureau voor de Statistiek, 2018, <https://www.cbs.nl/en-gb/news/2018/10/netherlands-closer-to-achieving-sustainability-goals>

[26] S&P Global, <https://www.spglobal.com/platts/en/products-services/electric-power/world-electric-power-plants-database>

[27] International Renewable Energy Agency, <https://www.irena.org/statistics>

[28] European Union, <https://eur-lex.europa.eu/legal-content/DE/TXT/PDF/?uri=CELEX:32018R0842>

[29] PV Magazine, <https://www.pv-magazine.com/2019/11/04/netherlands-to-reach-27-gw-of-solar-by-2030/>

[30] Own Calculation, [www.ffe.de/xos/laendersteckbriefe/methodik](http://www.ffe.de/xos/laendersteckbriefe/methodik)

## Main Studies

- **The Netherlands 2014 Review** (International Energy Agency) <http://www.iea.org/publications/freepublications/publication/energy-policies-of-iea-countries---the-netherlands-2014-review.html>
- **Energy Report Transition to Sustainable Energy** (Ministry of Economic Affairs of the Netherlands) <https://www.government.nl/documents/reports/2016/04/28/energy-report-transition-to-sustainable-energy>
- **Energy Agenda** (Ministry of Economic Affairs of the Netherlands) <https://www.government.nl/documents/reports/2017/03/01/energy-agenda-towards-a-low-carbon-energy-supply>

## Abbreviations

RES	Renewable Energy Source
EFR	Effort Sharing Regulation
PEC	Primary Energy Consumption
GHG	Greenhouse Gases
ESD	Effort Sharing Decision
EU ETS	European Union Emissions Trading System
EL	Electricity
EU	European Union
TSO	Transmission System Operator