Renewable Energy Policy Factsheet

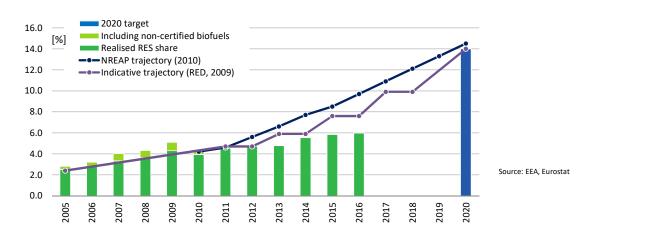
Netherlands

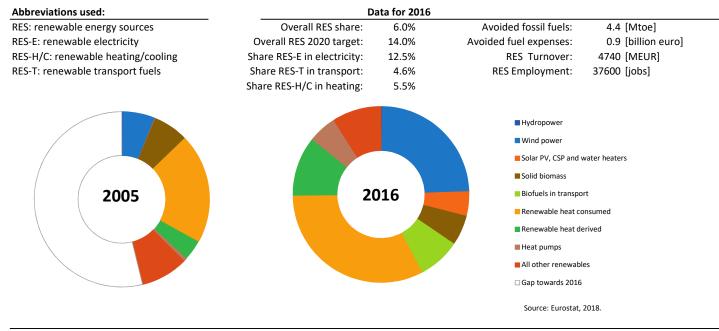
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Summary

Main support scheme: sliding feed-in premium scheme which is used to promote RES based electricity, renewable gas and heating purposes is the SDE+ which is structured as feed-in premiums and financed through a levy on the energy bill of end consumers.







| | 2005 | | 2016 | |
|---------------------------------|-------------|------------|------------|---------------------------------------|
| | Energy | Energy | Employment | Turnover |
| Hydropower | 8.6 ktoe | 8.4 ktoe | < 100 Jobs | < 10 MEUR |
| Wind power | 174.9 ktoe | 719.1 ktoe | 21500 Jobs | 2680 MEUR |
| Solar PV, CSP and water heaters | 3.0 ktoe | 134.1 ktoe | 4800 Jobs | 570 MEUR |
| Solid biomass | 193.2 ktoe | 163.9 ktoe | 3900 Jobs | 480 MEUR |
| Biofuels in transport | 0.0 ktoe | 232.1 ktoe | 400 Jobs | 70 MEUR |
| Renewable heat consumed | 601.9 ktoe | 967.1 ktoe | | |
| Renewable heat derived | 114.2 ktoe | 325.2 ktoe | | |
| Heat pumps | 16.9 ktoe | 155.0 ktoe | 3600 Jobs | 450 MEUR |
| All other renewables | 260.3 ktoe | 267.5 ktoe | | |
| Gap towards 2016 | 1599.4 ktoe | | | Source: Eurostat, EurObserv'ER, 2018. |

Hydropower jobs & turnover only covers 'small hydropower'. PV=Photovoltaics, CSP=Concentrated Solar Power. Biofuels in transport only covers compliant fuels (employment and turnover additionally cover the non-compliant biofuels). Derived heat includes heat produced in main activity producer plants and heat sold produced in autoproducer plants. Its counterpart is the final heat consumption in the final consumption sectors (such as households).



CURRENT RENEWABLE ENERGY POLICY

In September 2013, the Dutch government signed an Energy Agreement with more than forty parties involved in the energy market, including NGOs, regional and local governments, financial institutions, employers' associations and unions, and other civil-society organisations. The Energy Agreement aims to align the interests of industry, civil society and government towards the key objectives of sustainable and secure energy supply, industrial competitiveness and affordability for the consumers. At present, it is the most important document for the short term ambitions in the energy sector, and includes renewable energy (RES) ambitions and targets to 2023 and a broad range of measures to scale up RES generation. The agreement has triggered important improvements in the framework conditions for RES generation. For example, the responsibility for investigating site conditions for offshore wind deployment has been taken over by the government; permits and subsidies are now coordinated; and TenneT (the Dutch TSO) has been assigned the responsibility for offshore grid connections. These measures have contributed to far better investment conditions for offshore wind development.

More recently, the Dutch government presented in December 2016 its Energy Agenda. It is intended as a long-term perspective for the period after 2023. Among others, to the plan stipulates that no new cars with combustion engines may be sold from 2035 on, and the removal of the legal requirement for households to be connected to the gas networks. The intention of the latter is to reduce the use of gas, and replace the energy demand of households with renewable electricity and heating.

In accordance with 2009/28/EC directive, the Netherlands has set a RES target is 14% and a binding target of 10% renewable energy in road transport by 2020. In addition, the Energy Agreement includes a RES target of 16% by 2023 as well as a target of 4.5GW offshore wind by 2023. The Wind Energy Roadmap ('Rijksstructuurvisie Windenergie op Zee') outlines how offshore wind energy generation capacity is to be increased to 4,500 MW in 2023. For onshore wind power, there is an agreement with provinces to achieve 6,000 MW by 2020.

OVERVIEW OF MAIN SUPPORTING POLICIES

The main renewable energy policy used to incentivise investment in renewable energy projects in the Netherlands is the SDE (which was amended and renamed as the SDE+ in 2011). SDE and SDE+ incentives are structured as feed-in premiums and financed through a levy on the energy bill of end consumers. The Dutch government has announced that it will spend €12 billion on subsidies for renewable energy projects in 2017. Additional instruments to promote RES include loans, additional subsidy schemes, net-metering and various tax benefits. For offshore wind, a tendering scheme is available under the SDE+. The Netherlands has adopted an obligation scheme which should result in a 10% RES share of energy consumption in the transport sector. Tax credits exist for biofuel and hydrogen related RES-T investments. Additionally, the Netherlands Enterprise Agency facilitates market parties and specific organisations to establish training and certification facilities for RES installers and installations. Innovation in energy is supported through innovation contracts between private companies, universities, R&D institutes. In the framework of the Energieinvesteringsaftrek (EIA – Energy Investment Allowance), tax credits are available for RES-H&C infrastructure. The EIA

offers a tax deduction for enterprises investing in renewable electricity and heat of up to 41.5% of the investment costs. More details are provided in Table 1 and Table 2 below.

| | REGULATORY POLICIES | | | FISCAL INCENTIVE AND PUBLIC FINANCES | | | | | |
|---|---------------------------|-----------|--|---|---------------------------|---|-------------------------------------|--|-------|
| | Feed-in premium (SDE+) | Tendering | Quota obligation with Tradable Green certificates | Quota obligation without Tradable Green certificates | Net-metering/ net-billing | Capital subsidy, grants (e.g. ISDE) ¹ | Tax regulation mechanism I (EIA) | Tax regulation mechanism II (MIA/VAMIL) | Loans |
| RES-E | | | | | | | | | |
| - Offshore wind | 0 | 0 | | | | | 0 | 0 | |
| - Onshore wind | 0 | | | | | | 0 | 0 | 0 |
| - Solar | 0 | | | | 0 | | 0 | 0 | 0 |
| - Hydro | 0 | | | | | | 0 | 0 | 0 |
| - Geothermal | 0 | | | | | | 0 | 0 | 0 |
| - Solid biomass | 0 | | | | | | 0 | 0 | |
| - Biogas | 0 | | | | | | 0 | 0 | |
| RES-H/C | | | | | | | | | |
| - Solar thermal | 0 | | | | | | | | 0 |
| - Geothermal | 0 | | | | | | | | 0 |
| - Biomass | 0 | | | | | | 0 | | |
| - Biogas | 0 | | | | | | 0 | | |
| Small scale installations, e.g. solar thermal collects, heat pumps, biomass boilers and pellet stoves | | | | | | 0 | 0 | | |
| Others, i.e. aerothermal, hydrothermal | | | | | | | 0 | | |
| RES-T | | | | | | | | | |
| - Bio gasoline | | | 0 | | | | | 0 | |
| - Biodiesel | | | 0 | | | | | 0 | |

Table 1: Overview of support schemes to promote renewable energy in the Netherlands

Sources: EurObserv'ER, GSR/REN21, RES-Legal Europe (2017)

¹ Note for the editor: use footnotes to add more information if appropriate.

| Instrument | Description |
|------------------------|---|
| SDE+: Incentive | Sliding feed-in premium scheme which is used to promote RES based electricity, |
| Scheme for | renewable gas and heating purposes. SDE+ subsidies are allocated through a quasi- |
| Sustainable Energy | tendering process, where energy producers compete against each other for feed-in |
| Production | premium support. It encompasses a system of phased admission, six in total, with |
| Stimulering Duurzame | escalating base tariffs which favours low cost RES options. |
| Energieproductie | ů i i i i i i i i i i i i i i i i i i i |
| ISDE: Sustainable | Provides both private persons and small-scale business with a subsidy for the |
| energy investment | purchase of solar thermal collects, heat pumps,, biomass boilers, and pellet stoves. |
| subsidy scheme | |
| Investeringssubsidie | |
| Duurzame Energie | |
| EIA: Energy | A tax relief programme which gives a direct financial advantage to companies that |
| Investment Allowance | invest in energy-saving equipment and sustainable energy. Entrepreneurs may |
| Energie investerings- | deduct 44% of the investment costs for such equipment (purchase and/or |
| aftrek | production costs) from their company's pre-tax profits, over the calendar year in |
| | which the equipment was purchased. The business assets that qualify for the EIA for |
| | the year 2016 are set out in the Energy List 2016. The list contains more than 160 |
| | energy-saving technologies and is divided into five categories: 1. business premises; |
| | 2. processes; 3. means of transport; 4. renewable energy; 5. energy advice. |
| MIA/VAMIL: | The MIA scheme, offering a tax refund on environmental investment, and the Vamil |
| Environmental | scheme providing for voluntary depreciation on environmental investment, are two |
| Investment Rebate | different schemes run by the Ministry of Infrastructure and the Environment, or |
| Milieu-investerings | I&M for short, and the Ministry of Finance. The aim of both of them is to encourage |
| aftrek | Dutch entrepreneurs to invest in their business operations in an environmentally |
| Arbitrary depreciation | friendly way. The MIA scheme allows you to deduct up to 36% of the cost of an |
| of environmental | environmentally friendly investment from your fiscal profit while the Vamil scheme |
| investments | lets you decide for yourself when to write off 75% of your investment costs. You |
| Willekeurige | determine how fast or slow that will be. |
| afschrijving milieu- | |
| investeringen | |
| Green fund | The Dutch government gives a tax benefit to consumers who invest or put their |
| | savings in a green fund, which enables banks to offer loans at lower interest rates to |
| | 'green' projects. For a project to qualify for such a loan it should apply for a |
| | declaration on the basis of the Regulation Green Projects 2016. The declaration is |
| Current Deal | valid for 10 or 15 years depending on the application. |
| Green Deal | Introduced by the Dutch government in 2011 with the aim of identifying sustainable |
| Programme | projects (not only energy related) that would benefit from streamlined permitting |
| | and planning procedures, specific advice and/or the introduction of public-private |
| | funding structures. Eligible projects vary from large-scale geothermal research |
| | projects, industrial heat utilisation projects and smart grid projects, to smaller-scale |
| | biomass projects in the horticultural industry. Support provided is focus on facilitation (non-financial) rather than direct subsidisation. |
| | |

Table 2: Brief description of key policy instruments aimed at promoting RES in the Netherlands

For further information:

Dutch 2013 Energy Agreement, <u>https://www.government.nl/topics/energy-policy/contents/energy-agreement-for-sustainable-growth</u>

EEA, 2017. [1] EEA, 2017 <u>http://www.eea.europa.eu/data-and-maps/daviz/actual-res-progress-indicative-trajectory-2#tab-</u> <u>chart 3 filters=%7B%22rowFilters%22%3A%7B%7D%3B%22columnFilters%22%3A%7B%22pre_confi</u> <u>g_country%22%3A%5B%22European%20Union%22%5D%7D%7D</u>

Energy Agenda 2050, *Energieagenda: naar een CO*₂-*arme energievoorziening*, (December 2016), <u>https://www.rijksoverheid.nl/documenten/rapporten/2016/12/07/ea</u>

Global Status Report by REN21

http://www.ren21.net/wp-content/uploads/2016/10/REN21_GSR2016_FullReport_en_11.pdf

Member State Progress Report, available at the Renewable Energy pages of the European Commission, <u>http://ec.europa.eu/energy/en/topics/renewable-energy</u>

MIA/VAMIL, http://www.rvo.nl/sites/default/files/2014/02/MIA%20and%20Vamil.pdf

RES Legal database, http://www.res-legal.eu/search-by-country/netherlands/

Rijksstructuurvisie Windenergie op Zee (2014) https://www.noordzeeloket.nl/images/Rijksstructuurvisie Windenergie op Zee_3390.pdf

SDE+ subsidy programme, http://english.rvo.nl/subsidies-programmes/sde

What is meant by ...?

| Auctions for granting renewable energy support | An auction is a process of granting production or investment support to renewable energy projects based on the lowest bids by eligible project developers. |
|--|---|
| Feed-in tariff (FiT) | A support scheme which provides for a technology-specific remuneration per unit of renewable energy payable to eligible renewable energy producers. A proper, periodic review of FiT rates is often undertaken with the aim to prevent both too high FiTs so as to minimise regulatory rents, i.e. supra-normal returns and too low FiTs to preclude below-target market uptake because of FiT levels that are perceived by market participants to be less attractive. In addition, feed-in tariffs often include "tariff degression", a mechanism according to which the price (or tariff) ratchets down over time. |
| Feed-in premium (FiP) | A scheme which provides for a support level per unit of renewable energy to eligible renewable energy producers, typically for a period of 10-20 years, at a pre- set fixed or floating rate. The premium is typically adjusted periodically to exactly offset change in the average energy wholesale market price, based on a pre- specified benchmark market price. A floating FiP may move freely or may only be allowed to move within a pre-set interval. |
| Grants | Grants are non-repayable funds disbursed by one party (grant makers), often a government department, corporation, foundation or trust, to a recipient, often (but not always) a non-profit entity, educational institution, business or an individual. (Source: Wikipedia.org) |
| Green public procurement | In Green public procurement contracting authorities take environmental issues into account when tendering for goods or services. The goal is to reduce the impact of the procurement on human health and the environment. (Source: Wikipedia.org) |
| Renewable quota scheme (RQS) | A RQS mandates certain market actors (typically retail suppliers or large energy end-users) to respect a pre-set minimum share or amount of their total energy procurements from renewable sources of energy. Typically a tradable green certificate (TGC) scheme is operated to enable the obligated parties to prove their compliance with the prevailing renewable quota target by means of TGCs. |
| Sliding feed-in-tariff | A FiT scheme which pre-sets technology-specific declining feed-in tariffs for certain prospective vintages in line with the technology-specific learning curve, as projected by the National Regulatory Agency (NRA). Often a degression rate is used indicating the %/annum decrease in the rate level. |
| Soft loans | Loans at concessional (below market-based) terms, for example at sub-market- conform interest rates, made available in several Member States to stimulate certain renewable energy technologies. |
| Tax credits | These are amounts a tax paying entity is allowed to deduct when declaring payable taxes, for example company tax or income tax, to the tax authorities, for example the producer tax credits (PTCs) used in the United States to stimulate among others wind energy deployment. |



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Disclaimer

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