

2020 annual report on energy efficiency in the Netherlands

Reporting under Article 24(1) of and Annex XIV to the EU Energy Efficiency Directive (Directive 2012/27/EU)

Annual report	2020
Reporting year	2018
Member State	Netherlands

a) Data based on national indicators

(see annex for table in full)

	Data field	AR Indicator	Unit
B1	3,094	(i) primary energy consumption	PJ
B2	1,875	(ii) total final energy consumption	PJ
B3	569	(iii) final energy consumption - industry	PJ
B4	459.00	(iii) final energy consumption - transport	PJ
B6	404	(iii) final energy consumption - households	PJ
B7	286	(iii) final energy consumption - services	PJ
B8	148	final energy consumption - agriculture	PJ
B9	9	final energy consumption – other sectors	PJ
B10	84,533	(iv) gross value added - industry	Million euro (2015)
B11	517,157	(iv) gross value added - services	Million euro (2015)
B12	381,022	(v) disposable income for households	Million euro
B13	744,505	(vi) gross domestic product (GDP)	Million euro (2015)
B14	361	(vii) gross electricity generation from thermal power generation	PJ

B15	43	(viii) gross electricity generation from CHP	TWh
B16	174	(ix) gross heat production from thermal power generation	PJ
B18	174	(x) gross heat production from CHP	PJ
B20	894	(xi) Transformation input for electricity and heat generation	PJ
B21	211	(xii) passenger kilometres	billion pkm
B22	27,585	(xiii) tonnes kilometres	million tkm
B23	17,181,084	(xv) population	Persons
B24	7,858,000	Total number of households	Households

Comments on increase/continuity in energy consumption:

Main reason 1 Main reason 2 Please, explain 'other' reasons and provide any additional comments, supporting data or links to documents

34	Industry	Please select	Please select	
35	Transport	Economic growth	Increase of transport of passengers	Consumption increase of 11 PJ due to increased consumption by road traffic. Transport of freight has increased due to economic growth. Although passenger kilometers is slightly lower in 2017 compared to 2016, the vehicle kilometers have increased, resulting in additional energy consumption
36	Households	Increase of population and/or households	Please select	Consumption increase of 0.7 PJ due to an increase of population and the number of households
37	Services	Please select	Please select	
38	Agriculture (voluntary)	Please select	Please select	

Reporting on CHP

For reporting relating to CHP, see the enclosed Excel spreadsheet.

b) Policy changes

1. Changes under Article 7 – Alternative measures

1.1 Fiscal measures

1.1.1 Changes to energy tax

Energy tax rates were amended as of 1 January 2020¹. The Central Government increased the energy tax on natural gas and reduced that on electricity in order to encourage households to increasingly choose electric heat options, such as heat pumps, or sustainable heat options, such as geothermal energy. The following tables set out the rates for 2017, 2018, 2019 and 2020 in euro cents per unit:

	2017 level	2018 level	2019 level	2020 level
Energy tax (euros per unit excluding VAT)				
<i>Natural gas</i>				
0-170,000 m ³	0.25244	0.26001	0.29313	0.33307
170,000-1,000,000 m ³	0.06215	0.06464	0.06542	0.06444
1,000,000-10,000,000 m ³	0.02265	0.02355	0.02383	0.02348
> 10,000,000 m ³	0.01216	0.01265	0.01280	0.01261
<i>Reduced natural gas rate for greenhouse horticulture</i>				
0-170 000 m ³	0.04054	0.04175	0.04707	0.05348
170,000-1,000,000 m ³	0.02346	0.02440	0.02469	0.02432
1,000,000-10,000,000 m ³	0.02265	0.02355	0.02383	0.02348
> 10,000,000 m ³	0.01216	0.01265	0.01280	0.01261
<i>Electricity</i>				
0 -10,000 kWh	0.1013	0.10458	0.09863	0.09770
10,000 – 50,000 kWh	0.04901	0.05274	0.05337	0.05083
50,000 – 10,000,000 kWh	0.01305	0.01404	0.01421	0.01353
>= 10,000,000 kWh private use	0.00107	0.00116	0.00117	0.00111
>= 10,000,000 kWh business use	0.00053	0.00057	0.00058	0.00055

1.1.2 Changes to the sustainable energy surcharge

The table below shows the changes in the rate of the sustainable energy surcharge (opslag duurzame energie, ODE) under the sustainable energy+ subsidy scheme (Subsidieregeling Duurzame Energie+, SDE+) for 2017, 2018, 2019 and 2020:

	2017	2018	2019	2020
Natural gas in m³	<i>In euros per cubic metre of natural gas</i>			
0- 170,000	0.0159	0.0285	0.0524	0.0775
170,000-1 million	0.0074	0.0106	0.0161	0.0214
1 million-10 million	0.0027	0.0039	0.0059	0.0212
>= 10 million	0.0013	0.0021	0.0031	0.0212
Natural gas in m³, reduced rate for greenhouse horticulture	<i>In euros per cubic metre of natural gas</i>			
0- 170,000	0.0026	0.0046	0.0084	0.0124
170,000-1 million	0.0025	0.0040	0.0061	0.0081
1 million-10 million	0.0027	0.0039	0.0059	0.0212

¹https://www.belastingdienst.nl/wps/wcm/connect/bldcontentnl/belastingdienst/zakelijk/overige_belastingen/belastingen_op_milieugrondslag/tarieven_milieubelastingen/tabellen_tarieven_milieubelastingen

>= 10 million	0.0013	0.0021	0.0031	0.0212
Electricity in kWh	<i>In euros per kilowatt-hour of electricity</i>			
0- 10,000	0.0074	0.0132	0.0189	0.0273
10,000- 50,000	0.0123	0.0180	0.0278	0.0375
50,000-10,000,000	0.0033	0.0048	0.0074	0.0205
>= 10 million	0.000131	0.000194	0.0003	0.0004
ODE revenue in € million	678	1074	1730	2411

Electricity supplied to charging facilities for electric vehicles is subject to a zero-rate ODE.

1.1.3 Changes to the energy investment allowance (EIA)

The energy investment allowance has been in place since 1998. It allows operators to deduct targeted investments in energy saving and sustainable energy from the taxable profit of their business.

Changes in the EIA scheme between 2015 and 2019:	2015	2016	2017	2018	2019
Budget available (in € million)	101	161	166	149	147
Rate of deduction from taxable profit	41.5%	58%	55%	55%	45%

1.2 Other changes to alternative measures under Article 7

Energy savings reported by the Netherlands under Article 7 are achieved by means of the following policy measures: the energy investment allowance (EIA), the multiannual energy efficiency agreements (MJA3 and MEE covenants) and the combination of saving measures in the built environment and transport.

Below is an update on the most important policy changes that took place in 2019 (more wide-ranging than the policy measures described above).

Climate agreement

- On 28 June 2019 the Dutch Government presented the Climate Agreement and began to implement it. The Agreement includes over 600 commitments to combat greenhouse gas emissions. Measures leading to energy savings have been included where they are considered by the Netherlands Environmental Assessment Agency (PBL) to be cost-efficient. Generic instruments with an energy-saving effect, such as the carbon tax, have been announced. The ministries responsible are currently drawing them up in more detail. The introduction of measures to reduce carbon is supported by the SDE+ subsidy scheme. This is financed via the energy bill: with the sustainable energy surcharge (ODE). The Government believes that everyone needs to make a fair contribution to the transition. To this end, we are increasing the share of the sustainable energy surcharge paid by businesses in 2020 from 1/2 to 2/3.
- The Climate Agreement also includes mobility commitments. The targets of the Ministry of Infrastructure and Water Management include:
 - Green Deal for inland waterways (deployment of biofuels);
 - Battery development (extraction to recycling);
 - More sustainable mobility for people, including by the standardisation of work-related mobility, 'mobility as a service' (MAAS), carpooling and cycle highways;
 - Logistical efficiency and bullet logistics.

Recognised measures

- There are lists of recognised measures for 19 industry sectors. By taking the applicable recognised measures listed, a company or institution can comply with the energy savings requirement. The lists were updated in 2018 and at the beginning of 2019, so they comply with the state of the art and are based on current energy prices. The lists of recognised

measures are contained in Annex 10 to the Environmental Management Activities Order and were published in March 2019². They entered into force on 1 April 2019 and still apply.

Information requirement

- Under the information requirement, establishments (companies and institutions) are required to report every 4 years from 1 July 2019 what energy-saving measures have been taken to comply with the existing energy savings requirement (Article 2.15(1) of the Environmental Management Activities Order) to take all measures with a 5-year payback period (on the basis of the lists of recognised measures). The change has been agreed between the parties to the Social and Economic Council energy agreement. The target group is some 70,000 - 90,000 companies and institutions with energy consumption of more than 50,000 kWh, or 25,000 m³ of natural gas equivalent. At the start of 2020, just over 45,000 reports were submitted. The competent authority has access to the (classified) reports in its region. In 2020, communication to business will be about energy saving and the information requirement. In particular, there will be communication from MKB Nederland on behalf of the industry associations. At the same time, monitoring and enforcement by the competent authorities (municipalities and environmental services) have also started in relation to the information requirement.

MJA3/MEE covenants + 9 PJ

- The MEE and MJA3 covenants are agreements between the Central Government, companies and industry organisations to use energy more efficiently. The covenants will run until 2020 and collectively represent over 80% of industrial energy consumption and a quarter of total energy consumption in the Netherlands. The Netherlands is currently in the last 4-year planning period. On average, businesses are on course to meet the targets in 2020, but would also have to achieve good results in 2019 and 2020 to actually achieve the targets. According to the forecast for measures taking place under the addendum to the MEE covenant, the earlier surplus of planned measures is decreasing. The 2019 monitoring data will be submitted in April 2020, and the results will then be published in autumn 2020. Moreover, it was agreed with the parties to the MEE covenant that an additional 9 PJ in final energy savings would be made by 2020. The anticipated saving, including the planned projects, is 9.37 PJ. This is less than expected in 2017, when a saving of 9.72 PJ was anticipated. After the monitoring round ended, we learnt that a major project of almost 0.6 PJ cannot be implemented on time. Other ways of achieving this are being looked for to compensate for the loss. In the light of these interim results, it is desirable that the industry proposes new projects for the following monitoring point in April 2020 as well as actually carrying out most of the projects already planned.

Additional funding for the Energy efficiency greenhouse horticulture scheme

- In 2018, a subsidy of €8.9 million was granted under the Energy efficiency greenhouse horticulture scheme. Of this, €3.7 million have been allocated to second energy screens and dehumidification systems. The remaining funding has been granted for physical connection to a heating, biogas or carbon dioxide network or cluster. In 2019, a subsidy of €7.9 million was granted under the Energy efficiency greenhouse horticulture scheme. Of this, €4 million have been allocated to second energy screens and dehumidification systems. The remaining funding has been granted for physical connection to a heating, biogas or carbon dioxide network or cluster. Granting these subsidies means an extra saving in 2020 of 1.3 (0.7-1.9) PJ.

More rapid climate investments in industry

- In 2019 the Ministry of Economic Affairs and Climate Policy made €28 million available to subsidise more rapid climate investments in the industry. Entrepreneurs wishing to carry out CO₂-saving measures in their businesses may use the scheme if the payback period is longer than five years and the investment costs are high.

2. Amendment of Article 5 (central government buildings)

² Government Gazette No 8650, 2019

Article 5 of the Energy Efficiency Directive (EED) contains an annual obligation to renovate 3% of the building stock of the central government. After renovation, this 3% of the building stock must comply with the minimum energy performance criteria set by the Member State concerned under Article 4 of the Directive on the energy performance of buildings (EPBD). This obligation applies to buildings that are owned and used by central government and have a usable surface area greater than 250 m². The Directive allows an alternative approach to be pursued in order to realise the same energy savings. The Netherlands will make use of this alternative in the period 2021-2030. The Netherlands wishes to take an alternative approach based on the sectoral roadmap of the Central Government Real Estate Agency (Rijksvastgoedbedrijf). This roadmap was created under the Climate Agreement and describes how central government can achieve a low-carbon property portfolio by 2050. The intended saving according to the roadmap is 1.3 PJ in 2030. This is far higher than the expected saving of 0.2 PJ from annually renovating 3% of the buildings owned and used by central government with a usable surface area greater than 250 m². In the report 'Energy saving by renovation of government buildings under Article 5 EED', drawn up by ECN part of TNO, further details are given in support of the alternative approach and the expected savings impact³.

3. Changes under Article 8 (energy audits)

The audit regulations were evaluated in 2018. In light of the evaluation, the Ministry of Economic Affairs and Climate Policy adapted the temporary scheme for implementing Articles 8 and 14 of the Energy Efficiency Directive (EED)⁴. Since July 2019, responsibility for supervision and enforcement of energy audits has been moved from municipalities, provinces and environmental services to the Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland), which operates under the Ministry of Economic Affairs and Climate Policy.

The Ministry of Economic Affairs and Climate Policy intends to initiate a number of improvements to the regulations in 2020. Energy audits are currently included in a temporary scheme and will be laid down in the Act implementing the EU Energy Efficiency Directives. This amendment introduces provisions enabling businesses to submit an energy audit per business as opposed to per establishment (as is the case with the temporary scheme), meaning they can meet the audit obligation more efficiently.

4. Changes under Articles 9, 10 and 11 (metering, billing and costs)

The proposal for an Act amending the Act implementing the EU Energy Efficiency Directives and the Heating Act has been presented in the Lower House in conjunction with the implementation of Directive 2018/2002/EU on energy efficiency. The amendment of the accompanying general administrative regulation is being prepared.

According to Directive (EU) 2019/944 ('the Electricity Directive'), in the Netherlands, where roll-out of smart meters has already started, the situation by 1 January 2024 should be that 80% of final customers have a smart meter system. The Netherlands is expected to achieve this percentage.

5. Changes under Article 14 (heating and cooling)

Under the Climate Agreement it has been decided that each municipality is to draw up a Transition Vision for Heating for each of the neighbourhoods within it, based on the costs of transition to a carbon-free heating supply. This already anticipates the update of the comprehensive assessment. An analysis for all the neighbourhoods in the Netherlands was made available to all municipalities in October 2019.

6. Amendment of Article 19 (other measures to promote energy efficiency)

Reduction in levies improving sustainability

³ <https://www.rijksoverheid.nl/documenten/rapporten/2019/08/30/energiebesparing-door-renovatatie-van-rijksgebouwen-in-het-kader-van-artikel-5-eed-door-tno>

⁴ Government Gazette No 30626, 2019

Landlords that own more than 50 rental properties pay a levy based on the property value (WOZ) of the rental accommodation. This applies to rental properties for which the rent is at most €720.42 per month (at 2019 price level). The Prime Minister’s Office wants housing corporations to invest in the sustainability of housing. Accordingly, since 1 February 2019 landlords obliged to pay tax have been able to apply for a tax reduction on investments in the sustainability of housing. A total of 150 million was available for this purpose. The scheme came to an end on 1 July 2019 when the available budget was exhausted. We will consider the possibility of reopening the scheme for tax reductions for sustainability in future.

Subsidy scheme for advice on climate-neutral and circular purchases

From 1 May to 30 September 2019, public contracting authorities could apply for subsidies under the subsidy scheme for advice on climate-neutral and circular purchases (AKCI). This subsidy was for obtaining external advice on socially-responsible purchases (MVI), including advice on climate-neutral and circular purchases from product groups expected to involve relatively major consumption of resources and/or CO₂ reduction. A total of €1 million was available. In total, 126 applications were made, of which 96 were approved.

Subsidy for energy savings for homeowners

In 2019, the subsidy for energy savings for homeowners (SEEH) was set up again. Under the scheme, €84 million was made available for insulation measures in housing.

Scheme for Reduction of Energy consumption

In 2019 the central government allocated €87 million to the Scheme for Reduction of Energy consumption (RRE). Under the scheme, municipalities set up projects to encourage homeowners to carry out small energy-saving measures in their homes. This includes, for example, setting up heating installations, placing radiator foil and window strips, or putting in LED lights. In addition, municipalities use the scheme to provide homeowners with advice on energy-saving measures such as roof, window or facade insulation.

7. Amendment of Article 20 (Energy Efficiency National Fund)

School Building pilot project

On 19 June 2019, a pilot project for school buildings began under the Energy Efficiency National Fund. The project studied whether school buildings could more quickly be made more sustainable with the help of an attractive loan. Together the Ministry of the Interior and Kingdom Relations and Rabobank made €5 million available for the pilot project. The Schools’ Energy-saving Loan has a term of 15 years with a fixed low interest rate. The loan may be used for five energy-saving measures: solar panels, facade/cavity wall insulation, roof insulation, LED lighting and energy management systems.

c) Floor area of buildings

41- -1	Total building floor area [m2] of the buildings with a total useful floor area over 250 m2 owned and occupied by the Member States’ central government on 1 January 2019	5,973,000
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d) Energy savings achieved in renovated buildings, Article 5(6)

43- - 11	Amount of energy savings [ktoe] achieved in 2018 in eligible buildings owned and occupied by their central government as referred to in Article 5(6), in primary or final energy	2.4
43- - 12	Sum of energy savings [ktoe] achieved in eligible buildings owned and occupied by their central government through the implementation of Article 5(6) in primary or final energy over the time period 2014 -2018	33.3

e) Energy savings achieved under Article 7(9)

Energy savings achieved in 2018		Policy measures	Total annual end-use savings achieved [ktoe] in 2018 (amount of savings from new actions implemented from 2014 to 2018 that delivered savings in 2018)	thereof savings achieved [ktoe] in 2018 only from <u>new</u> actions that were implemented in 2018
44- -1	EEOS			
44- -2	Alternative measure 1	Energy Investment Allowance (EIA)	2503.2	228.9
44- -3	Alternative measure 2	Long Term Agreement industry	1103.8	75.0
44- -4	Alternative measure 3	Long Term Agreement big industry (MEE), excl. refineries	1530.7	92.4
44- -5	Alternative measure 4	Long Term Agreement service sector	139.2	19.3
44- -6	Alternative measure 5	Policies targetted to households	3186.5	278.9
44- -7	Alternative measure 6	Policies targetted to the service sector	999.9	71.8
44- -8	Alternative measure 7	Corrections for double counting	-1686.2	-155.4