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# Assessment of climate change policies in the context of the European Semester

## Country Report: The Netherlands



Ecologic Institute

Authors team: Eike Dreblow, Matthias Duwe, Tim Wawer, Lena Donat, Elizabeth Zelljadt, Andrew Ayres

eclareon

Author: Robert Schachtschneider

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Ecologic Institute

eclareon

**Ecologic Institute, Berlin:**

Pfalzburger Strasse 43/44  
10717 Berlin  
Germany  
[www.ecologic.eu](http://www.ecologic.eu)

**eclareon GmbH**

Giesebrechtstraße 20  
10629 Berlin  
Germany  
[www.eclareon.eu](http://www.eclareon.eu)

**Contact:**

Eike Dreblow,  
Fellow Climate and Energy  
Tel. +49 (30) 86880-165  
Fax +49 (30) 86880-100  
[eike.dreblow\(at\)ecologic.eu](mailto:eike.dreblow(at)ecologic.eu)

**Contact:**

Robert Schachtschneider  
Consultant, Policy Department  
Tel. +49 (30) 88 66 74 000  
Fax +49 (30) 88 66 74 010  
[rs\(at\)eclareon.com](mailto:rs(at)eclareon.com)

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The report provides an overview of current emission trends and progress towards targets as well as policy developments that took place over the period May 2012 to January 2013.

The content of the report represents the state of knowledge in February 2013, specific updates were made adding the latest official greenhouse gas emission data by the European Environment Agency (EEA).

Please feel free to provide any comments or suggestions to the authors through the contacts listed above.

## Short summary

- **Background:** *The Netherlands has undertaken concrete measures to stimulate a low-carbon economy by promoting energy efficiency and renewable energy.*
- **GHG target:** *The 2011 non-ETS emissions were below of the 2013 emission allocation and according to the latest national projections the Netherlands are also expected to meet the 2020 target.*
- **Policy development:** *In the framework of mitigation and adaptation policy, the Netherlands has reformed the promotion of renewable energy. Moreover, investment support for environmentally friendly technologies has been stimulated.*

## I Background on climate and energy policies

The Netherlands has been active in the field of climate policy for more than 20 years. The first formulation of a national climate change policy dates back to 1989. Awareness of climate change in the Netherlands is high due to the natural characteristics of the country. In particular, rising sea levels, floods, as well as the salinisation of arable land pose a threat to the country. Therefore, the Netherlands has in general been quite enthusiastic and active in developing mitigation and adaptation policies, such as the *Deltaprogramma* for flood protection and the prevention of salinisation. The Netherlands is on track to reach its non-ETS emissions goals. However, according to the Climate Change Performance Index published in 2012, Dutch climate change policy has recently become less ambitious and progressive (CCPI 2013). Overall, the Dutch economy is highly carbon intensive compared to other G20 countries (BNR 2012).

The long-term goal for Dutch energy policy is “to switch to sustainable, low carbon energy supplies” (Dutch Government 2013a) by 2050. According to information provided by the government, the energy industry accounted for 7% of GDP in 2012 (Dutch Government 2013b). The vast share of energy is produced from fossil fuels, such as gas and coal (Dutch Government 2013b). Although the Dutch government supports renewable energy via the SDE+ system, the share of renewable energy in % of gross final energy consumption in 2010 was only 3.8% (Eurostat 2013), which is below the EU average (Eurostat 2012a). Moreover, fossil fuels are subsidised indirectly in the form of an exemption from the energy tax for energy-intensive industries equal to € 2 bn per year (NRC 2012). Discussions on new nuclear power reactors are currently on hold. While a concrete target for renewable energy has been set of 14 %; there is no explicit target for energy-efficiency increases in the building sector. This has been criticised by various stakeholders, since the sector promises large energy savings.

According to government data from 2012, employment in the sustainable sector (*duurzame* sector) reached 10,000 jobs with revenue of € 3.3 bn per year (Dutch Government 2013b). The government aims to stimulate economic growth without imposing negative consequences on climate, water, soil, resources, and biodiversity. The greening of the economy is perceived as a chance to increase overall welfare and provide Dutch companies with a competitive advantage on the international market. In 2011, the government published a sustainability agenda by identifying main priority areas,

such as resources and product cycle, sustainable water and land use, food production, climate and energy, and mobility (Dutch Government 2013c). Aside from regulative actions by the state, Green Deals between citizens, companies, and other organisations are designed to facilitate local and individual actions and problem-solving activities. In 2012, about 75 new deals have been signed, bringing the total to 150; these include the use of renewable energy in swimming pools and the production of bioplastic. The state assists in reducing and or simplifying barriers created by legislation and administrative procedures (Dutch Government 2013d).

## 2 GHG projections

### Background information

In 2011, the Netherlands emitted 194.4 Mt CO<sub>2</sub>eq (UNFCCC inventory 2011), 8% less than in 1990. The main emissions sources are energy supply and use. Emissions from energy supply increased by 18% between 1990 and 2011, reflecting a growing demand for heat and power. In comparison, emissions from energy use decreased by 11%, mainly due to improved insulation that partly outweighed the increased energy use of the commercial sector. The sharpest increase in emissions was reported in the transport sector as a result of the growth in freight and passenger road transport, international aviation, and maritime transport. In contrast, emissions from industrial processes and agriculture decreased from 1990 to 2011 by more than 50% and 25%, respectively. However, emissions from horticulture are rapidly increasing (UNFCCC inventory 2011, EEA 2012c, UNFCCC 2012).

### Progress on GHG target

There are two sets of targets to evaluate: 1) the Kyoto Protocol targets for the period 2008-12 (which has just ended) and 2) the 2020 targets for emissions not covered by the EU ETS.

Under the Kyoto-Protocol the emission reduction target for Netherlands for the period 2008-2012 has been set to minus 6 % based on 1990 for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O and on 1995 for F-gases. An evaluation of the latest complete set of greenhouse gas data (for the year 2011) shows that the Netherlands's emissions have decreased by 8.8% since from the Kyoto base year to 2011 (EEA 2013a). This shows that the Netherlands are likely to meet its Kyoto target through domestic emissions reductions directly.

By 2020 the Netherlands needs to decrease its emissions not covered by the EU ETS by 16% compared to 2005 in accordance with the Effort Sharing Decision (ESD) <sup>(1)</sup>. The latest data suggest that the Netherlands is presently on track. Emissions in 2011 were 6% below the Annual Emissions Allocation (COM 2013) for the year 2013. National projections show that the Netherlands is expected to achieve its target by 2020 with

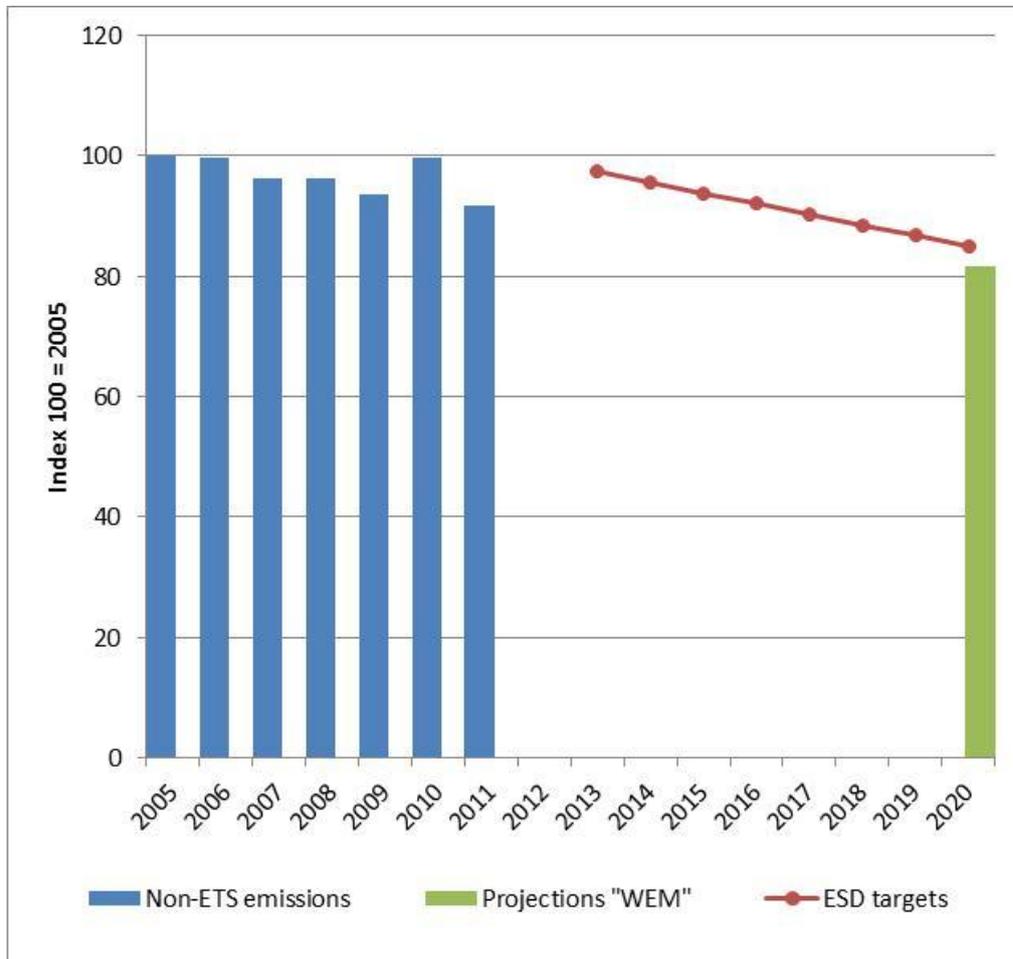
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<sup>1</sup> Decision No 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020.

existing measures and even surpass it significantly with additional measures <sup>(2)</sup> (EEA 2013b).

Figure 1 shows the Netherlands' non-ETS emissions until 2011, targets under the ESD for the period 2013-2020 and the projections with existing measures for 2020.

**Figure 1: Non-ETS emission trends and projections compared to the ESD targets**



Source: EEA. Projections are based on 15/04/2013 draft GHG inventory submissions under the UNFCCC and MS projections submitted

<sup>2</sup> Calculations are based on domestic emissions only, without accounting for possible use of flexibility options. The 2020 targets and 2005 non-ETS emissions are all consistent with 2013-2020 ETS scope, i.e. they take into account the extension of the ETS scope in 2013 and the unilateral inclusion of installation in 2008-2012.

**Table I: GHG emission developments, ESD-targets and projections (in Mt CO<sub>2</sub>eq)**

	1990	2005	2010	2011	ESD target*		2020 Projections**	
					2013	2020	WEM	WAM
Total	211.8	209.5	209.2	194.4				
Non-ETS emissions (% from 2005)		125.2	124.7	114.7	121.8	104.5	100.3	99.5
				-8%	-3%	-16%	-19%	-20%
Energy supply (% share of total)	52.7 25%	67.7 32%	66.6 32%	62.4 32%				
Energy use (w/o transport) (% share of total)	71.4 34%	65.5 31%	73.2 35%	63.6 33%				
Transport (% share of total)	26.3 12%	35.0 17%	35.0 17%	35.2 18%				
Industrial processes (% share of total)	22.2 10%	15.8 8%	10.4 5%	10.4 5%				
Agriculture (% share of total)	22.6 11%	17.0 8%	16.6 8%	16.0 8%				

Source: UNFCCC inventories; EEA (2013b); COM (2013), Calculations provided by the EEA and own calculations.

\* The ESD target for 2013 and for 2020 refer to different scopes of the ETS: The 2013 target is compared with 2011 data and is therefore consistent with the scope of the ETS from 2008-2012; the 2020 target is compared to 2020 projections and is therefore consistent with the scope of the ETS from 2013-2020. Non-ETS emissions in 2005 for the scope of the ETS from 2013-2020 amounted to 124.4 Mt CO<sub>2</sub>eq.

\*\* 2013 projections with existing measures (WEM) or with additional measures (WAM).

Legend for colour coding: green = target is being (over)achieved; orange = not on track to meet the target

Total greenhouse gas emissions (GHG) and shares of GHG do not include emissions and removals from LULUCF (carbon sinks) and emissions from international aviation and international maritime transport.

National projections of GHG emissions up to 2020, summarised by the EEA, need to be prepared by the Member States in accordance with the EU Monitoring Mechanism <sup>(3)</sup> every two years, and the latest submission was in 2013. Projections need to be prepared reflecting a scenario that estimates emissions reductions in line with policies and measures that have already been implemented (with existing measures, WEM), and an additional scenario that reflects developments with measures and policies that are in the planning phase (with additional measures, WAM) may also be submitted. In the following two tables, these measures - as outlined by The Netherlands as basis for their projections as of April 2011 <sup>(4)</sup> - have been summarised with a focus on national measures and those EU instruments expected to reduce emissions the most <sup>(5)</sup>. An update on the status of the policies and measures is included in order to assess the validity of the scenarios.

<sup>3</sup> Decision No 280/2004/EC of the European Parliament and of the Council of 11 February 2004 concerning a mechanism for monitoring Community greenhouse gas emissions and for implementing the Kyoto Protocol.

<sup>4</sup> The respective policies and measures were not available at the time of the preparation of this country report. Thus, policies and measures as outlined in April 2011 are given here.

<sup>5</sup> The implementation of the EU-ETS has not been included. Other EU Directives have only been considered if they have been outlined in the projections as one of the main instruments to reduce GHG emissions.

**Table 2: Existing and additional measures as stated in the 2011 GHG projections**

Existing Measures (only important national measures; w/o EU legislation)		Status of policy in January 2013
Energy	Demonstration projects CCS	The Rotterdam Opslag en Afvang Demonstratieproject (ROAD) plans to capture 1.1 million tonnes of CO <sub>2</sub> per year from 2015 onwards.
	Energy investments deduction (Investment cost can be deducted from profits)	Energieinvesteringsaftrek (IEA) is in place. Eligible investments can be retrieved from the energy list.
	Energy tax	The energy tax applies to natural gas and electricity and changes each year.
	SDE (Stimulerend Duurzame Energieproductie) Subsidy scheme for renewable energy: feed-in tariff	The current system is called SDE+, replacing the old SDE. Last changes have been made in December 2012.
	Subsidy scheme for renewable heating	Covered by SDE+.
Energy Efficiency	Ecodesign to improve energy efficiency of electrical equipment	An energy label is required for different electrical appliances such as refrigerators, freezers, washing machines, tumble dryers, washer-dryers, dishwashers, ovens, lamps, and air conditioners.
	Voluntary agreement on energy efficiency with small and large firms: Implementing energy saving plans (energy management, saving projects)	Long-term agreements (meerjarenafspraken) have been concluded between individual companies, industries, and the competent authority. In 2011, LTAs generated energy efficiency improvements of 1.9% compared to 2010.
	More with Less Covenant and incentives: Voluntary agreement with installation branches, energy companies and building sector to realise energy savings in existing private properties and private rental houses	It is a joint initiative by the government, construction, installation, and energy companies focusing on energy efficiency and reduction of energy consumption. It includes support programmes provided by different regions, etc.
	VAT lowered for insulation	Labour costs in energy-saving insulation of floors, walls, and roofs of dwellings older than two years are subject to the 6% VAT rate if their R-value (thermal resistance) is 1.3.
Transport	Fiscal policy (more favourable tax regime) for efficient cars	Implemented. When registering a new passenger vehicle or motorcycle, a tax has to be paid calculated on the basis of absolute CO <sub>2</sub> emissions. The lower the CO <sub>2</sub> emissions, the less tax is paid—in some cases even tax exemptions apply. Consumers are thus encouraged to buy environmentally friendly cars.
	Transport biofuels act: Obligation of a certain percentage of biofuels in the fuel mix	The suppliers of fuels are required to ensure that the percentage of biofuels in fuel mix is 4.25% for 2011, 4.5% for 2012, 5.0% for 2013, and 5.5% for 2014.

	Impact of the EU CO <sub>2</sub> standards for new vehicles passenger cars (130 g/km in 2015)	Standard will be enforced by 2015.
Other non-ETS sectors	Covenant agricultural sector: voluntary agreement on clean and efficient ago sectors incl. energy efficiency and renewables in agriculture	Covenant for a clean and economical agricultural sector in place since 2008. The goal is a reduction of CO <sub>2</sub> emissions by 4.5 mega tonnes per year.
	Subsidy for energy efficiency in agriculture	The Ministry for Economy, Agriculture and Innovation offers subsidies for new energy efficient installations, machines, etc. The budget was € 7.5 Mio. in 2012.
	Waste management and landfill management	No information available on current developments at time of publication.

Source: Reporting of MS in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, April 2011

Additional Measures: Still to be implemented (only important national measures; w/o EU legislation)		Status of policy in January 2013
Energy	SDE (Stimuleren Duurzame Energieproductie) Higher budget and inclusion of co-digestion in agriculture and green gas from sewage water treatment plants.	SDE+ is in place with a budget for 2013 of € 3 bn (€ 1.7 bn in 2012) covering also co-digestions and green gas.
Energy Efficiency	More With Less commercial buildings (and some other measures)	Implemented
	Energy efficiency regulation for new buildings: Energy Performance Coefficient	For new buildings from 1 January 2011, an EPC-limit value of 0.6 is in place.
Transport	Impact of EU CO <sub>2</sub> standards for new vehicles - passenger cars (95 g/km in 2020)	Decision still pending at EU level
	Impact of EU CO <sub>2</sub> standards for new vehicles - delivery vans (175 g/km in 2014, 135 g/km in 2025)	No information available on current developments at time of publication.
	Continuation of fiscal policy for efficient cars	No information available on current developments at time of publication.
	Km charge: Tax regime based on driven kilometres	It is currently being discussed.
Other non-ETS sectors	Sector emission trading (particularly in the agriculture sector)	No information available on current developments at time of publication.
	Investment tax deduction and other fiscal measures to reduce F-gases used for cooling	No information available on current developments at time of publication.

Source: Reporting of MS in accordance with Decision No 280/2004/EC about their GHG emission projections up to 2020, April 2011

### 3 Evaluation of National Reform Programme 2012 (NRP)

In April of each year, Member States are required to prepare their National Reform Programmes (NRPs), which outline the country's progress regarding the targets of the EU 2020 Strategy. The NRPs describe the country's national targets under the Strategy and contain a description of how the country intends to meet these targets. For climate

change and energy, three headline targets exist: 1) the reduction of GHG emissions, 2) the increase of renewable energy generation, and 3) an increase in energy efficiency (<sup>6</sup>).

In the following table, the main policies and measures as outlined in the NRP of April 2012 (<sup>7</sup>) have been summarised, and their current status (implemented, amended, abolished, or expired) is given, with specifics on latest developments.

**Table 3: Main policies and measures as outlined in the NRP, April 2012**

<b>Strategy on 'climate policy en route to 2020': measures in transport</b>	
Status as stated in the NRP	To be done
Status as per Jan 2013	Published on 8 June 2011; ongoing activities
Description of policy or measure	The strategy contains a combination of different policies, such as covenants for actions, legislation, subsidies, and fiscal stimuli. For example, in the transport, the "Sectorconvenant Verkeer en Vervoer: Duurzaamheid in Beweging" plans measures such as the replacement of car fleet and efficiency increases in logistics by 2020.
<b>Strategy on 'climate policy en route to 2020': CO<sub>2</sub> settlement system in the glasshouse horticulture sector</b>	
Status as stated in the NRP	To be done
Status as per Jan 2013	Published on 8 June 2011; ongoing activities
Description of policy or measure	The strategy contains a combination of different policies, such as covenants for actions, legislation, subsidies, and fiscal stimuli. The Covenant for a clean and economical agricultural sector set up in 2008 has the goal of reducing CO <sub>2</sub> emissions by 4.5 mega tonnes per year. Moreover, the platform sustainable horticulture aims to bring together government and industry in order to coordinate their actions.
<b>Strategy on 'climate policy en route to 2020': Action Plan for Energy Conservation in the Built Environment</b>	
Status as stated in the NRP	To be done
Status as per Jan 2013	In place (published 25 February 2011)
Description of policy or measure	The strategy for the building sector focuses on energy efficiency measures, energy performance obligations, and the use of renewable energy. In this respect, a couple of support schemes are directed towards achieving these objectives, such as the 'meer met minder' programme.

<sup>6</sup> There are specific targets for all MS by 2020 for non-ETS GHG emission reductions (see section 2) as well as for the renewable energy share in the energy mix by 2020 (see section 4, renewable energies). Specific energy efficiency targets will be defined (or revised) by the MS until the end of April 2013 in line with the methodology laid out in Article 3 (3) of the Energy Efficiency Directive (Directive 2012/27/EU).

<sup>7</sup> All NRPs are available at: [http://ec.europa.eu/europe2020/documents/related-document-type/index\\_en.htm](http://ec.europa.eu/europe2020/documents/related-document-type/index_en.htm)

**Strategy on 'climate policy en route to 2020': - agreements to ensure achievement of the non-ETS objective**

Status as stated in the NRP	To be done
Status as per Jan 2013	No information available on current developments at time of publication.
Description of policy or measure	In the framework of long-term agreements (meerjarenafspraken), small and medium-sized companies in the sector of decentralised electricity production, energy distribution, as well as waste processing are encouraged to realise energy efficiency improvements. However, the concrete steps taken as part of this strategy are unknown.

**New round of Green Deals: Green deals with businesses, provinces, municipalities and nongovernmental organisations**

Status as stated in the NRP	To be implemented in 2012
Status as per Jan 2013	New agreements have been implemented
Description of policy or measure	In the areas of resources, biodiversity, water, sustainable mobility, renewable energy, and energy savings, the government stimulates the conclusion of green deals. Accordingly, the initiative must be profitable, and results must materialise within 3 years. Initiatives must trigger new economic activities or cost savings for companies and households. Green Deals provide no financial support; instead, the government aims to eliminate administrative barriers using specific government instruments, expertise. In 2012, about 75 new deals have been signed, e.g., on the use of renewable energy in swimming pools and the production of bioplastic.

**Local Climate Agenda 2011-2014**

Status as stated in the NRP	Ongoing
Status as per Jan 2013	Ongoing
Description of policy or measure	This instrument aims to facilitate knowledge and information exchange between the central government and local authorities in order to increase local community participation in the field of climate and sustainability. Most local authorities implement their own policies and instruments to achieve the CO <sub>2</sub> reduction target.

**Green tax package**

Status as stated in the NRP	Ongoing
Status as per Jan 2013	Partly implemented. Reduced tax rate for red diesel has been abolished and excise duty for LPG increased as of 1 January 2013.
Description of policy or measure	This policy development is designed, amongst other things, to reduce the use of fossil fuels by taxing energy-related products more heavily including, e.g., increasing the natural gas tax (aardgasheffing), the coal tax, taxes on "red diesel" fuels, and tap water and retaining the Eurovignette.

**Sustainable Energy Incentive Plus Scheme (SDE+)**

Status as stated in the NRP	Implemented in 2011
Status as per Jan 2013	Reformed in 2012
Description of policy or measure	The SDE+ constitutes the main support scheme for electricity from renewable electricity. The support is allocated in 6 stages on a 'first come, first serve' basis. In each round, the tariffs are increasing. However, late bidders run the risk of being rejected due to a lack of funds. The allocated budget for 2013 is €3 bn.

**Sustainable Mobility Scheme (Proeftuinen Duurzame Mobiliteit)**

Status as stated in the NRP	Implemented
Status as per Jan 2013	Will be phased out by 31 December 2013
Description of policy or measure	Using subsidies, the government supports the development of innovative and sustainable modes of transport, such as electric vehicles, the use of biogas and other biofuels. The budget is € 2.6 Mio.

## 4 Policy development

This section covers significant developments made in key policy areas between May 2012 and January 2013. It does not attempt to describe every instrument in the given thematic area. The time-frame was chosen based upon the release of the National Reform Programmes (in the section above) in April 2012, which contain the status quo for policy on most topics.

Only a few changes to Dutch mitigation and adaptation policies have been made recently. Main changes concern foremost the production of electricity from renewable energy, including net-metering and the support for investments in environmentally friendly technologies (VAMIL/MIA).

### Horizontal Issues

The Sustainability Agenda (Agenda duurzaamheid: een groene groei-strategie voor Nederland) sets out the main objectives and activities for stimulating green growth. The agenda defines the following priority areas: resources and product chains, sustainable water and land use, food, climate and energy, as well as mobility. In these areas, different instruments are being deployed.

In the framework of 'groen beleggen en financieren' (Green Loan) consumers can receive a tax benefit if they invest in a green fund. In return, banks offer green loans at lower interest rates to so-called 'green projects' using the extra liquidity generated by the consumers' investments. These projects need to have a positive environmental impact in the categories of nature, bio-agriculture, agriculture, sustainable resources, recycling, renewable energy, energy saving, sustainable construction, sustainable mobility, or the sustainable water cycle. In 2011, the approved amount of support was € 0.5 bn.

The MIA scheme offers a tax refund on environmental investment whereby up to 36 % of total investment costs can be deducted from the taxable profit. The Vamil scheme offers

a voluntary depreciation on environmental investment. The eligible technologies are laid out in the Environment list.

Additionally, a new round of Green Deals to promote local and individual environmentally friendly undertakings was approved in 2012, totalling 75 projects. The total number of projects that have been supported by this programme is now 150; these include the use of renewable energy in swimming pools and the production of bioplastic. The state assists in reducing and or simplifying barriers created by legislation and administrative procedures (Dutch Government 2013d).

### **Environmental Taxation**

The Dutch environmental taxation system is highly developed, and environmental taxation revenues were equivalent to 4% of GDP in 2010, the second-highest value among EU MS (Eurostat 2012b). The implicit tax rate on energy was also among the highest in the EU in 2009, having increased by 12% between 2005 and 2009 to € 195.3 per tonne of oil equivalent (Eurostat 2013). The Netherlands also ranked first in revenues from pollution charges as a percentage of GDP among EU MS, with revenues equalling 0.7% of GDP in 2010 (Eurostat 2012b).

Fossil fuels are subsidised in the Netherlands via energy tax exemptions for energy-intensive industries equal to € 2 bn per year (NRC 2012). A green tax package that was announced in the NRP has not yet been fully implemented. However, as of 1 January 2013 the reduced tax rate for red diesel has been abolished and the excise duty for LPG increased.

### **Energy Efficiency**

The Dutch economy is moderately energy intensive when compared with other EU Member States; it was the 17<sup>th</sup>-least energy intensive economy in 2010 but still slightly above the EU average. Energy intensity decreased from 2005 to 2010 at a rate well below the EU average (1.8% compared to 7.7%). Total energy consumption in 2010 increased compared to the 2001-2005 average by almost 4%. While energy use in the industrial and transport sectors remained stagnant, the service sector's consumption increased over this time period (Eurostat 2013).

In the Netherlands, a variety of support schemes for energy efficiency measures exist at the provincial and municipal level. In the framework of the action plan "Aanpak 2.0", the province of Overijssel has been supporting energy efficiency measures since October 2012 through the Sustainability Premium and Sustainability Loans for building owners in order to reduce energy consumption. The premiums and loans are directed towards building owners. Nearly 45% of private housings have an energy performance of D, E, F or G. The premium varies between €300 and €600 depending on the measure (roof, windows, facade, or floor). On top of that, a bonus of €300 is granted if at least two measures are implemented with at least two neighbours.

The sustainability loan is granted at the level of municipalities; however, not all municipalities participate. The loan (with an interest rebate of 3%) is provided via the municipality to building owners for energy-saving measures. The low-interest loan has a duration between 10 (loan of up to €7.500) and 15 years.

"More with Less" is a joint initiative by the government, construction, installation, and energy companies focusing on energy efficiency and the reduction of energy

consumption. It includes support programmes financed by different regions; subsidies depend on the measure implemented and the energy performance obtained - the implementing regions decide on the details.

## Renewable Energy

The share of renewable energy in total energy consumption in the Netherlands increased slightly between 2005 and 2010, but it is still fairly low at 3.8%. The Netherlands has much work to do before meeting its target of 16% by 2020 as set by Rutte II cabinet. The electricity sector is in slightly better shape; the share of renewable sources in final electricity consumption increased by approximately 50% between 2005 and 2010, but at 9.26% it was still far below the EU average of 19.94% (Eurostat 2013).

The SDE+ constitutes the main support scheme for electricity from renewable electricity and was revised in 2012. The budget is no longer allocated to individual technologies. Instead, the financial support is part of an overall subsidy platform meaning that all technologies compete against each other for the subsidy funding in 6 steps on a 'first come, first serve' basis. In each stage, a maximum base price (basisbedrag) is defined for each technology (also called "category"). This price represents the price of €ct necessary to produce 1 kWh electricity from renewable energy. The base price increases in each round. Electricity producers can decide at which stage they apply for subsidy taking into consideration that late bidders run the risk of being rejected due to a lack of funds. The SDE+ foresees only one fixed overall budget. The new scheme favours technologies that already produce at a low price. Accordingly, it has been criticised that new technologies, being relatively expensive, lack sufficient support and thus the chance for further cost-reducing development (Tonneyck 2013). In 2013, the first out of 6 stages is opened on 4 April 2013 at 9:00 AM. The overall fixed budget for 2013 is € 3 bn. Compared to 2012, the following changes have been introduced to the SDE+ 2013: Regarding onshore wind, the number of full load hours is differentiated in different categories. Moreover, some categories have been combined. Concerning digesters, there is no longer a distinction made between solo installations and installations that are part of a hub. The annual eligible geothermal production of energy per plant was increased. Additionally, new categories have been introduced, such as "geothermal heat with a depth  $\geq$  2700 meters", "renovation of hydro power plants", "production of green gas (sewage treatment/waste water treatment plants)" and "mono manure digesters" <sup>(8)</sup>.

Net-metering applies to systems with an output of less than 15 kWp and that do not fall under SDE+. From 1 July 2013 the maximum reference value for net-metering of 5,000 kWh per year is being abandoned.

Moreover, the *Lente Akkoord* introduced a subsidy for PV. Accordingly, PV installations with a capacity of 0.601 kWp to 3.5 kWp are eligible for a subsidy of 15% of investment costs. For installations with a capacity greater than 3.5 kWp, the support is calculated by multiplying the 15% of investment costs by 3.5 and then dividing by the actual capacity in kWp. The maximum subsidy is €650.

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<sup>8</sup> An overview on the subsidy levels per phase by eligible technology can be retrieved from [http://www.agentschapnl.nl/sites/default/files/Digitale%20brochure%20SDE+%202013%20\(kleurenversie\)%20def%20incl%20monitoring.pdf](http://www.agentschapnl.nl/sites/default/files/Digitale%20brochure%20SDE+%202013%20(kleurenversie)%20def%20incl%20monitoring.pdf)

The Energy Investment Allowance (EIA) offers a tax benefit for entrepreneurs registered at the Dutch tax office to write off investments in renewable energy plants. The eligible technologies are stipulated in the energy list (which includes all major renewable technologies). The amount of tax credit may be up to 41.5% of the total investments made in renewable energy or energy efficiency technologies within one year. The energy efficiency component covers industrial process improvements as well as building renovation for enterprises. The level of funding depends on the source of energy and type of technology. At least €2.300 and no more than €188 Mio must be invested within one year. Investments of less than €450 are not considered.

### **Energy Networks**

The Innovation Programme Smart Grids provides financing for model smart grid projects. In order to be eligible for subsidy, the project is assessed on the basis of innovation, sustainability, project organisation, and economic feasibility. The project shall be implemented at the level of a residential district, city centre, industrial site, or office environment. The subsidy amounts to 40% of the additional costs (relative to the reference investment) but no more than € 4 Mio per project. Currently, 12 projects are in the process of implementation, such as Cloud Power Texel and Couperous Smart grid.

### **Transport**

The transport sector in the Netherlands emitted slightly fewer emissions in 2010 than 2005, but from 2010 to 2011 the emission increased slightly. The share of emissions from the transport sector in total emissions remained at around 17%-18% (see Table 1). Meanwhile, taxation in the transportation sector is strong in the Netherlands, with revenues from transport taxation (excluding fuel charges) equalling 1.2% of GDP in 2010, the third-highest value in the EU (Eurostat 2012b). The emission efficiency of newly registered cars increased between 2005 and 2011 to 126.2 gCO<sub>2</sub>/km driven. This is 9% above the EU average and makes the Netherlands rank fourth among EU Member States (EEA 2012e).

In order to further increase emission efficiency, electric vehicles are supported: Under the framework of MIA/Vamil (tax refund on environmental investment) electric cars are eligible for support through the Action Plan Electric Mobility if CO<sub>2</sub> emissions are lower than 50 grams per kilometre. The overall policy goal is 15,000-20,000 electric cars in 2015 and 1 million by 2025; in 2012 there were 4,000 registered electric vehicles in the Netherlands (Trouw 2012).

### **Agriculture**

In the agricultural sector, the Platform Sustainable Horticulture is a national platform where government and industry are working together in order to reduce CO<sub>2</sub> emissions in horticulture by 6.2 Mega tonnes per year until 2020. However, it seems unclear how this reduction is meant to be realised.

The covenant for a clean and economical agricultural sector sets out the measures planned until 2020 containing concrete actions for various sectors, such as agriculture, horticultural field crops, and livestock. The goal is a reduction of CO<sub>2</sub> emissions by 4.5 mega tonnes per year. By 2020, 200 PJ of renewable energy from biomass shall be produced each year.

## Adaptation

The Adaptation Programme *Ruimte en Klimaat* was stopped in 2010, and aside from the law called *Deltawet*, which focuses mainly on water safety, freshwater supply, and climate resilient urban development, no fundamental adaptation strategy is currently in place (Algemene Rekenkamer 2012).

## 5 Policy progress on past CSRs

As part of the European Semester, Country Specific Recommendations (CSRs) for each MS are provided by the EU Commission in June of each year for consideration and endorsement by the European Council). The recommendations are designed to address the major challenges facing each country in relation to the targets outlined in the EU 2020 Strategy. In the following table, those CSRs that are relevant for climate change and energy that were adopted in 2012 are listed, and their progress towards their implementation is assessed.

No CSRs related to climate change and energy were issued for the Netherlands in 2012.

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