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Report of the centralized in-depth review of the fourth national communication of the Netherlands

According to decision 4/CP.8, Parties included in Annex I to the Convention are requested to submit to the secretariat, in accordance with Article 12, paragraphs 1 and 2, of the Convention, a fourth national communication by 1 January 2006. This report presents the results of the in-depth review of the fourth national communication of the Netherlands conducted by an expert review team in accordance with relevant provisions of the Convention and Article 8 of the Kyoto Protocol.

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I. Introduction and summary

A. Introduction

1. The Netherlands has been a Party to the Convention since 1993 and to its Kyoto Protocol since 2002. Within the burden-sharing agreement of the European Union (EU) for meeting commitments under the Kyoto Protocol, the Netherlands committed itself to reducing its greenhouse gas (GHG) emissions by 6 per cent in relation to the 1990 level during the first commitment period from 2008 to 2012.

2. This report covers the centralized in-depth review (IDR) of the fourth national communication (NC4) of the Netherlands, coordinated by the UNFCCC secretariat, in accordance with decision 7/CP.11. The review took place from 12 to 17 May 2008 in Bonn, Germany, and was conducted by the following team of nominated experts from the UNFCCC roster of experts: Ms. Maryse Courchesne (Canada), Ms. Jane Ellis (Organisation for Economic Co-operation and Development), Ms. Fatou Ndeye Gaye (Gambia), Mr. Abdelkrim Ben Mohamed (Niger), Mr. Bhawan Singh (Trinidad and Tobago), Mr. Vlad Trusca (Romania) and Mr. Knut Vrålstad (Norway). Ms. Ellis and Mr. Ben Mohamed were the lead reviewers. The review was coordinated by Ms. Ruta Bubniene (UNFCCC secretariat).

3. During the IDR, the expert review team (ERT) examined each part of the NC4. The ERT also evaluated the information contained in the report demonstrating progress (RDP) by the Netherlands in achieving its commitments under the Kyoto Protocol, and the supplementary information provided by the Netherlands under Article 7, paragraph 2, of the Kyoto Protocol.

4. In accordance with the guidelines for review under Article 8 of the Kyoto Protocol (decision 22/CMP.1), a draft version of this report was communicated to the Government of the Netherlands, which provided comments that were considered and incorporated, as appropriate, in this final version of the report.

B. Summary

5. The ERT noted that the NC4 of the Netherlands broadly complies with the "Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications" (hereinafter referred to as the UNFCCC reporting guidelines), and presents the required information in a very clear and concise manner. As required by decisions 22/CP.7 and 25/CP.8, the RDP provides clear and detailed information on the progress made by the Netherlands in achieving its commitments under the Kyoto Protocol. Supplementary information under Article 7, paragraph 2, of the Kyoto Protocol[1] is provided in both the NC4 and the RDP. The ERT commends the Netherlands for its coherent and consistent reporting.

1. Completeness

6. The ERT noted that the NC4 covers all the sections required by the UNFCCC reporting guidelines. The ERT also noted that the RDP of the Netherlands contains all parts stipulated by decisions 22/CP.7 and 25/CP.8. Furthermore, the ERT noted that the Netherlands has provided the supplementary information required under Article 7, paragraph 2, of the Kyoto Protocol.

[1] Decision 15/CMP.1, annex, chapter II.

2. Timeliness

7. The NC4 and the RDP were submitted on 22 December 2005. Decision 4/CP.8 requested Parties to submit their NC4 by 1 January 2006. Decision 22/CP.7 set the same date for Parties to submit their RDP.

3. Transparency

8. The ERT acknowledged that the NC4 of the Netherlands is well structured and concise. The NC4 provides clear information on all required aspects of implementation, with the exception of underlying factors and activities for projections by sector. It is structured following the outline contained in the UNFCCC reporting guidelines. In the course of the review, the ERT formulated a number of recommendations that could help the Netherlands to further increase the transparency of its reporting, such as providing information on underlying factors and activities for projections by sector. The ERT noted that the information contained in the NC4 is generally consistent with that contained in the RDP.

II. Technical assessment of the reviewed elements

A. National circumstances relevant to greenhouse gas emissions and removals

9. In its NC4, the Netherlands has provided a description of its national circumstances, how these affect GHG emissions and removals in the Netherlands, and how national circumstances and changes in national circumstances affect GHG emissions and removals over time. The ERT encourages the Netherlands to provide more detailed analysis on these changes in future reports. The ERT noted that the main drivers of emission trends in the Netherlands include demographic developments, overall economic activity, changes in primary energy use and an increase of annual mean surface temperature. Table 1 illustrates the national circumstances of the country by providing some indicators relevant to GHG emissions and removals.

10. In its NC4, the Netherlands has provided a summary of information on GHG emission trends by gas and by sector for the period 1990–2003. This information is consistent with the 2005 GHG inventory submission. Summary tables, including trend tables for emissions by gas and by category in carbon dioxide equivalent (CO_2 eq) are provided in an annex to the NC4. The ERT noted that GHG emissions in the Netherlands rose in the early 1990s and have subsequently declined.

11. Total national GHG emissions in the Netherlands decreased by 2.0 per cent between the base year and 2006 both when emissions and removals from land use, land-use change and forestry (LULUCF) are excluded and when they are included. This was mainly attributed to the decrease of the GHG emissions in industrial processes (29.4 per cent), agriculture (17.7 per cent) and waste (50.6 per cent). Emissions of methane (CH_4) and nitrous oxide (N_2O) decreased by 36.0 and 15.0 per cent, respectively, in the period 1990–2006. In contrast, CO_2 emissions excluding net CO_2 from LULUCF increased by 8.1 per cent over the same period. The most important GHG in the Netherlands is CO_2 (mainly from the energy sector), which accounted for 75.3 per cent of the total GHG emissions in the base year and 83.0 per cent in 2006. Emissions of perfluorocarbons (PFCs), hydrofluorocarbons (HFCs) and sulphur hexafluoride (SF_6) accounted for about 3.3 per cent of total GHG emissions in 1990 and 1.0 per cent in 2006. Table 2 provides an overview of GHG emissions by sector from the base year to 2006 (see also discussion of sectoral trends in chapter II B below).

Table 1. Indicators relevant to greenhouse gas emissions and removals for the Netherlands

	1990	1995	2000	2006	Change 1990–2000 (%)	Change 2000–2006 (%)	Change 1990–2006 (%)
Population (million)	14.95	15.46	15.92	16.32	6.5	2.5	9.2
GDP (2000 USD billion using PPP)	342.43	383.55	467.67	511.67	36.6	9.4	49.4
TPES (Mtoe)	67.12	73.03	76.40	80.01	13.8	4.7	19.2
GDP per capita (2000 USD thousand using PPP)	22.91	24.81	29.37	31.35	28.2	6.7	36.9
TPES per capita (toe)	4.5	4.72	4.80	4.9	6.6	2.2	8.9
GHG emissions without LULUCF (Tg CO_2 eq)	211.65	223.98	213.63	207.48	0.9	–2.9	–2.0
GHG emissions with LULUCF (Tg CO_2 eq)	214.32	226.45	216.30	210.05	0.9	–2.9	–2.0
CO_2 emissions per capita (Mg)	10.66	11.04	10.65	10.55	–0.1	–1.0	–1.0
CO_2 emissions per GDP unit (kg per 2000 USD using PPP)	0.47	0.44	0.36	0.34	–22.1	–7.2	–27.7
GHG emissions per capita (Mg CO_2 eq)	14.16	14.49	13.42	12.71	–5.2	–5.2	–10.2
GHG emissions per GDP unit (kg CO_2 eq per 2000 USD using PPP)	0.62	0.58	0.46	0.41	–26.1	–11.2	–34.4

Data sources: (1) GHG emissions data: 2008 greenhouse gas inventory submission of the Netherlands; (2) population, GDP and TPES data: International Energy Agency.
Abbreviations: GDP = gross domestic product, GHG = greenhouse gas, LULUCF = land use, land-use change and forestry, PPP = purchasing power parity, TPES = total primary energy supply.
Note: The ratios per capita and per GDP unit are calculated relative to GHG emissions without LULUCF; the ratios are calculated using the exact (not rounded) values and may therefore differ from a ratio calculated with the rounded numbers provided in the table.

Table 2. Greenhouse gas emissions by sector in the Netherlands, 1990–2006

	GHG emissions (Tg CO_2 eq)					Change (%)		Shares[a] by sector (%)	
	1990	1995	2000	2005	2006	1990–2006	2005–2006	1990	2006
1. Energy	154.01	165.52	164.28	170.95	167.09	8.5	–2.3	72.8	80.5
A1. Energy industries	52.70	61.77	63.83	67.76	62.29	18.2	–8.1	24.9	30.0
A2. Manufacturing industries and construction	33.14	28.23	26.86	27.25	27.56	–16.8	1.1	15.7	13.3
A3. Transport	26.44	29.76	32.95	35.17	36.15	36.7	2.8	12.5	17.4
A4.–A5. Other	38.87	43.15	39.12	38.46	38.87	0.0	1.0	18.4	18.7
B. Fugitive emissions	2.85	2.62	1.52	2.31	2.23	–21.8	–3.6	1.3	1.1
2. Industrial processes	22.19	23.56	20.25	15.54	15.66	–29.4	0.7	10.5	7.5
3. Solvent and other product use	0.54	0.44	0.31	0.21	0.22	–60.1	1.3	0.3	0.1
4. Agriculture	22.10	23.14	19.92	18.28	18.18	–17.7	–0.5	10.4	8.8
5. LULUCF	2.67	2.47	2.67	2.58	2.57	–3.5	–0.3	1.3	1.2
6. Waste	12.82	11.32	8.87	6.76	6.33	–50.6	–6.4	6.1	3.1
GHG total with LULUCF	214.32	226.45	216.30	214.34	210.05	–2.0	–2.0	101.3	101.2
GHG total without LULUCF	211.65	223.98	213.63	211.75	207.48	–2.0	–2.0	100.0	100.0

Abbreviations: GHG = greenhouse gas, LULUCF = land use, land-use change and forestry.
Note: The changes in emissions and the shares by sector are calculated using the exact (not rounded) values and may therefore differ from values calculated with the rounded numbers provided in the table
[a] The shares of sectors are calculated relative to GHG emissions without LULUCF; for the LULUCF sector, the negative values indicate the share of GHG emissions that was offset by GHG removals through LULUCF.

B. Policies and measures

12. As required by the UNFCCC reporting guidelines, the Netherlands has provided in its NC4 well-organized information on its package of policies and measures (PaMs) implemented, adopted and planned in order to fulfil its commitments under the Convention and its Kyoto Protocol. Each sector has its own textual description of the principal PaMs relating to that sector, supplemented by a summary table and other tables on the "clusters" of PaMs. The Netherlands also provided information on how it believes its PaMs are modifying longer-term trends in anthropogenic GHG emissions and removals consistent with the objective of the Convention. A summary of information is provided for most of the PaMs identified in the NC4. The ERT noted that general information such as a description of the PaMs, the GHGs affected and/or implementing entity were not provided for a few policies – in part because these have been in place for a considerable time and were described in the third national communication (NC3), such as the national climate policy implementation plan (NCPIP) and the energy tax.

13. The PaMs to mitigate GHG emissions are spread through several sectors, and are of many different types. Considerable reductions of non-CO_2 emissions have occurred since 1990. This mixture of PaMs is expected to continue to 2010, with updated information (EEA, 2007) indicating that substantial emission reductions are expected in the energy industries, industrial processes and waste sectors, as well as from the European Union emissions trading scheme (EU ETS). Table 3 provides a summary of the reported information on the PaMs of the Netherlands.

Table 3. Summary of information on policies and measures

Major policies and measures	Examples/comments
Framework policies and cross-sectoral measures	
Integrated climate programme	National climate change policy implementation plan
Energy/electricity/emissions taxation	Energy tax for the households, services, agriculture and industry sectors
Emissions trading	The European Union emissions trading scheme
Policies and measures by sector	
Energy	
Combined heat and power (CHP) generation	Encourage construction and use of CHP by lowering investment costs and operating costs
Renewable energy sources	5% renewable energy in 2010; 10% in 2020; 9% renewable electricity in 2010 (4.1 Mt CO_2 eq in 2010); low CH_4 and gas production (0.3 Mt CO_2 eq in 2010)
Energy efficiency improvements	Benchmark covenant for energy efficient power generation and efficient use of energy in industrial sector with an objective for participating companies to be among the most energy efficient in the world by 2012; improve energy performance of existing and new residential and non-residential buildings; environmental permit, environmental impact assessment, cars labelled for energy efficiency; energy savings in greenhouse horticulture – increase energy efficiency by 65% over the period 1980–2010; improve market penetration of energy efficient appliances
Transport	
Vehicle and fuel taxes	Excise duties; kilometre charge; tax rebate on efficient cars
Agreements/partnerships	European Automobile Manufacturers Association (ACEA) agreement
Integrated transport planning	CO_2 reduction programme; EU biofuels directive
Industrial processes	
Pollution prevention and control	Afterburner hydrofluorocarbon (HFC) production – reduction in emissions of HFCs; reduction of emissions of perfluorocarbons (PFC) from aluminium production; reduction of emissions of N_2O from nitric acid production; reduction of fluorinated gas emissions from semiconductor industry
Agriculture	Reduction of livestock numbers; reduce nitrate application to soil and emissions of ammonia through more rational manure management
Waste management	Landfill policies such as decree on soil protection from landfills, decree on waste landfills and waste landfill bans, and landfilling tax
Forestry	Afforestation through measures such as national ecological network and day recreation facilities in urban areas)

Note: The greenhouse gas reduction estimates, given for some measures (in parentheses), are reductions in CO_2 or CO_2 eq for the year 2010.

1. Policy framework and cross-sectoral measures

14. The PaMs to mitigate GHG emissions in the Netherlands are implemented by different levels of government (the national Government, provincial governments, municipalities) or actors in specific sectors and the private sector. The NC4 lays out clearly the title, aim and status of the policies and measures described, as well as who is responsible for implementing which policy and measure. Overall, the climate policy of the Netherlands is coordinated by the Ministry of Housing, Spatial Planning and the Environment.

15. Since 1999 the framework for the climate policy of the Netherlands has been set out in the NCPIP, which outlines how the Netherlands intends to meet its emission reduction commitments by a mixture of actions both at the domestic level and abroad, and also provides for periodic evaluations of progress in climate policy. According to the NC3, the NCPIP indicates three main policy directions: to reduce CO_2 emissions (through energy conservation, energy efficiency and renewable energy), to increase CO_2 sequestration (through accelerated afforestation), and to reduce non-CO_2 emissions (by applying subsidies and other fiscal incentives). A 2005 NCPIP review indicated, among other things, that the Netherlands is 90 per cent likely to meet its domestic emission reduction objectives and that the

Government is investigating additional measures to counter potential setbacks (e.g. if emission reduction objectives through joint implementation (JI) and clean development mechanism (CDM) projects are not reached).

16. According to the NC4, since 2004, a new, complementary approach to national climate change policy was implemented, which sets sectoral targets for CO_2 emissions from four major sectors (industry and energy; agriculture; traffic and transport; and buildings) and a target for total emissions of non-CO_2 gases in 2010, and outlines institutions responsible for implementing the measures to meet these targets. As a member State of the EU, the Netherlands also implements several policies and measures at the EU level, for example the EU ETS, combined heat and power (CHP) production, the use of biofuels in transport, and reducing CH_4 emissions from landfills. The NC4 indicated that phase I of the EU ETS covered CO_2 emissions from 206 installations. Allocation for the second phase of the scheme (2008–2012) expanded the scope to opt in N_2O emissions from the chemical industry, which increased the expected effect of this scheme to 6.1 Mt CO_2 eq in 2010 (EEA, 2007), compared to 1.1 Mt CO_2 eq as outlined in the NC4. Regarding the use of biofuels in transport, subsequent information provided to the ERT indicates that the target of the EU biofuels directive has been reached, and this will lead to 5.75 per cent of diesel or petrol for transport purposes being replaced by biofuel in 2010.

17. The Netherlands has reported several national cross-cutting PaMs that aim to mitigate emissions in the energy, industry, transport, household, services and agriculture sectors, including the CO_2 reduction programme, the reduction programme for non-CO_2 gases (known by its Dutch acronym "ROB"), the energy tax, and the climate covenant and energy investment tax deduction (known by its Dutch acronym "EIA"). The CO_2 reduction programme (EUR 351 million) provides subsidies to encourage investment in large-scale investment projects, which are assessed in terms of the cost of avoided emissions per euro of subsidy. The ROB (EUR 200 million for 1999–2012) includes a number of policy measures, such as subsidies, grants and fiscal incentives used for such activities as encouraging the implementation of measures and subsidizing research and development on new mitigation measures. The energy tax has been in effect since 1996, and is levied on the gas and electricity use of commercial and non-commercial users. Rates have been increased several times since 1996, and revenue raised by the tax is recycled to the consumer through reduced income taxes. Income tax reductions for investment in innovative energy-efficient technologies are available via the EIA.

18. The NC4 provides clear and concise information on PaMs. The ERT noted that where policies have been in place for several years, and described in previous national communications, increased references to the aims, types and means of implementing such policies would increase the transparency of the NC4. The ERT also noted that only limited information was provided on PaMs in the forestry sector, and encourages further development of such reporting in the next national communication. The ERT encourages the Netherlands to present information on action taken to periodically revise its own policies and practices which encourage activities that lead to increased levels of GHG emissions than would otherwise occur in its next national communication.

2. Policies and measures in the energy sector

19. Between 1990 and 2006, GHG emissions from the energy sector increased by 8.5 per cent (13.1 Tg), bringing the sector's share of total national emissions from 72.8 per cent in 1990 to 80.5 per cent in 2006. The increase was mainly driven by the transport (up 36.7 per cent, 9.7 Tg) and energy industries (up 18.2 per cent, 9.6 Tg) sectors. According to the NC4, a number of drivers underline this growth, such as the increase in the level of passenger road transport (by 30 per cent) and freight road transport (by 48 per cent) between 1990 and 2005. Energy consumption increased in all sectors, leading to an increase in total primary energy supply of 22.3 per cent between 1990 and 2005. In turn, this has led to a rise in electricity generation, most notably from the increasing number of CHP plants, which has led to a higher overall energy efficiency in the economy.

20. The Netherlands has implemented a number of PaMs to address GHG emissions from energy production, industrial energy use, transport and the buildings sector.

21. ***Energy industries.*** Supporting new CHP capacity to be brought into the electricity system has been a central part of the PaMs in the energy industries. The PaMs in energy industries are expected to result in 1.9 Mt CO_2 eq of avoided emissions in 2010. However, six of the reported eight PaMs for energy industries have been discontinued. Support for renewable energy has been reinforced with several new PaMs. The estimated impact of these measures in 2010 is 4.1 Mt CO_2 eq of avoided emissions. Two important programmes are the Intergovernmental Wind Energy Agreement, known as the "Blow covenant", aiming at an additional 1,500 MW of onshore wind power capacity by 2010, and the Environmentally Friendly Electricity Production Programme, which is a feed-in tariff system with different flat rates for different renewable technologies (and CHP). Furthermore, the "Coal Covenant" is a negotiated agreement with the existing coal-fired power plants to increase their transition to biomass, and to increase energy efficiency through the adoption of the "Benchmarking Covenant".

22. ***Industrial energy use.*** To encourage improvements in energy efficiency in the industrial sector, separate approaches have been adopted for energy-intensive and non-energy-intensive industries. Since 1999, all plants with energy consumption higher than 0.5 PJ may sign up to the Benchmarking Covenant. According to information provided by the Netherlands to the ERT during the IDR, about 80 per cent of plants, which cover 95 per cent of the energy use of all plants eligible for the Benchmarking Covenant, have signed this covenant. An independent verification bureau for benchmarking will monitor the signatories' achievements towards their committed target – to be among the world's most energy-efficient plants in their sector by 2012. The long-term agreements on energy efficiency and environmental permits are a set of agreements that the Netherlands Government has negotiated with the less-energy-intensive industries, supported by fiscal incentives such as the EIA, and implemented through environmental permits. In total, the estimated effect of these PaMs is 1.4 Mt CO_2 eq in 2010.

23. ***Transport.*** Fuel-efficiency improvements through technical measures, behavioural changes and transition to lower-emission modes of transport are the focus of the Netherlands Government's PaMs in the transport sector. Specific programmes include the new driving force programme (behaviour), the CO_2 reduction programme, including passenger transport and freight transport (technical), and the energy labelling of vehicles. The ERT noted that several PaMs have already been implemented or are in the planning stages, but that the estimated avoided emissions are rather limited (1.4 Mt CO_2 in 2010) in this sector, which is fast-growing and one of the largest emitting sectors in the Netherlands.

24. ***International transport.*** The NC4 reports on steps relating to GHG emissions from aviation and marine bunker fuels and emphasizes the active role and initiatives the Netherlands takes in the International Civil Aviation Organization and the International Maritime Organization forums to pave the way for possible future regulation of emissions from bunker fuels. It does not, however, report on any concrete measures to reduce these emissions.

25. ***Buildings.*** The PaMs for the buildings sector are directed at new buildings, at retrofitting existing buildings or at appliances; they are often differentiated between residential and non-residential buildings. The CO_2 Tender Scheme for Buildings that was outlined in the NC4 has since been implemented. Also implemented are the Energy Performance Advice, which provides information; the Energy Performance Norm, which determines a set of energy performance coefficients to be reached in new buildings according to their type; and the Climate Covenant, which was established to encourage provinces and municipalities to reduce GHG emissions, for example, in their housing programmes. The NC4 estimates the total effect of these PaMs at 2.7 Mt CO_2 eq in 2010. More recent information (EEA, 2007) revises this figure to 2.2 Mt CO_2 eq.

26. The ERT commends the Netherlands for its ambitious implementation of PaMs in the energy sector, most notably for the promotion of renewable energy capacity and energy efficiency in industry,

and for a well-structured presentation in the NC4. The ERT suggests that in its future national communications, the Netherlands provide cost-efficiency estimates for all sectors to enable cross-sectoral comparison of PaMs. The ERT noted that PaMs in the transport sector have a rather limited GHG reduction effect up to 2010.

3. Policies and measures in other sectors

27. In 2006, GHG emissions from the industrial processes, agriculture, LULUCF and waste sectors in the Netherlands, taken together, accounted for 20.4 per cent of total GHG emissions including LULUCF. Between 1990 and 2006, GHG emissions decreased by 28.8 per cent (17.4 Gg CO_2 eq), a trend that was driven by decreased emissions from the industrial processes and waste sectors. The PaMs for these sectors comprise technical and administrative (regulatory) measures as well as financial incentives.

28. ***Industrial processes.*** Between 1990 and 2006, emissions from the industrial processes sector decreased by 29.4 per cent (6.5 Tg CO_2 eq), led by reductions in HFC and PFC emissions. The NC4 identified that further reductions from this sector are expected by 2020, mainly due to policy clusters aimed at reducing HFC and PFC emissions.

29. ***Agriculture.*** Between 1990 and 2006, emissions from this sector decreased by 17.7 per cent (from 22.1 to 18.2 Tg CO_2 eq). The most significant reduction in this sector came from N_2O emissions from agricultural soils (26.1 per cent), due to more stringent norms for the application of manure to soils. According to the NC4, the greenhouse horticulture sector accounts for 80 per cent of emissions from the agricultural sector. The two main policies relating to this sector are the Glami Covenant (improvement of the energy-efficiency index) and regulations referred to as the orders of Council Greenhouse Horticulture (crop-specific energy norms). The ERT noted that maintaining the present measures will not significantly further reduce emissions from this sector by 2020.

30. ***LULUCF.*** Emissions from the LULUCF sector declined slightly (3.5 per cent or 0.1 Tg) between 1990 and 2006. The ERT noted that the National Ecological Network and the creation of recreational facilities are the most important goals of the country's national forestry strategy, combating climate change being one of the benefits of this strategy.

31. ***Waste.*** GHG emissions from the waste sector decreased by 50.6 per cent between 1990 and 2006. This seems to be the result of Government policies aimed at reducing the amount of waste disposed of on land and those aimed at collecting and using CH_4 from landfill for energy production. The ERT noted that emissions from this sector are expected to decrease further by 2020.

32. The ERT noted that the NC4 contains a comprehensive description of PaMs in the non-energy sector, and information about the expected impacts of these PaMs, except for indications of the protection of sinks and reservoirs, as stipulated in Article 4, paragraph 2(a), of the Convention. The ERT encourages the Netherlands to strengthen emission reduction policies in non-energy sectors.

C. Projections and the total effect of policies and measures

1. Projections

33. Overall, the projections section of the NC4 of the Netherlands is very well presented. In response to a request by the ERT for recent GHG projections, the Netherlands provided updated information in the *2007 Climate Policy Progress Report of the Netherlands* (CPPRN). The ERT used this source for all the data presented in this chapter, unless specified otherwise.

34. The GHG emission projections provided by the Netherlands in its NC4 include a 'with measures', a 'with additional measures' and a 'without measures' scenario until 2020. For 1990, 1995 and 2003 GHG emissions are presented under a 'with measures scenario' only. Projections are presented on a sectoral basis, using the same sectoral categories used in the PaMs chapter, and on a gas-by-gas basis for the following GHGs: CO_2, CH_4, N_2O, PFCs, HFCs and SF_6) (treating PFCs, HFCs and SF_6 collectively in the case of aggregated sectors). In addition, projections were provided in an aggregated format for each sector as well as for a national total, using global warming potential values. Emission projections relating to fuel sold to ships and aircraft engaged in international transport were reported separately and they are not included in the totals.

35. The ERT noted that the Netherlands did not provide the total effect of its PaMs, in accordance with the 'with measures' definition, compared to a situation without such PaMs for 1995 and 2000, as Parties are encouraged to do by the UNFCCC reporting guidelines.

36. The Netherlands has presented two scenarios for emission projections, namely strong Europe (SE) and global economy (GE). International cooperation is coupled to public responsibility in the SE scenario whereas the GE scenario is oriented sharply towards international trade. Population growth is higher in the GE scenario. Between 2002 and 2020, the annual average growth rate of the gross domestic product is 1.7 per cent under the SE scenario and 2.7 per cent under the GE scenario. The single nuclear plant remaining in the Netherlands is assumed to be closed in 2013 under the SE, but continues to operate after 2013 under the GE scenario. Table 4 provides a summary of GHG emission projections for the Netherlands.

Table 4. Summary of greenhouse gas projections for the Netherlands

	Greenhouse gas emissions ($Tg\ CO_2$ eq per year)		Changes in relation to base year level (%)	
	Strong Europe	Global Europe	Strong Europe	Global Europe
Inventory data 1990[a]	211.7	211.7	–0.6	–0.6
Inventory data 2006[a]	207.5	207.5	–2.6	–2.6
Kyoto Protocol base year[b]	213.0	213.0	-	-
Kyoto Protocol target[b]	200.3	200.3	–6.0	–6.0
'With measures' projections for 2010[c]	211.6	218.1	–0.7	2.4
'With additional measures' projections for 2010[c]	212.9	219.1	–0.1	2.9

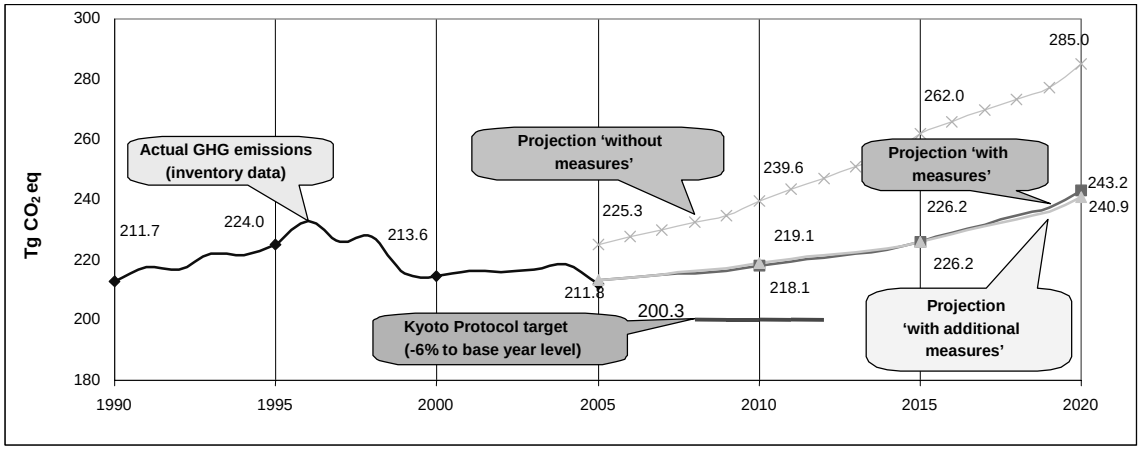
[a] Data source: 2008 greenhouse gas inventory submission of the Netherlands; the emissions are without land use, land-use change and forestry.
[b] Data source: Based on the initial review report contained in document FCCC/IRR/2007/NLD.
[c] Data source*: 2007 Climate Policy Progress Report of the Netherlands*, provided by the Netherlands in response to the request of the expert review team during the in-depth review.

37. Under the SE scenario, GHG emissions in the Netherlands in 2010 are projected to be 0.7 per cent lower than in the base year under the 'with measures' scenario, and 0.1 per cent lower under the 'with additional measures' scenario. Under the GE scenario, emissions are projected to be 2.4 per cent higher in 2010 than in the base year under the 'with measures' scenario, and 2.9 per cent higher under the 'with additional measures' scenario. The ERT noted that, according to the CPPRN, the

Netherlands's GHG emissions 'with additional measures' are 1.1 Tg CO_2 eq higher than emissions under the GE 'with measures' scenario.

38. The figure below presents emissions for the GE scenario for the period 1990–2020, (the GE scenario was presented in the NC4 as a graph of aggregated results) using the data presented in the CPPRN. The ERT noted that according to the GE 'with measures' scenario, emissions in 2010 are projected to be 8.9 per cent (17.8 Mt CO_2 eq) above the Kyoto target, and according to the GE 'with additional measures' scenario 9.4 per cent (18.8 Mt CO_2 eq) above the Kyoto target. That means that the Netherlands will not meet its target under the EU burden sharing agreement under the Kyoto Protocol by means of domestic actions alone. However, according to the CPPRN, the Netherlands Government has already decided to acquire 100 Mt CO_2 eq of credits from the project-based mechanisms under the Kyoto Protocol. The ERT noted that this will be sufficient to enable the Netherlands to meet its Kyoto target.

Greenhouse gas emission projections



Data sources: (1) Data for the years 1990–2005: 2008 greenhouse gas inventory submission of the Netherlands; the emissions are without land use, land-use change and forestry. (2) Data for the years 2006–2020: *2007 Climate Policy Progress Report of the Netherlands* (CPPRN), global economy scenario.
Note: The 'without measures' scenario starts in 2005 following the data from the CPPRN.

2. Total effect of policies and measures

39. In its NC4, the Netherlands has presented the estimated and expected total effect of implemented and adopted PaMs in accordance with the 'with measures' definition, compared with a situation without such PaMs, in terms of GHG emissions avoided or sequestered, by gas, for CO_2 and non-CO_2 gases, in 2005, 2010, 2015 and 2020, but not for years before 2005. The impact of the 'with additional measures' scenario is presented only for 2010. These emission reduction impacts by sector can be calculated using the data in annex 5.3 of the NC4. The NC4 does not present relevant information on factors and activities for each sector for the years 2000 to 2020.

40. Table 5 presents the projected effects of implemented and adopted policies as well as planned measures in 2010 under the GE scenario.

Table 5. Projected effects of planned, implemented and adopted policies and measures in 2010

	Effect of implemented and adopted measures (Tg CO_2 eq)	Relative value (% of base year emissions)	Effect of planned measures (Tg CO_2 eq)	Relative value (% of base year emissions)
Energy (without CO_2 from transport)	7.8	14.1	–0.2	–0.4
Transport – CO_2	–0.2	–0.6	–0.4	–1.3
Industrial processes	7.6	13.9	0.3	0.5
Agriculture	0.2	0.7	–0.2	0
Waste	4.0	31.3	0	0
Buildings	2.2	8.1	–0.6	–0.7
Total	**21.5**	**10.2**	**–1.1**	**–0.5**

Data source: *2007 Climate Policy Progress Report of the Netherlands*, global economy scenario; data are for greenhouse gas emissions without land use, land-use change and forestry.
Note: The total effect of implemented and adopted policies and measures is defined as the difference between the 'without measures' and 'with measures' scenarios; the total effect of planned policies and measures is defined as the difference between the 'with measures' and 'with additional measures' scenarios.

41. The ERT noted that the CPPRN presents elaborated information on factors and activities for each sector. According to the CPPRN, the total effect of implemented and adopted measures is estimated as 21.5 Tg CO_2 eq, which represents about 10 per cent of the base year emissions. Most of the reductions would occur in the energy, industrial processes and waste sectors. According to the same source, the additional measures would reduce GHG emissions by an additional 1.1 Tg CO_2 eq.

42. The ERT recommends that the Netherlands include information on factors and activities for each sector in its next national communication and provide data for the 'without measures' scenario for 1995 and 2000.

D. Vulnerability assessment, climate change impacts and adaptation measures

43. In its NC4, the Netherlands has provided detailed information on the expected impacts of climate change in the country, on adaptation measures to address these impacts and, to a lesser extent, on vulnerability assessments for key sectors, including water resources and management, coastal areas, nature, agriculture, food security and human health. Climate scenarios developed by the Intergovernmental Panel on Climate Change (IPCC), the Met Office Hadley Centre and the Royal Dutch Meteorological Institute, and socio-economic scenarios developed by the Netherlands Central Planning Bureau are used to perform impact and adaptation studies. Table 6 summarizes the information on vulnerability and adaptation to climate change presented in the NC4.

44. Adaptation to climate change has gradually gained importance on the political agenda as a cross-cutting issue. Adaptation is most developed in the water sector. The latest Netherlands spatial policy paper recognizes the need for consolidating the needs for adaptation in water management, coastal zone management, agriculture, nature protection and city planning. There is a policy to prevent floods and to place greater emphasis on managing water levels rather than keeping water out.

45. The ERT found that the Netherlands has adequately addressed the key sectors that are likely to be affected by climate change, namely water resources (as the central theme), coastal zones, biodiversity and natural ecosystems, agriculture and food security, fisheries and human health. The ERT encourages the Netherlands to assist countries at risk from rising sea levels, particularly developing countries, to implement efficient adaptation measures, and to report these measures in its next national communication.

Table 6. Summary of information on vulnerability and adaptation to climate change

Vulnerable area	Examples/comments/adaptation measures reported
Water resources	***Vulnerability***: Sea level has risen 20 cm over the past century and will rise even further (by an expected average of 60 cm) in the next century. Climate change will lead to a 40 per cent increase in river discharges in winter and 30 per cent lower discharges in summer; it is likely that drought will affect water supply for domestic use, energy production, natural habitats, agriculture, recreation, river levels and shipping ***Adaptation***: Adaptation measures are strongly integrated into the water-policy agenda; e.g. "Room for the River" – the policy document on planning for adaptation with regard to the river Rhine; information sharing and capacity-building for adaptation; arrangements for cooperation and implementation of water policy are detailed in an administrative agreement (National Bestuursakkoord Water) between the Government, provinces, water boards and municipalities
Coastal zones	***Vulnerability***: It is highly likely that sea level will rise and extreme weather events will occur as a result of low topography and subsidence; higher sea levels, together with summer droughts, will also result in increased salt intrusion in low-lying parts of the Netherlands which will impact on agriculture, nature and drinking water supply ***Adaptation***: Coastal policy plan; introduction of sand supplements as a way of dynamically managing coasts; risk assessments of flooding and coastal damage; safety standards embedded in legislation; procedures under consideration to update these standards by integrating climate change
Biodiversity and natural ecosystems	***Vulnerability***: The growing season is longer and this may increase carbon sequestration and water-use efficiency. Southern species have migrated and established themselves permanently; this latter effect may be due to climate or non-climate factors, such as fragmentation of natural areas, and migrating species may face the threat of food scarcity. Prolonged droughts may also affect the resilience of ecosystems and increase the risk of forest fires ***Adaptation***: Implementation of existing policies such as realizing green corridors and ecological zones, and strengthening the resilience of ecosystems; consideration of synergy with water management; paying farmers, landowners and recreation organizations for their contribution to water and ecosystem management. The Agenda for a Living Countryside will assess whether climate change requires a modified spatial distribution of ecological zones, whether desiccation, saline intrusion and freshwater shortage will intensify with climate change, and the effect of climate change on human health
Agriculture and food security	***Vulnerability***: Although climate change may stimulate crop growth, agricultural activities could be threatened by sea level rise, drought and the risks of plagues and diseases; higher insurance rates may be set due to the increasing number of extreme weather events ***Adaptation***: Improved forecasting of extreme weather events to enable farmers to adjust their management practices; crop improvement; changing planting and harvesting schedules; relocating farms; insurances (AquaPol – insurance against damage from rainstorms); services for achieving water policy objectives and possibly adaptation in agriculture
Fisheries	***Vulnerability***: Climate change will probably lead to increased pressure on fisheries: in the Wadden Sea area, climate change contributed to the decision to reduce shellfish fisheries
Human health	***Vulnerability***: Increased health hazards as a consequence of increased flood risks, heat waves and the spread of infectious diseases brought about by climate change ***Adaptation***: The policy document *Health and Environment* recognizes that climate change may change the incidence of diseases and infections. Studies are ongoing on impacts, vulnerability and adaptation assessment. Human health is a part of the European climate change and adaptation strategies for human health

E. Financial resources and transfer of technology

1. Financial resources

46. In its NC4, the Netherlands has provided details of measures it has taken to give effect to its commitments under Article 4, paragraphs 3, 4 and 5, of the Convention. It has provided substantial funds for climate change activities through a number of multilateral organizations. It provides assistance to developing countries and to countries with economies in transition in the form of programmes and projects in the areas of education, capacity-building and institutional set-up. The Netherlands has also provided detailed information on the funding provided to developing countries that are particularly vulnerable to the adverse effects of climate change to help them meet the costs of adaptation to those adverse effects.

47. The Netherlands has also provided human and financial support to the Least Developed Countries (LDC) Expert Group. The support to the LDCs is provided indirectly through multilateral assistance by organizations such as the United Nations Development Programme and the World Bank, and directly through bilateral, regional and other multilateral channels.

48. The ERT commends the Netherlands on the transparent reporting of the new and additional financial resources contributed for combating climate change. Table 7 summarizes information on financial resources.

Table 7. Summary of information on financial resources

Official development assistance (ODA)	The Netherlands Government maintained its ODA budget at 0.8 per cent of its GNP for the period 2001–2004
Climate-related aid in bilateral ODA (EUR million)	188.93 for mitigation (2001–2004) 31.24 for adaptation (2001–2004)
Climate-related support programmes (EUR million)	1 630.123, total ODA committed to environmental programmes (2001–2004)
Contributions to Global Environmental Facility (EUR million)	73.89 (2001–2004)
Activities implemented jointly	Reported in the third national communication of the Netherlands
JI and CDM under the Kyoto Protocol	The fourth national communication of the Netherlands does not identify the financial resources for the planned acquisition of 100 Mt CO_2 eq credits

Abbreviations: CDM = clean development mechanism, GNP = gross national product, JI = joint implementation.

2. Transfer of technology

49. In its NC4, the Netherlands has provided detailed information on measures relating to the promotion, facilitation and financing of the transfer of, or access to, environmentally sound technologies. The ERT noted that in the Netherlands, the development and transfer of technology activities ranges from hardware (equipment) to know-how. The transfer of know-how relates mainly to adaptation. The Netherlands supports technology transfer in programmes/projects and/or research for either people or institutions, and it clearly distinguishes between activities undertaken by the public sector and those undertaken by the private sector. The Netherlands has indicated programmes which aimed at stimulating the private sectors in Parties included in Annex I to the Convention and in Parties not included in Annex I to the Convention to develop environmentally sound technologies.

50. The ERT noted that the Netherlands has reported on activities relating to technology transfer and distinguished reporting of activities carried out by the private and public sectors. The activities of the Netherlands for financing access by developing countries to 'hard' or 'soft' environmentally sound technologies considerably contribute to the transfer of technology to developing countries and to Central and Eastern European countries. Furthermore, the Netherlands has reported on the steps it has taken to promote, facilitate and finance transfer of technology, and has supported development and enhancement of endogenous capacities and technologies of developing countries. The ERT commends the transparent reporting of the Netherlands on eight projects it has implemented in eight different developing countries and on the environmentally sound technologies employed.

51. The Netherlands has complied with the reporting requirements under Articles 4, paragraphs 3, 4 and 5, of the Convention regarding financial resources and the development and transfer of environmentally sound technologies to developing countries.

F. Research and systematic observation

52. In its NC4, the Netherlands has provided detailed information on its activities relating to research and systematic observation. The Netherlands Government has an impressive inventory programme and participates in climate change research and systematic observation covering a wide range of climate systems, as well as in impact and policy support studies at the national, European and global levels.

Research activities and the national research programmes in the Netherlands actively encourage participation of the private sector and dialogue among stakeholders from the scientific, policymaking and private sectors.

53. Research on climate change in the Netherlands is focused on three large international scientific programmes in global change research: the International Geosphere–Biosphere Programme, the World Climate Research Programme and the International Human Dimensions Programme on Global Environmental Change. These are supported by national research programmes: the Netherlands Organisation for Scientific Research and the Royal Netherlands Academy of Arts and Sciences. Extensive support in research is also given to the IPCC.

54. The Netherlands Government also cooperates in research projects and networks on climate and monitoring financed by the EU framework programmes (for example, CLOUDNET/CLIWANET), PRUDENCE, DAEDALUS, MERSEA, EMEP, ACCENT, FLUXNET, CARBOEUROPE, PEER, ATEAM and STELLA ADAM). As for systematic observation, several Netherlands institutions actively participate in various national and international programmes on climate-related monitoring (for example, Global Climate Observing System, Global Ocean Observing System, Global Terrestrial Observing System, Global Earth Observation System of Systems, European Space Agency, European Organisation for the Exploitation of Meteorological Satellites and National Aeronautics and Space Administration (NASA).

55. The main research themes, which were previously described in the NC3 and are still in force, fall under four main themes: climate scenarios, mitigation, adaptation, and integration and communication. The Netherlands Government also encourages free data exchange, within the limits of international regulations. The ERT commends the Netherlands for its involvement in research and systematic observation with regard to climate change.

G. Education, training and public awareness

56. The Netherlands has provided concise information on its actions relating to education, training and public awareness.

57. Relevant and major ministries implement activities in education, training and public awareness in their respective fields of interest. The subsidy programme entitled Social Organisations and the Environment, among others, focuses on projects on global warming issues such as climate change programmes for primary and secondary schools. The ERT noted that pupils are very committed to those programmes, particularly on issues relating to emission reduction.

58. The Netherlands has involved the public in various awareness-raising activities, including surveys and prime-time television shows. Platform Communications on Climate Change, established in 2003, aims to raise awareness of politicians, policymakers, industry, non-governmental organizations, the media and the general public on climate research, including the consequences of climate change and possible adaptation measures.

59. The ERT noted the efforts undertaken by the Netherlands to implement education, training and public awareness programmes. It also noted that the Netherlands development cooperation policy on climate change, particularly in the areas of mitigation and adaptation, is strongly focused on poverty alleviation. The ERT further noted that that NC4 did not provide information on the strengthening of national institutions and the exchange or secondment of personnel to train experts in the field of climate change as stipulated in Article 6 of the Convention.

III. Evaluation of information contained in the report demonstrating progress and of supplementary information under Article 7, paragraph 2, of the Kyoto Protocol

A. Information contained in the report demonstrating progress

60. The RDP of the Netherlands includes four chapters containing all the information required by decisions 22/CP.7 and 25/CP.8. The ERT found the information contained in the RDP to be consistent with that provided in the NC4, as the documents were written in parallel. Between 1990 and 2006, total national GHG emissions decreased by 2.0 per cent. Based on the projections presented in the RDP, the Netherlands will meet its GHG emission reduction target through the 'with additional measures' scenario, combined with credits acquired from CDM and JI projects. The current domestic PaMs are estimated to reduce projected national emissions in 2010 by 10 per cent compared to business as usual. The Netherlands plans to acquire, through CDM and JI, 100 Mt CO_2 eq over the period 2008–2012, achieving two thirds by using the CDM and the rest by using JI. The Netherlands has provided sufficient information on supplementarity regarding the use of the flexible mechanisms, by presenting the domestic actions implemented or under implementation before (1990–2003) and after (2004–2010) its ratification of the Kyoto Protocol and their effects as "avoided emissions".

B. Supplementary information under Article 7, paragraph 2, of the Kyoto Protocol

61. The Netherlands has provided almost all the supplementary information required under Article 7, paragraph 2, of the Kyoto Protocol in its NC4 and the RDP. This information reflects the steps taken by the Netherlands to implement the relevant provisions of the Kyoto Protocol. It has provided descriptions of the national inventory system and the national registry, and information on its efforts to implement PaMs in such a way as to minimize adverse effects, including the effects of climate change, effects on international trade, and social, environmental and economic impacts on other Parties, particularly those identified in Article 4, paragraphs 8 and 9, of the Convention. However, the Netherlands has not reported on the national legislative arrangements and administrative procedures relating to the implementation of activities under Article 3, paragraph 3, of the Kyoto Protocol.

62. The supplementary information is placed in different sections of the NC4 and of the RDP. Table 8 provides references to the NC4 and the RDP chapters in which supplementary information is provided.

63. The report of the initial review of the Netherlands[2] concluded that the national system meets the requirements for the implementation of general and specific functions and that the national registry is fully compliant with the registry requirements. The ERT took a note of these conclusions.

[2] FCCC/IRR/2007/NLD.

Table 8. Overview of supplementary information under Article 7, paragraph 2, of the Kyoto Protocol

Supplementary information	Reference
Supplementarity relating to the mechanisms pursuant to Articles 6, 12 and 17	NC4, chapter 4.6, pp. 62–64
Policies and measures in accordance with Article 2	NC4, chapter 4.7, pp. 64–67
Domestic and regional programmes and/or legislative arrangements and enforcement and administrative procedures	NC4, chapter 4.8, pp. 67–68 RDP, chapter 1.2, pp. 9–10
Information under Article 10	NC4, chapter 3.2, pp. 31 and annex 3.1 NC4, chapter 4.1–4.5, pp. 37–62 NC4, chapter 7.4, pp. 105 and annex 7.1 NC4, chapter 8.3, pp. 112–16 and annex 8.1 NC4, chapter 9, pp. 117–122 RDP, chapter 4.1–4.3, pp. 31–34
Financial resources	NC4, chapter 7.2–7.3, pp. 94–102 RDP, chapter 4.4, pp. 34–39

IV. Conclusions

64. Overall, the Netherlands has succeeded in reducing its GHG emissions by 2.0 per cent between 1990 and 2006, through a basket of PaMs, implemented at the EU level and at national and subnational level.

65. The ERT concluded that the NC4 provides a clear and consistent overview of the national climate policy of the Netherlands at the date of reporting, and that the RDP also contains all information required. Key climate change PaMs, GHG inventory projections and other issues addressed in the NC4 are either referred to, or presented, in a succinct way. The ERT also concluded that the presentation of information conforms to requirements set out in the UNFCCC reporting guidelines.

66. In the NC4 and the RDP, the Netherlands presents GHG projections for the period from 2005 to 2020. According to the projections presented in the CPPRN, under the 'with measures' scenario, 2010 emissions are within a range of a 0.7 per cent decrease to a 2.4 per cent increase of base year emissions. The Netherlands plans to purchase credits in the amount of 100 Mt CO_2 eq for the period 2008–2012 through CDM and JI projects. This implies that, with the use of the flexible mechanisms under the Kyoto Protocol, the Netherlands most probably will meet its Kyoto Protocol target.

67. In the course of the IDR, the ERT formulated a number of recommendations relating to the completeness and transparency of the Netherlands's reporting under the Convention and its Kyoto Protocol. These include[3] that the Netherlands provides information on underlying factors and activities for projections by sector.

68. Further, the ERT encourages the Netherlands to provide, in its future reports, further detail on:

- The changes in national circumstances that affect GHG emissions and removals over time;
- PaMs in the forestry sector (for example, on measures to enhance sinks);
- The effect of important "clusters" of PaMs;
- Actions taken to periodically revise its policies and practices which encourage activities that lead to increased levels of GHG emissions than would otherwise occur;
- Tables showing the differences between different scenarios and historical (1995, 2000) information on emission levels under a 'without measures' scenario;

[3] Recommendations are given in full in the relevant sections of this report.

- Assistance for countries which face risks of rising sea levels, particularly developing countries, to implement efficient adaptation measures;

- Further information on exchange and secondment of personnel to train experts on climate change issues, in particular for developing countries.

69. The ERT recognizes that several developments have occurred in the Netherlands since the NC4 was submitted, some of which increased the effects of expected GHG mitigation activities (for example, development of the second national allocation plan under the EU ETS), and some of which resulted in a reduced impact of GHG mitigation (for example, in the transport sector). The ERT appreciated receiving updated information in this regard.

Annex

Documents and information used during the review

A. Reference documents

"Guidelines for the preparation of national communications by Parties included in Annex I to the Convention, Part II: UNFCCC reporting guidelines on national communications". FCCC/CP/1999/7, pages 80–100. Available at <http://unfccc.int/resource/docs/cop5/07.pdf>.

"Guidelines for the preparation of the information required under Article 7 of the Kyoto Protocol". Decision 15/CMP.1. Available at <http://unfccc.int/resource/docs/2005/cmp1/eng/08a02.pdf#page=54>.

"Guidelines for review under Article 8 of the Kyoto Protocol". Decision 22/CMP.1. Available at <http://unfccc.int/resource/docs/2005/cmp1/eng/08a03.pdf#page=51>.

FCCC/IDR.3/NLD. Report on the in-depth review of the third national communication of the Netherlands. Available at <http://unfccc.int/resource/docs/idr/nld03.pdf>.

FCCC/SBI/2006/INF.2. Synthesis of reports demonstrating progress in accordance with Article 3, paragraph 2, of the Kyoto Protocol. Available at <http://unfccc.int/resource/docs/2006/sbi/eng/inf02.pdf>.

FCCC/SBI/2007/INF.6. Compilation and synthesis of fourth national communications. Available at <http://unfccc.int/resource/docs/2007/sbi/eng/inf06.pdf>.

FCCC/SBI/2007/INF.7. Compilation and synthesis of supplementary information incorporated in fourth national communications submitted in accordance with Article 7, paragraph 2, of the Kyoto Protocol. Available at <http://unfccc.int/resource/docs/2007/sbi/eng/inf07.pdf>.

FCCC/ARR/2005/NLD. Report of the individual review of the greenhouse gas inventory of the Netherlands submitted in 2005. Available at <http://unfccc.int/resource/docs/2006/arr/nld.pdf>.

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EEA (European Environment Agency). 2007. *Greenhouse Gas Emission Trends and Projections in Europe 2007 – Country Profile: The Netherlands*. Available at <http://reports.eea.europa.eu/eea_report_2007_5/en/Netherlands.pdf>.

Netherlands Ministry of Housing, Spatial Planning and the Environment. 2007. *2007 Climate Policy Progress Report of the Netherlands*. Submitted to the European Commission pursuant to Decision No 280/2004/EC, Article 3(2).

B. Additional information provided by the Party

Responses to questions during the review were received from Mr. Jeroen Bremme (Netherlands Ministry of Housing, Spatial Planning and the Environment), including additional material on policies and measures, greenhouse gas projections, vulnerability and adaptation.

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