

**Netherlands national allocation plan for
greenhouse gas allowances
2008-2012**

**Plan of the Minister for Economic Affairs and the State Secretary for
Housing, Spatial Planning and the Environment**

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Summary

1.	The Netherlands is on track to achieving its Kyoto objectives.
2.	Each year in the planning period 2008-12 the Netherlands will allocate a total of 79.8 megatons of CO ₂ in free allowances to existing installations.
3.	For new entrants there is a reserve deposit of 6.2 megatons of CO ₂ per year. In addition, there is a reserve of 0.5 megatons of CO ₂ per year for the outcome of legal proceedings.
4.	For the scope of the emissions trading system the Netherlands endorses the definition of combustion units laid down in the EU Commission's guidance document.
5.	Allocation at installation level takes place on the basis of the historic emissions, expected growth, the energy efficiency of the installation concerned and the correction factor for remaining within the total quantity of allowances available. Energy conversion is based on fixed efficiencies.
6.	Process emissions are subject to 50% of the correction factor.
7.	Electricity producers will be cut by 15% because of the expected windfall profits. Electricity production to 350 GWh will not be cut. 1/3 of the allowances cut will go to the industrial participants in emissions trading. This will be divided in proportion to their electricity use. 2/3 of the cut will be sold (this is approx. 4% of the total quantity of allowances to be allocated). The proceeds will be used to compensate the low-volume consumers for the high electricity prices.
8.	No further allowances will be issued to installations that close during the planning period. There is a relocation arrangement for the transfer of production within the same group.
9.	The allocation to new entrants will be made on the basis of the most efficient state of the art in commercial operation in global terms.
10.	Installations with a total installed capacity from 20 MW that are not covered by the additive rule for combustion used by NL can apply for an opt-in.
11.	The greenhouse gas N ₂ O from the production of nitric acid will be added to the system. An application for an opt-in will be made for this.
12.	A limit has been set on the use of JI/CDM of 12% per year per installation.

PART I: THE OUTLINES

1 Introduction

This is the Netherlands national allocation plan for greenhouse gas allowances for the period 2008-2012. This plan is the plan referred to in section 16.23 of the Environmental Protection Act (hereinafter: EPA). This plan is also called the national allocation plan for allowances (in short: NAP-II).

1.1 General

Under European regulations there is now an allowance trading system in operation within the European Union. The start date for this system was 1 January 2005. The EU directive on greenhouse gas allowance trading¹ (hereinafter: the Directive) has been implemented in the Netherlands in, among others, the Environmental Protection Act² and the Allowance Trading Decree³ (hereinafter: the Decree). The Decree sets out which installations are covered by the emissions trading system. The scope contained therein will hereinafter be called the statutory criteria. In particular installations from industry and the electricity production sector fall within the scope of the Decree. The installations concerned must have an emission permit to allow them to emit the greenhouse gases covered by these regulations. Each of the participating installations is allocated a quantity of allowances. At the end of each calendar year an installation must cover its emissions falling under the statutory criteria by the surrender of allowances.

National allocation plans apply to contiguous planning periods (EPA section 16.23(2)). The period for the first national allocation plan⁴ was three years: from 2005 to 2007. The periods for subsequent plans cover five years. Under the EPA a plan must be drawn up for each of these periods. This plan must at least contain an indication of the total quantity of greenhouse gas allowances for the planning period, the method of allocation (free of charge or otherwise), but also the manner of allocating allowances and an indicative list of installations and their allowances that are intended to be allocated to each individual installation on the basis of the methodology outlined in this plan. The present allocation plan relates to the planning period 2008 to 2012.

¹ Directive 2003/87/EC of the European Parliament and of the Council of the European Union of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC (OJ L 275) and Directive 2004/101/EC, the so-called Linking Directive.

² Implementing Act for the EU directive on greenhouse gas emission allowance trading, Bulletin of Acts and Decrees 2004, no. 511. The scheme contained in the Environmental Protection Act for greenhouse gas emissions trading has been amended for the purpose of implementing Directive 2004/101/EC of the European Parliament and of the Council of the European Union of 27 October 2004 amending Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms (OJ L 338) and the implementation of the parts relating to the approval of project activities of the Kyoto Protocol to the United Nations Framework Convention on Climate Change concluded in Kyoto on 11 December 1997. This is the Implementing Act for the EU directive on project-based Kyoto mechanisms, Bulletin of Acts and Decrees 2006, no. 189. This Implementing Act entered into force on 1 May 2006 (Bulletin of Acts and Decrees 2006, no. 213).

³ Bulletin of Acts and Decrees 2004, no. 737, most recently amended by decree of 31 May 2005, Bulletin of Acts and Decrees 2005, no. 284

⁴ Government Gazette of 20 August 2004, no. 159

The result of the application of the allocation rules in this plan can be found in the indicative list contained in Annex 1 to this plan, which lists the individual installations and the quantity of allowances that is expected to be allocated to each installation.⁵

The first step towards the definitive allocation and issuance of allowances to individual installations was the draft plan published in the Government Gazette and elsewhere on 23 May 2006. Everyone had until 4 July 2006 to make their views on the proposals in this draft plan known. There was frequent consultation with industry in the course of the preparation of that draft. Five representatives of industry formed part of the project group that drafted the plan. The proposed decisions were also discussed on various occasions with a consultative body specially set up for the purpose on which government and industry sat. On 16 January of this year an interim review of the plan was published – by way of extra communication – on which everyone had the opportunity to comment. At the same time newsletters containing the latest state of affairs concerning the allocation process were published with great regularity. Finally, on two occasions a conference on CO₂ emissions trading was organised by the government for all the parties concerned.

1.2 The procedure

The preparation of this plan took place according to the procedure under EPA section 16.26. Therefore, for six weeks following publication – from 23 May 2006 to 4 July 2006 – everyone had the opportunity to make their views of the draft of this plan known. In addition, the draft plan was sent to both houses of the States General on 30 May 2006. Consultation with the Lower House took place on 15 and 22 June and on 7 and 21 September 2006.

Following the public consultation period the Minister for Economic Affairs and the State Secretary for Housing, Spatial Planning and Environment (hereinafter: the Ministers) decided on their standpoint in respect of the public comments. This was sent to the Lower House on 4 September 2006. The way in which account was taken of the public comments is set out in section 7 of this chapter. The plan was then sent to the European Commission in accordance with article 9 of the Directive. The European Commission is testing the plan against the Directive. The other member states can also give their opinion on the plan. To this end the plan has been sent to the Permanent Representatives of each member state at the European Commission. Amendments to the plan can – during the review period referred to in article 9(3) of the Directive – both arise from objections that the European Commission makes during the review procedure of article 9 of the Directive and be amendments that are deemed necessary on the Ministers' own initiative. All the amendments will have to be incorporated with the approval of the European Commission before the plan can finally be adopted. The definitive plan alone forms the basis for the national allocation decision and other allocation decisions as referred to in EPA section 16.29 and section 16.32 respectively. Appeals can be lodged against the allocation decisions.

In short, there is a consultation version of the plan, an EU version of the plan and a definitive plan. These versions can differ from one another.

1.3 Legal protection

No appeal against the definitive plan can be lodged with the administrative courts. This follows from EPA section 20.2(1) and section 8:5(1) of the General Administrative Law Act. Legal protection against the National Allocation Decision and other allocation decisions is possible.

⁵ It is an indicative list because participants and/or the quantity of emission allowances per installation are still subject to change as a result of amendments.

1.4 Bookmark

The structure of the plan is as follows. The first part contains an overview of the plan in broad outlines. The second part contains the determination of the national emission ceiling and the rules for the allocation of the allowances to the separate installations. Part I places the plan in a broader context. The text of part II is guiding. Annex 1 contains the provisional list of installations, which also serves as a basis for the allocation in the national allocation decision. Further background information about emissions trading and this plan can be found at www.CO2-allocatie.nl.

2 Underlying principles

The underlying principles for the allocation of the allowances are based on the statutory criteria, Annex III to the Directive, the guidance document of the European Commission⁶, the national allocation plan for the period 2005-2007 (NAP-I) and on existing and new policy.

- The Directive contains a number of criteria that the allocation plan must satisfy. It is important in this regard that the allowances are in principle linked to the direct emissions, in other words: the owner of the chimney receives the allowances.
- For the scope of emissions trading for combustion activities the Netherlands endorses the definition that the European Commission has included in its guidance document and the further elaboration thereof as discussed by the Climate Change Committee⁷ of 31 May 2006⁸.
- Another important basis for the allocation is current policy. This is because the member states have the option of using other criteria in addition to the criteria given in the Directive that the allocation must satisfy. The Netherlands is taking advantage of this option.
- The distribution is as far as possible tailored to the covenants on energy efficiency Benchmarking and the Long-Term Agreements (LTAs) on energy efficiency. The agreements between government and industry about the improvement of their energy efficiency are laid down in these covenants. The benchmark companies must be among the best in the world in the energy efficiency field. Under the long-term agreements, installations that have not signed the Benchmarking Covenant must take all the cost-effective energy efficiency measures with a payback period of up to five years. There are also agreements about the adjustment of electricity production in the Coal Covenant. When drafting this plan it was decided, within the scope provided by the Directive, to fit in with these existing agreements as far as possible. At the same time effect is given in this way to criteria 7 and 3 of Annex III to the Directive. Criterion 3 states that allowance must be made in the plan for the technological capabilities

⁶ Communication from the Commission, "Further guidance on allocation plans for the 2008 to 2012 trading period of the EU Emission Trading Scheme", Brussels 22.12.2005, COM(2005)703 final. This document is a supplement to the guidelines that the Commission drafted for the first trading period: Communication from the Commission on guidance to assist Member States in the implementation of the criteria listed in Annex III to Directive 2003/87/EC establishing a scheme for greenhouse gas emission allowance trading within the Community and amending Council Directive 96/61/EC, and on the circumstances under which force majeure is demonstrated., COM (2003) 830 final, 7.1.2004. These guidelines too continue to apply therefore.

⁷ At the Climate Change Committee of 31 May 2006 the Member States agreed to a further elaboration of the definition of incineration units as contained in the guidance document. This elaboration can be found at www.co2-allocatie.nl

⁸ All the incineration units are still included in the draft allocation plan because there was no clarity about the definition. There has now been insufficient time to adapt this plan fully in this respect. There will however be full adaptation in the context of the national allocation decree and – for new entrants – in the other allocation decrees.

that exist. This manifests itself in the factor in the allocation formula that relates to the relative energy efficiency and the way in which process emissions are dealt with. Technological potential has been identified by looking at levels of performance in the area of energy efficiency. These are levels of performance that companies have adopted voluntarily. In every case in which an installation has performed better than required in the agreement, it will be allocated additional allowances in proportion. If an installation has performed worse than agreed voluntarily, then this installation will receive proportionally fewer allowances because it has more technological potential to reduce emissions. Criterion 7 of Annex III to the Directive states that the plan can take into account the early measures for the improvement of energy efficiency taken in the Netherlands in the past.

- Existing electricity producers that are net exporters of electricity outside the installation will have their allocation cut by 15%. A lower limit of 350 GWh will however be applied first. The unallocated allowances resulting from this cut will in part benefit the other participants in emissions trading and in part be put into circulation by selling them.
- The greenhouse gas N₂O (laughing gas) will be added to the trading system. To this end the Netherlands will submit an application for an opt-in to the European Commission under article 24 of the Directive.

Many of the underlying principles are the same as in NAP-I, but there are also differences. The cut of the existing electricity producers and the addition of N₂O are new elements. Other important differences are that an opt-out of installations is no longer permitted and that from 2008 installations will be allowed to use Joint Implementation. Allowances that are issued in the second planning period can be carried forward to the next planning period. This was not permitted in the first planning period in the Netherlands.

3 The available emission capacity

3.1 Kyoto objectives

The total quantity of allowances to be allocated is derived from the Netherlands Kyoto objectives. In this way account is taken of criteria 1 and 2 of Annex III to the Directive. Criterion 1 states that each member state must show how the chosen total quantity of allowances meets the requirement that the Kyoto targets will be achieved or exceeded, taking account, on the one hand, of the share of the total emissions that these allowances represent in comparison with the emissions from other sources not covered by the Directive and, on the other, the national energy policy. Criterion 2 states that the total quantity of allowances to be allocated must correspond to the evaluations that have been made in accordance with Decision 93/389/EEC of the actual and expected advances in the achievement of the contributions of the member states to the community obligations.

The Netherlands has an emission capacity for greenhouse gases of 201.7 megatons of CO₂ equivalent for the period 2008 to 2012. This capacity broadly corresponds to an average emission reduction of 6% compared with the 1990 level. The Netherlands is achieving its Kyoto obligations in part through the purchase of allowances abroad (on average 20 megatons per year in the Kyoto budget period). As a result of this purchase there will be 221.7 megatons of CO₂ equivalent in domestic emission capacity available per year for the years 2008 to 2012.

This domestic emission capacity has been distributed amongst the sectors industry (including energy), agriculture, traffic and transport and built environment. The Cabinet has set a CO₂ target for the year 2010 for each of these sectors. At the same time a separate target has been set for the other greenhouse gases. Account has been taken in this regard of expected developments in the sectors and the effect of existing policy. The Cabinet sent a letter about the targets to the

Lower House on 13 April 2006.⁹ Among the conclusions in this letter is that on the basis of current calculations the achievement of the Kyoto objectives is within reach.

3.2 The total quantity of allowances to be allocated

The total emission capacity for industry (including energy) for the years 2008 to 2012 has been set at 109.2 megatons of CO₂ per year. In the first period it was 112 megatons of CO₂ per year¹⁰. These 109.2 megatons cover the whole CO₂ emission capacity of Dutch industry, that is including the emissions of installations that are not covered by the statutory criteria, the emission capacity for new installations and a provision for outcomes of possible legal proceedings.

A deduction of 20.7 megatons will be made from the 109.2 megatons. This is for installations and emissions of installations that are not covered by the statutory criteria. A further 1.9 megatons will be added. This is emission capacity that will be transferred from the glasshouse horticulture sector and the built environment. As a result the total CO₂ capacity for participants in emissions trading, including new entrants, in this planning period comes to 90.4 megatons per year. Approximately 4% of this will be sold.

3.3 Deposit for new entrants and a deposit for legal proceedings

One deposit will be set up containing a total of 31 megatons of allowances for all new entrants with CO₂ emissions. A separate deposit will also be started, likewise for CO₂ emissions, with a total for the whole planning period of 2.5 megatons of allowances for honouring any legal proceedings¹¹ against the national allocation decision. If allowances from this last mentioned deposit remain, after processing appeals upheld by the Administrative Law Division of the Council of State in its final decision¹², they will go into the deposit for new entrants after 2006 (see also §6). If there are insufficient allowances in the deposit for legal proceedings, then the quantity of allowances to be allocated to the existing installations will have to be recalculated, based on the quantity of allowances available in total for allocation in the national allocation decision¹³. Any shortfall in the deposit for legal proceedings will not therefore be supplemented by allowances from the deposit for new entrants.

3.4 N₂O opt-in

An application for an opt-in for the N₂O emissions from nitric acid production will be made under article 24 of the Directive. This will affect three installations. Separate emission capacities will be set up for N₂O. The quantity of emission capacity per year is 1.4 megatons of CO₂ equivalents for the existing installations. In addition, there is approximately 0.3 megatons available for new entrants and there is a limited quantity of allowances for legal proceedings.

⁹ Parliamentary Documents II, 2005-2006, 28 240, no. 43.

¹⁰ The difference between 112 and 109.2 per year is the result of new insights into the emission factor of natural gas and of a different division between the targets. See also Part II, H2.

¹¹ In this way effect is given to EPA section 16.25(2)(b).

¹² See EPA chapter 20.

¹³ See the reference in EPA section 16.29(1) to EPA section 16.31.

3.5 Overview of CO₂ capacity NAP-I and NAP-II

Table 3-1: Overview of CO₂ capacity NAP-I and NAP-II in megatons of CO₂ per year

	NAP-I (2005-7)	NAP-II (2008-12)
Sectoral CO ₂ emission capacity of industry (incl. energy) ²	112.0	109.2
Correction for emissions not covered by the Directive ³	-/-15.5	-/-20.7
Addition other sectors ⁴	+0.2	+1.9
Total available for allocation incl. reservation	96.7	90.4
Correction for opt-out installations ⁵	-/-7.8	N/A
Correction for reserve for new entrants + legal proceedings	-/-2.5	-/-6.7
Correction for reduction electricity producers ⁶	N/A	-/-5.8
Offsetting of windfall profits in proportion to electricity use ⁷		+ 1.9
Total available for existing installations⁸	86.4	79.8

1. Figures have been rounded off.
2. Difference between NAP I and II targets is due to the change in the definition of the target for industry, so that now less CO₂ falls under industry. The natural gas factor (quantity of CO₂ in m³ natural gas) has also been adjusted. In terms of weight the two targets are comparable.
3. Difference from NAP-I as a result of the new definition of combustion units and the 20 MW addition criterion. It has been assumed in this regard that of the close to 200 installations that can in theory submit an opt-in application just half of them will actually do so. Ultimately, by approximation, approx. 1.3 megatons will fall into and approx. 1.4 megatons will fall outside the trading system. These figures will be made final on the basis of the definitive opt-in applications.
4. In NAP-II, part of glasshouse horticulture also falls under emissions trading.
5. In the first trading period a total of 152 installations were given an opt-out. They were mainly installations with an annual CO₂ emission of less than 25 kton, but also some larger installations.
6. This is an approximation. Electricity producers are being cut by 15%.
7. The electricity producers cut is being given to the consumers of electricity in compensation for the high prices. 2/3 of the cut (approx. 3.9 megatons) will be sold and the proceeds used for the low-volume consumer. 1/3 of the cut (approx. 1.9 megatons) will go in the form of free allowances to the industrial participants of emissions trading. This is therefore separate from the CO₂ ceiling.
8. The total number of installations in NAP-I = 207 and in NAP-II = 330

3.6 Electricity producers cut

The existing producers of electricity will be cut 15% per year. This cut is a limited one. The reason for this is the windfall profits that are expected to be made by these producers in this planning period too. This is a matter of passing on the price of a greenhouse gas allowance in the price of electricity for the end users although the allowances are allocated free of charge by the government. Research shows that this is currently happening on a limited scale but will increase

sharply in the years ahead¹⁴. This is reason to cut the existing electricity producers in the allocation.

The cut only applies to the electricity producers because they – unlike the other participants in emissions trading – are only exposed to limited international competition and in any event not to competition from outside the EU. It is therefore easier for this sector to pass on the price of the allowances. The electricity market is largely a regional market in which the competition comes from installations that are also covered by emissions trading and also pass on the price of a greenhouse gas allowance. The degree of cut seeks to ensure that the electricity producers – because of the cut – are not put at a competitive disadvantage compared with their main foreign rivals in the EU. Through the cut the producers retain an inducement to improve their environmental performance.

The production of steam or electricity for their own use is not covered by the cut. Only those installations are eligible for the cut that on an annual basis supply net electricity (GWh), that is supply more power outside the installation than is purchased. A lower limit will be applied to the cut. The first 350 net GWh of electricity that leave the installation will be exempted from the cut. The cut will be used to compensate consumers for the higher electricity prices. One third of the cut allowances will – by means of the allocation on the basis of this plan – benefit the other participants in emissions trading. The distribution will be adopted on the basis of the net electricity purchase.

Two thirds of the allowances will be offered on the market by being sold. The proceeds will benefit the low-volume consumers of electricity.

New electricity producers – who can be regarded as new entrants within the meaning of this plan – will not be cut by 15% per year. New power stations will be treated differently from existing power stations. New power stations will be allocated allowances on the basis of the best commercially operating comparable power station worldwide. In this way alone they will receive proportionally fewer allowances than an efficient existing power station.

4 Participants

In total, 330 installations are so far covered by the statutory criteria. Together these installations account for almost 90% of the CO₂ emissions of industry and the energy sector.

Regarding the extent and the nature of the Dutch participants in emissions trading in the second trading period the following standpoint has been taken:

1. The installations from the designated sectors come under the scope of emissions trading.

2. The definition of combustion units in this plan

For the scope of emissions trading for combustion activities the Netherlands endorses the definition that the European Commission has included in its guidance document and its further elaboration as discussed at the Climate Change Committee of 31 May 2006. The final provision of the scope and the associated consequences for the participating installations will be laid down in the Allowances Trading Decree. Further consideration will be given to this in section 3.2 of part II.

3. Small combustion installations

Installations from non-designated sectors that within their boundaries have set up a combustion unit of more than 20 MWth fall within the scope of the system. Installations from non-designated

¹⁴ CO₂ Price Dynamics, ECN-C0-06-015, March 2006; CO₂ trading and its influence on electricity markets Frontier economics, Feb 2006

sectors that within their boundaries do not have any combustion unit at all that exceeds 20 MW_{th} but where the 20 MW_{th} is in fact exceeded in total within the installation fall outside the scope of the system. A more detailed substantiation of this approach in relation to the Directive is given in section 3.2 of Part II.

A voluntary opt-in will be offered to a number of installations that fall outside the system as a result of this approach but that nonetheless wish to participate, in so far at least as they have an aggregated thermal input per installation of more than 20 MW_{th}. A number of installations have already indicated that they (provisionally) wish to be eligible for an opt-in application to the European Commission.

The consequence of the above is that the installations from non-designated sectors that do not have at least one combustion unit with an aggregated thermal input of more than 20 MW_{th} have not been placed on the indicative list in Annex 1 to this plan. This unless it is a question of the installations that have indicated that they wish to be eligible for an opt-in application to the European Commission.

5 Allocation

5.1 The method of allocation and issuance

The allowances will for the most part be allocated to the installations free of charge. Advantage will also be taken of the option to sell approx. 4% of the total quantity of allowances available. In this way article 10 of the Directive will be met. This sale is connected with the cut of the electricity sector described in chapter 3 on account of the windfall profits. The proceeds from the sale will benefit the low-volume user, because it generates the windfall profits to some extent. The way in which this will be given effect does not fall within the scope of the present plan.

The quantity of allowances to be allocated in the planning period will be issued annually in equal amounts (20%). An even distribution will also be used for new entrants, but then from the start of their actual production. In this way effect will be given to article 11(4) of the Directive and at the same time allowance will be made for an even spread of the allowances to be allocated over the expected growth in the planning period.

The allocation of allowances to installations from the base metal sector that produce residual gases and to installations that incinerate these gases elsewhere differs from the allocation of allowances to the other installations. This is in accordance with Guideline 92 of the Guidelines for the Application of the Criteria of Annex III to the Directive.¹⁵ These residual gases will be split into a process part and a combustion part. The allowances for the process part will be allocated to the producer of the residual gas. The allowances for the combustion part will be allocated to the installation that incinerates the residual gases.

5.2 The allocation to existing installations

In this section we describe the allocation to existing installations. These are the installations, including expansions, that are put into operation before 1 January 2007. They are also the installations that will be included in the national allocation decision. The quantity of allowances to be allocated per installation is based on the historic emissions, the expected growth per sector, the efficiency factor and a correction factor. The formula below represents the general principle.

¹⁵ Announcement of the Commission concerning guidelines for the application of the criteria of Annex III of Directive 2003/87/EC intended for the member states (COM/2003/0830 def.).

$$A = HE \times GF \times EE \times C$$

- A = the allocation to an individual installation
HE = the historic emissions (average of three years from the period 2001-2005)
GF = the growth (2006-2010)
EE = the relative energy efficiency (only applicable to energy-related emissions, not being energy conversion)
C = the correction factor in order to remain within the total emission ceiling

This formula is a simplified representation of the manner of allocating. We shall be giving full consideration to the rules for calculating the allocation in Part II. Annex 1 gives an indicative list of the participating installations. It includes the installations that are eligible for an opt-in application under article 24 of the Directive.

Historic emissions

The determination of the historic emissions in order to obtain a real picture of the CO₂ emissions of the individual installations is different from that in NAP-I. For the determination of their historic emissions existing installations can now choose themselves three years from the reference period 2001 to 2005. This period has been chosen because it is the most recent period about which details are known and that is in principle verifiable before the point at which the allocation plan is sent to the Commission. It is also in accordance with criterion 10 of Annex III to the Directive which stipulates that a member state must take a decision in advance (before the planning period begins) about the absolute quantities of greenhouse gas allowances that will be allocated in total and to the operator of each installation.

These details are provided by the installations themselves and are then verified by SenterNovem and the Benchmarking Verification Agency. Installations have until 1 October 2006 to amend their choice of the basic years to be used. The average emissions of the three years chosen will be used as the historic emissions. As a result of the choice of three years out of five an installation can disregard two years with lower emissions as a result of specific or legal circumstances or market conditions. This provides sufficient scope for obtaining a not so very different picture of the historic emissions. In this way sufficient justice is done to the individual interests of the separate installations and it is no longer necessary to apply rules for special circumstances to each installation.

Growth

Growth has been set at 1.7% per year for all sectors for the period from 2006 to 2010, 2010 being the middle year of the planning period 2008–2012. This is a matter of CO₂-related growth. It is based on the estimates of ECN.¹⁶ In this regard ECN looked separately at some large expected new entrants. They are above all new entrants that can be expected with sufficient certainty to be going to emit CO₂ in the trading period. A single growth figure for all the sectors has been chosen because the ECN estimates show that the growth figures for each sector in general are reasonably close to one another, once a number of new installations have been removed. With a further division sector by sector the sector-sensitivity of an individual installation remains very high. This has been offset by going to a higher aggregation level. In this way 'plant closures' and

¹⁶ For the industrial sectors economic growth expectations of sector experts of the CPB underlie the growth figures. They have been converted by ECN, also using the information, knowledge and expertise available at ECN, into physical growth figures. These physical growth figures form the basis in the ECN models for the calculation of the development of energy use. These figures do not include factors that can influence the installations themselves, such as energy saving, fuel substitution, use of sustainable energy and shifts of purchase or sale of electricity or heat. (ECN (Petten) memo 'growth figures for CAP', P. Kroon and B.W. Daniëls, www.ecn.nl)

'new installations' cancel each other out more and the direct impact of assessment uncertainties in the sector figures is also reduced. In this way sufficient account is taken of the average growth of the participants in the emissions trading system.

Relative energy efficiency

The measure for the relative energy efficiency for the combustion emissions has been derived from the performance levels within the energy covenants. In this way account is taken of the use of (voluntary) energy-efficient technologies in the past. This gives effect to criterion 3 of Annex III to the Directive. At the same time justice is also done to criterion 7 of Annex III to the Directive in this way.

- o For installations participating in the energy efficiency Benchmarking Covenant¹⁷, the energy efficiency factor (EE factor) is based on the distance from the best in the world as defined in that covenant. The installations in question are those that signed the Benchmarking Covenant not later than 31 December 2005. At the same time the best in the world, and the distance of the installation concerned from this best in the world, must be determined in accordance with the rules of the Benchmarking Covenant. These confidential data are calculated and managed by the Energy Efficiency Benchmarking Verification Agency¹⁸.
- o Installations participating in the Long-Term Agreements on Energy Efficiency (LTA¹⁹) Covenant have made agreements about improving their energy efficiency. Because of this they have an EE factor of 1. The reference date for participation in an LTA is 31 December 2005. This date has been chosen because it shows that the installation was an LTA participant during the reference period.
- o For installations not participating in an energy efficiency covenant an energy efficiency factor of 0.85 applies. It is assumed that their efficiency will be 15% improved in 2008-2012 compared with 2001-2005. This has been chosen so that a comparable performance can be used in respect of the agreements in the two energy covenants. It is possible to depart from this if before 1 October 2006 the installation can demonstrate objectively and properly substantiated that it has done more in the field of energy efficiency in the past. The installation must then show that it has made at least the same effort to improve the energy efficiency as the installations that are participating in the energy covenants.
- o Fixed efficiencies are used for energy conversion units (incl. CHP) that use fuel to generate/make electricity or steam. The efficiency requirements concerned have been derived from the values that are used in the Benchmarking Covenant. This choice also means that the Glasshouse Horticulture and Environment Covenant does not play a specific part in the allocation of the allowances, since there is only production of electricity and heat in glasshouse horticulture. For this sector therefore the use of fixed efficiencies for energy conversion suffices.

Table 5-1: Reference efficiencies for energy conversion

	Electricity generation	Heat (maximum on the basis of gas)
Gas & oil	52%	90%
Oil offshore	40%	90%
Coal	39%	90%
Furnace gas	40%	90%

¹⁷ Further information about the Benchmarking Covenant can be found at www.benchmarking-energy.nl

¹⁸ The Benchmarking Verification Agency is based in an independent foundation. The agency has been set up specifically to support the implementation of the Benchmarking Covenant (see www.benchmarking-energy.nl).

¹⁹ Further information about LTAs can be found at www.senternovem.nl/LTA/

- For process emissions a manner of allocating based on historic emissions and the growth factor alone is used. No EE factor is used. In the formula it is therefore set to 1 for this part of the emissions. The correction factor is partly applicable however.

The rating for energy efficiency has been maximised at 15%. This means that the EE factor from the formula can never be greater than 1.15. This has been done to prevent extremes and consequently to give effect to criterion 5 from Annex III to the Directive. Under this criterion not disproportionately many more allowances will be allocated to an installation than it would need to cover its expected emissions.

Special circumstances per sector

For some sectors there are special circumstances that are expected to lead to an increase in the CO₂ emissions that in the opinion of the Ministers should not be for the expense and risk of the sectors concerned. Allowance is made for them in the allocation. This is about sectors,²⁰ not individual installations. Because of the choice of three basic years from the series of five years allowance has already been made for special circumstances of individual installations. The special circumstance for which allowance has been made applies to the whole sector or a large part of it. Only those circumstances that have been adequately substantiated have been honoured in the context of this national allocation plan (see Part II, H3). Allowance will be made for the following special circumstances:

- Process emissions: 50% of the process emissions of an existing installation will be exempted from the correction factor. In this way allowance will be made for the fact that (some of) the process emissions are in general more difficult to reduce than energy-related emissions. 50% is used to build in a visible incentive to reduce the emissions for these emissions too, for example through material substitution. This also shows that the process emissions too must make their contribution to the achievement of Dutch emission targets. All the more so since these emissions are included in the Dutch Kyoto objectives. There is also the fact that it has not proved possible to determine the precise share of non-reducible process emissions clearly. The approach is in accordance with the third criterion of Annex III to the Directive, which states that the quantities of allowances to be allocated must correspond to the capabilities, including the technological capabilities, of the activities covered by this scheme for cutting the emissions.
- Coal Covenant: to some extent allowance has been made in the allocation of the allowances for the electricity production companies that have signed the Coal Covenant for the agreements in that covenant. This means that a cut in the allocation will be implemented that is in accordance with the Coal Covenant. This cut will, within the scope that the Directive provides for this, as far as possible be assessed on the basis of the underlying principles of the Coal Covenant and the opportunities for individual companies to carry out the covenant. The fact that a cut will be applied is in accordance with criterion 4 of Annex III to the Directive. Under this criterion allowance must be made for the sustainable energy directive in the allocation of allowances. With the reheating of biomass or other sustainable CO₂-reducing measures in coal-fired power stations effect is after all partly given to the sustainable energy directive, which requires that sustainably generated electricity must have a share of 9% of Dutch electricity consumption in 2010. The way in which allowance will be made for impediments to the implementation of the Coal Covenant is set out in Part II, section 3.4.2.3. The general principle is that no allowances will be allocated for the use of biomass, except in the cases referred to in that section.

Correction factor

To make the sum of the allowances allocated to each installation equal to the available CO₂ capacity the same correction has been applied to each installation for the quantity of allowances

²⁰ The sector limits are based on the classification used by ECN and the environmental permit. It is however conceivable that in certain cases part of a sector with a logical connection will be taken. Think for example of coal-fired power stations.

for all installations. This correction factor will be applied to all the individual installations so that all the installations contribute to the Dutch climate objectives and in this way to lower CO₂ production. There are however two exceptions to this: this correction factor will not be applied to new entrants nor in principle to 50% of the process emissions of an installation. New entrants do not receive a correction factor because they must already meet the highest standards; they receive an allocation on the basis of the best state of the art as set out in Part 2, chapter 4.

New installations and expansions of existing installations before 1 January 2007

New installations and expansions of existing installations that are put into operation before 1 January 2007 will be included in Annex 1 of this plan and will be treated according to the rules of calculation of existing installations. The determination of the quantity of allowances for the category expansions of existing installations will as far as possible be based on the available historic emissions. If there are insufficient data available, then the future emissions will be estimated on the basis of a realistic forecast. The manner of allocating to new entrants will then be of corresponding application. Otherwise the correction factor is still applicable to both new installations and expansions of existing installations before 1 January 2007.

The expansions from before 1 January 2007 will form part of the national allocation decision. See also under 6.

6 New entrants and extensions from 1 January 2007, closures and deposits

This chapter considers the treatment of new installations that are covered by the statutory criteria, expansions of existing installations and the rules on closure of an installation, the latter whether or not with a transfer of production. An indication is also given of how the deposit of allowances for new entrants will be dealt with.

6.1 The allocation to new entrants

The term new entrants means existing installations that have substantially expanded their production capacity in the period after 31 December 2006 or entirely new installations (hereinafter new entrants). These installations too will in principle receive their allowances free of charge. These are new entrants that are put into operation after 31 December 2006.

New entrants does not mean the installations that in the first planning period remained outside emissions trading as a result of the opt-out arrangement, but are covered by it from 2008. Nor does it mean other installations that were already in operation in the reference period or in 2006. These categories of installation will be treated in the same way as existing installations.

To be covered by the arrangement for new entrants there must be entirely new installations in the Netherlands or a physical expansion or new build of a production unit within an existing installation that leads to substantially increased emissions. In this way production growth without the (physical) expansion of a production unit within an existing installation will not be regarded as an expansion. To be eligible for allowances according to the rules for new entrants a lower limit applies to the expansions or new build of a production unit within an existing installation: 50 kt/yr CO₂ increase in the quantity of allowances already allocated or a potential increase in the emissions per installation by a minimum of 10% as a result of a (physical) expansion of the production capacity. This lower limit has been set so that (extra) allowances can only be obtained for significant expansions of production capacity.

These threshold values do not apply to entirely new installations, that is new build outside existing installations. New installations within whose boundaries no combustion unit at all exceeds 20MW_{th}, but where 20 MW_{th} is exceeded in total within the installation will be offered an opt-in

option in accordance with the scheme that is applicable to existing installations (see Part II, section 3.2).

Intensification of existing production within the current capacity or relatively small adjustments to existing capacity are not eligible for the arrangement for new entrants. In that case not a very different picture of the historic emissions on which the allocation is based emerges.

A separate provision has been included for allocating extra allowances, if necessary, where industrial sites are expanded for the production of steam and other thermal energy carriers. District heating is also covered by this provision. The reason is that on these sites future expansions of the site have been anticipated in the energy supply. The consequence of this is that larger (for example CHP) units have been installed on those sites than was necessary at the time of installation.

The new entrants that are put into operation from 1 January 2007 are not included in Annex 1 of this plan. But the manner of allocating for these new entrants is included in this plan. This gives effect to criterion 6 of Annex III to the Directive. The installations concerned will have to submit a separate application to obtain allowances on the basis of separate allocation decisions (section 16.32 EPA).

These installations will be allocated allowances on the basis of the best state of the art²¹ and on the basis of expected production. It is in any event the case that the attributable CO₂ allowances are never higher than the CO₂ emission actually planned on an annual basis. Likewise a maximum of 90% of the nameplate capacity of the expansion concerned or the draft production capacity applies on an annual basis unless it is demonstrated that 100% is customary in the sector. These installations will not have a growth factor, but also no correction factor like the existing installations. The cut in the context of the windfall profits will not be applied to new power stations, because they will be treated differently from existing power stations. New power stations will be allocated allowances on the basis of the best commercially operating comparable power station worldwide. In this way alone they will have fewer allowances in proportion than an efficient existing power station. But to cut these power stations would put them at too much of a disadvantage compared with their competitors.

6.2 Closures

There will be installations that are covered by the statutory criteria but that close during or even before the planning period. The term closure means that the installation is no longer covered by the requirement of EPA section 16.5(1) to have a permit. The emission authority can then revoke the emission permit. From the time that the emission permit is revoked by the emission authority the installations concerned will not be issued any more allowances. The allowances once issued will simply remain on the operator credit account. The allowances that are no longer issued following closure will go into the deposit for new entrants and will be available for new entrants.

6.3 Relocation arrangement

This arrangement offers installations of the same group the option to apply for allowances to cover the emission increase through the takeover of similar production by another installation of the same group. One of the requirements for this is that both installations concerned are participating in the emissions trading system. A relocation exists if, in spite of closure, the production is continued at another installation. The arrangement has been set up in this plan to

²¹ On the basis of the emissions of the energy technology best commercially operating unit in the world.

accommodate more efficient production through increase in scale and concentration of production.

6.4 Deposit

A separate deposit will be set up with allowances for all new entrants. As indicated this deposit will be supplemented with allowances that cease to be issued as a result of closure. The allowances from this deposit will be allocated free of charge.

The legal requirements, as currently laid down with regard to the finiteness of the deposit, continue to apply in full. One of the things this means is that in the event of exhaustion of the deposit new entrants will have to buy their allowances on the market. The allocation will take place for the rest of the planning period, issuance from the deposit will take place annually. If the deposit is not yet exhausted on 31 December 2011, then a further decision will be taken regarding what is to be done with the allowances.

The government is working on the assumption that the assessed extent of the reserve for new entrants after 2006 will be sufficient for the whole of the second planning period. However, since it is an assessment over a long period, the figures are surrounded by some uncertainty. This could mean that the deposit for new entrants becomes exhausted before the end of the planning period. But to give the installations sufficient investment certainty for their new build and expansion plans, in the event of an impending shortfall in the deposit the government will consider whether a system must be developed in which the deposit is increased. It will research the options and on the basis of this a decision will be taken by the Ministers whether or not to make provision for this. Any adjustment of the deposit will have to be in keeping with the EU regulations existing at the time and the fleshing out of the Dutch Kyoto objectives with sectoral targets, as set out in the letter on the government's climate policy dated 13 April 2006.²²

If after honouring the outcomes of the final judgment of the Council of State allowances remain from the separate deposit for legal claims,²³ they will go into the deposit for new entrants.

7 Public consultation

This section gives effect to criterion 9 of Annex III to the Directive.

The draft national allocation plan 2008-2012 was published in the Government Gazette and elsewhere on 23 May 2006. Everyone had the opportunity to make their views of the plan known until 4 July 2006. Altogether 109 comments were received from the public. The comments were for the most part from the installations concerned, in addition to comments from trade associations and two environmental organisations.

The comments from the public ranged from fundamental criticism of the whole system to possible errors at installation level. In a number of cases the public comments have led to amendments of the plan, but also in a great many cases to a confirmation of the approach taken until then. This can be explained by the frequent consultation with industry, as indicated in section 1.1 of Part 1, which made it possible to anticipate what companies raised. The outlines of the public

²² Parliamentary Documents II, 2005-2006, 28 240, no. 43

²³ See EPA art. 16. 25(2)(b).

consultation and the responses of the Ministers to it have been set out in a letter to the Lower House.²⁴

Everyone who responded during the consultation period was notified by separate letter that a specific response to the comments would only follow where commercially sensitive information was concerned. In those cases contact was usually made with the company concerned to verify this information and to explain allocation calculations. The letter also stated that the outlines of the comments and the standpoint of the Ministers in respect of them is available to all at www.co2-allocatie.nl for example.

The parts of the plan that have been amended compared with the draft plan are listed below:

- The following deadlines have been extended.
 - Regarding the choice of the basic years companies have until 15 October 2006 to make their final choice known.
 - If an installation that is eligible wishes to take advantage of an opt-in in respect of the 20 MW criterion, an application to this effect can be submitted to the Ministry of Housing, Spatial Planning and the Environment up to three weeks after the plan has been readopted following comments of the Commission or otherwise or three weeks after an announcement has been made in the Government Gazette that the plan has not been amended further.
- The size of the deposit for new entrants has been raised by 0.2 megatons of CO₂ per year.
- A separate provision has been included for allocating extra allowances, if necessary, in the event of expansion of industrial sites for the production of steam or other thermal energy carriers. District heating is also covered by this provision.
- Installations from non-designated sectors that do not have at least one combustion unit of more than 20 MWth are not covered by the scope of emissions trading. These installations do however have the option to apply for an opt-in in so far at least as they have an aggregated thermal input exceeding 20 MWth per installation.
- 50% of emissions from processes will be exempted from the correction factor.
- The benchmark employed for laughing gas emissions (N₂O) has been increased from 1.7 to 1.8 kilogram per ton of 100% nitric acid.
- The limit for the use of JI/CDM by participants in emissions trading has been set at 12% per installation.
- A fixed conversion factor for oil has been added.
- Under the Coal Covenant electricity production companies participating in the covenant that have received an MEP ruling receive a covenant deduction of 50%. Participants in the Coal Covenant that are not eligible for the MEP subsidy on account of the MEP subsidy being set to zero do not receive any covenant deduction.
- In the determination of the allocation at installation level first the deduction on account of the Coal Covenant will be applied and only then the deduction on account of the windfall profits.
- New electricity producers do not receive any 15% cut under the windfall profits.
- In addition there are many (other) amendments at installation level.

The allocation plan was discussed in the Lower House with the Permanent Committee of Housing, Spatial Planning and the Environment and Economic Affairs on 15 June, 22 June, 7 September and 21 September 2006.

²⁴ Parliamentary Documents II, 2005-2006, 28 240, no. 52. The letter can also be found at www.co2-allocatie.nl.

PART II: THE ALLOCATION PLAN

Chapter 1: Dutch climate policy

This chapter sets out the total number of allowances to be allocated for emissions trading, and how these allowances are calculated. According to Annex III (criterion 1) to the Directive, the number of allowances must be such that each member state can achieve or improve on its target as laid down in the Kyoto Protocol. Because of this criterion, this chapter discusses further the obligations agreed by the Netherlands in respect of restricting greenhouse gas emissions for the 2008-2012 period (the 'Kyoto budget period'). In order to meet these obligations, a national climate policy has been developed, in which sectoral target values have been set for domestic emissions. In addition, a foreign target has been set for the purchase of allowances through the flexible mechanisms of Kyoto. This chapter describes which emission capacity has been reserved for the industrial sector (including energy) the built environment, glasshouse cultivation and other greenhouse gases. This is used to calculate the total national emission capacity that is available within this period covered by the plan for allocation to installations that fall within the scope of Chapter 16 of the Environmental Management Act. The Evaluation Memorandum on climate policy 2005²⁵ of 31 October 2005 gives an overview of the situation regarding Dutch emissions in relation to the Dutch Kyoto objective. The summary of this memorandum has been largely taken over in this document, updated with the full considerations on climate policy²⁶ (the Climate Letter), which the Government sent to the Lower House on 13 April 2006. For more detailed information you are referred to the Evaluation Memorandum and the Climate Letter itself. Further updating has been carried out where necessary.

1.1 National emissions target

The emission capacity for greenhouse gases, expressed in CO₂ equivalents, for the Netherlands under the Kyoto Protocol in the period from 2008 to 2012 is an average of 201.7 megatons per annum. This corresponds to an average reduction of 6 per cent compared to the reference level²⁷ contained in the Kyoto Protocol (214.6 megatons). Such a reduction means that the Netherlands will fulfil its contribution to achieving the European obligation under the Kyoto Protocol. It is a tough target, because at the time of the burden-sharing agreements²⁸ in 1998, almost half of the Dutch energy mix already consisted of gas, the Dutch industry was already relatively energy-efficient and power stations for the co-generation of heat and power (WKK) in the Netherlands already accounted for roughly one-third of domestic electricity production. Despite this, the Netherlands has a reduction target of 6 per cent. According to a study commissioned by the Directorate-General for the Environment of the European Commission, the marginal reduction costs for greenhouse gases in the Netherlands are therefore more than 100 euro per ton of CO₂. This is more than double the average marginal costs elsewhere in the EU²⁹.

²⁵ Parliamentary documents II, 2005-2006, 28 240, no. 37.

²⁶ Parliamentary documents II, 2005-2006, 28 240, no. 43.

²⁷ The reference level consists of the sum of emission levels in the year 1990 for CO₂ (without temperature correction), nitrous oxide and methane and the emission levels in the year 1995 for the three fluorinated gases.

²⁸ Council Decision 2002/358/EC of 25 April 2002 concerning the approval, on behalf of the European Community, of the Kyoto Protocol to the United Nations Framework Convention on Climate Change and the joint fulfilment of commitments thereunder.

²⁹ I. Capros, P. Capros, N. Kouvaritikas and L. Mantzos, Economic evaluation of sectoral emission reduction objectives for climate change; top-down analysis of greenhouse gas emission reduction possibilities in the EU, National Technical University of Athens, Athens, 2001.

1.2 Sectoral target values and JI and CDM targets

The Netherlands is fulfilling its commitments under the Kyoto Protocol, on the one hand by means of a comprehensive package of national measures, and on the other hand and additionally by making use of the flexible mechanisms under the Kyoto Protocol, i.e. Joint Implementation (JI) and the Clean Development Mechanism (CDM). For this purpose, Dutch emission capacity has been divided into a domestic target for greenhouse gas emissions (aiming for an average maximum emission of 221.7 megatons per annum in the Kyoto budget period) and a target for the use of the JI and CDM mechanisms (through the purchase of allowances averaging 20 megatons per annum in the Kyoto budget period, or 100 megatons for the entire period).

In order to achieve the domestic target, sectoral target values were set in early 2004, taking account of the technical potential (criterion 3 of Annex III to the Directive). These target values concern the year 2010, the year exactly halfway through the 2008-2012 period covered by the plan and therefore a good indicator for determining the position in relation to the Kyoto commitments. The target values have been updated in the Evaluation Memorandum on Climate Policy 2005 and in the Climate Letter, above all in response to technical changes in the way in which emissions are calculated. The Climate Letter contains the target values adjusted, for example, in response to adjustments to the emissions factor of natural gas. The current targets are shown in the following table.

Table 1-1: The current sectoral targets

Sector	Target value 2010 in megatons of CO ₂ equivalent
CO ₂ industry/energy	109.2
CO ₂ traffic and transport	38.7
CO ₂ built environment	28.3
CO ₂ agriculture	7.6 (8.2 ¹)
Other greenhouse gases	35.4
Forest emissions	0.1 ²
Total	219.3 (219.9 ¹)

¹With an increase in the area under glasshouse cultivation up to 11,500 hectares or more, the target value for agriculture will be increased by a maximum of 0.6 megatons, from 7.6 megatons to a maximum of 8.2 megatons.

² There is no target value for forest emissions, but since these emissions also count towards the Kyoto objective, capacity has been reserved for them.

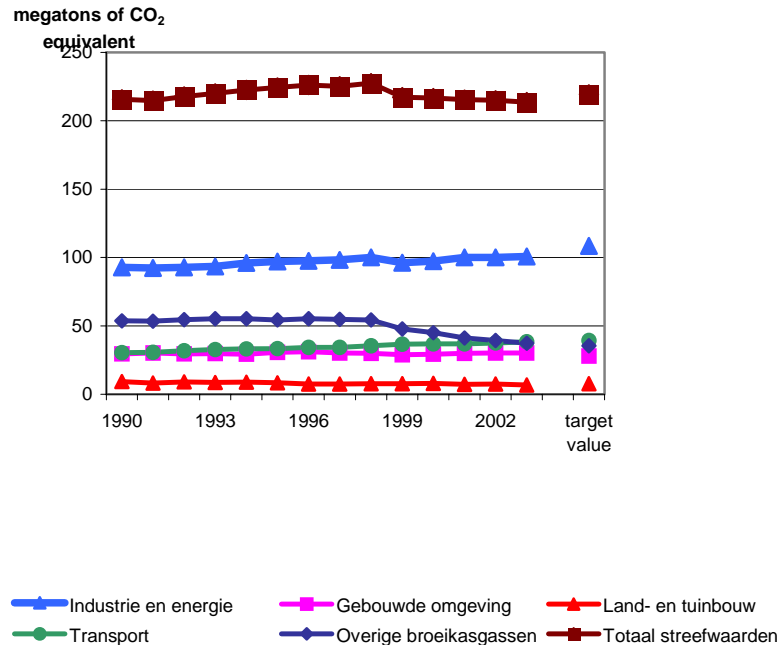
A budget has been made available for the purchase of JI and CDM allowances, assuming that about one-third of the allowances will be bought through JI (34 megatons) and two-thirds through CDM (67 megatons).

Both the European Union and the Kyoto Protocol impose requirements on the monitoring and reporting of greenhouse gas emissions and allowances. Compliance with these requirements is important for achieving the targets for JI and CDM, since the parties may only use these instruments if they meet all the requirements. The Netherlands already meets a number of these requirements, and the remaining commitments will be met within the applicable international deadlines.

1.3 Historical development of domestic emissions

Figure 1-1 shows the development of emissions for each target value sector since 1990. Although CO₂ emissions continue to rise, this growth is slower than before. With the other greenhouse gases (CH₄, N₂O, and the F gases) emissions continue to fall. In the industrial and energy sector, agriculture and the traffic and transport sector, emissions are below the target values for 2010.

The built environment and other greenhouses gases are still above the target. At present policy is being prepared which will bring and keep these sectors within the target value as well.



(translation of legend:

Industry and energy Built environment Agriculture & horticulture
 Transport Other greenhouse gases Total target values)

Figure 1-1: Emission developments in the target value sectors, 1990 to 2003 (as in Evaluation Memorandum on Climate Policy 2005)

The policy currently being pursued is already having an effect. Thanks to domestic climate policy, emissions in 2003 were about 5 per cent, or 11 megatons lower than they would have been without the policy. The biggest part of this effect (about 8 megatons) is due to energy savings, followed by measures for the other greenhouse gases and renewable energy. Relatively speaking the policy has had the greatest effect in agriculture and the built environment, where emissions were 16 and 9 per cent lower respectively than they would have been without the policy. With traffic and transport, the industry/energy sector and the other greenhouse gases the relative effect was smaller (an emissions reduction of less than 5 per cent).

1.4 Future development of domestic emissions

The policy that has already been implemented, together with the policy currently under preparation, ensures that the annual domestic target of 221.7 megatons in the Kyoto budget period will not be exceeded.

The Evaluation Memorandum on Climate Policy 2005 presents estimates of domestic emissions in 2010, and these estimates have been adjusted in the Climate Letter following recent (policy) developments. Adjustments involved a correction for the adjusted emission factor for natural gas, the effect of the high oil prices and new insights in respect of traffic emissions. In response to the higher traffic emissions it was decided to increase the share of biofuels in traffic to 5.75% in 2010.

Table 1-2 shows the adjusted estimates for two levels of certainty. The table shows clearly that domestic emissions will remain below the domestic target of 221.7 megatons/year with 90% certainty. This however is on condition that the supplementary policy is introduced and has the intended effect. In order to demonstrate its importance, the last column shows the effect of the supplementary policy separately. Supplementary policy, for example, concerns reducing nitrous oxide emissions in nitric acid production (included in this plan), 5.75% biofuels in 2010 and the effect of the energy-saving policy set out in the 2005 Energy Report.

Table 1-2: Target values and estimates of emissions in 2010 (in megatons of CO₂ equivalent)

Sector	Target values	Estimates 2010 (50% certainty)	Estimates 2010 (90% certainty)	Effect of supplementary policy
CO ₂ industry/energy**	109.2	109.2	109.7	
CO ₂ traffic	38.7	38.5	41.5	-2.3
CO ₂ built environment	28.3	28.3	29.8	-0.3
CO ₂ agriculture	8.2	7.1	7.6	<-0.1
Other greenhouse gases	35.4	31.5	35.5	-3.5
Forest emissions	0.1	0.1	0.1	
Total (Kyoto emissions)	219.9	214.8	219.8	-6.1
Domestic emission capacity		221.7	221.7	

* This column does not add up vertically to the total, because it incorporates 90% margins per sector which do not add up to the total margin.

** This concerns the emissions of the industry/energy sector, based on emission capacity contained in this plan.

Naturally there are still uncertainties that may lead to both windfalls and setbacks. Although greater clarity on these uncertainties will emerge over time, the opportunity to deal with setbacks will decrease over time. Potential uncertainties in respect of the domestic targets are to do with socio-economic factors such as growth in mobility, developments in the artificial fertilizer manufacturing industry and fuel prices. Further limitations in uncertainty will occur because an opt-in application is currently being prepared for nitrous oxide emissions from artificial fertilizer production (in accordance with Article 24 of the Directive). By participating in the European system of emissions trading, the reduction targets for these emissions can certainly be safeguarded. The way this is tackled is dealt with separately in this plan.

Some uncertain factors, such as the demand for electricity, the use of coal and the balance of electricity imports, are neutralised by emissions trading. After all, emission levels have been set through the allocation of CO₂ allowances for the 2008-2012 period covered by the plan, for which the Netherlands will be held to account for the trading installations.

Another essential factor is that an additional package of reserve measures is kept aside to deal with any setbacks. Concerning the further cover of any risks that a certain target value may not be achieved, the target value system means that if emissions show an unfavourable development, the department responsible for the target value concerned must take action. Increasing the share of biofuels in the transport sector as decided on in the Climate Letter is an example of such a reserve measure that has been used within the traffic and transport sector to tackle disappointing emission developments in this sector.

1.5 Actual and future development of JI and CDM targets

Because of the early start with JI and CDM, the Netherlands has contributed to the development of the international market for the relevant allowances. As the first-mover in this market, the Netherlands has been able to benefit from favourable conditions in (framework) contracts and has built up a significant advantage with contracting, negotiating favourable conditions in (framework) contracts. The Dutch contribution has encouraged project developers to be active in this area and has helped host countries in building up government institutions for the implementation of JI and CDM.

Various tools have been developed to acquire emission reductions through JI and CDM, such as direct contracting through European tender programmes (ERUPT and CERUPT³⁰), framework contracts with multilateral and regional development banks and participation in funds. The target of 100 megatons is divided across these tools. Meanwhile, with JI and CDM the entire target of 100 megatons has been covered through framework contracts with intermediary organisations, participation in funds and project contracts. The project-related contracts are getting well underway.

For JI, the target is 34 megatons. Meanwhile more than 50 per cent of the target has already been confirmed in project contracts. This concerns in particular projects via ERUPT. The project contracts by the two banks involved (European Bank for Reconstruction and Development and International Bank for Reconstruction and Development/International Finance Corporation of the World Bank), however, continue to lag behind the agreed milestone planning, caused in part by the difficult situation in Russia and the Ukraine. The government is therefore trying to contract a number of projects directly, in order to reduce the risks attached to the current and future JI portfolio.

The market for JI credits has been affected by the arrival of emissions trading in Europe. For JI this means that the supply from a part of the (East-European) host countries may decrease because these countries, by joining the EU, will now be participating in emissions trading, something that is in competition with JI. Switching to Russia and the Ukraine, which have great potential, is risky in view of the institutional uncertainties.

In order to secure the JI targets even better, the government has initiated a study into the opportunities to acquire green Assigned Amount Units³¹, or AAUs. The World Bank too (one of the intermediary organisations), is exploring the possibilities in this area with a view to its commitment for JI. Green AAUs are still under development. However, their advantage is that the emission reductions can still be bought up to the end of 2012 and that 'greening' can also still continue after 2012. That is why there is still time to make a decision on this. Consultations with a number of selling countries are expected to have reached such a stage at the end of 2006 that a decision on this alternative can be made.

The expectation for JI is that in respect of the target of 34 megatons, about 29 megatons will already have been confirmed in project contracts by the end of 2006. The intermediary organisations have set up a sufficiently large portfolio of projects for this. Because of pressure on prices, however, it is unavoidable for JI that a higher price must be offered for this confirmation. Agreements will be made in the preparations for the 2007 budget for any related budget increases.

³⁰ ERUPT: Emission Reduction Unit Procurement Tender en CERUPT: Certified Emission Reduction Unit Procurement Tender. For more information about both, go to www.carboncredits.nl

³¹ With green AAUs the purchase of emission capacity from countries is bound to the condition that the revenue is used for 'green' purposes, i.e. for the benefit of the climate.

The target for CDM is 67 megatons. The division of the target across intermediary organisations has been adjusted somewhat in order to respond to the extent to which these organisations can contract successfully. The intermediary organisations have a broad portfolio of projects to which the Netherlands has a preferential right. For this reason, it is expected to be possible for CDM for to confirm the target of 67 megatons fully in project contracts with the existing available resources. One condition, however, is that the prices do not rise too much or too fast. Incidentally, the resources were already increased by more than 10 per cent at the end of 2005 in order to cope with the price rises that had occurred.

The Climate Letter once again considered whether there is sufficient certainty that the targets will be met for JI and CDM. Following this consideration in the letter, the Government is sufficiently confident that the Dutch Kyoto target can be achieved with the contribution of JI and CDM. The letter states that the risks have been reduced in respect of the institutions concerned. With a view to price rises, a decision will be made concerning extra resources as part of the budget for 2007. The alternatives for covering project-related risks (should projects yield less than expected) will be explored. These concern, in addition to green AAs:

- Over-commitment. This means that more projects are contracted than the target.
- Options on emission reductions. This means that a premium is paid now to obtain a right to buy allowances in the future at an exercise price agreed in advance. This tool is still under development.

These provide the Netherlands with sufficient measures to achieve the target of 100 megatons for JI and CDM.

1.6 Kyoto target - conclusion

To summarise, the Netherlands' conclusion is that domestic emission targets will be achieved and that sufficient measures are in place to anticipate developments in the market for the JI and CDM allowances.

The target value for the industry and energy sector that emerges from this policy has been set at 109.2 megatons in 2010. The emissions ceiling in this allocation plan for the CO₂ emissions that come under emissions trading will be derived from this.

The Evaluation Memorandum on Climate Policy 2005 stipulates that from 2006 onwards an interim review will be carried out each year to assess whether the Netherlands is still on course to achieve its Kyoto objective. The Climate Letter was the first review in this series. A comprehensive evaluation of the climate policy is planned for 2008 too. This will allow the Netherlands to keep a close eye on developments, so that policy can be adjusted if necessary in good time. A provision has also been created to solve any setbacks in emission developments.

Chapter 2: The total amount of allowances

This chapter describes how the total amount of allowances brought into circulation has been calculated, taking as the starting point the target values described in Chapter 1. In order to calculate the total available emission capacity, the target values for industry, agriculture and the built environment are important. The major part of emission capacity for the emissions trading system is taken up by the industry and energy sectors. The capacity for this is derived from the target value for these two sectors together. Since a number of glasshouse production companies also come under the emissions trading system and these installations come under the target value for 'agriculture', some of the emission capacity from the 'agriculture' target value is added to the emission capacity for emissions trading. An analogous reasoning applies to the target value for the built environment, which also includes hospitals and universities which come under the statutory criteria. An application for an opt-in for N₂O emissions from nitric acid production has also been made. N₂O emissions come under the target value for 'other greenhouse gases'. The nitric acid producers therefore take emission capacity from this target value to emissions trading.

2.1 Emission capacity per sector

2.1.1 Emission capacity for industry

As stated in Chapter 1, the target value for industry (including the energy sector) has been set at 109.2 megatons per annum. This value is the basis for calculating emission capacity for the parts of the industry and energy sectors that come under emissions trading. In calculating the capacity for emissions trading for both of these sectors, account must also be taken of the fact that part of these sectors do not come under the system. For this purpose, an ECN³² study has followed an approach that consists on the one hand of a top-down approach and on the other hand a comparison of the results with a bottom-up approach. In the top-down approach, estimated emissions from non-participating sources are deducted from the target value for the industry and energy sector. The estimate of the non-participatory sources is based on information from recent estimates by ECN/MNP³³ and national emissions data from the monitoring of national emissions of greenhouse gases [ECN/MNP³³, Reference estimates³⁴, NIR³⁵].

As a supplement to this, a bottom-up approach has been followed in which the (aggregated) data from company statements for NAP-I have been compared with the results of the top-down approach. Based on this confrontation, a further indication has been obtained of the inherent uncertainties in both estimates. The resulting calculation of emission capacity is shown in table 2-1.

³² ECN: The Netherlands Energy Research Foundation (Petten), memo 'allocation extent for CAP', P. Kroon, August 2006, www.ecn.nl. *This updated version includes the definition of combustion units and small installations.*

³³ MNP: Netherlands Environmental Assessment Agency.

³⁴ Reference estimates: Reference estimates of energy and emissions 2005-2020, ECN/MNP 13 May 2005.

³⁵ National Inventory Report RIVM.

2.1.2 Emission capacity for glasshouse cultivation

The target value for agriculture has been set at 7.6 to 8.2 megatons in 2010. Of this amount, glasshouse cultivation accounts for 6.6 to 7.2 megatons. This value is taken in calculating emission capacity from glasshouse cultivation that comes under emissions trading. For this sector, because of the relatively small extent of the participating emissions, only a bottom-up route is followed in order to calculate emission capacity. The resulting emission capacity is shown in table 2-1.

2.1.3 Emission capacity for built environment

The target value for the built environment has been set at 28.3 megatons per annum. This value is taken in determining emission capacity from the built environment that comes under emissions trading. For this sector too, because of the relatively low level of participating emissions only the bottom-up route is followed in order to establish the emission capacity. The capacity includes elements in the built-up area that come under the statutory criteria, such as universities, hospitals, defence buildings, auction halls and a few other buildings. The resulting emission capacity is shown in table 2-1.

2.1.4 Emission capacity for nitric acid production

Emission capacity for the nitric acid production in CO₂ equivalent has been rounded off to 1.4 megatons per annum. This figure is the result of the calculation of the bottom-up approach based on the N₂O standard for the emitters involved. Chapter 3 discusses the calculation method in further detail. The resulting emission capacity is shown in table 2-1.

2.2 Contribution of sectors to emission trading

The table below gives a summary of the emission capacity that is intended for emissions trading.

Table 2-1: Emission capacity for emissions trading in megatons of CO₂ equivalent per annum

Sector	Target value 2010	Coming under statutory criteria
Industry (and energy)	109.2	88.5
Agriculture	7.6 – 8.2	1.3
Built environment	28.3	0.6
Other greenhouse gases	35.4	1.4
Total emission capacity for emissions trading		91.8

The following should be noted in relation to this table:

- With the industry and energy sector, the total number of units as included in this plan has been assumed;
- the figures assume a 'broad' interpretation of 'combustion processes' and are based on a study by ECN, and subsequently corrected in accordance with the current approach as approved within the EU
- for both 'agriculture' and 'built environment' the starting point is that the emission ceilings that come under the system will exactly cover the initial allocation with the application of the general growth figure and general correction factor, as well as a reserve for new entrants.

If there is any change to the starting points, the ceilings will need to be adjusted on a pro rata basis.

2.3 The deposits

2.3.1 Deposits for new entrants

A deposit is to be created, containing allowances to be allocated to expanding installations as well as entirely new installations that come into operation after 31 December 2006 (see extended Chapter 4). These are referred to as 'new entrants' within the framework of this plan. The deposit for new entrants contains a total of 31 megatons of allowances. This is based on a macro-economic analysis by ECN³⁶ and a survey of initiatives of installations which can be plausibly expected to be realised within the 2008-2012 period covered by the plan. These allowances are only intended for allocation to new entrants. It concerns here a deposit as referred to in Article 16.25 paragraph 2 under a of the Environmental Management Act. The allocation will be made by means of 'other allocation decisions', as referred to in Article 16.32 of this Act.

The deposit applies to all new entrants with the exception of the new entrants in the nitric acid industry, for which a separate deposit will be set up. The deposit for new entrants in the nitric acid industry comprises a total of 1.4 megatons of CO₂-equivalent allowances. The stipulations concerning the deposit for new entrants similarly applies for the deposit for new entrants in the nitric acid industry. There is just one difference, and that concerns the distinction made in new entrant allowances for nitric acid plants, between new plants to be built and the expansion of existing plants. For both types of new entrants, the size of the new entrants deposit is calculated according to a different standard (see paragraph 3.5 of part II of the plan). For new plants, a benchmark of 0.6 kilogram per ton has been allowed for, and for the expansion of existing plants this is 1.8 kilogram per ton.

2.3.2 Deposits for legal proceedings

Separate deposits will be created, containing the total amount of available allowances for legal claims that may be pursued against the national allocation decision³⁷. If there are any allowances left over, these will be added to the deposits for new entrants. If there are not enough allowances in one of the deposits, the number of allowances to be allocated to existing installations will be recalculated³⁸. This will be done by calculating the new total amount and by using a factor to bring it within the then available amount (the original amount, plus 0.5 megatons/year). In fact a new C-factor will be calculated, which will be less than the C-factor initially calculated. The size of the deposit for new entrants will not be changed. The total available allowance for legal claims is 2.5 megatons. The nitric acid industry has its own deposit, in which a total of 0.042 megatons CO₂-equivalent is available.

2.3.3 Deposit of allowances for sale

Some of the allowances will be sold. The allowances concerned will be placed in a separate deposit for sale at a later time. This is related to the decision of the ministers to restrict the windfall profits for electricity producers. Chapter 3 discusses this in further detail. If the outcome of legal proceedings is that the windfall profits approach cannot be upheld, the deposit will be used to comply with the accompanying ruling of the Council of State. In such a case too, part of the reduced allowances that was allocated to the other participants in emission trading will be reversed in proportion to their electricity consumption. This may mean that groups of installations will receive fewer allowances after an (interim) ruling from the Council of State.

³⁶ Source: ECN (Petten) memo 'growth figures for CAP', P. Kroon and B.W. Daniëls, www.ecn.nl.

³⁷ This is in implementation of Article 16.25 paragraph 2 under b of the Environmental Management Act.

³⁸ This is in implementation of the provisions of Article 16.29 of the Environmental Management Act. which refers to Article 16.25 paragraph 1 under a of the Environmental Management Act.

Two-thirds of the reduction is intended for the deposit for the sale of allowances during the entire period covered by the plan.

2.4 Summary of the amount of available allowances

The tables below give a summary of the total amount of allowances available.

Table 2-2: Summary of available emission capacity CO₂

	megatons/year	megatons/period covered by the plan
Total available for allocation, incl. reserve	90.4	452.0
Correction for reserve for new entrants + legal proceedings	- 6.7	- 33.5
Correction for reduction electricity producers	-5.8	- 29.0
Set-off of windfall profits in proportion to electricity consumption	+ 1.9	+ 9.5
Total available for existing installations	79.8	399.0

Table 2-3: Summary of available emission capacity for nitric acid

	megatons of CO ₂ equivalent/year	megatons of CO ₂ equivalent/period covered by the plan
Allocation in National Allocation Decision	1.431465	7.157326
Deposit for new entrants (allocation in other allocation decisions)	0.284864	1.424320
Deposit for legal claims	0.008582	0.042908
Total available	1.724911	8.624554

Chapter 3: The allocation

This chapter first discusses the underlying basis for the allocation. It will then go on to identify the installations that come under the statutory criteria. The way in which the necessary information is obtained from the installations concerned will then be discussed, as also the way in which the amount of allowances to be allocated is determined for each installation. This chapter is in response to Article 16.25 paragraph 1 under b of the Environmental Management Act, in which the corresponding part of Article 9 paragraph 1 of the Directive is also implemented.

A distinction is made here between three categories of installations:

1. the 'existing installations', i.e. installations that were put into operation before 1 January 2007 without any substantial extensions during the period 2002-2006;
2. existing installations with substantial extensions in the period from 1 January 2002 to 1 January 2007, as well as new installations put into operation in the period before 1 January 2007;
3. the new entrants, including extensions, that have been put into operation after 31 December 2006.

This chapter comprises all installations that come under the statutory criteria, both in the energy and industry sectors, as well as in horticulture, the built environment, etc.

The allocation of allowances to installations in the base-metal sector that produce residual gases and to installations that burn these gases elsewhere deviates from the allocation of allowances to the other installations. This is in accordance with Guideline 92 of the Guidelines for the application of the criteria of Appendix III to the Directive³⁹. These residual gases are split into a process part and a combustion part. The allowances for the process part are allocated to the producer of the residual gas. The allowances for the combustion part are allocated to the installation that burns the residual gases.

3.1 Basis for the allocation

The allowances are allocated to the holder of the emission permit, i.e. the 'operator of the installation'.

The allocation method⁴⁰ means that about 4 per cent⁴¹ of the total allowances available in this period covered by the plan will be sold. The remaining allowances will be allocated free of charge. When issuing the allocated allowances each year, a ratio of 20/20/20/20/20% will be maintained.

A bill is currently being drawn up⁴² to give the emissions authority the option from the start of the second period covered by the plan to withdraw the emissions permit if the installation concerned no longer comes under the emission permit obligation of Article 16.5 paragraph 1 of the Environmental Management Act (the statutory criteria). This will then constitute a closure. The

³⁹ Communication from the Commission on guidance to assist Member States in the implementation of the criteria listed in Annex III to Directive 2003/87/EC (COM/2003/0830 def.).

⁴⁰ The allocation method refers to Article 10 of the Directive, which states that for the second period covered by the plan at least 90 % of the allowances must be allocated free of charge.

⁴¹ Existing electricity producers have a reduction of 15%, of which 2/3 will be sold. This corresponds to about 4% of the total allowances available.

⁴² The Bill to amend the Environmental Management Act to clarify and rectify defects in the systems for trade in greenhouse gases and NOx emissions allowances (Act amending the trade in allowances). This bill was recently presented to parliament.

bill links the withdrawal of the emissions permit to consequences for the issuance of greenhouse gas allowances. The bill states that as from the start of the second period covered by the plan (2008-2012) the operator of the installation must possess an emission licence at the moment that the greenhouse gas allowances are issued. If the operator of the installation does not possess or no longer possesses an emission permit, no greenhouse gas allowances will be issued, even if the installation is included on the list in the national allocation decision. In this sense there is always a conditional allocation of the allowances. This is therefore different to that set out in NAP-I.

3.2 Identification of installations involved

Annex 1 to the Decree on trading in allowances states which activities come under the system of emissions trading⁴³. An amendment to this decree is currently being prepared. There are two reasons for this. Firstly, it became apparent during the 2005-2007 period covered by the plan that different definitions of the term 'combustion installation' within the European Union (now in the Dutch context referred to as 'combustion unit') were being used. Secondly, during the period covered by the plan the Netherlands interpreted the category of energy activities in Annex I to the Directive in such a way that many small emitters found themselves coming under the system. This plan anticipates these amendments in the decree. It concerns changes in two areas for the 'non-assigned' sectors: the criterion of adding up to 20 MW_{th} and the assignment of types of combustion units that come under the system. For these categories, only the CO₂ emissions from the combustion units of that installation count, however not the process emissions. With the 'assigned sectors', referred to in the subcategories 1.2, 1.3 and the categories 2 to 4 of Annex 1 to the existing Decree on trading in allowances, in principle *all* CO₂ emissions of the installation count⁴⁴. The national allocation decision will be issued on or after the moment this intended amendment comes into force, thus guaranteeing that the basis for the definitive allocation corresponds sufficiently with the emissions.

The adding-up criterion

The intention is to design the abovementioned Decree as follows. An installation comes within the scope of the system for greenhouse gas emissions trading if at least one combustion unit has a total capacity of more than 20 MW_{th}. If the installation comes under emissions trading according to this criterion, the other combustion units will also be included in the system. The basis of this approach in relation to the Directive is as follows. Point 2 of Annex 1 to the Directive states the following: "Where one operator carries out several activities falling under the same subheading in the same installation (read: unit) or on the same site (read: installation), the capacities of such activities are added together." The heading is 'energy activities'. The subheading is 'combustion installations with a thermal input capacity of more than 20 megawatts'. The subheading therefore only comes into effect if there is a single unit of more than 20 MW_{th}, and not if there is a *totalled* capacity of more than 20 MW_{th}. The adding-up criteria only comes into play if the subheading is applicable. That is why it must be assessed first whether a single unit exceeds 20 megawatts. Only if that is the case will all capacities of the combustion units be added together according to point 2 of the Annex. If an installation comes under that system based on this criterion, all combustion units will then count towards emissions trading. The Decree on trading in allowances will be modified in accordance with this approach.

An opt-in option is offered to installations where no unit within their boundaries exceed 20 MW_{th}, but where the total of 20 MW_{th} is exceeded within the installation as a whole. It may concern here, for example, installations containing three units of 7 MW_{th}. For this purpose, the Netherlands will

⁴³ This annex therefore also concretises the scope of application of Chapter 16 of the Environmental Management Act.

⁴⁴ See also the document of the European Commission: non-paper on the installation coverage of the EU emissions trading scheme and the interpretation of Annex I.

have to submit a request to the European Commission in accordance with Article 24 of the Directive. Installations in which no combustion unit of more than 20 MW_{th} is found, but whose combined capacity exceeds 20 MW_{th} within the installation, must submit an application for an opt-in no later than three weeks after an announcement has been published in the Government Gazette or notification has been given concerning the adoption of the plan⁴⁵, to the Ministry of Housing, Spatial Planning and the Environment⁴⁶. Only if such an opt-in request has been received can an allocation follow by means of an allocation decision. The paragraph below describes which types of combustion units are applicable.

Types of combustion units

In determining the types of combustion units that fall within the scope of the system, we follow the definition as used by the European Commission in its Guidance document⁴⁷ and the further elaboration on this as discussed in the Climate Change Committee⁴⁸ of 31 May 2006⁴⁹. By adopting these definitions, maximum harmonisation within Europe is being achieved.

The intention is to state in the Decree which types of combustion units from the non-assigned sectors do or do not come within the statutory criteria and to specify this as follows.

1. Units where one or more fuels are being converted into one or more of the secondary forms of energy: electricity, steam or hot water. At any rate, hot oil boilers and furnaces, gas turbine/compressor combinations, dryers and incinerators do not come within this category. The latter list is not exhaustive.
2. Units within petrochemical cracking facilities with a combined production of more than 50 kilotons of propylene or ethylene (separately or combined) per annum. This refers to the entire process of cracking, and so the term 'cracker' must be given a broad interpretation. At any rate the following units are not included: ammonia production, synthesis gas production, methanol production, CO and H₂ production, VCM cracking furnaces. This list is not exhaustive.
3. Units that are directly or indirectly used for the production of glass wool or rock wool within installations with a smelting capacity of more than 20 tonnes per day per installation. This includes all units that are directly or indirectly involved with the process of making glass wool or rock wool. In principle, this will therefore concern all units within the installation.
4. Units with a combined capacity of more than 20 MW_{th} which are used, directly or indirectly, for the production of carbon black through the carbonisation of organic material. Of all units that are directly involved in the process of making carbon black, the nameplate capacity within the installation must be added up, therefore, in principle, all units count.
5. Flare units with a combined capacity of more than 20 MW_{th} per installation for the combustion of hydrocarbons or other organic substances for purposes other than energy production on onshore oil and gas-receiving stations or offshore oil and gas facilities.

⁴⁵ Announcement as referred to in Article 16.26, paragraph 5 of the Environmental Management Act or - when redetermining the plan - announcement in accordance with Article 16.27 in connection with Article 16.26 paragraph 4 of the Environmental Management Act

⁴⁶ Attn. the Director for Climate Change and Industry, ipc 650, Postbus 30945, 2500 GX The Hague, stating 'opt-in 20MW 2008-2012'.

⁴⁷ Further Guidance on allocation plans for the 2008-2012 trading period of the EU Emission trading scheme, Com (2005)703 final, 22 December 2005

⁴⁸ In the Climate Change Committee of 31 May 2006 the Member States agreed to a further specification of the definition of combustion units as contained in the guidance document. This specification can be found at www.co2-allocatie.nl.

If an installation from a designated sector comes outside the scope of the statutory criteria, based on the threshold amounts for that sector as stated in Annex 1 to the Emissions Allowances Trading Decree, it will remain outside this scope in its entirety. Installations that are intended or used solely for research, development and/or testing or for burning hazardous or household waste also do not come within the scope of the emissions trading system.

The national allocation decision will be issued on or after the moment the intended change to the Decision enters into force. This will ensure that the basis for the definitive allocation corresponds sufficiently with emissions.

3.3 Way in which the necessary information is obtained

For the CO₂ emissions, installations that comply with the statutory criteria were identified based on the available government databases and using information supplied by the installations themselves. In addition, at the start of October 2005, the Ministries of Economic Affairs and Housing, Spatial Planning & the Environment (VROM) placed advertisements in a number of national newspapers and a few regional papers⁵⁰, calling on installations to come forward in order for allowances to be allocated. Finally, installations were given the opportunity to respond to the draft allocation plan that was published on 23 May 2006.

Installations that do come under the statutory criteria but have not yet come forward are strongly advised in their own interests to report to the Dutch emissions authority. Even without allocation, these installations, if they come under the statutory criteria, must possess an emissions permit and must surrender sufficient allowances to cover their emissions in a particular year. The only way for existing installations to obtain allowances is through the national allocation plan and the national allocation decision that will follow it.

For the allocation of allowances to individual installations, historical emissions, growth expectations for the sectors concerned and the energy efficiency of the individual installations must be known.

To establish historical emissions, information from the installations concerned has also been used. These have been collected together by means of an application form⁵¹. For N₂O, data has been obtained by collecting production data from the three installations concerned.

The information thus obtained was verified by SenterNovem and the Benchmarking Verification Bureau⁵² based on information from the national emissions registration⁵³, the monitoring reports that were drawn up as part of the Energy Efficiency Benchmarking covenant and the Long-term agreements on energy efficiency. In cases where the form was sent in too late or was incomplete, SenterNovem and VBE themselves made an estimate of an installation's energy consumption based on the available information. During the consultation round that will follow before the

⁵⁰ The Government Gazette, *het Financieel Dagblad*, *de Volkskrant*, *de Telegraaf*, *Forum* (for members and partners of VNO-NCW), *Het Hele Westland* (regional newspaper), *Chemisch2Weekblad*.

⁵¹ These forms were sent to the qualifying installations. A form that can be filled in electronically was also made available on the website:

<http://www.senternovem.nl/emissiehandel/Allocatieplan2/Aanvraagformulier.asp>.

⁵² Hereinafter referred to as VBE: The VBE takes on an advisory and controlling role in respect of the benchmarking covenant

⁵³ The annual emissions registration will be used as a national tool to monitor emissions of known relevant emission sources in order to make progress in environmental policy.

Both industrial and non-industrial sources are to be included in this. The information system of the emissions registration supports the regional distribution of emissions data according to a number of geographical divisions. See <http://www.emissieregistratie.nl>.

national allocation decision is adopted, the installations can check their own details and pass on any changes if necessary so that the database can be corrected in time.

The growth figure adopted is derived from information by ECN. Paragraph 3.4.2.3 discusses in greater detail the way in which this figure is used further for allocating allowances individually. The growth figure is used for both the CO₂ and the N₂O emissions, also considering the way in which account has been taken of any special circumstances per sector or type of emissions.

Information on the energy efficiency of installations has been collected as part of the implementation of the Benchmarking covenants and the Long-term agreements on energy efficiency.

3.4 Allocation method for CO₂

3.4.1 General setup

This paragraph sets out the allocation method⁵⁴, with a further explanation of the choices that have been made. The calculation contains four steps for CO₂ emitters, which are explained in turn in this chapter.

For N₂O emitters, a separate regime applies.

These steps are:

1. establishing historical emissions of installations;
2. allowing for the relative energy efficiency of installations;
3. processing growth expectations and special circumstances at sector level, including the reduction due to the windfall profits of electricity producers;
4. applying a correction factor with which the total of the allowances thus calculated will be equalised with the available CO₂ emission capacity, as well as applying the division of part of the reduction due to windfall profits.

3.4.2 Calculating the allocation

The four steps described above will be explained further in this section, together with the calculation rules applied.

3.4.2.1. Step 1 Calculating historical emissions

In order to establish historical emissions, installations were asked to report on their emissions in the reference period (2001 to 2005). From this period of five years, the installations choose three as baseline years. This series of five years has been chosen because these are the most recent years for which information was available and verifiable before the moment the allocation plan was sent to the Committee. This is also in accordance with criterion 10 of Annex III to the Directive, which lays down that a member state must take a decision beforehand (before the period covered by the plan begins) on the total absolute volumes of greenhouse gas allowances that are allocated to the operator of each installation.

The average of emissions over these three years is used to determine the installations' historical emissions, assuming full calendar years. It is therefore left to the installations themselves to choose which years may not be representative. The installation must submit this information by

⁵⁴ This fulfils the requirements of Article 9, paragraph 1 of the Directive and Article 16.25, paragraph 1, under b of the Environmental Management Act, which states that the allocation method must be included in the plan.

15 October 2006 at the latest. This also creates a provision at the same time for market circumstances, specific statutory requirements, disasters or special circumstances such as major maintenance, exceptional climatological circumstances etc.

In establishing historical emissions, account is also taken of extensions in the period from 2002 to 31 December 2006. The installation, if it wishes account to be taken of this extension, must have demonstrated in a realistic way that with the choice of three baseline years from the reference period, a highly erroneous picture would have been produced compared to the historical emissions as a consequence of the extension. Only in these cases will a realistic estimate of the 2006 emissions be made, which will then be used to determine the historical emissions.

In calculating the historical emissions each year, a distinction is made between:

- combustion emissions; these consist of emissions through energy conversion and emissions from other combustion processes
- process emissions
- emissions from extensions; although this naturally also concerns combustion emissions or process emissions, extensions entail a number of specific points of attention which will be described separately in the paragraph below.

In adopting emissions factors, the starting point is that this is done in the same way for both allocation and monitoring. The assumption with this plan is that uniform national monitoring factors will be set each year. A fixed emissions factor will also be adopted for the allocation (see Appendix 3).

Combustion emissions from energy conversion systems

The combustion emissions from energy conversion units will be determined based on the output (net electricity and heat delivered) of these units, the conversion yield and the emission factor of the fuel used. For energy conversion units, fixed yield requirements are taken (see table below). The emission factors too come from a list of standard values (see Appendix 3). If no business-specific values are applied or allowed, the default values from Appendix 3 will be applied. Any additional combustion of biomass will be set off using the same yield as the principal fuel.

Table 3-1: Fixed yields for energy conversion

	Electricity generation	Heat (based on gas)
Gas & oil	52 %	90 %
Oil offshore	40 %	90 %
Coal	39%	90%
Furnace gas	40 %	90 %

The emissions are calculated as stated in the formula box (formula 1). To calculate emissions in this way, the output data (electricity production and heat production) are essential. If this data is not available, emissions will have to be calculated based on input data, however in such a way that the installation gains no advantage from the lack of information on output data. For units larger than 60 MWth, it is assumed that output information is available. Only if the operator of the installation concerned can demonstrate plausibly that no output information on units smaller than or equal to 60 MWth is available will the input data for these units be assumed. If it has been plausibly demonstrated that no historical output figures are available and the installation cannot substantiate the output stated in a verifiable way either, the input figures will be taken, with a reduction factor of 0.85 applied to the result.

Formula box 1: Calculating historical emissions from energy conversion systems

Formula 1. For each fuel:
$$HE_{EC,jr} = \frac{P_{tot} \times 3,6 \times EF_{brandstof}}{OR_{brandstof}} + \frac{Q \times EFW_{brandstof}}{0,9}$$

in which:

HE	historical emission [ton CO ₂ /yr]
EC	energy conversion
P _{tot}	the total net electrical energy supplied [GWh]
Q	the net amount of steam, condensate and hot water supplied [TJ]
yr	year
EF _{fuel}	emission factor for the fuel used [ton CO ₂ /TJ]
EFW _{fuel}	emission factor for the fuel used [ton CO ₂ /TJ], with a maximum value of 56.8
OR _{fuel}	conversion yield of the fuel used (see table 3.1)

If the installation consists of several units where a different fuel is used in each unit, formula 1 will be repeated for each unit and the resulting emissions added up. If the installation uses several fuels in one and the same unit (multi-fuel unit), an average production yield for the OR_{fuel} must be calculated. For multi-fuel units, the emission factor (EF_{fuel}) of the fuel mix will be averaged in the same way as for the OR_{fuel}.⁵⁵

Other combustion processes

The emissions from 'other' combustion processes are calculated based on the amount of fuel used, its combustion value and the emission factor of the fuel concerned. The combustion value and the emission factor are derived from a list of standard values. If no business-specific values are applied or allowed, the default values from Appendix 3 will be used. The method of calculation is shown in formula box 2:

Formula box 2: Calculation of historical emissions from other combustion processes

Formula 2:
$$HE_{OV,jr} = \sum (brandstof_{OV} \times verbrandingswaarde \times emissiefactor)$$

Whereby:

HE	historical emission [ton CO ₂ /yr]
OV	other combustion processes
yr	year

⁵⁵ As an example: in the case of coal and gas, the calculation for OR_{fuel} is as follows:

$$OR_{fuel} = \frac{\text{energy gas [TJ]} \times 0.52 + \text{energy coal [TJ]} \times 0.39}{\text{energy gas} + \text{energy coal [TJ]}}$$

In the case of coal and gas, the calculation for EF_{fuel} is as follows:

$$EF_{fuel} = \frac{\text{energy gas [TJ]} \times 56.8 + \text{energy coal [TJ]} \times 94.7}{\text{energy gas} + \text{energy coal [TJ]}}$$

Process emissions

Process emissions are regarded as less easy to reduce than combustion emissions. Determining the level of reducibility, however, is a complex matter requiring separate analyses for each installation and product type. These analyses have proved not to give a sufficiently undisputable and objective picture because of the lack of clear definitions and calculation methods. CO₂ emissions can also be influenced by substitution for other products.

In order to do justice nevertheless to the more difficult levels of reducibility, it has been decided to 'correct' the process emissions of allocated sectors less severely (a factor of 50% was chosen) than the other emissions, when matching total allowances with the available capacity. This factor of 50% was chosen in order to incorporate a visible incentive after all to encourage the production of materials with which emissions can be reduced even more. This is to show that the reductions concerned need not be (entirely) present within the installation itself. The system of emissions trading in fact makes it possible to use emissions reductions achieved elsewhere. An important point of consideration with the choice of this approach is that process emissions too must make a contribution to achieving Dutch emission targets. After all, these emissions are included in the Dutch Kyoto objectives.

The approach is incorporated mathematically in formulae, by dividing the total volume of process emissions per installation from an allocated sector into 50 per cent 'non-reducible' and 50 per cent 'reducible' process emissions. The total process emissions therefore comprise two components in formula form (formula box 3), both components being of equal size.

Formula box 3: Fixed division of process emissions

Formula 3: $HE_{PE,jr,tot} = HE_{PE,jr,red} + HE_{PE,jr,nred}$

In which:

HE the historical emission [ton CO₂/yr]

PE process emission

yr year

tot total

red 'reducible' process emissions (set at a fixed 50%)

nred 'non-reducible' process emissions (set at a fixed 50%)

Averaging and extensions

The next step concerns the averaging of historical emissions over the chosen baseline years, taking into account any extensions (including new installations), in those cases where the '3 of 5' choice is not sufficiently representative for the extensions in the period from 2002 to 2006. An extension will only qualify for the allocation of extra allowances if there has been physical new building and threshold values are exceeded (the latter does not apply to entirely new installations). The requirements formulated in Chapter 4 (rules for extensions within existing installations and rules for new installations from 1 January 2007) are similarly applicable.

The average historical emission is calculated as follows:

- For each installation the annual emissions are divided into emissions as a result of the abovementioned extension in the period 2002-2006 and emissions of the installation without this extension. With such extensions a distinction is also made between energy conversion, other combustion processes and process emissions.
- The net⁵⁶ emission values of the abovementioned extensions in the period 2002-2006 are used as the basis for the allocation of allowances for these extensions⁵⁷.

⁵⁶ I.e. extension less replacement, in accordance with the statement form. This information will of course be verified and adjusted in the statement if necessary.

- The emissions thus obtained for the abovementioned extensions will be added to the emissions of the installation without the extension, which have been averaged over the three baseline years (see formula box 4).
- If three baseline years are not available because of the late start-up of the total installation, the allocation will be based solely on the emissions from the extension.

Formula box 4: averaging of baseline years + extensions 2002-2006

$$\text{Formule - 4a : } HE_{EC, gem} = \frac{\sum HE_{EC, jr, excl. uitbr.}}{3} + U_{EC};$$

$$\text{Formule - 4b : } HE_{OV, gem} = \frac{\sum HE_{OV, jr, excl. uitbr.}}{3} + U_{OV};$$

$$\text{Formule - 4c : } HE_{PE, red, gem} = \frac{\sum HE_{PE, jr, red, excl. uitbr.}}{3} + U_{PE, red}$$

$$\text{Formule - 4d : } HE_{PE, nred, gem} = \frac{\sum HE_{PE, jr, nred, excl. uitbr.}}{3} + U_{PE, nred}$$

in which:

HE	the historical emission [ton CO ₂ /yr]
EC	energy conversion
OV	other combustion processes
PE	process emission
U	emissions from the extension [ton CO ₂ /yr]
av	average (over 3 baseline years)
yr	year
red	'reducible' process emissions (set at a fixed 50%)
nred	'non-reducible' process emissions (set at a fixed 50%)

3.4.2.2. Step 2 Calculating the relative energy efficiency factor

As outlined above, the emissions of energy conversion systems are calculated based on fixed yields. With the other combustion processes, the emissions will be 'corrected' in line with the relative energy efficiency of these processes by applying the 'beta factor'. This will be used for participants in the two energy covenants.

BM participants (energy efficiency benchmarking covenant)

This concerns installations that signed the Benchmarking covenant before 31 December 2005 and where the world leaders and the distance of the installation concerned from these world leaders has been established in accordance with the rules of the Benchmarking covenant. With these installations, the actual energy efficiency has been compared with the current benchmark for the process concerned. The data for this is managed by the VBE. The beta factor is established based on the distance from the world leaders, laid down in the second Benchmark

⁵⁷ In line with the rules in paragraph 4.2, in calculating the allocation of extension emissions the (actual) emissions as a consequence of the abovementioned extensions in the year 2005 will be added to the estimated emissions in 2006, up to a maximum of 90% of the CO₂ emission of the total extension. This maximum can be increased to 100% if the installation can demonstrate that a higher percentage of production is characteristic of the production process applied.

round⁵⁸. The beta factor is the energy consumption of the world leaders divided by the actual energy consumption of the installation in the benchmark year. The beta factor is therefore a relative indicator. The beta factor may not exceed 1.15 (see further below) but has no lower value limit. This is done to create a comparable approach to that of the energy conversion, which also has no lower limit.

Participants in MJA and Glami

Installations that signed the Long-Term agreements on energy efficiency or come under the Glami covenant have committed themselves to improving their energy efficiency and how they report this. If they joined the MJA by 31 December 2005, the starting point is that, in view of the commitments in relation to MJA, a relative energy efficiency factor of 1 is regarded as appropriate. For the participants in the Glami covenant, the emissions concern energy conversion only, for which the fixed levels of efficiency apply as shown in formula box 1.

Other installations

Of the installations that do not come under any agreement, it is assumed that the energy efficiency in the period from 2008 to 2012 will have improved by an average of 15 per cent compared to the period from 2001 to 2005. It has been decided on 15 per cent in order to adopt a comparable performance compared to the agreements in the two energy savings covenants. This prevents installations from ceasing to participate in such a covenant because of a lighter regime. A difference of 15 per cent efficiency is assumed, unless the installation concerned has been able to demonstrate to the ministers no later than 15 October 2006 that it has produced an effort that is comparable to the covenants. In the case that this can be confirmed through verification, this relative energy efficiency factor will be set at one.

Calculating the beta factor and topping off

The positive evaluation for energy efficiency is maximised at 15 per cent. This means that the beta factor in the formula can never be greater than 1.15. This has been done because of criterion 5 of Annex III to the Directive. This criterion states that no disproportionately larger allowances will be allocated to an installation than it would need to cover its expected emissions. The topping off of 1.15 is also applied to the total emissions from combustion processes (from energy conversion and from other combustion processes together). Formula box 5 shows how the energy efficiency is valued and topping-off applied.

Formula box 5: Topping off of energy efficiency values

$$\text{Formule - 5a : } BE_{VE} = \text{MIN}(1,15 \times VE_{input,gem}; VE_{EE,gem})$$

waarin :

$$\text{Formule - 5b : } VE_{input,gem} = \frac{\sum (VE_{EC,jr,excl.uitbr.} + HE_{OV,jr,excl.uitbr.})}{3} + U_{EC} + U_{OV}$$

$$\text{Formule- 5c : } VE_{EC,jr,excl.uitbr.} = \sum (\text{brandstof}_{EC} \times \text{verbrandingswaarde} \times \text{emissiefactor})_{excl.uitbr.}$$

⁵⁸ Letter to Benchmarking Committee dated 18 February 2003 'Implementation of the second round of Benchmarks'.

$$\text{Formule - 5d : } VE_{EE, gem} = HE_{EC, gem} + \beta \times (HE_{OV, gem} - U_{OV}) + U_{OV}$$

whereby

BE	calculated emission as basis for the further allocation calculations [ton CO ₂ /yr]
HE	the historical emission [ton CO ₂ /yr]
VE	emission as a result of combustion processes [ton CO ₂ /yr]
EC	energy conversion
EE	calculated value after processing relative energy efficiency factors
OV	other combustion processes
U	extension emissions [ton CO ₂ /yr]
β	beta factor relative energy efficiency (see also the definitions)
input	calculated on the basis of fuel input
MIN	minimum of the numbers shown between brackets
av	average (over 3 baseline years)
yr	year

3.4.2.3. Step 3 Incorporating growth and special circumstances at sector level

Growth

An adjustment is applied to the emissions obtained from the previous step, based on the expected average annual growth of 1.7% in the period from 2006 to 2010, whereby 2010 is the middle year of the 2008-2012 period. It therefore involves a growth factor over 5 years (growth factor is 1.017⁵). Figures by ECN are used to calculate the growth. Part 1 discusses further how ECN calculates the growth figures, which are figures for CO₂-related growth. No account has been taken of potential energy efficiency improvements and a single growth figure is used for all participants. This has been done because estimates by ECN show that the growth figures of the various sectors are all very similar to each other. It is also the case that, as indicated in the ECN document itself, that the more detailed the growth estimates are for each sector, the more unreliable these estimates become. The reason is that with a less detailed approach the irregularities average each other out. The lack of precision at sector level is, in comparison with NAP-I, relatively high due to the long period covered by NAP-II. This means that deviations in growth within a sector can be just as great as those between sectors. ECN has 'corrected' the growth figure in anticipation of new large entrants, so that a more representative figure is obtained for 'existing' installations.

Coal covenant

The Renewable Energy Directive⁵⁹ requires that electricity generated from renewable sources must account for 9% of Dutch electricity consumption by the year 2010. As part of this, the Coal Covenant⁶⁰ aims to achieve emission reductions in the 2008-2012 period, resulting in a 3.2 megaton CO₂ emission reduction in 2012 of fossil origin from coal-fired power stations or coal gasification through the use of biomass and other CO₂-reducing fuels. The switch to the use of biomass and alternative CO₂-reducing fuels and the implementation of other measures will take place in the period 2008-2012. The starting point is that the switch is already being gradually made. This leads to a reduction in the allocation for the installations concerned, the reduction being in accordance with criterion 4 in Annex III to the Directive. As a consequence of this criterion, national allocation plans must be brought in line with other Community legislative and

⁵⁹ Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the domestic electricity market.

⁶⁰ Covenant for coal-fired power stations and CO₂ reduction of 24 April 2002.

policy instruments. The Renewable Energy Directive provides for a reduction in emissions coming under the Directive. For this purpose, a lower number of allowances must be provided in the area of energy generation than would otherwise be the case.

Generally speaking, no allowances are allocated for the (historical) use of biomass. The reason for this is that no allowances need to be surrendered for biomass either. On the other hand, specific rules apply to participants in the coal covenant, which are set out below.

In allocating the CO₂ allowances, the agreements in the Coal Covenant will be taken into account for the businesses concerned that fall within the scope offered by the Directive. On the one hand, when calculating the historical emissions the use of biomass is expressed in terms of coal consumption in so far as in accordance with the Coal Covenant. This corresponds to an increase in historical emissions and is viewed as 'early action'. On the other hand, a reduction of the allocation will be made that is derived from the obligations of the organisations as contained in the Coal Covenant. On balance, both components lead to the abovementioned reduction.

In determining historical emissions, action within the framework of the Coal Covenant will qualify for a reward for early measures, in the sense that it is assumed that the co-burning of biomass used to generate energy will also be expressed in terms of coal based on energy content. This will be up to a maximum at a corporate level as agreed in the Coal Covenant. An effort that goes further than that agreed in the Coal Covenant will therefore not be rewarded when calculating historical emissions. This is to prevent installations being allocated substantially more allowances than they would need.

The calculation of the allocation reduction is made as follows. Article 2, paragraph 3 of the Covenant sets out the CO₂ emission reduction to be achieved per group. In NAP-I it was assumed that 37.5 per cent of the agreements in the Coal Covenant on the use of biomass would be achieved. This corresponds to a 1.2 megaton reduction of CO₂ per annum. No CO₂ allowances will be allocated for this use of biomass during the first period covered by the plan. For the 2008-2012 period, the second part of the deduction will be included, assuming that the first part of the deduction (1.2 megatons of CO₂ emissions per annum) has been realised in mid-2006. The deduction will be spread across the 2008-2012 period in linear growth form, whereby the value of 1.2 megatons of CO₂ emissions per annum will apply as from 1 July 2006, and 3.2 megatons of CO₂ emissions per annum as from 1 July 2012. The second part will be spread across the 2008-2012 planning period in linear growth form for each participating installation according to these figures and will be set off as a fixed average for each year covered by the plan. Based on 7,500 operating hours per annum, this is equivalent to 2.54 megatons for each year covered by the plan. When applying the correction on the number of operating hours in the selected years, this amount will be 2.51 megatons for each year covered by the plan, using statements for the number of operating hours in the selected baseline years provided by the companies during the comment period. The operating hours correction will be calculated separately for each company and taken into account in the historical emissions.

In order to concretise the agreements in the Coal Covenant for individual installations, during the comment period for the draft plan the groups were given the opportunity to consider the following points for each installation.

- Since the Coal Covenant was signed, a number of changes have been made to the ownership rights of the electricity production companies that participate in the Coal Covenant. During the comment period the companies were invited to allocate the agreements made in the Coal Covenant for each installation and to pass on this information to the relevant contact address for comments. The distribution chosen by the companies will be used when taking the Coal Covenant into account in calculating the historical emissions and in calculating the abovementioned reduction.
- Concerning the use of alternative fuels and other measures, the following applies. In accordance with Article 3, paragraph 1 of the Covenant, the installations may take other CO₂-reducing measures than the use of biomass if they have good grounds to do so. Examples are the closure of a power station, the use of natural gas or alternative fuels or mixed fuels.

During the comment round the companies were invited to give details on the historical emission of alternative energy sources which the companies had reported for the individual electricity production installations. These statements are taken into account when calculating the reward for taking early action.

It has become clear that there are obstacles preventing the installations concerned from being able to implement the Coal Covenant regardless, such as not possessing an environmental permit for the use of biomass, issued by the competent authorities or under a court judgment. During the comment period, the installations were invited to provide information on the obstacles that had arisen. In addition, the MEP subsidy⁶¹, which is also applicable to the use of (large-scale) biomass under the regulation of the Minister of Economic Affairs of 8 December 2005⁶², has been set to zero for new projects. The abovementioned obstacles may also occur in the future for the group that currently is not experiencing any obstacles. This is the reason for applying only 50% of the reduction, including the operating hours correction. This means that participants in the Coal Covenant, which at present qualify for an MEP subsidy as well as possessing an environmental permit, may obtain a reduction of 50%.

No reduction will be applied to participants in the Coal Covenant who, because of the abovementioned Ministerial Decision, do not qualify for an MEP subsidy, nor will these participants be rewarded for taking early action under the terms of the Coal Covenant. This is because for these companies there is no prospect of meeting their part of the bargain under the Coal Covenant.

With installations that have not provided any or enough information during the comment period and for which it is plausible that one or more of the abovementioned situations occur, it is assumed that there are no obstacles to implementing the Coal Covenant. This means that a 50% reduction will be applied to these installations.

To summarise: a 50% reduction will not be applied only if either a participant of the Coal Covenant does not qualify for an MEP subsidy as a consequence of setting the MEP subsidy to zero under the abovementioned Regulation of December 2005, or if a participant of the Coal Covenant has made sufficiently plausible during the comment period that it does not possess an environmental licence for the use of biomass within the framework of the implementation of the Coal Covenant.

Reduction for windfall profits

The ministers have decided to allocate less to the producers of electricity. This will be a limited reduction. This is because of the windfall profits that these producers are expected to make in this period are covered by the plan too. It involves passing on the price of a greenhouse gas allowance to the price of electricity for the end users, although the allowances are allocated by

⁶¹ The MEP is a subsidy system, the aim of which is to improve the environmental quality of the Dutch electricity production. MEP stands for *Milieukwaliteit Elektriciteitsproductie*, or Environmental Quality of Electricity Production. The quality of electricity production can be improved in various ways, such as through the use of biomass.

⁶² This concerns the Regulation of the Minister of Economic Affairs dated 8 December 2005 amending the Regulation for subsidies for the environmental quality of electricity production 2005, the Regulation for subsidies for the environmental quality of electricity production 2006 (period 1 January to 1 July), the Regulation for subsidies for the environmental quality of electricity production 2006 (period 1 July to 31 December), the Regulation for subsidies for the environmental quality of electricity production 2007, the Regulation on guarantees of origin for renewable electricity and the General Implementing Regulations for Environmental Quality, Government Gazette 15 December 2005, no. 244. This Regulation sets the subsidy amounts for electricity generated by combustion of pure and non-pure biomass in and for electricity generated by offshore wind energy at €0.00 for new subsidy applications.

the government free of charge. Research shows that this only happens on a limited scale at present, but will increase substantially in the coming years⁶³.

The production of steam or electricity for own use is not included in the reduction. Furthermore, a lower threshold will be set, whereby the first 350 GWh of electricity that leaves the installation will be exempt from the reduction, as a result of which the reduction will be somewhat limited. On the grounds of an allocation based on this plan, one-third of the reduced allowances will be allocated to the other participants in emissions trading. The allocation will in principle be established on the basis of net electricity purchased. In order for the allocation to be made correctly, extra information has been requested from the installations concerned. Two-thirds of the allowances will be sold. Since the way in which the small consumer will be compensated does not concern the allocation of allowances, this point is not a part of this allocation plan.

The reduction amounts to 15% and is applied to the emissions that are related to the net⁶⁴ amount of electricity leaving the installation on an annual basis.

The way in which the reduction is applied for the energy conversion systems concerned is shown further in formula box 6.

Formula box 6: Application of windfall profits reduction

If the installations meet the criteria for correction due to net (calculated in GWh annually) supply of electricity outside the installation, a 'windfall reduction' will be applied, whereby 350 GWh per installation is exempt from the reduction.

$$\text{Formula 6a: } BE_{WFKorting, jr} = \frac{P_{Korting} \times 0,15 \times 3,6 \times EF_{brandstof}}{OR_{brandstof}}$$

The reduction is averaged over the three baseline years chosen ($BE_{wfreduction,av}$). The reduction in the amount of allowances issued to the installation each year compared to the basic allocation that would be made without the application of the windfall reduction will then be:

$$\text{Formula 6b: } Allocation\ reduction_{WF} = BE_{wfreduction,av} \times GF \times C$$

in which:

$P_{reduction}$	electrical energy (in GWh) that is supplied net per annum outside the installation in excess of 350 GWh
BE_{av}	calculated emissions as basis for further calculations [ton CO ₂ /yr]
yr	year
EF_{fuel}	emission factor of the fuel used [ton CO ₂ /TJ]. For the combustion of biomass and alternative fuels the emission factor will be maintained without adjustment in relation to the Coal Covenant
OR_{fuel}	conversion yield of the fuel used (see table 3.1)
GF	growth factor
C	correction factor to add to capacity distribution within the limits (without applying the windfall reduction)

⁶³ CO2 Price Dynamics, ECN-C0-06-015, March 2006; CO2 trading and its influence on electricity markets Frontier economics, Feb 2006.

⁶⁴ I.e. on a calendar year basis, supply less purchase (GWh).

A third part of this will be made available – through allocation – for distribution among the installations within the trading system, which have a net purchase of electricity. The remaining two-thirds of the amount will not be allocated. The starting point with this one-third/two-thirds distribution is that the companies that generate or will generate the windfall profits will be accommodated in this way.

3.4.2.4. Step 4 Calculation of the final allocation

The final allocation is calculated in this step.

The total ‘entitlements’ from the abovementioned steps must be reduced by means of a correction factor to the total emission capacity that is available for participants in emissions trading. This correction factor (C-factor) is applied to all individual installations, in order for all installations to contribute to the Dutch climate objectives, and with it to a lower production of CO₂. This means that the allowances for each installation from the previous steps will be reduced by a C-factor for all installations. Exceptions to this are the process emissions that come under the statutory criteria. These will be reduced by only half as much. This is done mathematically by not applying the C-factor to a standard fifty per cent of the process emissions. New entrants too are not given a correction factor within the meaning of this plan.

N₂O emissions are also not included in the correction. The C-factor will then be applied to the remaining other entitlements.

The C-factor is calculated and the windfall reduction applied as follows:

1. Firstly, the C-factor is calculated for the situation in which no windfall deduction will be applied. This also produces the basic allocation (Allocation_{basis}) that every other installation would obtain if no windfall profit reduction were to be applied.
2. For qualifying installations, the windfall profits reduction is then calculated using the formulae in formula box 6. The associated allowances (Allocation deduction_{WF}) are calculated, i.e. including the application of the growth factor and the C-factor calculated under step 1 above, and deducted from the allocation to these installations.
3. Distribution of windfall among the participants in emissions trading. One-third of the allowances calculated in step 2 will be divided among participants in emissions trading in proportion to the net amount of electricity bought in. The average of the electricity bought by an installation in the baseline years will be divided by the total of the averages of the electricity bought. This percentage will be multiplied by the amount of available allowances to be distributed.

Formula box 7 shows the calculation of the final allocation

Formula box 7: Calculating the final allocation

The basic allocation is calculated as the sum of the allocation for combustion emissions and the allocation for process emissions:

$$\text{Formula 7a: } Toewijzing_{basis} = C \times GF \times BE_{VE} + C \times GF \times HE_{PE, red, gem} + GF \times HE_{PE, nred, gem}$$

For those installations that supply net electricity outside the installation, the reduction as a consequence of the windfall profits will be deducted from this:

$$\text{Formula 7b: } Toewijzing_{tot} = Toewijzing_{basis} - Toewijzingkorting_{WF} - Kolenconvenantkorting$$

In formula 7b the following applies:

- the *Allocation reduction_{WF}* (due to windfall profits) is only applicable for those installations that supply net electricity outside the installation, whereby the first 350 GWh net supply is not included in the reduction.
- The *Coal Covenant reduction* is only applicable for participants in the Coal Covenant and is calculated at installation level in accordance with that set out in the preceding section. For installations not participating in the Coal Covenant, this factor is zero.

For those installations that receive net electricity from outside the installation, an addition to allowances applies as follows:

$$\text{Formula 7c: } Toewijzing_{tot} = Toewijzing_{basis} + \frac{P_{ontv, gem}}{P_{ontv, gem, tot}} \times \frac{Toewijzingskorting_{WF, tot}}{3}$$

whereby:

C	original correction factor for the benefit of distribution of capacity within the allocation ceiling
GF	growth factor
BE	calculated emissions as basis for allocation calculation [ton CO ₂ /yr]
VE	combustion processes
HE	historical emission [ton CO ₂ /yr]
PE	process emission
tot	total
WF	windfall
av	average (over 3 baseline years)
yr	year
red	'reducible' process emissions (set at a fixed 50%)
nred	'non-reducible' process emissions (set at a fixed 50%)
P _{rcvd, av}	net amount of electrical energy received in GWh (never negative)
P _{rcvd, av, tot}	net amount of electrical energy received in GWh, across all participants (never negative)
<i>Allocation reduction_{WF, tot}</i>	concerns the reduced allowances due to windfalls (total across all participants)

3.5 Allocation for the nitric acid industry

3.5.1 Basis for the allocation

The ministers will apply for an opt-in for the N₂O emissions from nitric acid production on the basis of Article 24 of the Directive. This concerns three installations in the Netherlands. This paragraph is only relevant if the Commission agrees to the opt-in application, and so in this sense the list of intended allocation is therefore also provisional.

The allocation of allowances for N₂O emissions from nitric acid production is not made on the basis of historical emissions, but on the basis of a 'benchmark'⁶⁵, expressed in 'kilos N₂O per ton 100% nitric acid', which is then converted into an allocation by multiplying together the average production, the conversion factor into CO₂ equivalents (GWP Global Warming Potential) and a growth factor.

⁶⁵ The member states that are currently considering an opt-in use the term 'benchmark' for the amount of allowances per ton of product. We can also refer to this as a 'standard'.

A benchmark is used with a view to monitoring the commercial market and monitoring a level playing field within the European Union. A level playing field assumes a benchmark that is not greater than the maximum emissions to be permitted with the use of Best Available Techniques (BAT) according to the BREF for the nitric acid industry, since opt-in installations would otherwise have a (significant) advantage over comparable installations in member states that do not submit an opt-in application. After all, in the member states that do not apply for opt-in, installations will have to comply with BAT on the grounds of the IPPC Directive. A level playing field also assumes a comparable benchmark in all member states that apply for an opt-in for this sector.

3.5.2 Allocation method for the nitric acid industry

Allocation is made based on a benchmark that can only be achieved through the application of special reduction techniques. There have already been experiments for a number of years at an international level with these reduction techniques, consisting of various types of catalysers from a number of suppliers. CDM projects are also being started up around the world, in which catalysers are being incorporated in nitric acid plants. Since there is still a lack of experience with these new techniques in the Dutch nitric acid industry, this branch of industry is confronted with extra challenges and risks in these early years.⁶⁶ The formula used for the allocation to each installation is as follows:

Formula box 8: Calculation of the final allocation

$$\text{Allocation}_{\text{N}_2\text{O}} = P * B * \text{GWP} * \text{GF} \quad (\text{in CO}_2 \text{ equivalents})$$

Whereby:

- P = the average production of a unit in three years to be selected by the installation from the period 2001 to 2005, expressed in tons of 100% nitric acid
- B = the benchmark: 1.8 kilograms of N₂O per ton of 100% nitric acid
- GWP = the Global Warming Potential for conversion of N₂O into CO₂ equivalents (being 310)
- GF = growth factor (1.088)

3.5.3 The N₂O deposits

For the allocation, 7,157,326 tons of CO₂ equivalents are available for the 2008-2012 period covered by the plan. In view of the market for artificial fertilizer production, it may be that new installations will be set up in the Netherlands in the coming years. It is also possible that existing installations will expand during the 2008-2012 period. A deposit will be set aside for these developments, because it will be possible for a new entrant to apply for these allowances, provided that the new entrant threshold is reached. This is in accordance with that laid down in this plan on this subject for CO₂ emissions.

The N₂O deposit for new entrants is 1,424,320 tons for the entire period from 2008 to 2012. For the allocation of new entrants' allowances to installations that are being set up new, another benchmark will be taken than that for the allocation of new entrants' allowances in the case of extensions to existing installations. This distinction is being made in order to conform to the BREF concept for nitric acid plants, in which the difference in reduction opportunities for new units to be built compared to existing units will be expressed in the accompanying average emission values for N₂O. For production expansion of existing installations, the same benchmark will be used as for the allocation, namely 1.8 kilograms per ton of 100% nitric acid. For new units, however, allocations will only be made based on best available techniques.

⁶⁶ See <http://cdm.unfccc.int/> for an overview of applications and current projects at nitric acid plants.

A separate N₂O deposit will be set up to accommodate any successful appeals against the national allocation decision. The amount in this deposit is half a per cent of the number of allowances to be allocated for nitric acid production, being 42 kilotons. Any remainder will be credited to the new entrants' deposit for N₂O.

Table 3-2: Overview of the available number of allowances for N₂O (in megatons CO₂ equivalent) for the entire period 2008-2012 covered by the plan

Allocation	7.157326
New entrants' deposit	1.424320
Legal deposit	0.042908
Total available	8.624554

The N₂O deposits are kept separate from the deposits that are kept available to cover CO₂ emissions.

3.6 New installations and extensions before 1 January 2007

New installations or extensions of existing installations that are put into operation before 1 January 2007 will be considered as existing installations. Only if the historical emissions in the three selected baseline years show a highly diverging picture of the emissions as a consequence of new building within the existing installation or the physical extension within the existing installation will allocations be made in a different manner. That is the reason why in such cases the rules for allocation to new entrants, as described in Chapter 4 (new entrants), are similarly applicable.

In short: requirements will then be imposed on physical expansion and the threshold value will apply. Only for entirely new installations do no threshold values apply. Chapter 4 (rules for newcomers from 1 January 2007) is similarly applicable.

The relocation scheme and business premises scheme in Chapter 4 are also applicable, including the conditions laid down therein.

The correction factor will be applied as usual to new installations and extensions to existing installations that came into operation before 1 January 2007.

The allocation of allowances to the new installations or extensions to existing installations referred to above before 1 January 2007 will be made in the national allocation decision. The allocation process is also contained in the indicative list of allocations with this plan.

Chapter 4 Method of allocation to new entrants (incl. extensions) from 1 January 2007

This chapter discusses how to deal with new installations that will come under the emissions permit obligation of Article 16.5 paragraph 1 of the Environmental Management Act and extensions to existing installations⁶⁷. It also describes how the allocation of allowances from the deposit designated for this purpose will be dealt with. The size of the deposit itself has already been discussed in Chapter 2.

4.1 New entrants from 1 January 2007

As part of this allocation plan, the term 'existing installations' is used where it concerns installations that come under the statutory criteria before 1 January 2007. This includes installations that have been extended or are entirely new during the reference period and the year 2006. These installations will be treated as existing installations. The method of allocation to these installations has already been dealt with in Chapter 3.

This chapter discusses only new entrants, including extensions, from 1 January 2007⁶⁸. These new entrants are not included in Appendix 1 to this plan, nor is this group included in the national allocation decision. A new entrant must submit an application at a later date to obtain allowances. The application will then be assessed to see whether allocation will go ahead, on the basis of Article 16.32 of the Environmental Management Act. The method of allocation to newcomers will be dealt with in this chapter.

Rules for extensions within existing installations from 1 January 2007

The following criteria must be met at the same time:

1. There must be a physical extension or physical new building of a production unit for which a modification to the environmental permit or an announcement is necessary. This prevents production growth from being regarded as an extension where there is no physical extension or physical new building of a production unit within an existing installation.

⁶⁷ This is in implementation of Article 16. 32, paragraph 5, under b and c of the Environmental Management Act.

⁶⁸ Article 3 under h of the Directive contains a definition of new entrants. This is implemented in Article 16.25, paragraph 2 under a of the Environmental Management Act, in which new entrants are referred to as installations that do not yet have a permit or no amendment to the permit after the notification of the allocation plan to the European Commission. This means that the designation 'new entrants' is linked to the moment at which notification of the plan is made. In this plan, 'new entrants' means something slightly different than in the Directive and the Environmental Management Act. This is to keep in line with the distinction between the national allocation decree and other allocation decisions, whereby a different name is also appropriate. In this plan, installations that are put into operation before 1 January 2007 are referred to as existing installations. Installations that come into operation or have undergone changes from 1 January 2007 or thereafter (Article 3, under h of the Directive), are referred to as new entrants. Existing installations, particularly those who have an opt-out in NAP-1, also come in the category of existing installations in NAP-II. It is evident that the installations which have undergone changes after notification of the allocation plan, however before 1 January 2007, will receive firm information about their allocation at an early stage. This will be through the indicative list with this plan, and with the national allocation decree.

When submitting an application for allocation, an installation must demonstrate plausibly that the physical extension or new building of a production unit is actually taking place.

This assessment will consider:

- a. concrete project or business plans that underpin the physical building;
 - b. the application for modification of the environmental permit or a building permit by the competent authority or submission of the report to the competent authority;
 - c. the formal instruction/contract for the physical building;
 - d. the realisation of the stated production volumes.
2. The extension or new building within an existing installation must lead to a rise in emissions above the threshold value. The threshold value for (extra) allocation for an extension or new building of a production unit is an increase of 50 kilotons/yr CO₂ (equivalent) in the amount of allowances already allocated or a potential increase in emissions per installation with a minimum of 10% as a consequence of production expansion.

Rules for new installations from 1 January 2007

An installation that comes under the scope of the system for the first time must comply with the following criteria at the same time:

1. There must be a physical extension or physical new building of a production unit for which an environmental permit or an announcement is necessary.

When submitting an application for allocation, an installation must demonstrate plausibly that the physical extension or new building of a production unit is actually taking place.

This assessment will consider:

- a. concrete project or business plans that underpin the physical building;
 - b. the application for modification of the environmental permit or a building permit by the competent authority or submission of the report to the competent authority;
 - c. the formal instruction/contract for the physical building;
 - d. the realisation of the stated production volumes.
2. If an installation comes under the scope of the system for the first time, the threshold values as referred to above with the rules for extensions or new buildings within existing installations under no. 2 do not apply. This is on condition that the permit obligation of Article 16.5, paragraph 1 of the Environmental Management Act did not apply to these new installations. An installation that was already subject to the permit obligation of Article 16.5, paragraph 1 of the Environmental Management Act, but failed to apply for an emissions permit and consequently was not allocated any allowances, can therefore not apply for allowances after all as a new entrant.

The installations too that have an opt-out under NAP-I are not new entrants within the meaning of this draft plan and these installations themselves will therefore have to make sure that they are included on the indicative list of installations in this plan and on the definitive list of installations in the national allocation decision.

4.1.1 Relocation scheme

A special type of new entrant arises from the relocation scheme. This relocation scheme offers an installation the opportunity to submit an application for extra allowances to use them to cover new emissions, without a physical expansion having taken place. The new emission arises because the production of another installation within a group of companies is being taken over. The starting point here is that the allowances follow the production. Relocation is said to exist if a production is closed at one production location and this production is continued at another production location within the same group of companies. A 'group' in this context is a group within the meaning of Section 24b of Book 2 of the Dutch Civil Code⁶⁹.

⁶⁹ Article 24b of Book 2 of the Dutch Civil Code defines 'group' as an economic entity in which legal entities and companies are bound in an organisational sense. Group companies are legal entities and

In order to qualify for allocation on the grounds of the relocation scheme, contrary to the abovementioned general rules the following criteria apply to relocating new entrants.

1. The installation taking over the allowances must state from which installation the allowances come, and demonstrate that the production of similar products is being relocated.
2. The installation must demonstrate that production in the installation being closed has been stopped and that an increase in production at the receiving installation exceeds:
 - a. 10% per annum compared to the existing situation at the receiving installation, or
 - b. a 50-kiloton increase in annual emissions at the receiving installation.
3. Both installations concerned came under Chapter 16 title 2 of the Environmental Management Act (the statutory criteria) before the closure took place.
4. Both installations concerned are in Dutch territory.

The company that expands its production will receive an addition to its allocation which is directly in proportion to the expansion of its production, with a maximum in proportion to the production that is transferred. If only part of the production is transferred (and the remainder, for example, ceases altogether), a maximum will therefore apply that is derived from the transfer. The supplement to the allocation can never be more than the allowances no longer issued to the closed installation.

4.1.2 Scheme for industrial zones

A second exceptional type of new entrant arises from the situation at industrial zones. The scheme for industrial zones offers installations the opportunity to submit an application for extra allowances, to be used to cover new emissions that are the consequence of the increase in heat production due to physical expansion outside the installation. The following conditions must be met in such a situation:

1. The supplying installation must supply the heat (=steam, hot water, thermal oil, or any other source of thermal energy) to a heat infrastructure between two or more businesses or a residential district. There must be a physical connection between the supplying installation and the installation/residential district where the expansion will take place.
2. The supplying installation must demonstrate that a physical expansion outside the boundaries of the supplying installation for which the supplying installation wishes to obtain allowances leads to a demonstrable increase in heat production which will be supplied only by the installation that applies for the allowances and that this increase in emissions exceeds the following thresholds:
 - a. 10% per annum compared to the existing situation of the installation supplying this heat, or
 - b. an annual 50-kiloton increase in emissions at the installation supplying the heat.

4.2 Method of allocation to newcomers

The method of allocation is as follows:

1. Allocation is based on the best state of the art. This is established based on the emissions of the most energy-efficient commercially operated unit in the world. This can be derived from the current Benchmarking world leaders⁷⁰ or in another comparable manner.
2. A maximum of 90% of the annual design production capacity applies to the allocation, unless it can be demonstrated that 100% production is typical for the production process used.

companies that are bound to each other in a group. The article therefore describes a term under corporate group law.

⁷⁰ These are the world leaders as established within the framework of the benchmarking Covenant.

3. For all installations, the amount of allowances to be allocated may never exceed the realistic planned annual emissions.
4. The allowances will be allocated from the starting date of the new entrant. A new entrant is put into operation if the unit has been operating for at least 10 successive days at more than 20 per cent of the design capacity. If the production cycle customary in that sector is shorter than 10 days, the unit must have been in operation for at least 10 days at more than 20 per cent of the design capacity.
5. For electricity production units, no more allowances are allocated than are customary with a similar unit. The reason for this is that the number of operating hours for electricity production is related to the efficiency of electricity generation: the higher the efficiency, the more operating hours can be expected.
6. No allocation is made for a test period preceding the start date.
7. If the relocation scheme is applicable: no more allowances may be allocated to the receiving installation than were allocated previously to the closed installation.
8. If incidents occur during the period covered by the plan whereby new entrants will store CO₂ sustainably, it will be considered whether to allocate allowances to them as if there are emissions into the air. This is in accordance with the other allocation rules for new entrants. This too must conform to the then applicable EU legislation.

4.3 Reservation of allowances in the new entrants' deposit

New entrants must buy their allowances on the market once the deposit is exhausted. However, in order to provide assurances early enough on obtaining allowances for new entrants, the wish has been expressed for an installation to be allowed to submit a well-substantiated application for a reservation of allowances in the deposit for new entrants. It is not yet certain whether this reservation option will actually go ahead. The conditions under which use can be made of such a reservation still have to be worked out and determined further. The idea at present is to introduce conditions in which the following aspects could play a role:

- a. the new installation will have to submit an environmental permit or notification;
- b. concrete building plans including investment decisions and (financial) business plans must be submitted;
- c. the reservation will be cancelled if the final approval for the investment by the authorised person or persons (usually the Management Board or Board of Directors) within the installation or the group cannot be submitted within six months of the application for a reservation.

At present, Chapter 16 of the Environmental Management Act contains no opportunity to reserve allowances. A legislative proposal to amend the Act for this purpose is expected to be introduced in mid-2007. Depending on the outcome and the time frame involved, a reservation will in principle still be possible in this period covered by the plan.

Chapter 5: Limit on the use of JI and CDM allowances

The European trading system originally focused only on trading in allowances allocated in the EU countries within the framework of the Directive. Supplementary to this, the use of reduction units generated outside the EU has also been made possible. This is laid down in the Linking Directive⁷¹ (LD) that was adopted on 27 October 2004 and published on 13 November 2004. The LD contains amendments to the EC Directive on the trade in greenhouse gas allowances that focus on creating a link between the European trading system and the global Kyoto system that provides, amongst others, for JI and CDM.

In a letter⁷² to the Lower House, the ministers set out how the implementation of the LD in national legislation would take place. This chapter deals briefly with this letter. For a further description of the purpose and contents of the LD, please refer to the letter itself. The LD has meanwhile been implemented in the Environmental Management Act.⁷³

On the grounds of the LD (Article 1, paragraph 2), member states must set a limit on the use of JI and CDM for the 2008-2012 period within the framework of trade in allowances in the European Union. Criterion 12 of Annex III to the Directive lays down for this purpose that in the plan the maximum number of CERs and ERUs are specified that may be used by the operator of the installation within the framework of the Community scheme, as a percentage of the amount allocated to each installation. This percentage must tally with the supplementary obligations of the member state in accordance with the Kyoto Protocol and the decisions that have been taken in accordance with the UNFCCC and the Kyoto Protocol.

The limit must therefore take the form of a percentage of the total number of allowances that are allocated for a certain period covered by the plan, and must be specified in the national allocation plan for this period, i.e. in this plan first.

Both CDM and JI can be used in the 2008-2012 period.

The intention formulated in the abovementioned letter to the Lower House to set the limit for the 2008-2012 period at 8% will be adjusted. The letter to the Lower House stated that only limited information is available from other EU member states concerning limits for the use of CERs and ERUs within the framework of allowances trading. More information has meanwhile become available. It has been decided to raise the limit to 12%, the same as that used in Germany, bringing the companies to the same starting position.

This means that installations may use the allowances up to a maximum of 12% of the allowances allocated to them via JI and CDM projects to cover their own emissions. This limit of 12% offers installations sufficient capacity to operate in the new market for JI and CDM projects, and offers opportunities in the longer term to explore opportunities to acquire allowances through such projects. The limit in fact only applies to cover a company's own emissions. If an installation has obtained more ERUs or CERs than this limit, it may sell them.

⁷¹ Directive no. 2004/101/EC of the European Parliament and the Council of the European Union of 27 October 2004 (OJ L 338) amending Directive 2003/87/EC establishing a scheme for greenhouse gas allowance trading within the Community, in respect of the Kyoto Protocol's project mechanisms.

⁷² Parliamentary documents II, 2004-2005, 28.240 no. 18.

⁷³ Bulletin of Acts and Decrees 2006, 189.

Annex 1: list of participating installations⁷⁴

This list will be delivered in the first week of October.

⁷⁴ This is an indicative list. These figures are subject to change.

Annex 2: definitions

The definitions contained in this list are also usually to be found in legislation and regulations. For the sake of transparency and readability we have not made do with references alone. This can mean that interpretation differences are seen. In case of doubt the legislation and regulations are always decisive for the correct interpretation.

General

Allowance or greenhouse gas allowance: Transferable right to cause an emission of one tonne of carbon dioxide equivalent in the air in the course of a given period (Environmental Management Act section 1.1(1)).

One tonne of carbon dioxide equivalent: A metric tonne of carbon dioxide or a quantity of another greenhouse gas with an equivalent global warming capacity (Environmental Management Act section 1.1(1)).

Directive: Unless otherwise stated: Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas allowance trading within the Community and amending Directive 96/61/EC of the Council (OJ L 275) (Environmental Management Act section 1.1(1)).

Planning period: Period to which a national allocation plan relates. For NAP-I this is a period of three years (2005-2007) and thereafter periods of five years each (Environmental Management Act section 16.1(1)).

Allocation: Decision or order of the State Secretary for Housing, Spatial Planning and the Environment and the Minister for Economic Affairs by which the quantity of allowances to be allocated to one or more installations is laid down. Allocations are valid for a single planning period.

Competent authority: Body responsible for the implementation of regulations or parts thereof. The State Secretary for Housing, Spatial Planning and the Environment and the Minister for Economic Affairs are responsible for the allocation of the allowances (Environmental Management Act section 16.23(1), section 16.29(1) and section 16.32(2)). In practice, the division of roles is that the Ministry for Economic Affairs takes the lead in the drafting of the NAP and the Ministry for Housing, Spatial Planning and the Environment in the actual allocation of the allowances (NTB and allocation orders).

The Netherlands emission authority is (in short) responsible for both the issuance of the emission permit (Environmental Management Act section 16.5(1)) and the issuance of the allowances (Environmental Management Act section 16.35(1)), for the management of the greenhouse gas allowance register (Environmental Management Act section 16.43) and for the maintenance of the emission trading system (Environmental Management Act section 18.2f).

Installation: Any activity undertaken by people on commercial lines or on a scale as if it were on commercial lines that is carried out within a certain limitation (Environmental Management Act section 1.1(1)). The units belonging to a like undertaking or organisation that have mutual technical, organisational or functional ties and that are located in each other's immediate vicinity are regarded as a like installation.

Unit: Technical part of the installation, such as a furnace, boiler, etc. This term will be defined further in the Allowances Trading Decree.

Allocation and issuance

National Allocation Plan (NAP): Plan that for example contains the allocation of allowances for a planning period, the maximum quantity of allowances to be allocated and an indicative list of allocations to individual installations (Environmental Management Act section 16.23(1)).

NAP-I: NAP for the first planning period, running from 2005 to 2007.

NAP-II: NAP for the second planning period, running from 2008 to 2012.

National Allocation Decision (NTB): Decision for a planning period, consisting of the total quantity of allowances to be allocated, the allocations of allowances to individual installations and the part that is issued annually and if necessary the reserve(s) retained (Environmental Management Act section 16.29(1)).

NTB-I: NTB for the first planning period, running from 2005 to 2007.

NTB-II: NTB for the second planning period, running from 2008 to 2012.

Other allocation decisions: Individual decisions to be adopted periodically for the allocation of allowances. These decisions are used to make the allocation of allowances to new entrants (Environmental Management Act sections 16.32 and 16.33). For the second planning period the decisions relate to putting into operation after 31 December 2006. The allocation contained therein relates to the planning period 2008-2012.

Issuance: Giving of allowances to installations by means of crediting of allowances to the operator credit account, on the basis of the allocation, by the NEa (Environmental Management Act section 16.35).

Definitions from NAP-II

Statutory criteria: The criteria laid down in the Environmental Management Act and the Allowances Trading Decree that determine whether or not an installation falls under the emissions trading system.

Designated sectors: Named categories of activities contained in Annex I to the Allowances Trading Decree (categories 2 to 4). This does not therefore affect the installations that fall under that decree solely on the basis of the 20 MW_{th} criterion (category 1 of Annex I to the Allowances Trading Decree).

Reference period: Continuous period of five years, running from 2001 to 2005, from which the historic emissions are determined for NAP-II.

Basic years:

For existing installations: the three years from the reference period used for the determination of the historic emissions.

For the expansions and new installations: the years from the reference period used, if necessary extended with 2006, according to the manner of the NAP.

Benchmark

Determination of the best in the world in accordance with the rules of the Benchmarking Covenant.

Beta factor (in the case of BM companies)

The beta factor is the energy consumption of the best in the world divided by the actual energy consumption of the installation in the benchmark year. (In the case of the LTA and other companies the beta factor is used in a different way: see chapter 3.)

Existing installations: Installations which, including any expansions, had put their installation into operation before 1 January 2007.

CO₂ combustion emission: Emission of CO₂ that takes place on the exothermic reaction of a fuel with oxygen (see Allowances Trading Decree) from:

- energy conversion (these are units in which the fuel is converted into a different energy carrier (electricity, steam, hot water) that is utilised elsewhere (in or outside the installation).
- other combustion units (units in which a fuel is used to generate heat directly in the production process).

CO₂ process emission: Emission of CO₂, not being a CO₂ combustion emission, that occurs as a result of intended or unintended reactions between materials or in their transformation, including the chemical or electrolytic reduction of metal ores, the thermal decomposition of materials and the forming of materials intended for use as product or as raw material (see Allowances Trading Decree).

CO₂ emission factor: factor that is based on the carbon content, expressed as tonnes of CO₂/TJ for CO₂ combustion emissions (see Allowances Trading Decree).

C-factor: Correction factor that is determined by dividing the available quantity of allowances for a group of installations by the sum of individual calculations that underlie the allocation for separate installations. The C-factor is the last step in the determination of the allocation. It involves the multiplication of the individual calculation by this factor. NAP-II sets out to which groups the C-factor is applicable.

LTA

Long-term agreements (LTAs) on energy efficiency are agreements between the government and companies and organisations about the more effective and more efficient use of energy.

Expansions/New entrants, reserves and closure

Expansion: The person who falls under the statutory criteria and who has obtained a permit or an adjustment of the permit for greenhouse gas emissions on account of a change in the nature of the working of the installation or on account of an expansion of the installation from 2002 to 1 January 2007. The term expansions also means installations that have undergone a similar change but did not yet have an emission permit because in the first planning period (2005-2007) they were not yet participating in the emissions trading system or because they started participating in the system as completely new before 1 January 2007. The allocation of allowances to an expansion is contained in NAP-II.

New entrant: Significant expansion of an installation or entirely new installation after 31 December 2006. NAP-II states that certain threshold values must be exceeded if a new entrant wishes to be eligible for the allocation of (extra) allowances. The allocation of allowances to new entrants is also contained in NAP-II. New entrants will not be included in NTB-II. Other allocation decisions are applicable to them (Environmental Management Act section 16.32).

New entrant deposits: Quantity of allowances that is kept on deposit for the allocation to new entrants via allocation orders (Environmental Management Act section 16.29(1)(d)).

Legal deposits: Quantity of allowances that is kept on deposit for any extra allocation as a result of the outcome of legal proceedings (see Environmental Management Act section 16.29(1)(d)).

Closure: In the context of emissions trading an installation is regarded as closed if it is no longer covered by the statutory criteria. Decisive is whether an installation is still covered by emissions trading (the ban of Environmental Management Act section 16.5(1)). Closure only exists if an installation of a non-designated sector definitively closes a unit so that the installed capacity is limited to 20 MWth or less (this must still be included in the Environmental Management Act).

Relocation: takeover within a group of the production by an installation that is covered by the statutory criteria or an installation that is closed and that was also covered by the statutory criteria.

Annex 3: combustion values and emission factors

Fuel or energy carrier	Unit	Combustion value [in GJ/unit]	CO ₂ emission factor [tonnes CO ₂ /TJ]
		Default value	Default value
Natural gas Groningen quality	nm ³ _{ae} * 1000	31.65	56.8
Natural gas high calorie	nm ³ _{ae} * 1000	31.65	56.8
LPG	tonne	45.20	66.70
Blast furnace gas	GJ	1.00	247.4
Coke oven gas	GJ	1.00	41.2
Light oil (HBO)	tonne	42.70	74.30
Heavy oil	tonne	41.00	77.40
Coal	tonne	24.5	94.7
Petroleum cokes	tonne	35.20	100.80
Biomass	tonne	-	-
Hydrogen	nm ³ * 1000	10.78	-

Annex 4: overview tables

These tables will be delivered in the first week of October.