

## Summary

The Netherlands Court of Audit conducted an investigation between December 2000 and October 2001 into Dutch policy on the abatement of greenhouse gases over the period 1989-2001.

Since 1990, Dutch greenhouse gases emissions have increased by about 3%. In 2000, 80% consisted of CO<sub>2</sub> and 20% of other greenhouse gases such as methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O).

Since the publication of the first National Environmental Policy Plan (NEPP) in 1989, policy to cut greenhouse gases has featured more prominently on the domestic policy agenda. An important element of this policy is energy conservation. In 1990 an overall objective was set of cutting CO<sub>2</sub> emissions by 3% by 2000.

In 1997 an international agreement was signed within the framework of the 1992 Climate Convention: the Kyoto Protocol. As a result of this and other developments, a commitment was included in the coalition agreement of the second Kok government that greenhouse gas emissions would be reduced by 6% relative to the 1990 level by 2008-2012. Half of this reduction would be achieved in the Netherlands and the other half in other countries. It was agreed within the EU that member states would be allowed to achieve up to 50% of their reduction through flexible instruments in other countries.

The Court of Audit has considered whether the objectives of greenhouse gas policy were well-defined and verifiable, and whether there is sufficient good-quality information on the preparation and implementation of policy, on implementation performance and the effects of policy, and on how policy was coordinated.

The investigation was carried out by reference to the main socioeconomic sectors affected by the policy: industry, energy, transport, agriculture and households. A number of policy measures in each sector were analysed. The general fiscal instruments used to implement climate policy were also examined. The investigation considered all policy for the period up until the Dutch commitment under the Kyoto Protocol (1997) had been worked out, and the domestic part only since then.

The ministries involved in the policy to abate domestic greenhouse gas emissions are those of Housing, Spatial Planning and the Environment (VROM), Economic Affairs (EZ), Transport, Public Works and Water Management (V&W), Agriculture, Nature Management and Fisheries (LNV) and Finance. The Ministry of Foreign Affairs (BuiZa) is involved in the implementation of measures to abate greenhouse gases in other countries. Implementation organisations such as Novem and Senter were also involved in the Court of Audit investigation.

Concurrently with this investigation the Court of Audit began its own analysis, in association with the Agricultural Economics Institute, of the effectiveness of energy conservation policy in the glasshouse horticulture sector. This study will be published in due course.

#### *Main conclusions*

In September 2001 the National Institute of Public Health and the Environment (RIVM) published its *Milieubalans 2001*. This showed that CO<sub>2</sub> emissions were 8% higher in 2000 than in 1990. The Netherlands therefore failed to meet its objective of cutting emissions by 3% over this period. The Court of Audit investigation shows that on the basis of present policy it is not certain that the objective for domestic emissions for the period 2008-2012 will be met either. Present policy is characterised by a lack of coherence and deficiencies in policy preparation. Measures are also being taken which are not properly enforceable and which lack sanctions, and from which large-scale energy users are partly spared. The Minister of VROM, responsible for coordinating policy, has few instruments or powers to impose emission reduction measures on other ministries.

Policy also depends on external factors such as economic growth, international energy prices and other policy such as the liberalisation of energy markets. This can create uncertainty for industry, which may diminish investment in energy conservation.

The second main conclusion is that even if the domestic objective for 2008-2012 is met, it will not be possible to say whether this was a consequence of the policy adopted. There is no system for aggregating the results of domestic measures to give an overall result.

Other conclusions reached by the Court of Audit are set out below under the different headings of the investigation.

#### *Formulation of objectives*

As the issue of greenhouse gas reduction has taken on a higher political profile, its objectives have become less precise. Since 1995 the overall objective has no longer been clearly disaggregated sectorally. Since 1999 there have no longer been sectoral objectives for greenhouse gas reduction for which the Ministers concerned (EZ, LNV and V&W) can be held accountable, and the emphasis has been on objectives for (relative) energy efficiency. The objectives have since been weakened. The domestic objective for 2000 was to achieve a 3% cut in domestic CO<sub>2</sub> emissions relative to 1990. The new national objective for 2008-2012 relates to all greenhouse gases together, and half the target reduction may be implemented in other countries.

Furthermore, the objectives for the measures studied are not always well formulated. The objectives for the energy, transport, agriculture and household sectors are generally better formulated (SMART: specific, measurable, attainable, relevant, time-related) than those for the industry sector or for the cross-sectoral fiscal instruments.

#### *Policy preparation*

The preparation of greenhouse gas abatement policy has exhibited weaknesses across the board. The relevant policy documents are insufficiently underpinned with problem analyses, *ex ante* evaluations and cost-effectiveness analyses for the different sectors, etc. And many policy measures have little by way of supporting analysis. The few analyses carried out for the industry and transport sectors are of poorer quality than for the other sectors.

#### *Policy implementation*

Implementation of the measures to reduce domestic greenhouse gas emissions is behind schedule. Consider, for example the ambitious CO<sub>2</sub> reduction plan: of the €425 million earmarked for this policy from 1997, only €197.3 million had been committed by mid-2001, and only €21 million had actually been disbursed.

The information on implementation is adequate at all levels, and is of reasonable quality.

#### *Implementation performance and effects*

The objective for 2000 of a 3% cut in CO<sub>2</sub> emissions relative to 1990 was not achieved. In fact these emissions rose by 8%. The main sectoral objective was only met by the industry sector. The feasibility of the domestic emissions objective for 2008-2012 is regarded by the Court of Audit as uncertain. Within the overall objective, the individual objectives for the industry and agriculture sectors may well be feasible. There is relatively little information

about the implementation performance and effects of policy in the agriculture and household sectors. Of the information available, that for the energy, transport and agriculture sectors is of good quality.

### *Recommendations*

Because the feasibility of the domestic emissions objective for 2010 is uncertain, the Court of Audit considers it important that the government should define its climate policy and assign tasks, including coordination and enforcement, in greater detail in the near future. The coherence and consistency of policy should be strengthened, for example by halting the proliferation of different schemes and ensuring that the various policy objectives are expressed in the same units. This is also important in relation to the 'From policy budgets to policy accountability' exercise, in which great importance is attached to well-defined policy objectives.

Attention should be paid to a proper underpinning of policy and to the effects of policy. The influence of external factors and other (related) policies could also be explicitly looked at.

The quality of policy preparation could be improved in all the ministries concerned, particularly in regard to *ex ante* evaluations and cost-effectiveness analyses.

The Court of Audit also recommends that a system be developed for determining the impact of domestic policy on greenhouse gas emissions.

Finally, the Court recommends that the Minister responsible for coordination of climate policy be given more incisive instruments and powers so that he can take proper charge and can formulate a national emissions guideline based on the domestic objective, which can be extrapolated to the various sectors and ministries.

The Court of Audit also has a number of specific recommendations based on individual elements of the investigation.

It recommends, for example, that the Minister of Finance initiates, with the other relevant ministers, a study into the contribution made by various tax incentives schemes to reducing greenhouse gas emissions. The Ministers of EZ and VROM should establish a more direct relationship between energy conservation policy in industry, especially the benchmarking covenant, and climate policy.

As far as the energy sector is concerned, the Court recommends that the Minister of EZ credits the reduction in CO<sub>2</sub> emissions as a result of reduced electricity consumption to the sectors where this reduction was made. The Minister should also review the objectives for renewable energy.

The Minister of V&W should indicate, in the case of policy for which one of the aims is to reduce greenhouse gases, what the explicit effects will be in terms of reductions in greenhouse gas emissions. Reductions in the transport sector should target not only road traffic but also inland waterway vessels and mobile machinery.

It is also suggested that the Minister of LNV might evaluate any negative impact that delays in restructuring the glasshouse horticulture sector and the liberalisation of energy markets are having on the energy conservation measures specified in the glasshouse horticulture and the environment covenant. If there are such negative effects, the Ministry might consider taking other measures.

As far as the household sector is concerned, the Ministers responsible (VROM, EZ and Finance) should justify the payments being made to energy distribution companies for the (very high) costs of operating the energy premium scheme with calculations based on actual costs. The Court of Audit also recommends that the Minister of Finance asks the energy companies to give him access to the data on the regulatory energy tax (ecotax) collected, and to clarify how the proceeds of this tax are recycled back to households.

#### *Response of Ministers*

A response to the investigation was received from the Minister of VROM, as the coordinator for climate policy, on his own behalf as well as that of the Ministers of EZ, LNV, V&W, Finance and BuiZa, in a letter dated 27 February 2002.

The Minister indicated that he accepts the overall conclusion of the investigation that the policy objectives for 2000 were not met. Unlike the Court of Audit, however, he believes that the objectives for 2008-2012 will be met. He supports this belief by referring to the Climate Policy Evaluation Document, sent to the House of Representatives in February 2002. Furthermore a new baseline estimate of energy and emissions indicates that that the emissions reduction to be achieved by policy for 2010 should be 40 Mtonnes rather than 50

Mtonnes. According to the Climate Policy Evaluation Document, the reduction in domestic emissions of 20 Mtonnes can be achieved by the policy announced in the Climate Policy Implementation Document of 1999 (which entered partially into force after July 2001). The Minister states that a market in emissions reductions will be created by the Kyoto mechanisms once the Kyoto Protocol takes effect. In his view, this will be in time for the non-domestic reductions to be implemented. However it will be necessary, according to the Minister, for the effects of policy to be made sufficiently clear.

The government shares the opinion of the Court of Audit that *climate policy should be defined and tasks assigned*, including coordination and enforcement, in greater detail. It will therefore seek to disaggregate the national emissions allowance by formulating sectoral emissions targets. The concept of enforcement does not apply to some measures, for example market stimuli.

To reduce conflicts between the objectives of climate and other policy, the government considers that climate policy needs to be internalised and given an appropriate profile in the relevant ministries. To prevent an undesirable proliferation of different schemes and policy instruments, efforts will be made to disaggregate the national emissions limit into sectoral target values as mentioned earlier.

The Minister considers that policy has been properly prepared with the Climate Policy Evaluation Document and the Climate Policy Implementation Document.

The Minister acknowledges the importance of a better *understanding of the effects of policy* and has undertaken to seek to have sectoral studies carried out. To improve our understanding in the future, for example in 2005 when policy is evaluated, the policy performance data and evaluation scheme will be put into effect in the form of guidelines on the monitoring of climate measures.

The Minister does not feel the need for more incisive instruments for the *coordination of climate policy*. Sectoral target values as referred to earlier and transferring responsibilities to the various ministries should ensure a clear distribution of responsibilities between the ministries and a better understanding of the interrelationship between climate policy objectives and sectoral interests. According to the Minister, explicit account is taken of any significant climate policy impacts when decisions are being made in other policy areas in the

various ministries. The Minister will consider a national emissions guideline in the light of the sectoral emissions targets and the possible introduction of emissions trading.

#### *Sector-specific observations*

The government accepts the recommendation that research should be carried out into the contribution made by *fiscal policy* in reducing greenhouse gas emissions.

The Minister indicates that the severity of the energy conservation policy for *industry* will be determined by climate objectives. Where appropriate the instruments will be oriented towards CO<sub>2</sub>.

The Minister regards the objective for *renewable energy* for 2010 as realistic. The supply of renewable energy will be promoted by resolving problems at local level. The Energy Report 2002 announced that ways will be looked at of reducing investor uncertainty about renewable energy.

As far as the *transport* sector is concerned, the effects on greenhouse gas emissions of policy to reduce congestion will be allowed for as far as possible in policy preparation and decision-making. The Minister also announced measures to reduce CO<sub>2</sub> emissions in the transport sub-sectors where these are still lacking (inland navigation and mobile machinery).

In the case of the *agriculture* sector, the Minister announced that in 2002 consideration will be given to whether the instruments adopted for glasshouse horticulture should be reassessed.

For the *household* sector, the Minister does not wish to require energy companies to keep separate records of energy consumption for households and companies due to the high cost involved.

#### *Afterword by the Court of Audit*

Given the findings of its investigation the Court of Audit is not entirely convinced by the Minister's assurance that he expects the policy objective for 2008-2012 to be met.

A report prepared by the RIVM and the Netherlands Energy Research Foundation (ECN) as a basis for the Climate Policy Evaluation Document concluded that the estimates of the effects on CO<sub>2</sub> emissions of policy currently in preparation are subject to uncertainty. The

Ministry bases its assumptions on the most optimistic estimate of the ECN and RIVM. These institutes themselves regard it as unlikely that this level will be realised, however.

Furthermore, much of the policy needed to achieve that part of the Kyoto objective to be realised in other countries has yet to take effect.

These points strengthen the Court of Audit in its conclusion that it is not yet certain that the Kyoto objective will be achieved. This uncertainty is only increased by the fact that the effects of pre-July 2001 policy - which also affect whether the Kyoto objective is met - have not been established.

The Court of Audit is pleased that the government intends to apportion the national emissions allowance between the sectors, as sectoral targets. It regards this as an important step in integrating climate policy into the sectors and ministries. The development of sectoral target emissions, which the Court would regard as objectives for the sectors, will make for a more consistent policy. It urges that climate policy be given an appropriate profile in the ministries.

The Court of Audit does not share the Minister's view regarding enforcement and sanctions. There is an ongoing need to address the question of eliminating uncertainty about the effectiveness of voluntary instruments. The Court considers enforcement to be a relevant issue for subsidies and tax concessions as well.

The Court of Audit accepts the Minister's observation that there was a marked improvement in the underpinning of policy over the period studied. But it nevertheless urges that *ex ante* evaluations and cost-effectiveness analyses be carried out for each measure considered.

If a sectoral approach is taken, the Court of Audit believes it would be more informative to impute CO<sub>2</sub> emissions partly to the end-users of the energy instead of only to the producers in the energy sector. This is important for an emissions trading system, and in setting and monitoring sectoral emissions targets.

The Court of Audit supports the principle that the effects of transport policy initiatives in terms of greenhouse gas emissions should be estimated, and should feed into the decision-making process. It believes that when relevant policy decisions are made, or there are

changes or delays therein, the impact in terms of meeting the Kyoto targets and derived sectoral targets should be determined.

Finally the Court of Audit advocates that a systematic evaluation of the policy instruments in the different sectors be performed.