MNP report 500096001

EU SDS: ingredients for the 2006 revision

W. de Ridder, L.G. Wesselink

Contact: W. de Ridder Netherlands Environmental Assessment Agency Wouter.de.Ridder@mnp.nl



Netherlands Environmental Assessment Agency (MNP), P.O. Box 303, 3720 AH Bilthoven, the Netherlands Telephone: +31-30-274 274 5; Fax: +31-30-274 44 79; www.mnp.nl/en

Summary

The current EU strategy for sustainable development comprises three separate components. Collectively, these comprise a broad spectrum of sustainable development goals, ranging from economic growth and more jobs to halting biodiversity loss and attaining millennium development goals such as poverty reduction. On paper, the entire EU Sustainable Development Strategy (EU SDS) reflects the different views on sustainable development. In reality, however, it is the so-called Lisbon strategy, whose goal it is to transform Europe into the most competitive area of the world by 2010, that dominates policy development in the EU. This focus on the Lisbon strategy is motivated by the assumption that competitiveness is a precondition for sustainable development. However, historical trends show that more growth has thus far not contributed to attaining the sustainable development goals for protection of the world's climate and biodiversity. The current EU SDS is not clear about the extent to which such trade-offs are accepted or about how further trade-offs will be avoided. There are also indications that large groups of EU citizens do not necessarily desire the EU to focus on the Lisbon strategy in favour to the other components of the EU SDS. Revising the EU SDS provides an opportunity to explicitly subordinate the Lisbon strategy to the EU SDS by creating one single document, endorsed and monitored by the EU Council, in which all goals for sustainable development are presented integrally. This document should then describe how the focus on Lisbon will contribute to sustainable development and how tradeoffs are dealt with. Trade-offs should ideally be scientifically underpinned and choices based on broad societal consultation.

Anticipating the European Council's revision of the EU's Sustainable Development Strategy (EU SDS) in June 2006 we intend, in this paper, to explore the EU SDS and the EU current policy focus considering different perspectives on sustainable development. The paper will be concluded with recommendations for revising the current EU SDS.

The EU SDS: three components to achieve ambitious sustainable development goals

The EU SDS comprises three components, each describing specific goals and means for sustainable development. The first component is an agenda for socio-economic reforms in the EU, aimed at creating a dynamic knowledge-based competitive economy showing strong growth (3% per year) and providing more and better jobs (70% employment by 2010). This agenda is known as the Lisbon Strategy or Lisbon agenda, since it was adopted at the Lisbon Council in 2000. The second component of the EU SDS consists of a number of environmental priorities, including climate change and loss in biodiversity. These environmental priorities were considered as a serious threat to sustainable development and therefore added to the socio-economic reform agenda at the Gothenburg Council in 2001. The 6th Environmental Action Programme (CEC, 2001a) and 'thematic strategies' developed under this programme elaborate on such goals as 2º C maximum temperature increase over pre-industrial levels, and bringing to a halt the loss of biodiversity by 2010. Means to reach these goals were also outlined. The third component of the EU SDS is the so-called external dimension of the strategy (CEC, 2002), addressing global issues such as poverty and hunger. The external dimension was adopted at the Barcelona and Seville European Councils in 2002, and stressed the commitment of the EU to various international agreements, such as the Monterrey conference on financing for development, the Doha development agenda and the Millennium Development Goals.

With its many different goals, the EU SDS can be considered an ambitious and multifaceted strategy with varied means for working towards these targets. The Lisbon agenda uses both internal market and socio-economic reforms to realise more growth and more jobs as a means for sustainable development. Environmental regulations and policy are used as a means to address environmental threats to sustainable development, while international cooperation and commitment to international agreements and negotiations are introduced to address global sustainability issues.

The EU SDS embraces different world views on sustainable development

Applying its ambitious and broad approach, the EU SDS incorporates different views on how sustainable development can best be realised. And many different views do indeed exist here. The Netherlands Environmental Assessment Agency (MNP) has studied these different views, clustering them into four characteristic 'world views' (see *Four world views on sustainable development* in the text box). A world view is a combination of ideas on ends (i.e. goals) and means (i.e. ways to realise goals) for achieving sustainable development. Although more or less the same goals are aimed at in many world views (e.g. poverty reduction, jobs for everybody, wealth and a healthy environment), the crucial differences between the world views are found in the prioritisation between different goals, e.g. the extent to which certain goals can be traded-off against other goals. Opinions on the best way to reach the goals also differ; these range from progressive globalisation and individualisation to regional development and solidarity.

Four world views on sustainable development

The Netherlands Environmental Assessment Agency (MNP) has, in its 'sustainability outlook', used the concept of different views on sustainable development to design a framework to structure these views (MNP, 2004). Several surveys held under the Dutch population have resulted in four clusters of world views best distinguished by two axes. One axis represents the scale level (local/global), and the other the different opinions with respect to how means (resources, money etc.) should be used (efficiency/equity).

Four clusters emerge, showing the following characteristics:

- *Global Market* (A1): globalising economy free trade, efficiency, strong economic growth, individualisation, privatisation
- Safe Region (A2): block formation, trade with partners, efficiency, strong economic growth, individualisation, privatisation
- *Global Solidarity* (B1): global institutional cooperation, rules and conventions, solidarity, tempered economic growth, intergenerational and international responsibility, role for government
- Caring Regions (B2): local cooperation, rules and conventions, solidarity, tempered economic growth, community spirit, role for government

Characteristics of the four world view clusters on sustainable development

Globalisation

Efficiency 🗲	GLOBAL MARKET (A1) • Global economy • Free trade • Efficiency • Strong economic growth • Individualisation	GLOBAL SOLIDARITY (B1) Global institutional cooperation Rules and conventions Solidarity/equity Tempered economic growth International responsibility
	 SAFE REGIONS (A2) Block formation Free trade with partners Efficiency Strong economic growth Individualisation 	 Solidarity CARING REGIONS (B2) Local cooperation Rules and conventions Solidarity/equity Tempered economic growth Community spirit
Regionalisation		

Figure 1: Characteristics of the four world view clusters on sustainable development derived from public surveys (MNP, 2004).

Using the four world view clusters, we see that on paper the current EU SDS could be considered as an approach to sustainable development that builds on different world views (illustrated in Figure 2). The figure shows the different components of the EU SDS assigned to four quadrants. This assignment was motivated by the following:

• The Lisbon Strategy aims at higher EU competitiveness (more market liberalisation, more growth and jobs, more R&D investments etc.) as a means to achieving sustainable development. This approach to sustainable development corresponds most to the efficiency-based world views, where free trade, strong economic growth and individualisation are key characteristics (hence A). Furthermore, with the Lisbon Strategy, the EU aims to ensure that it reaps the benefits from further globalisation,

while minimising the negative impacts– in line with both the more global and locally oriented world views (hence A1 and A2).

- The environmental priorities are devoted to tackling environmental threats to sustainable development. This is done mainly via environmental policy, such as the 6th Environmental Action Programme and its thematic strategies. This approach to sustainable development corresponds best with the 'global solidarity' and 'caring regions' world views, where a more prominent role for government regulation is granted as compared to the other two world views, and where the EU takes its responsibility for solving local as well as global environmental problems (hence B1 and B2).
- In the external dimension of the EU SDS, various international agreements to which the EU is committed, are summarised, particularly the Monterrey conference on Financing for Development, the Millennium Development Goals (MDGs), the WTO negotiations and the Doha Development Agenda (CEC, 2002). These commitments are obviously globally oriented (hence A1 and B1). The MDGs, Doha and Monterrey aim to improve the living conditions of the poor; this can be considered a form of equity/solidarity, shown by the richer parts of the world towards the poorer parts (hence B1). The WTO approach to sustainable development is to liberalise trade as a means to improve welfare of people (typically A1).

A general positioning of the different components of the EU SDS with respect to the four world views

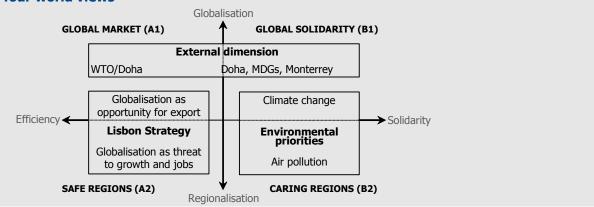


Figure 2: A general positioning of the different components of the EU SDS with respect to the four world views. Assigning EU SDS components to each quadrant is done on the basis of the main characteristics of the quadrant.

Note that even though the EU SDS officially comprises the different components mentioned, this does not necessarily mean that the EU SDS is always considered in the overarching policy context. The influence of the EU SDS on the different terrains of policy making is not addressed in this paper.

The Lisbon component dominates

The components of the EU SDS tend to go their own way; it has also become clear that different levels of importance are attached to each one. The Lisbon component of the EU SDS is currently dominant, at least within the European Commission, the European Council and the Member States. This conclusion is based on a number of observations. The first is about the policy level committed to the different components, the second about the way the different components are being implemented and the third about the monitoring system for the entire EU SDS.

Commitment

The entire EU SDS is endorsed at the highest policy level in Europe, i.e. the European Council of the heads of states. However, the Lisbon component is the only part of the EU SDS for

which the plan to reach the objectives and the monitoring system for follow- up on progress are discussed annually at the highest level. This is not the case for the other two components or the EU SDS as a whole.

Implementation

The EU SDS has to be implemented by the European Commission (EC) and the Member States. Only for the Lisbon component does there exist an obligation for Member States to report on what they do to fulfil the Lisbon objectives. Furthermore, the priorities set for policy development by the EC are dominated by the Lisbon agenda, as can be literally observed in the Commission's 'Strategic Objectives 2005–2009' (CEC, 2005). This is particularly the situation since the 're-launch' of the Lisbon strategy in 2005. The President of the EC devised the following metaphorical allusion to show the focus on competitiveness, and jobs and growth, in favour of focus on social or environmental issues:

'It is as if I have three children – the economy, our social agenda, and the environment. Like any modern father – if one of my children is sick, I am ready to drop everything and focus on him until he is back to health. That is normal and responsible. But that does not mean I love the others any less!' (Barroso, 2005).

Monitoring system

The indicator system used for yearly progress reporting for the EU SDS has gradually (since 2003) been re-focused on the Lisbon strategy. Some environmental indicators still populate the list, but are outnumbered by economic and socio-economic indicators. Indicators for the external dimension of the EU SDS are lacking. Council conclusions since the Barcelona Council in 2002 reflect this unbalance: i.e. there are significantly fewer discussions on the environmental and external dimensions of the EU SDS than on the socio-economic dimension.

Prioritising for sustainable development

It is impossible to equally and simultaneously strive for, and realise, all goals set out in the EU SDS. There are simply too many goals, and certain goals might even be conflicting. Prioritisation of sustainable development goals is needed, and may, consequently, necessitate trying to avert trade-offs, or accepting them if they cannot be avoided. A strategy should fill a gap here by providing a framework to move forward, with choices about what to do and not to do (see *Why a strategy?* in the textbox). However, since the Lisbon focus is not the result of explicit choices documented in the EU SDS, this could be risky when there are trade-offs (and there are, as explained in the next section), and when these trade-offs are not explicitly addressed.

Why a strategy?

Strategies aim to provide organisations with a framework to move forward with a sense of direction, purpose and urgency. The origins of the term 'strategy' are found in ancient Greek and relate to 'generalship' and 'manoeuvring an army'. The term 'strategy' entered the business world only after the Second World War. Since the 1970s, models for formulating and implementing business strategies have grown. An interesting and influential management model is Mckinsey's model, which suggests that real value in an organisation is to be gained by looking at shared values (super-ordinate goals) that rise above profit targets and growth objectives by relating the goals of the firm to deeper human needs and principles.

According to today's influential business strategists, strategies are about the ability to identify change when it occurs (Henry Mintzberg), decisions on what not to do and about the whole and not its component parts (Michael Porter), revolution (Gary Hamel) and transformation and breakthrough (Richard Pascale).

Source: Nortion and Irving, 1998; Peters and Waterman, 1982

The ecological risks of Lisbon dominance

Focusing on the Lisbon Strategy until 2010 could be the best thing to do for sustainable development, when high competitiveness is indeed a precondition for sustainable development. After all, a competitive Europe could, for example, provide the necessary

capital for technological innovation for leading to the required decoupling of economic growth from resource use and pollution. The Lisbon focus is therefore not necessarily *incompatible* with the other goals for sustainable development, but further growth could jeopardise sustainable development. We discuss two main environmental threats to sustainable development identified by the EU SDS: climate change and the loss of biodiversity, both of which have thus far been traded off against economic growth.

Climate change

Figure 3 shows the trend of worldwide greenhouse gas emissions (GHG emissions) since 1970 and also the worldwide gross domestic product (GDP, a common measure of economic growth). Both are seen to have continuously increased. Even though the intensity decreased over time (i.e. relatively less GHG emitted per dollar earned), still, every increase in dollars earned has led to more GHG emissions. In other words, global GHG emissions are coupled to global economic growth. If the 2° C target¹ to which the EU is committed is to be achieved with a probability of more than 85%, global GHG emissions may not increase beyond 2015, followed by reductions by as much as 40 to 55% in 2050 compared to 1990 levels (Elzen and Meinshausen, 2005: 30). This will mean a drastic trend reversal at relatively short notice: an absolute decoupling of GHG emissions from economic growth by 2015. Ongoing increase in GHG emissions up to 2020–2025 will lead to a doubling of maximum emission reduction rates required to reach the 2° C target at the end of the century, with very high costs being most likely (Elzen and Meinshausen, 2005: 30). How much the EU has to contribute to these global GHG emissions reductions is unknown and will depend, among other aspects, on GHG emission reduction obligations for other world regions. The task will surely be significant. If the world fails to achieve the 2° C target, the chances of significant economic damage from climate change impacts will increase. And even if the target is met, a 2° C temperature increase will still bring about significant risks, which could mean an additional motivation for not further delaying the required trends reversal (Figure 3).

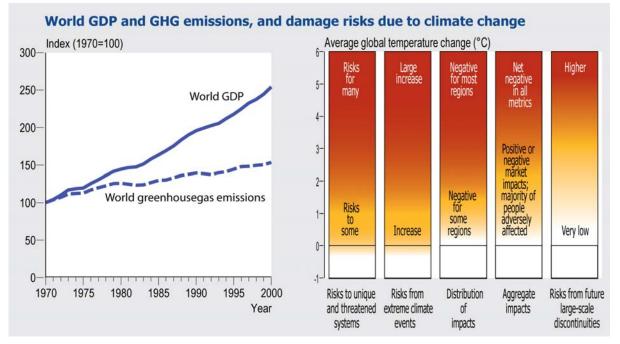


Figure 3: Global GDP (in constant 1995 dollars) and GHG emissions (in CO_2 equivalents) from 1970 to 2000 (MNP and Worldbank) and risk profile for damage caused by climate change for different levels of temperature increase (adapted from IPCC, 2001).

GHG emissions from the 15 old Member States dropped between 1990 and 2000, but have risen since 2000 (EEA, 2006). If the EU continues to focus on growth without explicitly attaching the condition that such growth should result in an absolute decoupling of GHG

¹ A maximum global temperature increase of 2 degrees Celsius over pre-industrial levels (OJ L 242/1, Article 2, paragraph 2)

emissions from growth, there is a high risk that the Lisbon focus will steer the EU further away from its climate change goals (see *The possible environmental effects of the Lisbon Strategy* in the textbox).

The possible environmental effects of the Lisbon Strategy

The Netherlands Bureau for Economic Policy Analysis (CPB) has analysed that achieving the targets of the Lisbon Strategy will lead to 12-23% more growth in 2025 and approximately 11% more jobs (CPB, 2006). The strongest effects are expected in the realisation of the employment- (6.3-9.2%) and R&D-objectives (3.5-11.6%).

The higher rate of economic growth will lead to an increase in the environmental impact if extra growth is not accompanied by sufficient eco-efficiency improvements and changes in the production structure towards less polluting sectors.

If all the five Lisbon Strategy targets are reached, the Lisbon Strategy might improve eco-efficiency. However, when looking at the employment objective, the CPB shows that the Lisbon Strategy will lead to lower wage rates and lower labour productivity. The lower wage rate reduces the production costs on the currently installed machines, which results in a postponement of replacement investments. Higher economic growth on the other hand could lead to extra investments in new and more efficient machines. Still, as it turns out, the latter effect is outweighed by the former effect, which means that the net effect of the employment objective could be a slowing down of eco-efficiency improvements. The opposite holds true for the R&D objective, which can obviously lead to more eco-efficient production technologies.

Achieving the Lisbon objectives also leads to changes in the production structure. The overall effect results in a higher growth in polluting sectors than in the commercial and public services. The employment objective, in particular, leads to relatively high growth rates in the most polluting sectors such as agriculture and low-tech manufacturing. This indicates that environmental pollution may increase more than proportionally with economic growth.

The net effect of the Lisbon Strategy on the environmental impact is undetermined, but given the higher level of economic growth and the less definite effects of eco-efficiency improvements and production structure there is a real possibility of increasing environmental pressure. On the other hand, the accelerated economic growth obviously also generates additional resources that can be used for expenditures on pollution prevention and control.

Biodiversity

Based on IUCN–World Conservation Union criteria for threats of extinction, between 10% and 50% of well-studied higher taxonomic groups (mammals, birds, amphibians, conifers and cycads) are currently threatened with extinction, (MEA, 2005). Approximately 147 vertebrates and 310 invertebrate species that occur in the EU25 are considered to be globally threatened (EEA, 2005: 280).

Changes in biodiversity due to human activities have been more rapid in the past 50 years than at any time in human history. This is a process that has been driven by increased and intensified land use through urbanisation, agriculture, forestry, fishery and pollution (MEA, 2005; Brink et al., 2006, in prep.). A century of growth in the welfare in the EU15 has meant a loss of approximately 65% of the original biodiversity on land, as illustrated in Figure 4. In the Netherlands, a densely populated area, this loss is even greater (over 80%). Worldwide, 70% of the original biodiversity on land still remains, but in a moderate economic scenario this is expected to fall to 63% in 2050 (Brink et al., 2006, in prep.). The EU's future impact on biodiversity is expected to increase with ongoing economic growth through import of products and resources either within or outside the EU (Brink et al., 2006, in prep.).

There is a high degree of uncertainty with respect to how bad it is that species become extinct and to how many and what kind of species may be lost without threatening nature and humanity. Notwithstanding these uncertainties, the European Council has agreed on the objective to halt the loss of biodiversity by 2010 (European Council, 2001: paragraph 31).

If the EU continues to focus on growth without explicitly attaching the condition that such growth should not cause a further decline in biodiversity, there is a high risk that the Lisbon focus will steer the EU further away from its biodiversity goals.

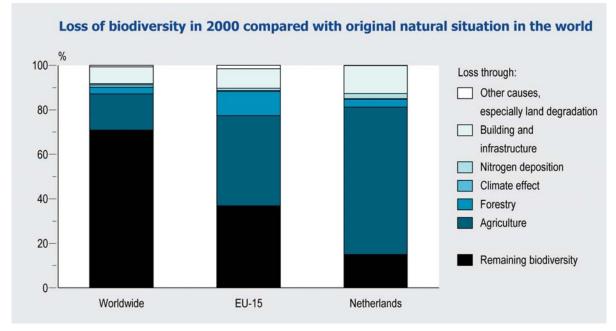


Figure 4: Loss of biodiversity in 2000 compared with the original natural situation in the world, Europe and Netherlands (MNP, 2004). Biodiversity loss has been expressed as mean abundance of the original species compared to the natural or low-impacted state, implying that many characteristics have become much less abundant or even extinct, while a few other species have become much more abundant and widespread.

Both examples show that thus far growth has not brought us closer to the EU SDS goals set for climate change and biodiversity. There has been a significant trade-off between economic growth on the one hand and climate change and loss of biodiversity on the other. Focusing on growth and jobs is therefore risky, when potential trade-offs with other EU SDS goals are not specifically dealt with.

EU citizens pursue additional goals to Lisbon

Exactly what sustainable development goals should be prioritised and what trade-offs are acceptable can be derived from science and from citizen's viewpoints. As shown in the previous section, analysis reveals that prioritising growth and jobs will not result in realising the goals set for climate and biodiversity unless a significant trend reversal occurs. It would be interesting to analyse what priorities EU citizens set for sustainable development and the acceptability of a trade-off between conflicting goals. Unfortunately, EU-wide public surveys with respect to what EU citizens consider the most important sustainable development goals are non-existent. But there are different sources from which views on sustainable development of participants in the survey, from large to small.

Eurobarometer

The Eurobarometer, an EU-wide opinion poll surveying approximately 25,000 persons in August 2005, shows the two most urgent problems identified to be unemployment and economic performance. This result suggests a perfect alignment with the Lisbon focus. However, the survey asked about short-term concerns and not longer term concerns, typical for sustainable development. Neither did it address the question of acceptable trade-offs between economic performance and employment. Nevertheless, we can conclude here that employment and economic performance are likely to be found among the short-term priorities of EU citizens for sustainable development.

World view survey

This world view survey, first held in the Netherlands, formed the basis for the characteristic world views as described earlier. It was subsequently conducted in six EU Member States.

Preliminary results showed that a majority of the EU citizens surveyed adhere to world views on sustainable development that more closely correspond to environmental and external components of the EU SDS than to the Lisbon Strategy. As many as 75% of the surveyed Europeans feel more associated with the equity than the efficiency world views; in other words, with such characteristics as institutional cooperation, solidarity, responsibility, rules and conventions and tempered economic growth (Figure 5). Although this survey covers only six member states and just over 3600 persons, it indicates the possibility of large groups of EU citizens more in support of an alternative approach to sustainable development than seen in the Lisbon focus.



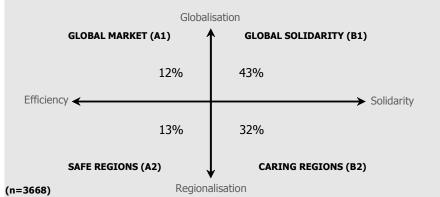


Figure 5: Shares of survey participants (n=3668) showing adherence to the different views on sustainable development in six EU countries in 2005 (France, Germany, Italy, Netherlands, Spain and the UK) (Verhue and Adriaansen, 2005).

EUSDS public consultation

Another source of public opinion on the goals for sustainable development is the public consultation organised for the EU SDS (1100 respondents). The overall result of this review is that most respondents supported the goals set out in the EU SDS, with the industrial sector traditionally responding that the EU SDS should focus more on the economy, and environmental NGOs responding that the environment should have higher priority.

Although no clear answer can be given to the question on what priorities EU citizens set with respect to sustainable development and the acceptability of a trade-off between conflicting goals, tentatively it can be concluded that although the Lisbon Strategy is supported by EU citizens, there are possibly large groups of citizens who do not necessarily want the EU to focus on Lisbon but on the other components of the EU SDS.

The EU SDS could be more explicit on priorities for sustainable development and trade-offs

What has been demonstrated here is that EU SDS objectives and the approaches for moving towards these objectives are broad, covering the wide range of views on sustainable development found in society. However, at the moment it is the Lisbon agenda for socio-economic reforms, more growth and jobs that dominates the policy agenda in the EU. This focus is risky considering that 'growth and jobs' have, to date, not gone hand in hand with reduction in GHG emissions or halting the loss of biodiversity, for example. A continued focus on the Lisbon Strategy could thus result in a trade-off between economic goals and other EU SDS objectives. There are, however, large groups of citizens in the EU who would like to see the non-Lisbon goals of the EU SDS receiving more serious attention.

If, as the European Commission puts it, Lisbon's jobs and growth are 'the most urgent issue facing Europe today', but at the same time 'means to an end rather then ends in themselves' (CEC, 2005: 3ff), then a revised EU SDS could be more explicit about how the Lisbon focus

will not restrain other sustainable development goals. With the help of the EU SDS review, the EU is now in a position to offer an explicit explanation on the relationship of this Lisbon focus to sustainable development. The EU SDS could then more specifically address the question of how the Lisbon focus will contribute to reaching other goals for sustainable development: what trade-offs are acceptable and exactly how are unacceptable trade-offs going to be avoided.

As an initial step, the Lisbon Strategy could be explicitly subordinated to the EU SDS by creating one single document, endorsed and monitored at the highest EU policy level, in which all goals for sustainable development are presented integrally. The next step could be to explicitly describe how the Lisbon focus will contribute to sustainable development and either how certain trade-offs are to be avoided or to what extent are they to be accepted. Ideally, trade-offs will be based on scientific underpinning and decisions based on broad societal consultation within the EU.

Having the Lisbon and EU SDS objectives integrated into one single document will likely make it easier to use the EU SDS as a framework for policy making, e.g. during impact assessments. This integration will also prevent certain sustainable development goals from becoming inexplicitly sidelined.

References

- Barosso, J.M., 2005. President of the European Commission, for the European Parliament: 'Working together for growth and jobs: a new start for the Lisbon Strategy', 02-02-2005 (http://europa.eu.int/rapid/pressReleasesAction.do?reference=SPEECH/05/67&format =HTML&aged=0&language=FR&guiLanguage=en)
- Brink, B. ten, R. Alkemade, M. Bakkenes, B. Eickhout, M. de Heer, T. Kram, T. Manders, M. van Oorschot, F. Smout, J. Clement, D. van Vuuren, H. Westhoek, L. Miles, I. Lysenko, L. Fish, C. Nellemann, H. van Meijl and A. Tabeau (2006). Cross-roads of Planet Earth's Life. Exploring means to meet the 2010-biodiversity target. Currently under review by the secretariat of the Convention for Biological Diversity (CBD).
- CEC (2001a). Environment 2010 Our future, our choice. Communication from the Commission to the Council, the European Parliament, the Economic and Social Committee and the Committee of the Regions on the sixth environment action programme of the European Community. Commission of the European Communities (CEC). Brussels.
- CEC (2002). Towards a Global Partnership for Sustainable Development. Communication from the Commission to the European Parliament, the Council, the Economic and Social Committee and the Committee of the Regions. Commission of the European Communities (CEC). Brussels.
- CEC (2005). Strategic objectives 2005 2009. Europe 2010: A Partnership for European Renewal. Prosperity, Solidarity and Security. Communication from the President in agreement with Vice-President Wallström. COM(2005) 12 final. Brussels.
- Elzen, MGJ and M Meinshausen. Meeting the EU 2° climate target: global and regional emission implications. Netherlands Environmental Assessment Agency (MNP). Bilthoven, the Netherlands.
- European Council (2000). Presidency conclusions. Lisbon European Council, 23 and 24 March 2000 (http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/ec/00100r1.eno.htm).
- European Council (2001). Presidency conclusions. Götenburg European Council, 15 and 16 June 2001 (http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/ec/00200r1.en1.pdf).
- European Council (2002). Presidency conclusions. Barcelona European Council, 15 and 16 March 2002 (http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/ec/71025.pdf).
- European Council (2005). Presidency conclusions. Brussels European Council. 22 and 23 March 2005. (http://ue.eu.int/ueDocs/cms_Data/docs/pressData/en/ec/84335.pdf).
- EEA (2005). The European Environment State and outlook 2005. European Environment Agency (EEA). Copenhagen.
- EEA, 2006. Development of EU-15 greenhouse gas emissions from base year to 2003 and distance to the (hypothetical) linear EU Kyoto target path (excluding flexible mechanisms). European Environment Agency (EEA), Copenhagen (http://dataservice.eea.eu.int/atlas/viewdata/viewpub.asp?id=1456).
- IPCC (2001). Climate Change 2001: Synthesis Report. Intergovernmental Panel on Climate Change (IPCC). Cambridge University Press. United Kingdom.
- MEA (2005). Ecosystems and Human Well-being: Biodiversity Synthesis. Millennium Ecosystem Assessment (MEA). World Resources Institute, Washington, USA.
- MNP (2004). Kwaliteit en toekomst. Verkenning van duurzaamheid. Milieu- en Natuurplanbureau (MNP). Bilthoven, The Netherlands (summary: http://www.rivm.nl/bibliotheek/rapporten/500013010.pdf).
- Norton, B. and R. Irving (1999). Understanding Strategy in a week. Hodder & Stoughton, London.
- Peters, T. and P. Waterman (1982). In Search of Excellence Lessons from America's bestrun companies. Harper Collins, New York.
- Verhue, D. and M. Adriaansen (2005). Waarden en wereldbeelden in Nederland en Europa. Veldkamp (p3917_1). Amsterdam.