

HEINONLINE

Citation: 10 Utrecht L. Rev. 60 2014



Content downloaded/printed from
HeinOnline (<http://heinonline.org>)
Thu Oct 30 12:36:54 2014

-- Your use of this HeinOnline PDF indicates your acceptance
of HeinOnline's Terms and Conditions of the license
agreement available at <http://heinonline.org/HOL/License>

-- The search text of this PDF is generated from
uncorrected OCR text.

-- To obtain permission to use this article beyond the scope
of your HeinOnline license, please use:

[https://www.copyright.com/ccc/basicSearch.do?
&operation=go&searchType=0
&lastSearch=simple&all=on&titleOrStdNo=1871-515X](https://www.copyright.com/ccc/basicSearch.do?&operation=go&searchType=0&lastSearch=simple&all=on&titleOrStdNo=1871-515X)

This article is published in a peer-reviewed section of the Utrecht Law Review

Sustainable Development in the EU: Redefining and Operationalizing the Concept

Sander R.W. van Hees*

1. Introduction

Currently, neither EU law nor EU policy clearly explains what the concept of sustainable development means and how it must be put into practice. This is a surprising observation in times when sustainable development is more topical in the EU than it has ever been.¹ As a result of this lack of clarity there is a risk that EU policy decisions, legislative proposals, and Member States' policies and legislation will not be designed in conformity with the objectives of sustainable development. This could seriously frustrate the EU's commitment towards sustainable development.

This article aims to clarify the concept of sustainable development by *first* explaining the guidance which EU law and policy already offer. *Subsequently*, it will propose (I) a more workable definition² of sustainable development than the one which is currently used, and (II) a framework of application for sustainable development. The working of this framework will be demonstrated by applying it to a decision in the field of energy policy. The article will conclude with a critical note on the effectiveness of the EU's current approach to sustainable development.

The first subsection of this introduction explains why there is a need to redefine and operationalize the sustainable development concept. The last subsection gives an overview of how the rest of this article will be set up.

1.1. Why is it necessary to enhance the understanding of sustainable development?

A. Sustainable development plays an important role in EU law

The concept of 'sustainable development' is frequently referred to in the law of the European Union. The Treaty on the European Union (TEU) mentions sustainable development as one of the goals of the

* Sander van Hees LL.M is a researcher at the Utrecht Centre for Water, Oceans and Sustainability Law and a lecturer of European Law at the Europa Institute, Utrecht University (the Netherlands). E-mail: s.r.w.vanhees@uu.nl.

1 The Europe 2020 Strategy which uses the motto 'A strategy for smart, sustainable and inclusive growth' could serve as an example of the topicality of sustainable development (Communication from the Commission 'Europe 2020, A strategy for smart, sustainable and inclusive growth', COM(2010) 2020 final). Also the EU's new environmental action plan contains many references to sustainable development (Decision No. 1386/2013/EU of the European Parliament and of the Council on a General Union Environment Action Programme to 2020 'Living well, within the limits of our planet', OJ L 354, 28.12.2013, pp. 171-200).

2 Note that the aim of this article is not to propose a material *change* to how the EU approaches the sustainable development concept. It rather proposes a new definition and framework of application which accurately *reflect* the EU's *present approach* towards sustainable development.

Union³ and the preamble to the Charter of Fundamental Rights (CFR) (which is binding on the EU)⁴ states that the EU should promote⁵ sustainable development. According to Article 37 CFR sustainable development should also be taken into account in policy-making:

‘A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development.’⁶

The Treaty on the European Union and the CFR illustrate that sustainable development is meant to play a central role in the rules and policies of the EU.

Secondary legislation, such as the Birds Directive⁷ and the Ecodesign Directive,⁸ use similar terminology as the CFR. For instance, the Ecodesign Directive states:

‘[This Directive] contributes to sustainable development by increasing energy efficiency and the level of protection of the environment, while at the same time increasing the security of the energy supply.’⁹

These directives have sustainable development as one of their goals, which exemplifies sustainable development’s important role in EU law.

B. The lack of a definition of sustainable development in EU law

Even though the above-stated legal documents refer to sustainable development, they do not clarify how the concept should be defined or implemented. Neither do other sources of EU law.¹⁰ Some authors refer to two Council regulations adopted in 2000 which *do* give a definition of sustainable development (see Section 3.1 of this article). None of these regulations are, however, still in force.¹¹ The lack of a definition in the TEU and the Treaty on the Functioning of the European Union (TFEU) might not be surprising as the phrase ‘sustainable development’ was introduced by the Treaty of Amsterdam as a result of political compromise rather than due to more substantive arguments.¹² The Charter of Fundamental Rights and the two directives mentioned above were, however, adopted long after the concept of sustainable development gained further acknowledgement and importance within the EU.¹³ The lack of guidance in these legal sources is therefore more surprising.

3 Art. 3(3) TEU states: ‘The Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance.’

4 The Charter is binding on the EU institutions, bodies, offices and agencies and on the Member States when they are implementing Union law. See: Charter of Fundamental Rights of the European Union, Art. 51; Treaty on European Union, Art. 6(1).

5 The preamble to the CFR states: ‘(...) The Union (...) seeks to promote balanced and sustainable development and ensures free movement of persons, services, goods and capital, and the freedom of establishment.’

6 Charter of Fundamental Rights of the European Union, Art. 37.

7 Directive 2009/147/EC of the European Parliament and of the Council of 30 November 2009 on the conservation of wild birds (the Birds Directive), OJ L 20, 26.1.2010, pp. 7-25. Para. 5 of the preamble states: ‘The conservation of the species of wild birds naturally occurring in the European territory of the Member States is necessary in order to attain the Community’s objectives regarding the improvement of living conditions and sustainable development.’

8 Directive 2009/125/EC of the European Parliament and of the Council of 21 October 2009 establishing a framework for the setting of ecodesign requirements for energy-related products (the Ecodesign Directive), OJ L 285, 31.10.2009, pp. 10-35.

9 The Ecodesign Directive, *supra* note 8, Art. 1(2).

10 See, in this regard, for an interesting search for a definition of sustainable development in EC law: L. Krämer, ‘Sustainable development in EC law’, in H.C. Bugge & C. Voigt (eds.), *Sustainable development in international and national law*, 2008, pp. 377-379.

11 Krämer, *supra* note 10, pp. 377-379. See: Regulation 2493/2000/EC of the European Parliament and of the Council of 7 November 2000 on measures to promote the full integration of the environmental dimension in the development process of developing countries (end of validity date: 31/12/2006; See Art. 11), OJ L 288, 15.11.2000, p. 1, Art. 2; and Regulation 2494/2000/EC of the European Parliament and of the Council of 7 November 2000 on measures to promote the conservation and sustainable management of tropical forests and other forests in developing countries (end of validity date: 31/12/2006; See Art. 12), OJ L 288, 15.11.2000, p. 6, Art. 2.

12 For the history of the phrase ‘sustainable development’ in EU primary law see: Krämer, *supra* note 10, pp. 377-379.

13 See for instance: Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006.

C. The lack of a workable definition of sustainable development in EU policy

EU policy documents – unlike EU law – *do* offer some guidance on the meaning of sustainable development. Sometimes, they explain sustainable development by referring to the famous definition used by the UN Brundtland Commission in 1987:¹⁴

‘Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.’¹⁵

This definition is appealing because it formulates a powerful – and idealistic – goal for sustainable development. However, it does not provide guidance on how sustainable development should be *implemented*. Therefore, this definition cannot serve as a basis either for policy-making, holding the EU accountable, or as a basis for a company’s CSR policy. It is – in other words – not a *workable* definition.

The main EU policy document on sustainable development (the ‘Renewed EU Sustainable Development Strategy’) does offer some guidance on how to implement sustainable development in practice. The document formulates eight ‘policy-guiding principles’ which serve as a basis for the EU’s approach towards sustainable development.¹⁶ The document does not, however, explain the content of these principles (which include, e.g., policy integration, using the best available knowledge, and the precautionary principle). Neither does the document propose a framework for the application of those principles into the day-to-day decision-making practice of the EU and the Member States.

D. Policy makers, NGOs, politicians and businesses need guidance on sustainable development

In order to fully understand the EU law which speaks of sustainable development, it should be understood *what* the concept means and *how* it must be implemented. First of all this is relevant for policy-makers (at the EU and Member State level) who need to understand sustainable development in order to incorporate it correctly in their policy-making practice. Secondly, understanding sustainable development makes it easier for NGOs, citizens and politicians to hold the EU’s institutions politically (or even legally)¹⁷ accountable for failing to comply with the objectives of sustainable development. Thirdly, a deeper knowledge of the methods for implementing sustainable development could help businesses when they want to contribute to sustainable development in the light of corporate social responsibility (CSR) programmes.¹⁸

1.2. The goal and set-up of the article

The goal of this article is to fill the gap between the lack of guidance, and the need for guidance on sustainable development. The article will propose a workable definition, and a framework of application. These can be used by policy-makers, NGOs, politicians and businesses in their decision-making practices. Subsequently, the proposed framework of application will be applied to a practical situation: the decision whether or not to build a new coal energy plant in the north of the Netherlands. This example will illustrate the possible functioning of the proposed framework, and its influence on a specific decision-making process.

Both the proposed definition and the framework of application are meant to *reflect* the EU’s *current* approach towards sustainable development (as laid down in law and policy). They *do not* propose a new

14 See for instance: Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006.

15 World Commission on Environment and Development (WCED), *Our Common Future*, 1987, Chapter 2, Para. 1.

16 Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006, pp. 3-5.

17 In Section 3 of this article it is argued that the essence of sustainable development is that it requires policy-makers to apply a balanced decision-making process. Enforcing sustainable development through the courts would therefore mean challenging the EU’s omission to apply such a ‘sustainable development-proof’ *decision-making process* to a specific decision (for example, when the EU adopts a new directive and it has not weighed the environmental and public health effects of that directive during the decision-making process). For an interesting account of the ‘justiciability’ of sustainable development from an international law point of view, see: A. Boyle, ‘Between process and substance: Sustainable development in the jurisprudence of international courts and tribunals’, in H.C. Bugge & C. Voigt (eds.), *Sustainable development in international and national law*, 2008, pp. 203-219.

18 The European Commission wants businesses to contribute to the EU’s sustainable development objective through corporate social responsibility initiatives. See: Communication from the Commission ‘A renewed EU strategy 2011-14 for Corporate Social Responsibility’, COM(2011) 681 final, p. 3.

design of the EU's sustainable development strategy. Nevertheless, the last part of the article will contain a critical note on the effectiveness of the EU's current approach to sustainable development.

The article has the following structure:

2. Sustainable development in current EU law and policy: overview and explanation
3. A new definition of sustainable development
4. A framework of application: sustainability impact assessment
5. The framework of application in practice: is it sustainable to build a new coal energy plant?
6. Conclusion

2. Sustainable development in current EU law and policy: overview and explanation

The following subsections give an overview of what guidance EU law and policy currently provide on the definition and the operationalization of sustainable development.

2.1. The treaties

The concept 'sustainable development' is laid down in the EU treaties as a binding objective of the European Union: an objective that the EU as an organisation should pursue. Although the treaties do *not* provide a definition of the concept, they do give indications as to how it is to be realised: sustainable development relates to the *integration* of policy areas. 'Policy integration' is recognised by many international¹⁹ and EU²⁰ sources as a key element of sustainable development. Those sources also reveal that policy integration is not the *goal* of sustainable development but merely a *tool* to achieve sustainable development. In Section 2.2 more will be said on the actual goal of the concept.

Policy integration means that important policy objectives (such as stimulating the economy, protecting the environment, job growth and public health protection) must not – at the very least – be dealt with in isolation. Yet, it would be even better if, while designing a policy in one of those policy areas, the EU would take into account all the other policy objectives that were just mentioned.²¹

The importance of policy integration is emphasised by Article 3(3) TEU which states that it is one of the goals of the EU to achieve:

‘the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment’

Hence, sustainable development is a concept which brings together many different policy areas.

The importance of policy integration for the EU's activities is reinforced by several 'integration clauses' in the Treaty on the Functioning of the European Union. These clauses provide for a legal basis to integrate policy areas such as the protection of the environment, public health and fundamental rights with all other policy areas of the EU (including with those which are of a more economic nature, such as competition law, energy law and policies to stimulate the economy). When talking about sustainable development the policy-linking clause of Article 11 TFEU is particularly important because it states:

‘Environmental protection requirements *must* be integrated into the definition and implementation of the Union policies and activities, in particular with a view to promoting sustainable development.’

19 For instance: World Commission on Environment and Development (WCED), *Our Common Future*, 1987, Chapter 2, pp. 37-38.

20 For instance: Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006, p. 5.

21 Apart from the Treaties, some, although very limited, guidance on the meaning of policy integration is also given in the EU Sustainable Development Strategy (which will be discussed more in depth later in this article): Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006, pp. 5-6.

Another policy-linking clause which can be of importance within the scope of sustainable development is found in Article 9:

‘In defining and implementing its policies and activities, the Union *shall* take into account requirements linked to (...) the fight against social exclusion (...) and the protection of human health.’

Especially after the introduction – by the Treaty of Lisbon – of a general integration clause in Article 7 TFEU it cannot be denied that policy integration is an important legal obligation imposed on the EU’s institutions. Article 7 provides:

‘The Union *shall* ensure consistency between its policies and activities, taking all of its objectives into account and in accordance with the principle of conferral of powers.’

Emphasis has been added to point at the imperative nature of the policy-linking clauses.

Member States and sustainable development

An interesting question which is not explicitly answered by the treaties relates to Member States. To what extent are Member States and local or regional governments required to integrate sustainable development into their activities? Member States are obliged to comply with sustainable development when they take action in policy areas which have been partly or fully harmonised by EU law. This can be derived from the principle of sincere cooperation as laid down in Article 4(3) TEU. This principle requires the Member States to assist the EU in ‘carrying out tasks which flow from the Treaties’ and to ‘refrain from any measure which could jeopardise the attainment of the Union’s objectives’.²² Actions which fall under the Member States’ own competence are in principle not subject to sustainable development as a binding objective of EU law. However, Member States will nevertheless be bound by sustainable development via binding international agreements.²³

Although sustainable development is (by far) not the only goal of the European Union, it is a unique goal because it influences the way in which the EU designs its policies and it puts particular focus on a simultaneous approach to policies of a very different nature. How the EU further elaborates its approach to sustainable development is dealt with in various policy documents, which will be discussed in the following sections.

2.2. Policy: Brundtland and the EU Sustainable Development Strategy

The *Renewed EU Sustainable Development Strategy* – a rather general strategy document that the European Council published in 2006 – still provides the clearest picture of what the role is that the EU envisages for sustainable development. In the EU sustainable development is – or should be – mainly given practical effect through sector-specific policies and legislation (such as the energy and environmental directives). Nevertheless, the *Renewed EU Sustainable Development Strategy* has an important role in promoting and explaining sustainable development in its function as an ‘overarching long-term goal of the EU’.²⁴

The UN’s Brundtland report

The EU strategy uses the same definition for *sustainable development* as was provided by the important United Nations’ Brundtland Commission in its report entitled *Our common future* (1987). The core message of that report is that when governments and companies are striving for development and economic growth, they have a *simultaneous* responsibility to prevent production processes from inter

22 Compare to the observations on the application of the precautionary principle to Member States in: N. De Sadeleer, ‘The Precautionary Principle in EU Law’, 2010 *AV&S*, 24, Para. 1.5 (last part).

23 For example: *United Nations Framework Convention on Climate Change* (UNFCCC), 1992, and the subsequent *Kyoto Protocol to the United Nations Framework Convention on Climate Change*, 1997.

24 Communication from the Commission ‘Mainstreaming sustainable development into EU policies: 2009 Review of the European Union Strategy for Sustainable Development’, COM(2009) 400 final, pp. 2 and 13.

alia depleting or polluting fish stocks, forests, oceans, fresh water and clean air. Also, governments and companies should ensure that animals and agricultural land are not endangered because of their activities and that we do not run out of essential resources like coal, gas and minerals before alternatives are available. In other words: while striving for economic growth and better lives we should at the same time protect the environment and stop asking more from the Earth than it can give us over the longer term (no overexploitation). The Brundtland Commission gave the name *sustainable development* to this *parallel* (or *integrated*) approach to economic development and environmental protection and used the following definition for it:

‘Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.’²⁵

The definition contains two important concepts: *needs* and *limitations*. On the one hand, *development* is necessary in order to provide all humans on Earth with their basic *needs* (such as water, food, shelter, education, medical care and energy); on the other hand, development is necessary to satisfy humans’ other needs that go beyond those basic needs (such as a nice house, transport and luxury appliances). Development must however (especially if it serves to satisfy the latter category of needs) be bound to *limits* of resource use. The most important argument for that is that we must guarantee that our present strife for better lives does not take away the possibility for future generations (our children and grandchildren) to meet their needs (both basic and the more luxurious ones) as well.²⁶

The idea of sustainable development demands that we (ourselves, our governments and our companies) make sure that while producing products and services, *renewable resources* (such as forests and fish stocks) will not be degraded beyond reasonable recovery. As far as *non-renewable resources* (such as oil, gas and minerals) are concerned, we can use them but they should not run out before acceptable substitutes are available. Also, their adverse effects on the environment should be minimised.²⁷

The ultimate goal that the Brundtland report links to sustainable development is that both the needs of present and future generations will be met, as the report clearly expressed in the above-stated definition of the concept and in other parts of the report.²⁸

So much for the United Nations’ Brundtland report; let us now return to the EU.

The EU Sustainable Development Strategy – and follow-up documents

In its *Renewed EU Sustainable Development Strategy* (EU SDS) and in subsequent policy documents, the European Council embraced the definition of sustainable development as it was used by the Brundtland Commission in 1987. While the Brundtland report focuses mainly on a parallel approach to economic development and *environmental protection*, the EU has an even higher level of ambition. In the EU, economic development should – in order to be sustainable – also run parallel to inter alia the protection of public health and fundamental rights, to the promotion of social cohesion (including, e.g., efforts to increase the labour market participation of women, older workers and migrants), to the creation of a strong financial system, the preservation of cultural diversity and to efforts in development cooperation and the eradication of poverty worldwide. Another interesting point of the EU Sustainable Development Strategy is that sustainable development is not only seen as an *internal* responsibility but also as an *external* responsibility. The EU wants to pursue themes like environmental protection and the promotion of fundamental rights not only within the 28 EU Member States, but also on the international level.²⁹ This is in line with Article 3(5) TEU.

25 World Commission on Environment and Development (WCED), *Our Common Future*, 1987, Chapter 2, Para. 1.

26 World Commission on Environment and Development (WCED), *Our Common Future*, 1987, chapter 2, Paras. 1-10.

27 World Commission on Environment and Development (WCED), *Our Common Future*, 1987, chapter 2, Paras. 11-14.

28 For example: World Commission on Environment and Development (WCED), *Our Common Future*, 1987, Chapter 2, Para. 15.

29 Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006, pp. 2-7; 2009 *Review of the European Union Strategy for Sustainable Development*, COM(2009) 400 final, pp. 2-3.

The ultimate goal of sustainable development in the EU seems to be identical to the one in the Brundtland report, since the EU SDS indicates that sustainable development ‘aims at the continuous improvement of the quality of life and well-being on Earth for present and future generations.’³⁰

Moreover, the EU SDS emphasises the importance of sustainable development by stating that it ‘is an overarching objective of the European Union set out in the Treaty, governing all the Union’s policies and activities.’³¹ This is particularly interesting because sustainable development’s status as an overarching objective seems to oblige the EU (and to some extent the Member States)³² to take the concept into account in all activities and decisions, irrespective of whether decisions are taken within the scope of an institution’s discretionary power, whether it concerns just minor decisions or whether it concerns merely recommendations or guidelines.

2.3. Policy-guiding principles

In order to shape the concept of sustainable development the EU Sustainable Development Strategy formulates eight ‘policy-guiding principles.’ These policy-guiding principles could be seen as the *tools* which should help to achieve sustainable development. The Sustainable Development Strategy does not go into the meaning and content of these principles. All eight policy-guiding principles will therefore be explained below. The explanations are based on legal sources, policy documents, and academic literature.

2.3.1. Policy integration and policy coherence

As mentioned before, policy integration requires the EU to *take into account* all sustainability-related policy objectives in the decisions they take.³³ But what does ‘to take into account’ mean in this context? According to the EU SDS it means that policies should be ‘coherent and mutually reinforce each other.’ In other words: policies should at least not hinder the achievement of each other’s objectives, and ideally they should even contribute to each other’s objectives. As a consequence, policy areas which were in the past mainly pursuing their own – isolated – policy agendas should now open up their views to the broader objectives of the EU.

Competition policy is an example of such a policy area. It has often been declared that consumer welfare is the main objective of competition policy.³⁴ Therefore, exceptions to (for instance) the cartel prohibition are only allowed if the agreements under review create additional (economic) value for consumers ‘by lowering the cost of producing an output, improving the quality of the product or creating a new product.’³⁵ Such a one-sided approach to competition policy is not in conformity with the principle of policy integration. Policy integration demands that competition authorities (just like every other governmental body subject to EU law) look further than consumer welfare in their decision making. Competition authorities should not – for instance – automatically prohibit agreements which are harmful to consumers’ (economic) welfare, but which are (at the same time) beneficial to the environment.³⁶ The Dutch competition authority sets an interesting precedent by promising that it will assess future cartels not only on their benefits for present consumers, but also on their benefits for future consumers.³⁷ This approach makes it possible to approve cartels which have as their aim the improvement of – for instance – the environmental performance of products. Although such cartels often lead to price increases for present consumers, they will bring benefits for the consumers of the future.³⁸ This ‘reinterpretation’ of

30 Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006, p. 1.

31 Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006, p. 2. Emphasis added.

32 See the observations on the ‘Member States and sustainable development’ at the end of Section 2.1.

33 Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006, pp. 5-6

34 N. Kroes, ‘European Competition Policy, delivering better markets and better choices’, Speech/05/512 London, 15 September 2005, <http://europa.eu/rapid/press-release_SPEECH-05-512_en.htm> (last visited 7 April 2014); P. Kalbfleisch, ‘Consumer Welfare, Innovation and Competition’, Innsbruck, 26 February 2009, <<https://www.acm.nl/nl/download/bijlage/?id=8837>> (last visited 7 April 2014).

35 Communication from the Commission ‘Guidelines on the application of Article 81(3) of the Treaty’, 2004/C 101/08, Para. 33.

36 See for a further elaboration on the relation between sustainable development and competition law and policy: S.R.W. van Hees, *A sustainable competition policy for Europe: a research on how the European cartel rules can make a stronger contribution to Europe’s sustainable development goals*, Science Shop of Law, Economics and Governance, Utrecht University, 2013.

37 ACM, *Draft Position Paper Mededinging & Duurzaamheid*, 2013, p. 14.

38 This is similar to what happened in the *CECED* decision where the European Commission suggested that the phasing out of energy-

competition policy's consumer welfare goal is less likely to hinder environmental policy, while at the same time consumer welfare can be maintained as the main goal of competition policy.³⁹

Obviously, it is not always possible to bring contradicting policy objectives into harmony by simply interpreting policy goals in a more flexible or coherent manner. Often various policy objectives should be weighed against each other. The issue of shale gas can be used as an example: should governments extract and use shale gas because of its economic benefits, or should they not do so because of the danger of contaminated vulnerable groundwater resources, which serve as drinking water supplies? In order to be able to balance the policy objectives of *economic development* and the *protection of groundwater and drinking water resources* we must first decide how much weight should be attached to both of the policy objectives. The literature on environmental policy integration shows that opinions can vary considerably on the issue of weighing policy objectives. On the one hand, it can be argued that environmental objectives should be given priority over other (such as economic) objectives,⁴⁰ while it can also be argued that it is merely the goal of policy integration to find 'win-win' solutions for different policy objectives.⁴¹ Both perspectives do however overlap on one point: policy integration means that some kind of balancing act should be carried out. Whether this balancing act should or should not give more weight to sustainability objectives such as the environment than to other objectives is still the subject of debate. Also EU law does not explain how to strike a balance between the protection of the environment and economic development. The treaties only indicate that for the purpose of sustainable development both objectives should be taken into account in decision-making. The task of finding a balance between concurring objectives is left – in the end – to the political process. Notwithstanding, however, that the political process should remain within the borders of some other policy-guiding principles – for example the precautionary principle – which will be discussed later in this article.

Impact assessments as a tool for policy integration

The EU Sustainable Development Strategy also mentions an important tool to achieve policy integration: impact assessments.⁴² An impact assessment is a process that supports the European Commission while designing a new policy and which the Commission carries out for the 'most important Commission initiatives and those which will have the most far-reaching impacts.'⁴³ The process results in a document (the impact assessment report) which gives an overview of – among other things – which policy options are available (this could be new legislation, but also a continuation of the status quo) and what the potential impacts of those policy options are on various policy areas, including those related to sustainable development. The College of Commissioners will take this report into account when taking the final decision on a (legislative) proposal.⁴⁴ Questions that should be considered in an impact assessment are related to all kinds of policy areas. They can include for instance: 'Does the policy proposal affect drinking water resources?', 'Does the option affect the emission of greenhouse gases (e.g. carbon dioxide, methane etc.) into the atmosphere?', and 'Does the option affect the prices consumers pay?'.⁴⁵ Once all necessary questions have been analysed the different policy options should be compared by using at least the following three basic evaluation criteria:

inefficient washing machines contributed to consumer welfare in general through the decreased environmental impact of the new washing machines, although the phasing out of the old ones would result in an increase in the price of washing machines for individual consumers. See: S.R.W. van Hees, *A sustainable competition policy for Europe: a research on how the European cartel rules can make a stronger contribution to Europe's sustainable development goals*, Science Shop of Law, Economics and Governance, Utrecht University, 2013, Section 3.4.2.

39 However, it is uncertain how 'sustainable' the Dutch competition authority (ACM) actually is since it issued a preliminary opinion in 2013 which condemned an agreement between several energy producers to close down five old coal energy plants, as part of a national sustainable energy deal. See for more elaboration on this case: H. Vedder, 'Sustainable competition law; competition law kills coal closure plan, or does it?', 2013 *European Law Blog*, <<http://europeanlawblog.eu/?p=1974>> (last visited 7 April 2014).

40 U. Collier, *Energy and environment in the European Union: the challenge of integration*, 1994, pp. 44, 259.

41 U. Collier, *Energy and environment in the European Union: the challenge of integration*, 1994, pp. 35-36.

42 These should however be distinguished from Environmental Impact Assessments (which will also be necessary for permitting large projects such as the extraction of shale gas).

43 European Commission, *Impact assessment guidelines*, SEC(2009) 92, p. 6.

44 European Commission, *Impact assessment guidelines*, SEC(2009) 92, p. 4.

45 European Commission, *Impact assessment guidelines*, SEC(2009) 92, pp. 33-38.

- Effectiveness – the extent to which options achieve the objectives of the proposal.
- Efficiency – the extent to which objectives can be achieved for a given level of resources/at the least cost (cost-effectiveness).
- Coherence – the extent to which options are coherent with the overarching objectives of EU policy, and the extent to which they are likely to limit trade-offs across the economic, social, and environmental domain.⁴⁶

Interests which are related to sustainable development will surely have to be assessed under the third criterion. Depending on the formulation of the goals of the policy proposal they could also be important under the first criterion. The outcome of the Commission's comparison of the policy options along the lines of these evaluation criteria could be a reason for the Commission to reconsider certain policy options (for instance because they require too much trade-offs on the environmental side). Also the comparison could help the Council to make a final decision on which policy option is the best one, because it indicates the advantages and disadvantages of each policy option.

Similar to the treaties, the EU documents on impact assessments do not however indicate what the individual weight should be of the various evaluation criteria in the decision-making process. This is understandable because an impact assessment must be seen (in the words of the Commission) as 'an aid to decision-making, not a substitute for political judgement'.⁴⁷

2.3.2. The polluter pays principle

Another policy-guiding principle is the polluter pays principle. The polluter pays principle seeks to ensure that 'prices reflect the real costs to society of consumption and production activities and that polluters pay for the damage they cause to human health and the environment'.⁴⁸ OECD documents explain that the principle means that the polluter should pay the costs of preventing and controlling pollution, irrespective of whether those costs are incurred by the producers or by the government. According to the OECD it is primarily a principle for allocating costs, which has not as its main task to bring down pollution to certain ideal levels. However, in the end consumers and producers could be tempted to adjust their buying and selling behaviour when the prices and production costs of goods and services will increase and reflect the environmental costs and the 'relative scarcity of environmental resources used in their production'.⁴⁹ In the EU it has been argued that the polluter pays principle should not only encompass the costs of preventing and controlling pollution, but also the costs of the recovery of environmental damage (by means of environmental liability regimes).⁵⁰ This idea has been reflected (although to a very limited extent) in the Environmental Liability Directive of 2004.⁵¹

The polluter pays principle is an important principle in the EU's environmental policy area. Article 191(2) TFEU states that the principle is binding on EU institutions when enacting environmental policy initiatives. Moreover, the European Court of Justice often applies the principle in its case law concerning the environment.⁵² Through the introduction of the EU Sustainable Development Strategy the EU committed itself to apply this principle not only in the area of the environment, but in all policy areas.

2.3.3. The precautionary principle and the taking of preventive action

The precautionary principle (being an important principle of EU environmental policy) comes into play when, for instance, a policy decision must be taken and if there is scientific uncertainty about the risks

46 European Commission, *Impact assessment guidelines*, SEC(2009) 92, 2009, p. 48.

47 European Commission, 'Communication on Impact Assessment', COM(2002) 276 final, pp. 9-10.

48 Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006, pp. 3-5.

49 OECD, *The Polluter Pays Principle*, 2008, pp. 15-16.

50 European Commission, *White Paper on environmental liability*, COM(2000) 66 final, p. 11.

51 Directive 2004/35/CE of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 143, 30.4.2004, p. 56. See for further elaboration on the relation between the polluter pays principle and civil liability: N. De Sadeleer, 'The Polluter-pays Principle in EU Law – Bold Case Law and Poor Harmonisation', in *Pro Natura: Festschrift Til H. C. Bugge*, 2012, pp. 405-419, Para. 4. Available at SSRN: <<http://ssrn.com/abstract=2293317>> (last visited 7 April 2014).

52 P. Lindhout & B. van den Broek, 'The Polluter Pays Principle: Guidelines for Cost Recovery and Burden Sharing in the Case Law of the European Court of Justice', 2014 *Utrecht Law Review* 10, no. 2, Section 3.

to public health which stem from that decision. According to the Court of Justice the precautionary principle justifies the adoption of restrictive measures when it is ‘impossible to determine with certainty the existence or extent of the alleged risk’ and when ‘the likelihood of real harm to public health persists should the risk materialise’. The measures taken should be non-discriminatory and objective.⁵³ The General Court phrases it somewhat more powerfully in the *Artogan* case by stating that if scientific uncertainty arises, EU institutions are required ‘to take appropriate measures to prevent specific potential risks to public health, safety and the environment, by giving precedence to the (...) protection of those interests over economic interests.’⁵⁴ It is thereby not necessary to postpone those measures until there is more specific scientific evidence available on the nature of those risks.⁵⁵ Therefore, the precautionary principle should be distinguished from a purely *preventive approach* where decision makers will normally only intervene when there is actual proof that a risk exists.⁵⁶ Although the treaties only mention the precautionary principle in Article 191(2) TFEU on the environment, the Court of First Instance (now: the General Court) held that the precautionary principle is a general principle of Community law. According to the Court the EU institutions should apply the principle also outside the specific field of environmental policy because ‘the Community institutions are responsible, in all their spheres of activity, for the protection of public health, safety and the environment.’⁵⁷ This finding by the Court is a clear acknowledgement of the integration clauses and of the concept of sustainable development.

According to the Commission Communication on the precautionary principle there are two phases when using the precautionary principle in policy-making. First, the nature of the scientific uncertainty and the possible risks to *the environment or human, animal or plant health* can either lead to the decision *to act*, or to the decision *not to act* at all. The Commission emphasises that this is a *political* decision. Secondly, if policy-makers decide to take action in a certain policy area, they will have to decide *how* to act.⁵⁸ When taking a decision on how to act, policy-makers should (according to the Commission) rely on general principles of risk management. These include inter alia the proportionality principle. According to this principle ‘measures based on the precautionary principle must not be disproportionate to the desired level of protection and must not aim at zero risk, something which rarely exists.’⁵⁹ Also, an examination of the benefits and costs of action and lack of action should be made by the policy-maker. According to the Commission this examination cannot be reduced to an economic cost-benefit analysis: non-economic considerations should also be included. In fact, the Commission affirms that objectives such as public health should sometimes be given greater weight than economic considerations, which seems to be in line with the General Court’s *Artegoda*n ruling (as discussed above).⁶⁰

In general it can be said that although a great deal of guidance is given by the judiciary and the Commission, the actual application of the precautionary principle remains (as with all principles discussed here) subject to the assessment of the policy-maker in every individual case.

2.3.4. Using the best available knowledge

Furthermore, the EU committed itself to developing policies ‘that are developed, assessed and implemented on the basis of the best available knowledge and that they are economically sound and cost-effective.’ To get a better understanding of this policy-guiding principle, it can be easily compared with a similar principle that is sometimes seen in EU directives: the principle that *best available techniques* should be used. The Industrial Emissions Directive⁶¹ lays down rules concerning an environmental permit for polluting industrial installations (such as oil and gas refineries). The directive requires the best available techniques to be used for the development of the permit’s conditions and for deciding on

53 Case C-77/09, *Gowan*, 2010, Para. 76. Also see: J.H. Jans & H.H.B. Vedder, *European Environmental Law: After Lisbon*, 2012, Chapter 3.2.

54 Case T-74/00, *Artegoda*n, 2002, Paras. 181-186. Also see the more recent cases C-236/01, *Monsanto Agricultura*, 2003, Paras. 111 and C-77/09, *Gowan*, 2010, Para. 73 which use slightly different wordings.

55 Case C-77/09, *Gowan*, 2010, Para. 73.

56 N. De Sadeleer, ‘The Precautionary Principle in EU Law’, 2010 *AV&S*, 24, Para. 1.1.

57 Case T-74/00, *Artegoda*n, 2002, Paras. 181-186.

58 European Commission, ‘Communication on the precautionary principle’, COM(2000) 1, Para. 5.

59 European Commission, ‘Communication on the precautionary principle’, COM(2000) 1, Para. 6.3.1.

60 European Commission, ‘Communication on the precautionary principle’, COM(2000) 1, Para. 6.3.4.

61 Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJ L 334, 17.12.2010, p. 17.

the maximum emission for each industrial installation. The directive defines the principle *best available techniques* as those techniques and installations which are most effective and advanced in preventing or reducing emissions. However, it also states that ‘available techniques’ means those techniques which are ‘developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages (...)’.⁶² In other words, in the process of deciding if a new technique is the ‘best available technique’ (and should therefore be used) it is allowed to carry out a balancing act which takes account of both the (environmental) advantages *and* the costs of the new technique.⁶³ The policy-guiding principle of *using the best available knowledge*, as laid down in the EU Sustainable Development Strategy, should most probably be interpreted against the same background.

2.3.5. The involvement of business and social partners

The EU regards businesses as important actors in achieving the EU’s sustainable development goal as formulated in the treaties.⁶⁴ According to the EU, enterprises should have in place ‘a process to integrate social, environmental, ethical, human rights and consumer concerns into their business operations’. They should prevent negative impacts on, for instance, the environment and human rights in accordance with the law, but they should do so even in situations for which no specific obligations are laid down in legislation. The EU furthermore recognises self-regulation and co-regulation and voluntary commitments or agreements as important contributions to the sustainable development goals.⁶⁵

2.3.6. The involvement of citizens & creating an open and democratic society

The policy-guiding principles ‘involvement of citizens’ and ‘open and democratic society’ are important topics within the EU. This is illustrated by Article 10(3) TEU which states that ‘Every citizen shall have the right to participate in the democratic life of the Union. Decisions shall be taken as openly and as closely as possible to the citizen.’

Furthermore, the EU directives which implement the Aarhus Convention⁶⁶ play an important role as it comes to involving citizens in decision making in the field of the environment. There is, for instance, a directive which guarantees the right for citizens to have access to environmental information held by the authorities of the Member States.⁶⁷ Another directive provides citizens with the right to public participation in respect of a Member State’s plans and programmes which relate to the environment.⁶⁸ Both directives also guarantee access to justice if a citizen has been refused the rights stemming from these directives.⁶⁹ In 2006, a regulation was adopted which guarantees the aforementioned rights also to citizens in relation to EU institutions and bodies.⁷⁰

Citizens’ participation in decision making is especially important in cases where administrative decisions are facing criticism from society, despite the fact that these decisions contribute to sustainable development. An example comes from the Dutch province of Noord-Holland where (because of ongoing

62 Directive 2010/75/EU of the European Parliament and of the Council of 24 November 2010 on industrial emissions (integrated pollution prevention and control), OJ L 334, 17.12.2010, p. 17, Art. 3(10). Also see Annex III for considerations to be taken into account when determining the best available techniques.

63 N. de Sadeleer, *Environmental principles: from political slogans to legal rules*, 2002, pp. 84-86.

64 Council of the European Union, *Renewed EU Sustainable Development Strategy* (annex to Council Note 10917/06), 2006, p. 5; Communication from the Commission ‘A renewed EU strategy 2011-14 for Corporate Social Responsibility’, COM(2011) 681 final, p. 3.

65 Communication from the Commission ‘A renewed EU strategy 2011-14 for Corporate Social Responsibility’, COM(2011) 681 final, pp. 1-14; Decision 1600/2002/EC of the European Parliament and of the Council laying down the Sixth Community Environment Action Programme, OJ L 242, 10.9.2002, pp. 1-15, Art. 3.

66 Convention on access to information, public participation in decision-making and access to justice in environmental matters, done at Aarhus, Denmark, on 25 June 1998 (the Aarhus Convention).

67 Directive 2003/4/EC of the European Parliament and of the Council on public access to environmental information, OJ L 41, 14.2.2003, pp. 26-32.

68 Directive 2003/35/EC of the European Parliament and of the Council providing for public participation in respect of the drawing up of certain plans and programmes relating to the environment and amending with regard to public participation and access to justice Council Directives 85/337/EEC and 96/61/EC, OJ L 156, 25.6.2003, pp. 17-25.

69 Directive 2003/4/EC, Art. 6; Directive 2003/35/EC, Art. 4.

70 Regulation (EC) No. 1367/2006 of the European Parliament and of the Council on the application of the provisions of the Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters to Community institutions and bodies, OJ L 264, 25.9.2006, pp. 13-19.

protests from citizens) the construction of new wind turbines on land for electricity production is now forbidden.⁷¹

2.3.7. *Promotion and protection of fundamental rights*

The EU Sustainable Development Strategy also considers the *Promotion and protection of fundamental rights* (including the reduction of poverty and the elimination of social exclusion worldwide) to be an important element of sustainable development. This is in line with the values and the objectives of the European Union as codified in Articles 2 and 3 TEU, which emphasise the importance of the protection of human rights both within and outside the European Union. Furthermore, the EU institutions, bodies, offices and agencies and the Member States (only when they are implementing Union law) are bound by the Charter of Fundamental Rights (CFR) of the European Union.⁷² Article 37 CFR on environmental protection even specifically refers to sustainable development: ‘A high level of environmental protection and the improvement of the quality of the environment must be integrated into the policies of the Union and ensured in accordance with the principle of sustainable development.’

2.3.8. *Solidarity within and between generations*

This final policy-guiding principle which is mentioned in the EU SDS has not been discussed so far. The reason for that is that ‘addressing the needs of current generations without compromising the ability of future generations to meet their needs’ must be seen as the ultimate goal of sustainable development, and not so much as a tool to achieve that goal. It is therefore surprising that the EU Sustainable Development Strategy mentions this as a separate policy-guiding principle.

3. A new definition of sustainable development

The latter sections have shown that the concept of sustainable development is – in the way it is interpreted in the EU – a very broad concept. Sustainable development requires the EU and its Member States to take balanced decisions, which are based not only on economic arguments, but also on environmental, social and public health arguments (and more). More specifically, the EU Sustainable Development Strategy requires decisions to be guided by policy-guiding principles, such as policy integration, the polluter pays principle and the precautionary principle. These policy-guiding principles are very important as they give meaning to the concept of sustainable development.

The Brundtland definition,⁷³ which is currently the main definition of sustainable development in the EU, does not reflect the existence of these policy-guiding principles. Instead, the Brundtland definition solely expresses what the ultimate goal of sustainable development is (meeting the needs of both the present and future generations), without conveying the substance of the concept. Therefore it is an unsuitable definition to be used in practice by, for instance, policy-makers or businesses.

Until 2006 a regulation was in force which included a definition of sustainable development that actually *gave* some guidance on the substance of the concept. Article 2 of that regulation stated:

‘For the purposes of this Regulation: “sustainable development” means the improvement of the standard of living and welfare of the relevant populations within the limits of the capacity of the ecosystems by maintaining natural assets and their biological diversity for the benefit of present and future generations.’⁷⁴

71 Province of Noord-Holland, ‘Beleidswijziging Wind op Land’, <<http://www.noord-holland.nl/web/Actueel/Nieuws/Artikel/Beleidswijziging-Wind-op-Land.htm>> (last visited 7 April 2014).

72 Charter of Fundamental Rights of the European Union, Art. 51; Treaty on European Union, Art. 6(1).

73 ‘Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.’

74 Regulation 2493/2000/EC of the European Parliament and of the Council on measures to promote the full integration of the environmental dimension in the development process of developing countries (end of validity date: 31/12/2006; See Art. 11), OJ L 288, 15.11.2000, p. 1-5, Art. 2.

This definition is more suitable than the Brundtland definition because it reflects at least one policy-guiding principle: policy integration. Namely, the definition requires welfare improvements to be balanced with maintaining natural assets. However, this definition is still not sufficiently accurate because it focuses only on environmental aspects, while in the EU a broad approach to sustainable development is taken.

In order to provide policy-makers, NGOs, politicians and businesses with both a workable and representative definition of sustainable development, the following alternative definition is proposed:

Sustainable development means stimulating and encouraging economic development (e.g. more jobs, creativity, entrepreneurship and revenue), *whilst* protecting and improving important aspects (at the global and European level) of nature and society (inter alia natural assets, public health and fundamental rights) for the benefit of present and future generations.

This alternative definition shows that sustainable development is, in the end, about *development*. Judging from the Europe 2020 Strategy, *development* will mainly be interpreted in the EU as *economic development*.⁷⁵ The adjective *sustainable* requires, however, that this economic development is conducted in a different way than it used to be at the time the EU was born. The goal of development should not only be to achieve a positive *economic* outcome (i.e. more jobs, entrepreneurship and revenue), but it should also include a positive outcome for inter alia the environment and society. This positive outcome⁷⁶ must guarantee that economic development runs parallel to the possibility of present and future generations to satisfy their needs (which run from enduring energy supply to the availability of wild life and clean air, and further).

4. A framework of application: a sustainability impact assessment

After having gained greater understanding of what sustainable development means, it is time to find out how the concept should be applied in practice. For this purpose, the policy-guiding principles which are mentioned in the treaties and in the EU Sustainable Development Strategy serve as a starting point. These principles include inter alia policy integration, the precautionary principle and the use of the best available knowledge.

In order to apply these principles to a decision-making process they should be turned into questions. These questions must aim at scrutinizing the policy proposal or the project that is being decided upon. They could be of a general nature, such as: ‘Does the project make use of the best available knowledge and techniques?’ and ‘Does it create possible risks of which the exact results are unknown?’. The questions could also be of a more specific nature: ‘Does the decision to be taken affect drinking water resources?’, ‘Does it increase the emission of greenhouse gases?’.

Ideally, the answers to these, and more questions will influence the decision-making process. The answers could lead policy-makers to the conclusion that a certain plan or project can be pursued (for instance, because the project carefully balances economic and environmental interests), that a plan should be changed, or even that a plan should not be implemented at all (for instance, when it causes irreparable damage to biodiversity).

The practice of asking these critical questions as part of a decision-making process could be called a *sustainability impact assessment*. This type of impact assessment would have to be applied to every important decision which is taken on an EU or Member State level. For minor decisions (like the procurement of a washing machine) the sustainability impact assessment could be limited to a brief review of the expected social, environmental, public health, human rights and economic consequences.

75 The three priorities of the Europe 2020 Strategy (smart, sustainable and inclusive growth of the economy) show that ‘sustainable’ is used as an adjective of economic development. See for further illustration: Communication from the Commission ‘Europe 2020 – A strategy for smart, sustainable and inclusive growth’, COM(2010) 2020 final, pp. 10 et seq.

76 Obviously the question remains what is, and what is not, a positive outcome for e.g. the environment? Realistically, this question will have to be answered by politics. Also see the conclusion (Section 6 of this article).

If applied to more substantial decisions (such as the decision to build a new coal energy plant or to allow for the extraction of shale gas) it would be a fully comprehensive report.

Below, some suggestions will be made for general questions which could be part of a standard sustainability impact assessment. It will be indicated on which policy-guiding principles the questions are based, as the questions are ultimately meant to serve as the practical application of these principles.

Policy-guiding principle(s)	Question
<ul style="list-style-type: none"> – Policy integration and coherence¹ – The protection of fundamental rights² 	1. Does the decision have negative consequences for policy objectives such as the protection of a high level of quality of the environment and public health and for the protection of fundamental rights?
<ul style="list-style-type: none"> – Using the best available knowledge³ 	2. Has the best available knowledge been used to prevent possible negative consequences resulting from the decision? Are there alternatives?
<ul style="list-style-type: none"> – The precautionary principle and the taking of preventive action⁴ 	3. Is there scientific uncertainty about the existence or extent of risks to public health, safety or the environment stemming from the decision? If there is, have measures been taken to prevent the occurrence of those risks?
<ul style="list-style-type: none"> – Policy integration – The polluter pays principle⁵ 	4. If negative consequences stemming from the proposed decision continue to exist: is the decision based on a sincere balancing act conducted between the positive economic effects of the decision and its negative (e.g. environmental) effects? And are the costs of these negative effects borne by those who are responsible for causing them?

1 See Section 2.3.1 of this article, 2. See Section 2.3.7 of this article, 3. See section 2.3.4 of this article.

4. See section 2.3.3 of this article, 5. See Section 2.3.2 of this article.

5. The framework of application in practice: is it sustainable to build a new coal energy plant?

In order to illustrate how the sustainability impact assessment would work out in practice the impact assessment will be applied to a decision taken by Dutch provincial governments last year: the decision to authorise the construction of a coal energy plant in Eemshaven (in the province of Groningen, near the the Wadden Sea which is a Natura 2000 site). The example of the Eemshaven coal plant will only be used as a ‘model case’ to illustrate how the direct application of the EU Sustainable Development Strategy (as embodied by the sustainability impact assessment) to a topical and real policy issue could work out in practice. Therefore, no reference will be made to sectoral legislation such as the Habitats Directive and national rules related to the protection of Natura 2000 sites.

The new coal energy plant in Eemshaven

After several years of decision making and of ongoing appeals by citizens and environmental groups, in April 2013 the provincial governments of Groningen, Friesland and Drenthe decided for the second time to approve the construction of a very modern and efficient coal power plant in the very north of the Netherlands: in Eemshaven. Security of supply is brought up as an important argument in favour of the construction of such plants. Since the Dutch natural gas reserves will slowly deplete during the coming years, the Netherlands will become more and more dependent on the import of natural gas. The Dutch Government considers coal plants to be an important contribution to solve this issue.⁷⁷ Nevertheless, the decision to build a polluting energy plant seems to be running completely contrary to the goals of sustainable development (in particular if we consider clean air to be important for the quality of life of

⁷⁷ Ministry of Economic Affairs, *Energierapport [Energy report]*, 2008; Energy Research Centre of the Netherlands (ECN), *Kolencentrales Eemshaven – Dwingende redenen openbaar belang [Eemshaven Coal energy plants – Overriding reasons of general interest]*, 2010, pp. 13-15.

present and future generations and if we take account of the possible influence of CO₂ emissions on the greenhouse effect). However – as will be illustrated hereunder – the outcome of applying the principles of the treaties and the EU SDS to the decision at hand will leave room for a surprising result.

Sustainability impact assessment

1. *Does the decision to build a new coal energy plant have negative consequences for policy objectives such as the protection of a high level of quality of the environment and public health and for the protection of fundamental rights?*

Coal energy plants produce a high level of carbon dioxide and nitrogen emissions into the air. High concentrations of these gasses are harmful to the environment and to human health.⁷⁸ Besides that, the new coal energy plant also affects the habitat of animals such as birds and fish. However, compensatory measures have been taken to reduce those effects.⁷⁹

2. *Has the best available knowledge been used to prevent possible negative consequences resulting from the decision? Are there alternatives?*

Remember first of all that *best available knowledge* will in this case probably refer to the techniques which are most effective and advanced in preventing or reducing emissions, *and* which can be implemented in the relevant industrial sector under economically and technically viable conditions. The question which must be answered is: has the best available knowledge been used to prevent the negative environmental effects resulting from the new energy plant? This question can be assessed from two different angles.

On the one hand, one can argue (as environmental organisations did in this case) that there are less polluting ways of energy production available, such as natural gas and wind and solar energy. These sources of energy should – according to the environmental organisations – therefore have been used instead of a new coal energy plant.

On the other hand, one can put forward the argument that the new plant is the most efficient coal energy plant that is currently available. It reduces carbon dioxide and nitrogen emissions considerably as compared to the older coal plants that it will replace over time.⁸⁰ Therefore, it can be argued that within the sphere of coal energy plants the best available knowledge has been used. Besides that, the Dutch Government held that although less polluting techniques are available it is not economically and technically viable to switch to those techniques completely. An important reason being that fossil fuel plants remain necessary alongside renewable energy sources in case the latter ones do not produce sufficient electricity, for instance when there is no wind or sun.⁸¹

Interestingly, within the scope of ‘using the best knowledge’ principle different arguments can lead to different outcomes.

3. *Is there scientific uncertainty about the existence or extent of risks to public health, safety or the environment stemming from the decision? If there is, have measures been taken to prevent the occurrence of those risks?*

Remember that the precautionary principle demands that decision makers ‘take appropriate measures to prevent specific potential risks to public health, safety and the environment, by giving precedence to the (...) protection of those interests over economic interests.’

78 See for instance: European Environmental Agency, *Air Quality in Europe – 2013 Report*, EEA Report No. 9/2013.

79 Vergunning Natuurbeschermingswet [Nature Conservation Act Licence] 1998 RWE (19-6-2012) and mainly Bijlage [Annex] 1, Kenmerk [Identifier]: 2012-26657 (Provinces of Groningen, Friesland and Drenthe).

80 See for instance: ECN, *Kolencentrales Eemshaven [Eemshaven Coal energy plants]*, supra note 77, pp. 26-27.

81 Ministry of Economic Affairs, Agriculture and Innovation, *Energierapport [Energy report]*, 2011, pp. 38-39; ECN, *Kolencentrales Eemshaven [Eemshaven Coal energy plants]*, supra note 77, pp. 6-7 and 24.

Scientific uncertainty exists concerning the environmental and public health effects of the emission of polluting gasses into the air. Also, uncertainty exists about the consequences of climate change, which may be worsened by those emissions. There are, however, no indications that the decision makers in the Eemshaven project have taken specific measures (such as Carbon Capture and Storage (CCS), for instance) to prevent these uncertain risks.

4. *If negative consequences stemming from the preferred option continue to exist: is the decision based on a sincere balancing act conducted between the positive economic effects of the decision and its negative (e.g. environmental) effects? And are the costs of these negative effects borne by those who are responsible for causing them?*

The governments involved in the decision-making process recognise the importance of emission reductions. In order to lessen the emissions of the new coal plant the governments and the energy companies are investigating the possibility of running the energy plant partly on biomass. Also research is being conducted into the possibilities of Carbon Capture and Storage (CCS) in the far future.⁸² However, policy documents show that fossil fuels will remain an important source of energy for the Netherlands during the coming years in order to guarantee a cheap energy mix in Europe.⁸³ The costs of the negative environmental effects of the energy plant are partly paid for by the energy company which has to implement a number of nature compensation projects.⁸⁴

Conclusion

When carrying out this sustainability impact assessment it stands out that a decision-maker could answer the questions in a way which is beneficial to the outcome he or she wants to achieve. Moreover, seemingly unsatisfactory answers can be given and the project being continued after all (which is the case for the Eemshaven project). This is a consequence of the fact that EU law and policy on sustainable development only provides guidelines for the *process* of decision-making, while it does not give any indications of the desired results. The lack of guidance as to the *outcome* of a sustainable decision-making process can frustrate the achievement of the goals of sustainable development. Moreover, it makes it difficult to hold decision-makers accountable for not achieving sustainable results.

6. Conclusion

This article proposed a clear and workable definition of sustainable development, *and* a framework for its application. The new proposed definition reflects the current EU approach towards sustainable development more accurately than the Brundtland definition, which is currently mostly used. The current EU approach is mainly based on the principle of policy integration, and therefore requires decision-makers to take various policies into account in their decision-making processes. The proposed definition reads as follows:

Sustainable development means stimulating and encouraging economic development (e.g. more jobs, creativity, entrepreneurship and revenue), *whilst* protecting and improving important aspects (at the global and European level) of nature and society (inter alia natural assets, public health and fundamental rights) for the benefit of present and future generations.

The new definition aims to clarify that sustainable development demands from decision-makers not to focus only on economic development, but to find a balance between economic development and other policy areas, such as the environment and public health.

82 See for instance: Ministry of Economic Affairs, Agriculture and Innovation, *Energierapport [Energy report]*, 2011, pp. 26 and 29.

83 Ministry of Economic Affairs, Agriculture and Innovation, *Energierapport [Energy report]*, 2011, p. 4.

84 See: Province of Groningen, *Natuurmaatregelen RWE [Nature measures RWE]*, <<http://www.provinciegroningen.nl/actueel/dossiers/rwe-centrale/natuurmaatregelen-rwe/>> (last visited 7 April 2014).

The framework of application which was proposed in this article offers a method for decision-makers to actually implement sustainable development in their day-to-day work. In order to comply with the concept of sustainable development decision-makers primarily need to implement a set of policy-guiding principles in their decision-making processes. These principles emanate from EU law and policy and include inter alia principles such as ‘using the best available knowledge’, the precautionary principle, policy integration, and the protection of human rights. Policy-makers can implement these principles by carrying out a sustainability impact assessment for every important decision that they take. This impact assessment consists of several questions to be asked in the course of the decision-making process. The questions relate to the policy-guiding principles mentioned above. They include questions such as: ‘Has the best available knowledge been used to prevent possible negative consequences resulting from the decision? Are there alternatives?’ and ‘is the decision based on a sincere balancing act conducted between the positive economic effects of the decision and its negative (e.g. environmental) effects?’

The main disadvantage of the EU’s current approach towards sustainable development (and therefore of the proposed framework of application) is that it mainly requires the implementation of a decision-making *process*. It does not, however, guarantee that this process also has a sustainable *outcome* (as was also illustrated by the coal energy plant example in Section 5 of this article). A possible solution for this problem will have to be found by politicians who should mark the boundaries of economic development.⁸⁵

However, considering the current state of EU law and policy, carrying out a sustainability impact assessment is the best thing that one can do to comply with the goals of sustainable development. ¶

⁸⁵ See, for instance, the interesting article by Kuhlman and Farrington who propose to set sustainability thresholds as part of the rules by which an economic agent must play: T. Kuhlman & J. Farrington, ‘What is sustainability?’, 2010 *Sustainability* 2, no. 11, p. 3443.