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The Use of Comparative Analyses for Sustainable Development

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Content

Executive Summary (in Dutch)

Duurzame ontwikkeling (DO) is een beleidsdomein dat gekenmerkt wordt door een zekere mate van complexiteit (bv. omdat het de integratie vraagt van verschillende beleidssectoren) en onzekerheid (bv. wat betreft de outcome van beleidskeuzes). Zowel beleidsmakers als academici zijn daardoor geïnteresseerd in hoe andere overheden DO benaderen, om uit hun ervaringen eventuele lessen te kunnen trekken. Met dat doel voor ogen werden de laatste jaren een groot aantal comparatieve analyses uitgevoerd. Die comparatieve analyses voor DO vormen het voorwerp van deze paper.

Na even stil te staan bij een aantal theoretische en methodologische aandachtspunten m.b.t. comparatieve analyses, wordt een niet-exhaustief overzicht gegeven van een aantal bestaande initiatieven. Het valt daarbij op dat die initiatieven in twee grote groepen kunnen ingedeeld worden, kwantitatieve vergelijkingen of indexen enerzijds en meer kwalitatief-georiënteerde vergelijkingen anderzijds. In de analyse van de geselecteerde vergelijkingen worden de inhoudelijke focus en de methodologie onderzocht, en wordt hun bruikbaarheid in een Vlaamse context geëvalueerd. Maar naast het in detail bekijken van enkele bestaande vergelijkingen, heeft de paper nog een andere doelstelling. De studie van bestaande vergelijkingen zal immers gebruikt worden om de methode voor project 3 zelf op het punt te stellen.

De paper komt tot een aantal interessante vaststellingen. Zo valt het op dat alle geanalyseerde vergelijkingen een gemeenschappelijke doelstelling hebben, nl. een bijdrage leveren tot een beter DO-beleid. Toch hebben ze soms een zeer verschillende focus. De vijf onderzochte indexen rangschikken de performantie van een groot aantal overheden op het vlak van DO. Ze belichten daarbij echter zeer verschillende dingen, en komen dan ook tot vaak zeer verschillende resultaten. Zo valt het contrast op tussen de resultaten van de ESI en de EPI enerzijds en de Ecologische Voetafdruk anderzijds. Toch kunnen de indexen interessant zijn, vooral om de score van een bepaalde overheid te contrasteren met die van vergelijkbare cases of 'peers'. De kwalitatief-georiënteerde vergelijkingen richten zich daarentegen niet zo zeer op de performantie van overheden, maar analyseren de inhoud van hun beleid zelf. Ze komen daarbij tot gelijkaardige conclusies en leggen factoren bloot die DO-beleid bepalen of beïnvloeden (bv. politieke cycli, persoonlijk leiderschap, verdeling van bevoegdheden en verantwoordelijkheden, economische factoren, …).

Uit de bevindingen van deze paper kunnen enkele aandachtspunten geformuleerd worden m.b.t. het gebruik van indexen voor DO. Ten eerste blijkt dat de interessantste conclusies getrokken worden wanneer Vlaanderen vergeleken wordt met gelijkaardige landen of regio's. Ook de evolutie van de Vlaamse performantie in de tijd kan interessant zijn. Concrete scores en posities zijn daarentegen minder relevant. Ten tweede valt het aan te bevelen dat binnen de Vlaamse overheid, indien ervoor gekozen wordt de performantie van het DO-beleid actief op te volgen, consistentie gehanteerd wordt in het gebruik van een bepaalde index of indicatorenset. Ten derde lijkt het echter wel aan te raden om –wanneer men effectief beleidsmaatregelen wil nemen op basis van de indexen– de kwantitatieve studies met kwalitatief onderzoek aan te vullen, met voldoende aandacht voor beleidsaspecten, omdat de indexen op zich minder geschikt zijn als instrument voor *policy learning*.

Voor project 3 is gebleken dat een kwalitatief-georiënteerde vergelijking van een klein aantal cases het meest geschikt is. Die methode laat immers toe om voldoende rekening te houden met de specifieke context van iedere case. Bovendien is zo'n methode meer geschikt voor *policy learning*, wat een van de doelstellingen is van het Steunpuntonderzoek. Deze paper heeft echter ook een aantal voorwaarden blootgelegd waaraan het onderzoek van project 3 moet voldoen.

Zo wordt het belang aangetoond van een gestructureerde en gefocuste vergelijking. Het project zal daarnaast ook voortbouwen op de bevindingen van vorig onderzoek, ondermeer van de comparatieve analyses die aan bod komen in deze paper.

Without comparisons to make, the mind does not know how to proceed.

Alexis de Tocqueville

1. Introduction

The research project in which this paper is embedded aims at comparing the Flemish approach to SD, which has recently been institutionalized, with the policies of other subnational entities. It is believed that such a comparison can be useful to learn about other experiences and approaches and to see how the Flemish policy relates to them. Before embarking upon the ambitious undertaking of an extensive policy comparison, it is useful to elaborate on the notion of comparing. What does comparing policies mean? What do Flemish policy-makers—or any other for that matter—have to gain from a comparative perspective? And, most importantly, how should such an analysis be conducted? These are indeed fundamental methodological questions and it is our belief that they are too often neglected in comparative analyses. Every comparison carries with it a number of assumptions, methodological choices and analytical trade-offs. The explicit justification of these decisions are indispensable for the scientific value and credibility of every comparative analysis.

In the first section of this paper, we explore the usefulness of the comparative method for our research. Subsequently, we take a look at the different ways in which comparative analyses are conceived. After having highlighted the major differences of some of the most common methods, we take a look at some of the comparative analyses that have previously been conducted for SD. While several assessments of quantitative comparisons (i.e. SD indices) have already been undertaken (e.g. Böhringer and Jochem, 2007; Hák et al., 2007; Parris and Kates, 2003; UNDESA 2001), it is our aim to analyze both quantitative and qualitative studies, which we believe will offer a deeper insight in the strengths and weaknesses of both types of comparison. In our analysis, we will also try to investigate the utility of the discussed studies in a Flemish policy-making context. The lessons learned from the many methodological issues treated in this paper will ultimately lead to the proposition of a method for our own comparative project.

2. The use and usefulness of comparative analyses

2.1 An age-old discipline

Comparative research is of all time. Several authors trace the origin of the discipline back to Ancient Greece or even earlier.[1] The fact is that countries and populations have always looked at other civilizations, for political reasons, from a scientific perspective, or just out of curiosity. During the past centuries comparative studies have occupied an important place in several scientific research areas. In political science the discipline Comparative Politics became particularly popular after the end of the Second World War (Almond, 1968, p. 332). Beforehand its interest was mostly limited to the study of European states and their institutions (Wiarda, 2005, p. 2).[2] As from the 1950s, and with the development of the Cold War, scholars applied themselves primarily to the comparison of large political systems (e.g. Almond, 1956). When the

[1] For a historical overview of comparative research, see Warwick and Osherson (1973) or Deutsch (1987).

[2] This primary focus on governments and institutions is illustrated by the denomination 'Comparative Government' that was alternatively given to the discipline (Almond and Powell, 1966, p. 2; Scarrow, 1969, p. 1-2; Wiarda, 2005, p. 2).

decolonization wave produced a major increase in the number of states, and in comparative studies, scholars concentrated on the comparison of Western and non Western countries (Almond and Powell, 1966, p. 5; Wiarda, 2005, p. 2). In these types of studies, Comparative Politics was mainly interested in the political organization and institutions of countries, their decision-making mechanisms, electoral systems, etc.

A subfield of Comparative Politics is the study of policy comparison, called 'comparative policy analysis' or 'comparative public policy';[3] The growing interest in public policy is accountable for comparative analyses of national policies in the areas such as health care, education, the environment or fiscal policy (Antal et al., 1987, p. 17). While Comparative Politics is mostly interested in generalizable conclusions and theory-building and focuses more on the macropolitical level, comparative policy analysis allows for practical knowledge of specific cases (Teune, 1978, p. 54).

2.2 Comparing is learning

Why do political scientists invest time and money in the analysis of the policy of others? Antal et al. (1987, p. 14-15) indicate three main motivations for comparative policy analysis (see also Jreisat, 2002, p. 80-82). First of all, the growing interdependence of countries makes that one needs to be aware of the policy of others, especially one's neighbours. After all, many issues cross borders and cannot be tackled without the knowledge of how other affected countries approach them. A second motivation is the desire to develop concepts and generalizations and to contribute to general political theory. Lastly, the authors indicate that comparative policy analysis contributes to the knowledge base of both domestic and international policy. Policy-makers need to be aware of the approach of other countries in order to adapt their own policies. Comparative policy analysis is thus used to learn about the policies of others. In addition, comparative analyses should be able to indicate which policy aspects are specific to the country or region in question, and which are universal and thus transferrable to other jurisdictions. Antal et al. also show that comparative policy analysis not only allows for learning about other policies, but that it also teaches something about one's own practices.

In the literature, learning about others' policies in order to use that knowledge for one's own policy is called *policy learning*[4]. It is an old practice that is becoming ever more important. The knowhow of other countries is increasingly considered an essential part of policy-making (Dolowitz, 2004, p. 29; Levi-Faur and Vigoda-Gadot, 2004, p. 1-2). When policy-makers are confronted with new problems, it is indeed more efficient for them to first look at similar situations in other countries than to start empty-handed. The expanding communication possibilities and the growing role that international organizations have in policy-making add to the increasing use of policy learning (Brans et al., 2003, p. 115-116; Dolowitz and Marsh, 2000, p. 6-7). Comparative analyses are therefore needed to find out what can be learned from which governments.

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[3] Heidenheimer et al. define *comparative public policy* as "the study of how, why, and to what effect different governments pursue particular courses of action or inaction" (Heidenheimer et al., 1990, p. 2-3).

[4] Levi-Faur and Vigoda-Gadot define policy learning as "the redefinition of one's interest and behaviour on the basis of newly acquired knowledge, after watching the *actions* of others and the *outcomes* of these actions" (Levi-Faur and Vigoda-Gadot, 2004, p. 7).

When policy-makers choose to adopt or imitate the policy of others, some scholars speak of *policy transfer*.[5] Different aspects of a policy can be transferred. Dolowitz and Marsh (2000, p. 12) distinguish between policy goals, policy content, policy instruments and policy programs. Also institutions, ideologies, ideas and attitudes can form the object of policy transfer. Furthermore, the extent to which policy is transferred can vary. Exact copies are rare. Mostly, the observed policy is adapted to the institutional, cultural and historical context of the receiver. Sometimes the experiences of two or more countries are processed into an adapted policy mix. Lastly, the policy of others can also be used as an inspiration or stimulus, without it really being transferred (Dolowitz and Marsh, 2000, p. 13; Rose, 1993, p. 30-31). In some cases policy comparison can lead to negative lessons, in the sense that one learns from the bad experiences of others what not to imitate (Dolowitz, 2004, p. 39; Rose, 1991, p. 4).

It is important to point out that policy comparison or analysis with policy learning as a goal can never be purely descriptive. Policy-making presupposes taking important decisions, which is why comparative policy analysis always contains a normative element as well. Particularly in the context of policy transfer the researcher has to ask the question whether a certain policy should be transferred or not, which makes that some form of evaluation becomes an indispensable step in such an analysis (Anderson, 1978, p. 20; Antal et al., 1987, p. 19; Rose, 1991, p. 7-8; 1993, p. 11).

2.3 Who is doing well?

An area where comparative analyses have frequently been used is environmental policy, including with the objective of policy learning. That is because environmental policy is, to a large extent, still plagued by uncertainty, e.g. concerning the outcome of policy choices (Esty, 2002, p. 2; Funtowicz et al., 1999; Glasbergen and Driessen, 2000, p. 7-9; Gysen et al., 2006, p. 102). Scholars and policy-makers are thus easily inclined to look at the environmental policy of other governments, and at their results. In doing so, they try to discover so-called 'best practices' or important success stories (Jänicke and Weidner, 1995). In the same light, rankings of environmental performance are created, to display the pioneers and laggards. Countries who continuously score high on such rankings are automatically referred to for examples of successful policies, while the laggards are pointed at and shamed.

It is important to emphasize, however, that when environmental policy is concerned one can rarely talk about absolute successes. That is why Jänicke (1992, p. 47) suggests to rather search for 'relative successes'. In stead of seeking to identify best practices, it might thus be wiser to speak of 'functional' practices and to ask the question "what works, where, when and how" (Bressers, 2004).[6] Indeed, it is not only a matter of knowing who is performing well, but also of finding out which factors determine his success (Jahn, 1998, p. 107).

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5 Policy transfer is "the process by which knowledge about policies, administrative arrangements, institutions and ideas in one political system (past or present) is used in the development of policies, administrative arrangements, institutions and ideas in another political system" (Dolowitz and Marsh, 2000, p. 5). Other scholars speak of *lesson-drawing* (Rose, 1991; 1993) or *borrowing* (Jacoby, 2001). A related concept is *policy diffusion* or "the socially mediated spread of policies across and within political systems, including communication and influence processes which operate both on and within population of adopters" (Knill, 2005, p. 766).

6 In the same way, Rose avoids speaking of successes and prefers the term *working programs*: "a program works if it produces more satisfaction than dissatisfaction within the government responsible for it" (Rose, 1993, p. 28).

2.4 Comparisons for sustainable development: overcoming uncertainty and complexity

Even more than traditional environmental policy, SD is a domain afflicted by vagueness and uncertainty concerning policy choices, partly because of the fact that it is a relatively young theme on the political agenda (Baker and McCormick, 2004, p. 278; Bomberg, 2004, p. 4, 15; Bruyninckx, 2006, p. 270-271; Dovers, 1997, p. 312; Karlsson et al., 2007, p. 27; Lafferty, 2004, p. 20; Meadowcroft, 1997, p. 184; 2000; O'Riordan, 2004, p. 22; O'Toole, 2004, p. 46). Moreover, the principles of SD are often directly opposite to traditional policy-making (Moldan and Dahl, 2007, p. 8-9; Rickard et al., 2007, p. 66; Spangenberg and Giljum, 2005, p. 1). The need for long-term planning and the integration of economic, social and environmental objectives causes policy-makers to operate in unknown territory and to face difficult choices. When it comes to SD policy, the desire to look beyond one's borders and to see how others are coping is thus all the bigger.

Since the emergence of SD on the global political agenda, several comparative analyses have been conducted to map the efforts of different countries and subnational entities in the implementation process (e.g. Berger and Pohoryles, 2004; Lafferty and Meadowcroft, 2000b).[7] Scholars have been interested in the first experiences of policy-makers with the complexity of the issue and have compared the different political approaches and institutional arrangements governments have applied to cope with it (Bachus et al., 2004; Jörgensen, 2002). These studies give evidence of large differences and show that SD can be interpreted and institutionalized in many different ways (Lafferty and Meadowcroft, 2000b, p. 2). The analyses conducted so far have also been helpful in identifying the obstacles and barriers for the implementation of SD, and they have tried to determine which factors are crucial for a functional policy (OECD, 2002, p. 9). Finally, comparative analyses for SD have attempted to define the main challenges for SD policy in the years to come (Berger and Pohoryles, 2004, p. 7).

3. Comparative analysis: a tree with many fruits

3.1 Classifying and defining the comparative method

'Comparative' is a label that has been given to a broad variety of studies. Consequently, the field of comparative analyses offers a heterogeneous landscape filled with many different research products that sometimes do not seem to have anything in common. Which kinds of comparative analyses can be distinguished? And, more importantly, when can a study truly be qualified as comparative?

It is not the first time that scholars have asked themselves these questions. Many authors have tried to make order out of chaos by proposing methodological classifications. In the field of Comparative Politics, reference is often made to the work of Arend Lijphart. In an effort to determine the limits of the comparative method, Lijphart (1975) proposes a typology of scientific methods. He distinguishes firstly between experimental and nonexperimental methods. The *experimental method*, hardly usable in political science, is applied by contrasting and then comparing two equivalent groups, one of which is exposed to a stimulus while the other is not (Lijphart, 1971, p. 683-684). Nonexperimental methods are further subdivided into three

[7] Not coincidentally, many of these studies were conducted during the build-up to and in the aftermath of the World Summit in Johannesburg (2002), where one of the main items on the agenda was precisely the lack of implementation a decade after the 1992 Rio Conference.

categories: the statistical, the comparative and the case study method.[8] The *statistical method* "entails the conceptual (mathematical) manipulation of empirically observed data […] in order to discover controlled relationships among variables" (Lijphart, 1971, p. 684). The *case study method* concerns "uncontrolled examinations of single cases[9] that cannot directly result in empirical generalizations and cannot even be used to test hypotheses" (Lijphart, 1975, p. 160). This classification gives rise to a number of questions, particularly concerning the definition of the comparative method and its distinction from other methods, which is not offered by Lijphart. In an earlier article (1971, p. 684) he considers the comparative and the statistical methods to be identical, except for the number of cases they deal with. He proposes that the comparative method should only be used when the number of cases is too small to be analyzed by the statistical method. He thus suggests that there is a limit in the number of cases for a study to be comparative, which seems unsatisfactory and suggests that one method is superior to the other.[10] Lijphart (1975) later adapted his typology and restricted his use of the term 'comparative method' to the *comparable-cases strategy*. In this strategy, the researcher tries to solve the "many variables, small N" problem[11] by selecting comparable cases for analysis—these are cases "similar in a large number of important characteristics (variables) which one wants to treat as constants, but dissimilar as far as those variables are concerned which one wants to relate to each other" (Lijphart, 1971, p. 687)—and thus achieving a large measure of control.[12] This conceptualization, however, raises questions about the distinction between the comparative and the case study method. Although Lijphart (1971, p. 691) defines case studies as examinations of single cases, he indicates that certain types of case studies can be considered implicit parts of the comparative method. Following that reasoning, the comparable-cases strategy can be considered as a specific application of the case study method. However, a study can also involve different cases without making a comparison between them (Yin, 2003, p. 14). We believe the case study method and the comparative method to be different methods, while a study consisting of comparing different cases should be considered as a combination of both.

The most important question is when exactly an analysis should be considered 'comparative'? Warwick and Osherson try to answer this question by using the term *comparative method* "to refer to social scientific analyses involving observations in more than one social system, or in the same social system at more than one point in time" (Warwick and Osherson, 1973, p. 8). Similarly, Ragin refers to *comparative research* as "research that uses comparable data from at least two societies" (Ragin, 1996, p. 75). These characterizations capture the essence of comparing and do not fall into the trap of limiting the number of observations for a comparative study. However, we believe, as George (1979, p. 62) and DeLeon and Resnick-Terry (1999, p. 12-13) imply, that a simple sequence of 'country-by-country' case studies followed by a general con-

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8 Lijphart's typology broadly follows the classification of Smelser who, in addition to Lijphart's categories, also mentions the *method of heuristic assumption* (Smelser, 1973, p. 55).

9 A *case* is understood as "an entity on which only one basic observation is made and in which the independent and dependent variables do not change during the period of observation" (Lijphart, 1975, p. 160).

10 Although this was not the case in Lijphart's time, Mahoney (2000, p. 387) indicates that most scholars by now agree that there is a place for studies involving only a small number of cases.

11 According to Lijphart (1971, p. 685), the comparative method suffers from the problem of handling too many variables with too small a number of cases.

12 At that point he defines the *comparative method* as "the method of testing hypothesized empirical relationships among variables on the basis of the same logic that guides the statistical method, but in which the cases are selected in such a way as to maximize the variance of the independent variables and to minimize the variance of the control variables" (Lijphart, 1975, p. 164).

clusion identifying trends and differences should not automatically be labeled as a comparative analysis. To qualify as comparative, the analysis must be conducted systematically (Jänicke and Weidner, 1997, p. v; Macridis, 2000; Rokkan, 1968, p. 19). That involves the selection of certain categories and concepts and the establishment of criteria of relevance for the selection of cases. The researcher must also connect his concepts and the interrelationships he discovers in the compiled data to theoretical assertions, in order to develop a systematic framework of comparison. A possible way of conducting a systematic comparative analysis is through George's *method of structured, focused comparison*. This method is 'structured' because it requires the researcher to ask the same standardized questions, which reflect the research objective, of each case and thus making systematic comparison. It is 'focused' because the comparison only deals with specific aspects of the examined cases. That way, the method ensures that the data of the cases are truly comparable and that the research is undertaken with a specific objective and theoretical focus in mind (George, 1979, p. 61-62; George and Bennett, 2005, p. 67-70; King et al., 1994, p. 45).

Part of the discussion about the classification of methods is a legacy of the classical divide between quantitative and qualitative research in social sciences. Because this divide, in our view, manifests itself strongly in comparative analyses for SD, we will develop this issue in the next section.

3.2 The quantitative-qualitative divide

The distinction between quantitative and qualitative methods is often made in social sciences, in part for educational purposes. In such a distinction, quantitative research emphasizes the measurement and analysis of relationships between variables and it often uses mathematical models, statistical tables and graphs. Qualitative research, in contrast, involves an interpretive, naturalistic approach and focuses on processes and meanings (Denzin and Lincoln, 2004, p. 35-36). Looking at some of the distinct differences between the two approaches, the distinction sometimes seems obvious. However, several scholars urge to discard the dichotomy, which often leads to a passionate debate (Prakash and Klotz, 2007). The opponents of the divide have valuable points of critique. First of all, the discussion sometimes concerns (quantitative versus qualitative) data collection, rather than research methods. Another point of criticism is that the term 'qualitative' is used too much as a default category, referring to everything that is not quantitative but without a meaning of its own (Barkin, 2007, p. 754-755). Others reply that the divide is equally discriminatory against the quantitative category, because it narrows it to numerical and statistical methods, while it can also involve non-numerical approaches (Hoffmann, 2007, p. 759-760).

This paper is not meant as an answer to the debate. Without taking an absolute stance, we feel that there should certainly not be a complete division between quantitative and qualitative methods. Scholars should particularly avoid speaking of 'the' quantitative or 'the' qualitative method. In the context of comparative analyses for SD, however, it appears justified to make a distinction between quantitatively-oriented and qualitatively-oriented studies. The remainder of this paper shows that those studies have always taken either a mainly quantitative or qualitative form. Before taking a look at some concrete examples, the next two sections will contrast the two approaches in the context of SD.

3.3 Quantitative comparisons for sustainable development: indicators and rankings

While quantitative studies can take different forms, they usually work with phenomena translated into numerical indicators and mathematical measurement of relationships between variables. Since quantitative data is comfortable to manage and thanks to digital technologies, quantitative studies can, and often do, analyze and compare a large number of cases. The biggest appeal of this kind of studies is therefore its ability to draw generalizations and to test and evaluate theories about relationships between phenomena (Braumoeller and Sartori, 2004, p. 130, 144; Ragin, 1996, p. 84; Sprinz, 1999, p. 42). Quantitative studies can also be attractive due to the standardization and objectification of data, which ought to make things value-free, transparent and clear for debates (Braumoeller and Sartori, 2004, p. 131; Denzin and Lincoln, 2004, p. 35). However, the objectivity of quantitative comparisons is not always guaranteed. The reliability and validity of data, especially when global data involving many different countries are concerned, often pose a problem for highly quantitative comparisons (Karlsson et al., 2007, p. 37-40; Lijphart, 1975, p. 169; Moldan and Dahl, 2007, p. 5; Sprinz, 1999, p. 55). Moreover, due to the objectification of data, quantitative studies do not pay attention to underlying causal processes (Braumoeller and Sartori, 2004, p. 135; Mahoney and Goertz, 2006). It makes it difficult, if not impossible, to interpret and understand outcomes. Quantitative comparisons tend to ignore the specific contexts and conditions of cases, especially in the field of political phenomena (Luts et al., 2008, p. 48). In contrast to economic, social or geographical data, political characteristics often do not lend themselves to quantitative expression (Scarrow, 1969, p. 19).

The use of quantitative comparisons on environmental issues is relatively new in social sciences (Sprinz, 1999, p. 42, 52; 2004). They are aimed at overcoming uncertainty and at facilitating decision-making through the objectification, simplification and condensation of environmental data (Esty, 2002, p. 2; Esty and Porter, 2002, p. 24). The end product often takes the form of an index that ranks different countries, through the aggregation of different environmental indicators. Subsequently, those data can be used, e.g., to evaluate the effectiveness of environmental regimes or to analyze the relationship between environmental results and economic development, trade, democracy, conflicts, etc. (Esty and Porter, 2002; Harring, 2008; Sprinz, 2004, p. 178-182). Although rankings attract the attention of policy-makers and can incite them to act (Moldan and Dahl, 2007, p. 13), their usefulness for policy-making is not uncontested. Rankings point at pioneers and laggards and they can indicate if the performance of a particular government is evolving in a good or a bad direction (if temporal variation is included), but they do not tell policy-makers what to do nor can they offer valid solutions based on the interpretation and explanation of the data (Anderson, 1978, p. 27; Böhringer and Jochem, 2007; Rose, 1991, p. 10).

In the field of SD, quantitative comparisons are often constructed around the conceptualization that SD can be subdivided into different pillars (economic, social, environmental and sometimes institutional), and indices are created by aggregating indicators of different pillars (McGlade, 2007, p. xix; Moldan and Dahl, 2007, p. 9). One could argue, however, that such an index goes against the integrative idea that is essential to SD. Sustainability can only be reached when all dimensions are integrated and simultaneously targeted, and a bad score on one dimension should not be able to be compensated by a higher score on the others. Besides such indices, other initiatives are aimed at creating a single indicator able to assess the sustainability

of a society and meant to replace GDP as a general measure of welfare.[13] Examples include the Index of Sustainable Economic Welfare (ISEW), the Genuine Progress Indicator (GPI) or Green Net National Product. In accordance with the policy principles of SD, these initiatives want to account for some of the externalities that GDP does not consider. According to critics, however, they are unlikely to provide satisfactory measures due to a lack of data and because not all aspects of welfare (let alone wellbeing) can be expressed in monetary terms (Prescott-Allen, 2001, p. 3; UNDESA 2001, p. 13; Zylicz, 2007, p. 103).[14] The ISEW has already been calculated by different institutions for some countries (e.g. for Belgium by Bleys, 2006), but these different exercises are said to be hardly comparable (Böhringer and Jochem, 2007, p. 5). Nonetheless, indicators are now widely regarded as one of the essential policy tools for SD. Many indicator sets have been developed since the start of the international SD process. Prominent examples include the sets of Eurostat (2008) and of the UNCSD (UNDESA 2008). Also different governments, including the Flemish government (Studiedienst van de Vlaamse Regering, 2006; 2008), have developed their own set of SD indicators. According to Kemp et al. (2005, p. 21) this proliferation of indicator sets is due to the fact that many institutions find work on indicators less threatening than actually intervening for change towards SD. Nevertheless, no consensus has thus far been found on a common set of SD indicators (Moldan et al., 2007, p. xxiii-xxiv). Moreover, the question of finding scientifically valid and policy relevant indicators for SD is a very complex and methodologically challenging debate.[15] In any case, as Lehtonen (2008, p. 242) argues, the actual use of such indicators is far more important than the way in which they are constructed[16].

3.4 Qualitative comparisons for sustainable development: the country-by-country approach

Instead of being focused on variables and indicators, qualitative studies focus on the cases themselves and compare them as a whole. They aim at explaining outcomes through the interpretation of a combination of characteristics and they argue that context matters. They thus pay attention to the specificities and settings of each case and they study processes and historical developments within cases (Bennett, 2004, p. 34-38; Denzin and Lincoln, 2004, p. 34-35; Landman, 2003, p. 24, 29, 228; Ragin, 1996, p. 75, 82-83). Due to the intensity of these investigations, qualitative studies tend to have a smaller number of cases. An important advantage of this approach is that the researcher can familiarize himself with his cases, analyze them in great detail and become sensible to their specific characteristics (Mahoney and Goertz, 2006, p. 243-244; Ragin, 1996, p. 84). Moreover, qualitative comparisons are attractive because they permit the analysis of complex causal relations. Such an analysis of causal mechanisms allows for the formulation of hypotheses, which can give rise to the generation of new theories (Bennett, 2004, p. 35-39; King et al., 1994; Mahoney, 2007, p. 125-126). Yet qualitative comparisons are often criticized for being unverifiable and subject to selection bias (Bennett, 2004, p. 39-40; Landman, 2003, p. 230). In addition, due to the importance of context, it is said to be almost impossible to find sufficiently similar cases in a qualitative approach when the

[13] Also in Flanders GDP is still regarded as a measure of welfare (e.g. Van Miert, 2008, p. 14), despite many voices reporting that it is not, including prominent economists (Funtowicz et al., 1999, p. 22; Neumayer, 1999, p. 77; 2000, p. 348; Nordhaus and Tobin, 1972, p. 512; Talberth et al., 2006, p. 1).

[14] For a comprehensive methodological critique on these initiatives, see Neumayer (1999; 2000).

[15] The literature on indicators for SD is extensive. A recent overview is found in Hák et al. (2007).

[16] See also the discussion on 'institutional embeddedness' in Bauler (2007).

comparison works with a 'most similar cases design'. Another disadvantage of qualitative comparisons is that only partial, if any, generalizations can be drawn from them (Lijphart, 1975, p. 172). Qualitative comparisons are often directed towards the applied knowledge of specific cases, rather than towards universal conclusions.

Because of their attention to specific contextual variables and causal processes, qualitative studies typically lend themselves to the comparison of policies. Policies, indeed, are embedded in a specific cultural, political and historical setting and cannot be interpreted without an understanding of that setting (DeLeon and Resnick-Terry, 1999, p. 18). In the context of SD, qualitative studies can also go beyond the traditional pillar approach and analyze the interdependence of policy issues. Qualitative comparisons for SD have usually taken the form of a country-by-country approach, a sequence of detailed single case studies with a comparative conclusion or epilogue.

4. An overview of some of the efforts made

In the following pages, we contrast a series of previously conducted comparisons on SD. We pay attention to both quantitatively-oriented and qualitatively-oriented comparative studies. Since our interest is restricted to comparative analyses, mere sets of indicators for SD are not retained, yet that does not entail any negative evaluation about the usefulness of some of those sets. Although the two kinds of comparisons we look at differ a lot and do not focus on the same phenomena, all analyzed comparisons are aimed at improving policy-making for SD. Because of their common objective it is justified to compare them. Our analysis mentions the authors, the objectives, the target audiences and the cases of the comparisons. Moreover, we discuss their methodological approach, their focus and some of their most interesting findings. Finally, we highlight some points of consideration and preliminarily evaluate their usefulness in a Flemish policy-making context. Our analysis is supported by literature study and by some expert interviews (see overview at the end of this paper).

4.1 Quantitatively-oriented comparisons

4.1.1 Ecological Footprint (EF)

authors: The EF was created by Mathis Wackernagel and William Rees and developed in their famous book *Our Ecological Footprint. Reducing Human Impact on the Earth* (1996). The EF in itself is a tool that can be used in several ways, including for comparative analyses. Most important are the *National Footprint Accounts* by Global Footprint Network. Those are also used in the two-yearly *Living Planet Report* published by WWF International, lastly in 2008 (Global Footprint Network, 2008b; WWF et al., 2008).[17]

objectives: The EF wants to be a standard measure of environmental sustainability at all levels of governance, assessing human pressures on the planet's carrying capacity. Ultimately, the EF wants to evolve into an indicator as important and valued as GDP (Global Footprint Network, 2007a).

[17] Besides the *National Footprint Accounts*, the EF turns up in various other analyses, e.g. the *Ecological Footprint of Nations* by Redefining Progress, a US think tank (Venetoulis and Talberth, 2006). Only the analyses of the Global Footprint Network, however, are backed by the creators of the EF.

target audience: The EF is created for a broad use by policy-makers, educators and the public in general. It has been picked up by scholars and the media and today it is used by companies, by NGOs and by public planning institutions at all levels (Moldan and Dahl, 2007, p. 15).

cases: The *National Footprint Accounts* include data for 147 countries, for each year starting from 1961.[18]

methodological approach: quantitative. The EF measures the area of productive land and aquatic ecosystems that a defined population needs in order to produce the resources it uses and to assimilate the waste it produces. Imports are added and exports are subtracted from national production. To make the results internationally comparable, the EF is expressed in *global hectares*, i.e. adjusted hectares which represent the average yield of all bioproductive areas. Alternatively, the results can be expressed in the number of planets the population would need in order to satisfy its needs, which can be an effective communication tool. The results of a country shed light on its environmental performance and identify whether it has an 'ecological reserve' or an 'ecological deficit', depending on whether its Footprint is smaller or bigger than its biological capacity.[19] Seen from a global perspective, the biological capacity of the Earth in 2003 was the equivalent of 1.8 global hectares/capita (Global Footprint Network, 2008a; b; UNDESA 2001, p. 12; Wackernagel, 2001, p. 7; Wackernagel et al., 2006, p. 104-105; WWF et al., 2006, p. 14).

focus: Wackernagel adopts a concrete and very narrow approach to SD, in order to "abandon fuzzy sustainability concepts and become specific about the core requirements of sustainability" (Wackernagel, 2001, p. 17). The EF does not consider the social and economic dimensions of SD but focuses on resource consumption as a measure of environmental sustainability (Böhringer and Jochem, 2007, p. 3; Moldan and Dahl, 2007, p. 15). The method is based on the concept of *carrying capacity* (UNDESA 2001, p. 12). This concept, meaning the capacity of ecosystems to support healthy organisms while maintaining its own capacity of adaptation and renewal, is inextricably linked to the concept and conception of SD (IUCN 1980; 1991; Zaccaï, 2002, p. 123-124). Wackernagel (2001, p. 10), too, interprets living within the Earth's carrying capacity as a minimum condition for SD. However, some resources are excluded from the EF, e.g. water, which makes that the real Footprints are actually even larger than those calculated.

findings: The latest *National Footprint Accounts* suggest that most countries today have ecological deficits, as well as the world as a whole. With an average Footprint of 2.7 global hectares/capita, we are exceeding the planet's biocapacity by 30%.[20] The world's Footprint has steadily increased since the first calculation of 1961 (mostly because of increasing CO_2 emissions) and it exceeded its biocapacity in 1986. Especially the Footprint of high income countries keeps rising, while it stays almost stable in low income countries and rises only modestly in middle income countries. The current ecological deficit is maintained through the liquida-

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19 Until 2006, Belgium and Luxemburg were included as a single case (WWF et al., 2006).

This can have bizarre consequences. In 2003 Finland had the 3rd largest Footprint/capita in the world, but was still considered to have an ecological reserve, because it has many natural resources. This conceptualization of ecological reserve or deficit is directly opposite to the principle of intragenerational solidarity, because it implies that inhabitants of countries with many resources are allowed to have a Footprint many times larger than those of other countries.

20 Global Footprint Network marked September 23rd 2008 as 'Earth Overshoot Day', the day the world's population has used all the resources the Earth can generate in a year (Global Footprint Network, 2008c).

tion of the planet's resources, a trend which cannot be upheld indefinitely. In order for the planet to be able to renew its resources, the global Footprint needs to decrease dramatically (Global Footprint Network, 2006; 2008b; c; WWF et al., 2006, p. 1, 14-15, 18; 2008, p. 14).

evaluation: The EF's most applauded quality is its simple and clear language, which gives it potential as a tool for education, awareness-raising and communication. Its attractiveness also lies in the fact that besides national comparisons, the EF allows for a calculation on any level, from the individual up to the world as a whole. Especially the global calculations give the EF an added value, because it can thus be used to depict some of the externalities linked to development in the North. Yet the EF is often criticized because its scope is too narrow and because its underlying information is not accessible. Moreover, the quality and reliability of its data are often questioned (Esty et al., 2005, p. 18; Moldan and Dahl, 2007, p. 15; Simmons et al., 2007, p. 4). Furthermore, the diachronic comparability of the *National Footprint Accounts* is not assured because of the fact that the EF's methodology often changes.[21]

Nevertheless, the EF has become one of the most widely-used measures for resource use. The European Environment Agency (EEA), for instance, mentions it various times in its latest environmental assessment report (EEA 2007, p. 35, 193, 263). Yet Simmons et al. (2007, p. 2) claim its application at the level of national governments is rather rare. According to Moldan and Dahl (2007, p. 15) it is most relevant at the local level of governance. The EF has also been incorporated as an indicator in other indices for SD, such as the Environmental Sustainability Index (ESI)[22] or the Sustainable Society Index (SSI) (Esty et al., 2005, p. 14; van de Kerk, 2007, p. 6).

usefulness in a Flemish context: In the latest *National Footprint Accounts*, Belgium has the 17th largest footprint of all included countries, with 5.1 global hectares/capita. The largest part of its footprint is caused by CO_2 emissions from fossil fuels, followed by cropland[23] (Global Footprint Network, 2008b; WWF et al., 2008, p. 14). In 2005, Global Footprint Network launched its "Ten-in-Ten" campaign, with the objective of institutionalizing the EF in at least ten countries by 2015. The Belgian federal government[24] was one of the partners that concluded an agreement with Global Footprint Network to calculate its EF in the framework of this campaign. Yet to this date no output has been made public.

The EF can also be applied at the subnational level. The government of Wales has been the first to adopt it as its main indicator for SD (Global Footprint Network, 2007a; Wackernagel et al., 2006, p. 107, 109). Quebec has developed it for its territory and intends to use it as a measure in its main SD reports (Vérificateur général du Québec, 2007, p. 7-9, 141-154). Brussels-Capital Region has also calculated the Footprint of its inhabitants (Ecolife, 2004). A Flemish Footprint, however, has not yet been developed. Yet much attention has recently been given to it in a television special (Global Footprint Network, 2007b, p. 3). Interviews have shown that the EF is considered an important metric in the context of SD. Its policy relevance, however, is in some cases felt to be less straightforward. Although the EF exposes some of the most pressing obstacles of SD, it mostly tells you where you are, not where you have to go,

21 The impact of nuclear energy, e.g., is not included in the most recent calculation, although it has been an indicator until 2006.

22 Paradoxically, large Footprints seem to coincide with high ESI values (Esty et al., 2005, p. 385-386).

23 The previous edition showed that nuclear energy was the third factor giving Belgium a large Footprint, but that variable has been eliminated in 2008.

24 The federal State Secretary for Sustainable Development and Social Economy, the Federal Planning Bureau and the National Institute of Statistics were initially involved in the process.

which can make it hard to attach policy goals to it. The EF is also often used to blame and shame (e.g. although the EU's Footprint is far too big, it is still only half of the Footprint of the US), while it should be used above all to change existing patterns of consumption and production.

4.1.2 Environmental Sustainability Index (ESI)

authors: The ESI was created by Yale Center for Environmental Law and Policy (Yale University) and Center for International Earth Science Information Network (CIESIN, Columbia University). It was sponsored by the World Economic Forum and developed in collaboration with the European Commission's Joint Research Centre. It was produced first in 2000. Later versions were published in 2001, 2002 and 2005.[25] After 2005, the ESI was succeeded by the Environmental Performance Index (EPI, cf infra).

objectives: The ESI is meant to permit cross-national comparisons of environmental performance and progress. Its underlying aim is to make a first step toward a more analytically driven approach to environmental decision-making (Hák et al., 2007, p. 378). Conscious of the fact that there is still no certainty about what exactly constitutes SD, the index simply wants to offer relative measurements, allowing to identify best practices and environmental laggards. It is said that much can be learned, above all, by comparing a country's position with that of its peers (e.g. countries with a comparable socioeconomic situation or a similar population density) (Esty et al., 2005, p. 1-2, 7, 29).

target audience: The ESI is mainly developed as a tool for policy-makers at the national level.

cases: The 2005 ESI ranks 146 countries (compared to 142 in the 2002 version, 122 in 2001, and 56 in the Pilot 2000 ESI). The authors excluded countries that were too small (in area or population) to be compared with others. However, data availability or the lack thereof is the primary reason for the missing cases. Wanting to incorporate as many countries as possible, the authors included every country for which data were available on at least 45 out of the 76 variables, using various techniques to fill in the gaps (Esty et al., 2005, p. 16).

methodological approach: quantitative. The index is composed by 21 core indicators, each of which aggregates several underlying variables (76 in total) (Esty et al., 2005, p. 1; Moldan and Dahl, 2007, p. 17). All 21 indicators receive equal weight in the index. However, an implicit weighting scheme is used within the indicators, as the number of variables for each indicator varies from 2 (e.g. 'eco-efficiency') to 12 ('environmental governance'), giving the latter variables a much lower proportional weight than the former.

focus: As its name suggests, the ESI focuses on the environmental dimension of SD. It focuses on the state of and the pressures on environmental systems, on their carrying capacity and on national societies' ability to cope with environmental stress. The 21 core indicators are grouped into 5 thematic components: 'environmental systems', 'reducing environmental stresses', 'reducing human vulnerability to environmental stresses', 'societal and institutional capacity to respond to environmental challenges' and 'global stewardship'. Environmental sustainability is defined as the ability to score high on all 5 components. 'Reducing environmental stresses' receives the highest importance, containing 6 out of the 21 core indicators (Esty et al., 2005, p. 11; Levy, 2002, p. 13).

[25] The specific data and rankings mentioned in this analysis are from the 2005 ESI.

findings: Among the ESI's main findings is the observation that environmental performance varies systematically with a country's economic and legal context (such as income or the environmental regulatory regime) (Esty and Porter, 2002, p. 24-30; Levy, 2002, p. 16). It supports the 'Porter hypothesis'—a high level of environmental protection is consistent with a high level of economic growth (Levy, 2002, p. 18; Porter and van der Linde, 1995)—, illustrated by the fact that the highest ranking countries in the ESI also figure in the top of the Global Competitiveness Index (Esty et al., 2005, p. 27; World Economic Forum, 2007). However, large differences remain among countries with a comparable socioeconomic situation. Belgium, for instance, scores lower than several developing countries, while countries with a comparable income do reach the top. Another important observation is the correlation between a low rate of corruption and high environmental performance (Levy, 2002, p. 18). It points at the central role of good governance in environmental policy success (Esty et al., 2005, p. 28).

evaluation: The ESI is useful in benchmarking a country's environmental performance in relation to that of its peers. In addition, it is praised for being a good communication tool. Partly due to its backing by the World Economic Forum, it receives a great deal of media attention. However, the index is also the object of many critiques. First, although the ESI's variables were selected on the basis of a review of the environmental literature and through statistical analysis (Levy, 2002, p. 15; UNDESA, 2001, p. 17), the selection is said to be arbitrary and without consideration of causal mechanisms (Moldan and Dahl, 2007, p. 17). Second, flaws and gaps in international data appear to cause anomalies in the index, e.g. the 33rd ranking of Russia with a significantly higher score than countries like the Netherlands. Due to missing and possibly faulty data, such anomalies question the overall reliability of the index (Levy, 2002, p. 19; Moldan and Dahl, 2007, p. 17, 22). Third, the ESI does not offer real explanations for a good or bad score. The data are unable to identify the most important drivers for environmental performance. Moreover, due to the equal weight of all 21 core indicators, policy-makers would have difficulties to define priorities based on the score of their country (Levy, 2002, p. 18; UNDESA, 2001, p. 18). Fourth, the ESI is said to have an inherently Northern bias, because it includes many measures of capacity and favours technical innovations. Most of these countries, however, have a resource use that is much higher and more unsustainable than developing countries, but the ESI, in contrast to the EF, is unable to fully measure it (Hák, 2007, p. 364, 367). A final and fundamental critique of the ESI is precisely its lack of attention to the external dimension of SD (Statistical Office of Estonia, 2005, p. 5). Indeed, a country might have a very good environmental performance within its own borders, but export its dirty production or its pollution abroad. Since SD is fundamentally a common and a global challenge, such a measurement is unsatisfactory. In addition, due to the ESI's exclusive focus on the environment with few attention to social and economic development (Moldan and Dahl, 2007, p. 17; UNDESA, 2001, p. 17), its usefulness for SD is questionable.

usefulness in a Flemish context: The ESI only considers countries and aggregates all data on the national level. Belgium's low ranking in the 2001 and 2002 ESI[26] received a lot of attention in national and international media. The debate on Belgian environmental policy which followed shows that the ESI can be a useful alarm bell when a country's performance is below average. It can subsequently cause a positive dynamic for policy change (Esty, 2002, p. 6; Levy,

[26] With a score of 44.1, Belgium ranked 79 out of 122 countries in 2001, between Albania and Romania. In the 2002 ESI, Belgium ranked 125 out of 142 countries with a score of 39.1. In 2006, its score went back up to 44.4, ranking 112 out of 146 countries.

2002, p. 19-20).[27] Yet the astonishingly low score also spurred methodological doubts about the ESI and questions about the data it uses. It is an example of the risks of highly quantitative studies. Minor changes to the ESI's methodology, such as weighting the 5 components equally in stead of weighting the core indicators equally, can cause an improvement for Belgium by almost 40 positions (Esty et al., 2005, p. 38). This is due to the fact that Belgium scores very high on 'reducing human vulnerability' and on the governance aspects, but extremely low on 'environmental systems' (e.g. water quality) and on reducing environmental stresses and pollution. However, our interviews have indicated that the ESI fails in giving many other than methodological explanations for low scores. And while the index is accompanied by well-documented reports and analyses, media and political attention remains restricted to concrete ranks and scores.

4.1.3 Wellbeing Index (WI)

authors: In 2001 Robert Prescott-Allen published *The Wellbeing of Nations*, in which the WI was developed. The study was sponsored by the World Conservation Union (IUCN). No updates have been made.

objectives: The WI wants to make a unique linkage between human and ecosystem wellbeing, based on the understanding that SD is a combination of both. The index should help each society to set a baseline, to keep track of its progress and to learn from its actions (Prescott-Allen, 2001, p. 1, 4).

target audience: The WI and the analyses that accompany it were made for policy professionals and scholars in the areas of development, environment, international relations, public policy and resource management (Prescott-Allen, 2001).

cases: In *The Wellbeing of Nations* 180 countries are compared.

methodological approach: quantitative. In Prescott-Allen's study actually four indices are developed: the Human Wellbeing Index, the Ecosystem Wellbeing Index, the WI itself, and the Wellbeing/Stress Index which assesses how much human wellbeing each nation obtains for the amount of ecosystem stress it causes. The WI is an aggregation of the two first indices, with equal weight. The two constitutive indices both have five dimensions. For the Human Wellbeing Index those are 'health and population', 'wealth', 'knowledge and culture', 'community', and 'equity'. For the Ecosystem Wellbeing Index those are 'land', 'water', 'air', 'species and genes', and 'resource use'. In total, about 88 indicators are used. However, few information is found on the selection and calculation of the indicators, except for the fact that only indicators are chosen for which data can be obtained from international sources. The data of the WI is mostly from the period between 1996 and 1999. An interesting fact is that the last dimension of each of the two constitutive indices ('equity' and 'resource use') are included in a country's score only if they deliver a result lower than the one that would otherwise be obtained. This prevents that a too high score on these dimensions would offset poor performance in the other ones. Countries scores are calculated on a 0-100 scale with a proximity-to-target approach, the targets of which are based, among other things, on international agreements. The scores are displayed on the 'Barometer of Sustainability', which entails five categories: 'bad', 'poor', 'medium', 'fair' and 'good'. 'Good' means sustainable and is reached at

[27] Esty et al. (2005, p. 34) report that especially the environmental authorities of Wallonia conducted a detailed review of the ESI, including a recalculation on the basis of updated data.

81/100 (Böhringer and Jochem, 2007, p. 5; Parris and Kates, 2003, p. 563; Prescott-Allen, 2001, p. 2, 6-9, 11, 16, 59; UNDESA 2001, p. 11).

focus: The Human Wellbeing Index wants to be a more realistic measure of socioeconomic conditions than monetary indicators, by covering more aspects of human wellbeing than other indices. Similarly, the Ecosystem Wellbeing Index is presented as a fairer measure of environmental conditions than existing indices such as the ESI. The aggregation of both results in the WI, which consequently allows the study of the impact of one on the other. Their relation and interdependence is made explicit by the 'Egg of Wellbeing' metaphor, in which the yolk represents human wellbeing and the egg white represents ecosystem wellbeing. One is embedded in the other, and the system can only be good (sustainable) if both are good (Prescott-Allen, 2001, p. 3-4; UNDESA 2001, p. 11).

findings: According to the WI, no country is as yet sustainable. This is mainly because no country scores 'good' on ecosystem wellbeing. On human wellbeing only three countries score 'good' (Denmark, Finland and Norway). Prescott-Allen states that income strongly determines human wellbeing. Regarding the environment, the results indicate that countries should better maintain habitats, expand protected areas and improve water quality. In addition, industrialized countries need to invest more in cutting greenhouse gases. The WI also shows that most countries' efforts to improve their wellbeing overexploit the environment, but that increases in human wellbeing do not necessarily have to result in greater impacts on the environment. The key conditions for combining high human wellbeing and low ecosystem stress, according to Prescott-Allen, are freedom, good governance and education (Prescott-Allen, 2001, p. 13, 17, 59, 107).

evaluation: The main attractiveness of the WI is its unique aggregation of human and ecosystem wellbeing. The study rightly shows the interdependence of both and is useful in measuring the impact of one on the other. Yet unfortunately the index shows little transparency on the selection and weighting of the underlying indicators (Esty et al., 2005, p. 17; van de Kerk, 2007, p. 19). Moreover, the numerical scale on which they are measured raises doubts, especially regarding the definition of the categories (when is sustainability reached?). Another disadvantage of the WI is that no updates are available, while precisely diachronic comparison of countries' scores would be very insightful.[28]

usefulness in a Flemish context: Belgium scores 'fair' on human wellbeing and 'poor' on ecosystem wellbeing. It has a score of 51.5 on the WI and ranks 30th. The only western European countries performing worse are Luxemburg and the Netherlands. Belgium qualifies as a 'high ecosystem deficit' country. While these results are interesting, given the above comments the WI proves little useful in a Flemish context.

4.1.4 Environmental Performance Index (EPI)

authors: The EPI succeeds the ESI and is developed and supported by the same institutions. A pilot version was developed in 2006, and a renewed index was published subsequently in 2008.

objectives: This new index aspires to the same objectives as the ESI, while adapting its focus.

[28] This comment is echoed by Van Roosbroek and Van Dooren (2006, p. 20) with regard to indices on performance of the public sector.

target audience: The EPI is meant as an improved guide for policy-makers, while also being aimed at environmental scientists and advocates, and at the public in general (Esty et al., 2008, p. 25).

cases: The 2008 EPI includes 149 countries, compared to 133 in 2006. The difference is explained by the fact that in 2006 the authors only included countries for which data was available on all indicators (without having to use techniques to fill in information gaps, a heavily critiqued technique they applied in the ESI), a criterion they dropped in the 2008 version.[29]

methodological approach: quantitative. In contrast to the relative measurements of the ESI, the EPI uses a benchmark approach with a proximity-to-target methodology. In stead of simply comparing countries' performances with each other, each country's score is a result of a measurement of environmental outcomes linked to policy goals, distilled from international agreements, national standards and scientific consensus. The 2008 EPI contains 25 indicators, aggregated into several policy categories and subcategories. The EPI uses a weighting scheme for its indicators based on scientific literature and statistical analysis. The weight of each indicator in the index varies greatly, from 0.625% (e.g. 'irrigation stress') tot 25% ('environmental burden of disease') (Esty et al., 2008, p. 18-19, 23; Esty et al., 2006, p. 1, 12, 275).

focus: Faced with critique on the ESI, the authors realized that their former index was actually not a measure for sustainability. The EPI therefore has the simpler ambition to focus upon countries' current environmental performance and has narrowed its scope to a few core areas which are within governments' control and which can be linked to targets and can be tracked over time. The EPI brings together two main objectives: 'environmental health' (reducing environmental stresses on human health) and 'ecosystem vitality' (reducing the loss or degradation of ecosystems and natural resources). It is motivated by the environmental dimension of the Millennium Development Goals and it attaches large importance to the popular issue of climate change. With this shift of focus, the authors hope that their new index will constitute a more useful policy guide than the ESI (Esty et al., 2008, p. 9, 24-25; Esty et al., 2006, p. 1, 7, 9).

findings: There are no large differences in the findings between the ESI and the EPI. Most top performers are still rich industrialized countries. Major differences concern a few developed countries (such as Germany and the United Kingdom) performing better in the EPI, and some developing countries, mainly African, performing much worse. This suggests that the latter are relatively unpolluted (thus performing better in the ESI), but unable to meet basic environmental and health services and infrastructure, while the former are facing substantial challenges regarding SD but are managing their present circumstances relatively well. Similarly to the ESI, the most interesting analyses in this index are found when comparing countries within their peer groups. It is in those analyses that the true leaders and laggards can be identified (Esty et al., 2008, p. 20-22; Esty et al., 2006, p. 15-20, 275).

evaluation: Due to the EPI's more restricted focus, it loses some of the interesting indicators of the ESI, such as the governance aspects and some measures of global stewardship. In this new index, in contrast to the ESI, a weighting scheme is used, which has a large impact on the overall results. The objective of 'environmental health' counts for 50% of the overall index, while being measured only by 6 out of the 25 indicators. This accounts for the high ranks of

[29] This is surprising because the techniques they use to fill in missing information were a heavily criticized practice of the ESI.

many industrialized countries who, although they can have bad environmental results, usually can count on a good health system and a low disease burden (the latter accounting for 25% of the total index!). Another consequence of the weighting scheme is that some countries' scores, including the one of Belgium, are very volatile. For Belgium, changes in weighting would cause a difference of up to 81 positions (Saisana and Saltelli, 2008). Just as the ESI, we cannot say that the EPI qualifies as a comparative analysis for SD, seeing its very narrow environmental focus. An encouraging feature of the EPI is its distance-to-target methodology. This can allow for a global application, giving the opportunity of measuring on a global scale how far the world is from meeting its environmental objectives (Esty et al., 2006, p. 275).

usefulness in a Flemish context: The EPI remains restricted to country cases. Compared to the ESI, Belgium has a much higher score here, 78.4 out of 100 (75.9 in 2006). It ranks 57th out of 149 countries.[30] Belgium scores very high on 'environmental health' (98.8), but with 58 on 'ecosystem vitality' it is the lowest scoring EU country and the third to lowest scoring OECD country. Again here, comparisons with peer countries are the most useful. A difference with the ESI is that the new focus of the EPI allows for an easier identification of the most urgent pressure points. In addition, the authors have developed an interactive tool online (see epi.yale.edu) which gives an instant image of the comparability of each country with its peers. This certainly improves the policy utility of the index. Unfortunately, however, it does not show the targets to be met for the indicators.

4.1.5 Sustainable Society Index (SSI)

authors: The SSI was developed by Geurt Van de Kerk and Arthur Manuel for the Sustainable Society Foundation in 2006. Two-yearly updates, the first in 2008, are announced (Stichting Duurzame Samenleving, s.d.).

objectives: The SSI wants to track each country's distance to SD, and the world's distance as a whole. It aims at performing better than other indices in covering all aspects of SD and in promising regular updates.

target audience: The index is above all designed as a tool for policy-makers on all governmental levels, but can also be used as an educational tool and to raise awareness for SD (Van de Kerk and Manuel, 2008, p. 239).

cases: The 2006 SSI covers 150 countries (these are all countries for which data was available on at least 12 out of the 22 indicators).

methodological approach: quantitative. This index is composed by 22 indicators, grouped into five categories: 'personal development', 'clean environment', 'well-balanced society', 'sustainable use of resources' and 'sustainable world'. Within each category, each indicator is weighted equally. In the overall index, however, the two last categories receive twice as much importance as the other three, since they measure the impact that a country has on the world at large. Most data is from around 2000-2004, but for some indicators it goes back until 1997. When data on some indicators was unavailable, the average score of comparable countries was used. The indicators are measured on a 0-10 scale, where 10 means 'full sustainability'. Those targets are objectively determined for some, but guessed for others. In cases where it is not clear what

[30] In 2006, when only 133 countries were included, Belgium ranked 39.

determines 'full sustainability', the best country's score is set as the target (Van de Kerk and Manuel, 2008, p. 231-233).

focus: The SSI is developed on the basis of the so-called 'Brundtland+ definition', which supplements the Brundtland definition with the qualitative aspects of human life.[31] From this definition, the five above mentioned categories are derived. Interestingly,[32] the economy is not mentioned. Monetary indicators are therefore not included in the index (Van de Kerk and Manuel, 2008, p. 229, 231).

findings: According to the ISS, no country has achieved full sustainability. Norway comes closest, with a score of 7.0 out of 10. Most best performing countries are western European, with the developing countries and the oil producers lagging far behind. The scores vary for each separate category. On 'sustainable world' African countries score much better than OECD countries due to their small footprint. Some anomalies do occur, such as Belarus's 7th rank on 'well-balanced society'. It raises questions about the reliability of the data and of the index as a whole (Van de Kerk and Manuel, 2008, p. 234-235, 238).

evaluation: In our view, the SSI fulfils its aim of being a simple and clear tool. Its usefulness, however, is possibly undermined by the reliability of its data. In addition, the targets of the indicators are highly questionable, since in some cases it is very uncertain at what point SD could be fully achieved.

usefulness in a Flemish context: This index shows once again that Belgium performs much worse than its neighbours and peers. With a score of 5.8, it ranks 48th out of 150 countries,[33] between Myanmar and Turkey. Only on 'personal development' it has a good score (9.7). Comparing Belgium and the Netherlands, Van de Kerk and Manuel (2006, p. 33) suggest that most differences are due to geographical conditions (especially water resources) and a difference in policies.

Notwithstanding the doubts that we have regarding the SSI, it will be interesting to see updates of this index, especially since the authors indicate a desire to develop it for subnational levels as well (Van de Kerk and Manuel, 2008, p. 239).

4.2 Qualitatively-oriented comparisons

4.2.1 Implementing Sustainable Development, Lafferty & Meadowcroft

authors: *Implementing Sustainable Development. Strategies and Initiatives in High Consumption Societies* is a book edited by William Lafferty and James Meadowcroft (2000b). Both are experienced scholars and have published many books and articles on SD. The editors have written the introductory and concluding chapters of the book, while the individual case chapters are written by different scholars.

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31 "A sustainable society is a society that meets the needs of the present generation, that does not compromise the ability of future generations to meet their own needs, in which each human being has the opportunity to develop itself in freedom, within a well-balanced society and in harmony with its surroundings" (Van de Kerk and Manuel, 2008, p. 229).

32 The authors indicate that they would have liked to include an indicator such as the ISEW, but this was impossible due to the lack of data (Van de Kerk and Manuel, 2008, p. 231-232).

33 For all scores and rankings, see Van de Kerk and Manuel (2006), which also offers a comprehensive analysis of the Dutch results. A detailed SSI for Romania has recently been developed as well (Popovici et al., 2008).

objectives: Lafferty and Meadowcroft were motivated by the fact that, although SD has been the object of many debates, little comparative work had been done on the way in which the policy concept is interpreted and applied in different contexts (Lafferty and Meadowcroft, 2000c, p. 1-2).

target audience: Lafferty and Meadowcroft's book is intended both for scholars[34] and for policy-makers. To make the study accessible to the latter, theoretical underpinnings are intentionally kept to a minimum (Lafferty and Meadowcroft, 2000c, p. 7).

cases: The book investigates the governmental efforts of "high consumption societies". It includes ten single case studies, comprising of nine national governments (Australia, Canada, Germany, Japan, the Netherlands, Norway, Sweden, the UK and the US) and the EU.

methodological approach: qualitative. The editors declare to adopt a "moderately structured case-study approach" (Lafferty and Meadowcroft, 2000a, p. 433). The case studies have been prepared by different scholars, specialists in each case, to take into account the specific context of each (Lafferty and Meadowcroft, 2000c, p. 6). They are written to stand on their own, which undermines the systematic character of the comparison. The two concluding chapters, however, make up for this procedure.

focus: Lafferty and Meadowcroft approach SD through the lens of the implementation of international commitments: what have the ten governments done to materialize their 1992 Rio engagements? By starting from these commitments, common to all cases, they track the patterns of convergence and divergence in the governments' efforts. Each case highlights the same six elements: the understanding of SD by each government, institutional mechanisms, monitoring, involvement of other actors, internationally oriented initiatives, and sustainable production and consumption. Finally, attention is given to the specific issues of climate change and biodiversity, two policy domains closely related to the Rio engagements (Lafferty and Meadowcroft, 2000c, p. 1-6).

findings: The authors show that SD has been integrated in the policy discourse of most jurisdictions and that it has been associated with changes in governmental structures. Yet many differences exist with regard to the interpretation of SD, which has implications on the way it is materialized, and with regard to the enthusiasm with which it has been received. Overall, three countries (the Netherlands, Norway and Sweden) appear pioneering in the matter, while most governments' efforts are generally supportive but uneven (this is the case of Australia, Canada, Germany, Japan, the UK and the EU). The US is featured as sceptical and uninterested. The study also indicates that in the context of SD central authorities have encouraged the involvement of other levels of government. In Australia, the Netherlands, Norway, Sweden and the EU SD was invoked to justify allocation shifts of duties and competences. In all cases SD has triggered a growth in intergovernmental approaches. In the federal systems it has been difficult to develop a coherent response. With regard to the different policy issues, most problems still exist in sustainable production and consumption and in support for environment and development in the South (Lafferty and Meadowcroft, 2000a, p. 426-427, 433; 2000d, p. 373-376, 411-412).

[34] This comparative analysis is already a 'classic' and has been used by many authors as a basis for further research on governance for SD (e.g. Bachus et al., 2004; Baker and Eckerberg, 2008b; Bomberg, 2004; Driessen and Glasbergen, 2002; Jänicke et al., 2001; Steurer, 2007; Volkery et al., 2004).

Lafferty and Meadowcroft identify several factors which influence the degree of a country's attention to SD. Economic conditions, political cycles and personal leadership clearly affect a government's willingness to invest in SD. Also other factors are said to have an impact, such as political culture, constitutional structure and experience with environmental policy (Lafferty and Meadowcroft, 2000a, p. 423-429).

evaluation: Building upon the tradition of comparative environmental politics and policy (Lafferty and Meadowcroft, 2000c, p. 8), this book is now one of the cornerstones of what could be called 'comparative governance for SD'. By comparing the efforts of ten different governments, it has revealed different patterns of implementation and made a first step in unravelling some of the factors which have an impact on governmental commitment to SD.

usefulness in a Flemish context: Since Belgium is not one of the case studies of this analysis, there is no direct link to the Flemish context. Even so, Lafferty and Meadowcroft's study does have some utility, since it investigates the factors that influence SD policies. It is also interesting in that it pays specific attention to federal systems and the problems which can arise in those settings (see Lafferty and Meadowcroft, 2000a, p. 427; 2000d, p. 375).

4.2.2 Governance for Sustainable Development, OECD

authors: *Governance for Sustainable Development. Five OECD Case Studies* is a research output published by the OECD in 2002. The case study chapters are prepared by different country teams. Findings and conclusions are summarized by the OECD Public Management Service (OECD, 2002, p. 3).

objectives: The project was aimed at identifying the main barriers for SD with regard to governance practices. It therefore analyzes decision-making mechanisms and specific institutional arrangements. It also pays attention to the context of the five cases by describing aspects of each national system which are important in the context of SD (OECD, 2002, p. 3, 9).

target audience: The OECD study is intended for governments at all levels, which can learn from its results in order to design long-term SD policies.

cases: The OECD examined five national case studies: Canada, Germany, Japan, the Netherlands and the UK. The five cases differ in many ways, but they have all made efforts to elaborate a specific approach to SD (OECD, 2002, p. 3, 9-10).

methodological approach: qualitative. Each case study is separately prepared and written. Yet all scholars had the same research questions and were looking at the same issues. The country chapters are constructed in the same way. After giving an overview of some general characteristics of the case, they address the 'Main issues and tensions' and the 'Institutions and policies' and 'Decision-making mechanisms' installed for SD. They conclude by highlighting the lessons that can be learned from that case. An overview at the beginning of the publication gives the main findings and conclusions of the analysis.

focus: Analyzing 'governance for SD', the OECD was mainly interested in the specific efforts governments have made to establish institutions and decision-making mechanisms to respond to the challenges posed by SD. Its focus was restricted to national governments. In the analysis emphasis is laid on mechanisms to institutionalize the main policy principles for SD, such as public participation or policy integration. The study also describes the role of different departments and agencies in SD policy and the way in which each of the five governments interprets

the notion of SD. Moreover, the OECD pays attention to the specific context and problems of each case.

findings: The OECD analysis concludes that all governments are struggling with three main challenges: policy integration, improving interaction between government and society, and creating a longer-term view in policy making. The study also offers policy recommendations based on the lessons learned from the cases. First, governments should adopt and promote a clear and operational definition of SD, linked to policy goals. Furthermore, there should be a commitment to SD at the highest level, and a strategy should be designed which is enforced by a focal point at the centre of government. Governments should also pay attention to vertical policy coherence, which entails an effort for decentralization while ensuring policy coherence across levels of governance. Finally, the OECD makes a plea in favour of consultation with citizens and scientific input in policy-making (OECD, 2002, p. 11, 33-34).

Besides these general findings, the OECD's study offers other valuable insights regarding the particular cases. For instance, it puts forward that the two federal countries, Germany and Canada, experience much more problems regarding cooperation and policy coherence than the other cases. In Canada, issues related to SD even exacerbate the relations between the provinces and the federal government (OECD, 2002, p. 20-21).

evaluation: Although the cases were prepared by different scholars, the study does qualify as a structured comparison because each case focuses on the same issues. Since the number of cases is rather low, no generalized conclusions should be drawn from this analysis. It is rather a report of what works, where and how. The analysis shows that an understanding of the domestic context matters in explaining governance processes for SD. The specific interpretation of SD by each government already has large implications in the way in which it is institutionalized, who takes charge of it, and which policy instruments will be developed to address the issue. The most interesting lessons can be learned from the specific experiences of each case, e.g. that in Germany a lack of a clear goal structure for SD results in a lack of a positive orientation for the involved actors (OECD, 2002, p. 146).

usefulness in a Flemish context: This overview shows that although Flanders or Belgium are not analyzed in the OECD study, it can still offer valuable insights. As the publication is deliberately aimed at policy learning, it allows for the identification of the main obstacles other governments have encountered in their efforts to institutionalize SD.

4.2.3 In Pursuit of Sustainable Development, Baker & Eckerberg

authors: *In Pursuit of Sustainable Development. New governance practices at the sub-national level in Europe* is edited by Susan Baker and Katarina Eckerberg (2008b), who have also written the introductory and concluding chapters. The authors of the remaining chapters are all leading experts in the topics that are developed in the book.

objectives: Building upon previous work on the implementation of SD (e.g. Lafferty and Meadowcroft, 2000b; Lafferty and Narodoslawsky, 2003), Baker and Eckerberg want to investigate how countries have responded to their Rio engagements by engaging with subnational and local actors. In this book, however, the authors intend to move beyond a pure implementation study, by examining how the promotion of SD has encouraged new forms of governance practices (Baker and Eckerberg, 2008c, p. 2-3).

target audience: This book is aimed primarily at scholars, in diverse disciplines from politics and social policy to geography and environmental sociology.

cases: Baker and Eckerberg study governance practices in pursuit of SD at the subnational level in Europe, covering Norway and several EU member states (Austria, Denmark, France, Germany, Ireland, the Netherlands, Spain, Sweden and the United Kingdom), some in more detail than others.

methodological approach: qualitative. This publication is the output of a workshop at the 2005 ECPR Joint Sessions in Granada. The different chapters are developed from the basis of individual papers presented at the workshop. To create a certain degree of systematic comparison, all contributing authors were requested to take into account two reporting protocols, one on SD and one on new governance practices. The protocols consist of a series of very specific questions and issues, which are assembled and summarized by the editors in their concluding chapter (Baker and Eckerberg, 2008a, p. 211-227; 2008b, p. xix; 2008c, p. 13, 19-20).

focus: Investigating SD practices at the subnational and local levels in Europe, Baker and Eckerberg focus on how these levels are engaged by national implementation strategies. The editors are interested in the steering role of the national governments. In addition, special attention goes out to 'governance for SD' and to how SD goes hand in hand with the emergence of new governance practices,[35] in contrast to traditional governing activities.

findings: Baker and Eckerberg conclude that SD is generally well developed at the declaratory level, while the extent of actual policy measures differs highly across cases. In most countries priority is still given to business interests, and the importance of SD strategies in comparison with other policies is marginal. Moreover, long-term policies still have not replaced politics based on electoral cycles. Yet in a few countries the authors observe a shift from traditional environmental management to integrated policy-making for SD, including at the subnational level. They also notice significant impact of the EU Structural Funds and of inter-subnational cooperation for SD. Moreover, the book states that commitment from central government is needed for the development of policy capacity for SD (Baker and Eckerberg, 2008a, p. 208-211, 214-215, 218; Berger and Steurer, 2008, p. 41-45).

With regard to new governance practices, the book points at the limits of new governance instruments. The authors do not notice a real breakthrough of those instruments, and their emergence is not causally connected to SD. While certain mechanisms such as public-private cooperation are enhanced, the authors still witness a crucial role for traditional governing activities, including steering by national governments and policy priorities and by international organizations (Baker and Eckerberg, 2008a, p. 209, 222-223, 226).

evaluation: Baker and Eckerberg uniquely address the subnational level of governance, which other studies (e.g. Lafferty and Meadowcroft, 2000b; OECD, 2002) have failed to do. They also pay significant attention to the issue of SD itself, e.g. contrasting it to the notion of 'ecological modernization' or to traditional environmental policy (Baker and Eckerberg, 2008c, p. 5-13). However, despite the reporting protocols, the individual chapters are still very different in focus and scope. Furthermore, although the authors' interest in subnational entities, each chapter still approaches them through a national lens, and does not study them in their own right. Yet interestingly some chapters do touch upon the differences between the approaches

[35] In this regard, the authors focus on multi-level governance, networks and public-private partnerships, participation, and so-called New Environmental Policy Instruments or NEPIs (see Baker and Eckerberg, 2008c, p. 13-19).

of some subnational entities, even within the same country (see, e.g., Baker and Eckerberg, 2008a, p. 209).

usefulness in a Flemish context: The biggest merit of Baker and Eckerberg's study is its attention to the subnational level of governance. The Belgian entities, however, are not taken into account. Nevertheless, this study is useful in a Flemish context, e.g. because it points at the need to look at the distribution of power and authority within a country if one is to compare SD policies (Baker and Eckerberg, 2008a, p. 220-221).

4.2.4 Other studies

Some other quantitatively-oriented comparisons on SD exist, but are not included in this analysis because they are not as extensive as the ones we already discussed or because they would not offer new elements that were not yet touched upon. Worth mentioning is the work by Kirsten Jörgensen (2002; 2007), who compares German *Bundesländer* and US states in their approach to environmental policy innovations and SD. It is one of the only authors who focus on subnational entities. Other qualitatively-oriented comparative studies concentrate on a specific aspect of SD policy, such as Strategies for SD (e.g. Swanson and Pintér, 2007; Volkery et al., 2004).

5. Conclusions and lessons learned

Our analysis has shown that the comparative investigations that have been conducted on SD display great differences, although the objectives of most studies are largely the same. Ultimately, all comparative analyses want to contribute to better policy-making for SD. However, the substantive focus of the studies is very distinct in each case, which has a significant impact on the results. We have observed that in the case of comparative analyses for SD a dichotomy between quantitatively-oriented and qualitatively-oriented studies certainly exists. Our analysis also confirms some of the strengths and weaknesses of both types of comparison.

The five highly quantitative analyses that were discussed rank the performance of a large number of governments in the area of SD. Yet in doing so, they focus on very different dimensions, either exclusively environmental, or combined with some other issues. As a consequence, they often have divergent and even conflicting results (compare Finland's extremely large Ecological Footprint with its applauded ranking in the ESI and the EPI, see also Blanc et al., 2008, p. 252). In addition, they point towards different problems and solutions. In the perspective of the EF, for instance, energy emerges as the main issue area of SD. When dealing with such indices, it is thus very important to carefully verify what they actually measure and how. As we have seen, this kind of comparative analysis draws general conclusions about groups of countries and how their performance on a certain aspect of SD is statistically linked to other facts, such as economic conditions, legal context, or values like freedom or good governance. These indices are unable, however, to ascertain causal mechanisms or underlying processes. Their most interesting conclusions are drawn when contrasting a country's performance with that of its peers and when enough attention is given to what lies beneath the numbers. Notice must also be given to the data, which sometimes lack the quality they need. Quantitative comparisons appear to be good communication and awareness-raising tools, but because of their specific characteristics are unable to explain their results. We recommend that policy-makers, including in the Flemish government, continue to monitor the studies that we have discussed, but we want to formulate some considerations. First, attention must be given to the performance of Flanders in comparison to other (comparable) governments and, if pos-

sible, to its diachronic evolution. Concrete positions and rankings, in contrast, should not be given a high priority. Second, when attention is given to these indices it should lead to a debate aimed at improving policy performance. Yet when designing concrete policy measures, additional studies must be conducted to explain the outcomes of quantitative studies. Third, if the Flemish governments chooses to actively monitor its performance on SD, it must consciously select a specific index (or set of indicators) and subsequently be consistent in using it for all monitoring and benchmarking studies.

The qualitative comparisons that we have reviewed do not measure the performance of governments, but analyze their policies for SD in order to draw lessons from them. While the focus of the comparison also differs within this group (whether on which part of policy they zoom in or how they approach the analysis), their findings have often been similar and reinforce each other. They have shown that there lies a gap between policy declarations and concrete actions, and that different governments are still struggling with the same issues, such as policy integration, participation and creating a long-term view for policy-making. These qualitative comparisons have also attempted to identify some of the factors which have an impact on governments' SD policies. First, the way in which SD is interpreted and conceptualized at policy level has an important impact on its materialization.[36] Furthermore, it appears that a commitment to SD at a central place of government is necessary for an effective policy. The studies also point out that political cycles and features of personal leadership affect a government's strategy. Moreover, the constitutional structure and the allocation of authority and responsibilities need to be taken into account, just as economic conditions. Finally, SD policies of governments are influenced by the history of political culture and by their experience with traditional environmental policy. It is thus clear that qualitative comparisons reach other conclusions than quantitative ones. Since they allow for the identification of influencing factors, which can be used to improve or adapt existing policies, qualitatively-oriented studies seem better equipped as an instrument for policy learning than quantitatively-oriented ones. For our own comparative project, therefore, we choose to adopt a qualitative method. It is the most suitable for policy learning and it will allow us to pay attention to the factors which have proven to be important. Some requirements for our method emanate from the analysis that we have conducted in this paper. First, our comparison needs to be systematic, structured and focused, a condition which poses a problem in several of the discussed studies and undermines their comparative character. We thus have to use the same concepts in all cases and investigate them in the same way, and our case selection and analysis need to be based on solid theoretical grounds. Second, attention needs to be given to the specific context of each case. This is an essential feature of policy analysis, but it appears to be even more important in the context of SD, seeing the complexity of the policy domain and the uncertainty that is often associated with it (see also Bressers, 2004, p. 311). Besides general context, we need to take into account the constitutional setting, the economic and political situation, and the policy experience of our cases. A third requirement of the proposed qualitative method is the fact that we will be forced to work with a relatively small number of cases.

It has been proven interesting to analyze a series of comparative analyses, both quantitative and qualitative, to assess their usefulness and pitfalls in the context of SD. This paper has also helped us to make a significant step in designing a method for our own analysis. Since a

[36] Hence the recommendation of the OECD (2002, p. 33) to develop a clear and operational definition of SD linked to concrete policy goals.

thorough comparison of SD policies has never been conducted with Flanders as a case, our project will make a first attempt at doing so.

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