

Article

Regulatory Measurements in Policy Coordinated Practices: The Case of Promoting Renewable Energy and Cleaner Transport in Sweden

Lisa Hansson ^{1,2,*}  and Lena Nerhagen ³

¹ Faculty of Logistics, Molde University College – Specialized University in Logistics, Britvegen 2, 6410 Molde, Norway

² Political Science Division, Department of Management and Engineering, Linköping University, 581 83 Linköping, Sweden

³ Department of Transport Economics, The Swedish National Road and Transport Research Institute, Box 920, 781 29 Borlänge, Sweden; lena.nerhagen@vti.se

* Correspondence: lisa.hansson@himolde.no; Tel.: +47-71-21-40-00

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Abstract: International organisations, such as the Organization for Economic Co-operation and Development (OECD) and the European Union (EU), are seeking to implement a cohesive Regulatory Impact Assessment (RIA) system in order to achieve better regulation and increased unity and transparency. Central to these evaluations is the use of cost-benefit analysis (CBA) and related tools. A comprehensive analysis of the use of impact assessment in the EU shows that many assessments lack important economic components. This paper draws on an extensive document study of the Swedish policy making process related to the EU Directive 2009/28/EC on the promotion of the use of energy from renewable sources. The aim of the paper is to examine how CBA is presented, negotiated and accounted for by central actors within a policy setting influenced by negotiation and policy coordination. The paper departs from a theoretical perspective on policy coordination and shows how this factor must be considered when explaining the low use of CBA. It concludes that the Swedish policy tradition, wherein the national government relies on consensus-based coordination between agencies, might counteract a more explicit assessment of different policy options. The paper also proposes a model that can be used for further studies on CBA and policy coordination.

Keywords: Regulatory Impact Assessment; CBA; policy coordination; renewable energy; transport; Sweden

1. Introduction

Energy and transport related activities are of central concern in the transition toward a more sustainable society. The transport sector contributes to increased air pollution and is a significant contributor to global warming through the emission of carbon dioxide. Within the transport sector, road transport is the largest contributor to global warming [1]. Most countries implement new regulations and policies with the aim to steer toward a more sustainable society. When policymakers choose among various regulative alternatives, they require tools that will allow them to distinguish between the options. As a consequence, recommendations on “better regulation policies” or “smart regulation” have emerged [2,3]. Within this work, the Regulatory Impact Assessment (RIA) is considered a key policy instrument [1]. The RIA has been progressively introduced throughout the world following the recommendations of international organizations such as the Organization for Economic Co-operation and Development (OECD) and the European Union (EU), with the ambition to implement a cohesive RIA system in order to achieve better regulations [2].

The RIA was introduced in the EU in 2002 [4] and today the Union requires an impact assessment for a wide array of policy initiatives, including legislative proposals, non-legislative

initiatives (e.g., white papers, action plans, financial programs, negotiating guidelines for international agreements that define future policies) and implemented and delegated acts. For the EU, an RIA should analyse the likely economic, social and environmental impacts of policy initiatives [5]. Central to these evaluations is the use of cost-benefit analysis (CBA) and related tools [4]. The EU has regularly updated and improved its guidelines for the use of economic analysis to evaluate regulatory options. Nevertheless, a comprehensive analysis of the use of impact assessment in the EU shows that recent EU impact assessments include more economic information, yet many continue to lack important economic components [4].

An RIA, which includes a “logic of economic analysis”, may constitute a challenging task within a government, and it has proven particularly difficult to implement in systems with negotiated policymaking traditions, such as are found in the European Union and many of its member states [6]. According to reference [7] this is, for example, the case in Sweden, where the impact assessment has focused on the reduction of administrative burdens, rather than on systematically controlling impacts across different dimensions, such as sustainability, macro-economic effects and so on.

This paper uses an example from policymaking related to renewable energy in Sweden. Sweden has a strong tradition of negotiated policymaking with autonomous agencies. Sweden is also a country that is highly compliant with EU regulations, which means that it incorporates and implements regulations to a considerable degree, but not always according to the intentions. A recent example is the discussions taking place in relation to the Water Framework Directive and energy production from hydropower plants [8]. In the fields of transport, environment, and energy, both the EU and the OECD have criticized Sweden for not carrying out an RIA in accordance with their recommendations. This is in spite of the fact that Sweden’s national objectives with regard to transport, environment and energy should be achieved in a cost-effective way [9–11].

This paper draws on an extensive document study that is largely related to Directive 2009/28/EC on the promotion of the use of energy from renewable sources and its implementation, covering data from 2003 to 2015. The aim of the paper is to examine how CBA is presented, negotiated and accounted for by central actors within a policy setting influenced by negotiation and policy coordination. The paper departs from a theoretical perspective on policy coordination and examines questions related to: “Who is initiating the use of CBA methods?”; “What are the narratives related to the method among the actors?”; “Does the use of CBA differ among actors along the policymaking process or is it a cohesive perspective?” The paper captures aspects of policy integration between agencies and the national government, and advances this as a factor that must be considered when explaining why the use of such assessment tools remains low.

The paper relates to studies on regulatory assessments, where an RIA is analysed from organizational or political aspects [2,12,13]. These studies argue that aspects such as bureaucracy, policy processes, actors’ preferences and the legitimacy of the regulatory process need to be taken into account when examining the implementation of an RIA [4,13,14]. Actor constellations as well as the context in a specific policymaking process also represent central factors in determining the use of an RIA. According to reference [15], an RIA may not only constitute an instrument to improve regulation, but also a political instrument that actors utilize to pursue their personal agendas [15]. An RIA is used politically when the policymaking process is conflictive, and stakes are high for the actors involved. The RIA is then used to legitimize and raise support for preferred policy options, as well as being a strategic instrument to affect the policy process as whole [15]. There also exists a debate among practitioners and academics on the use of CBA as a decision-making tool in terms of infrastructure decisions. It has been argued that cost benefit analyses of transport investment projects tend to neglect long-term environmental impacts and prove misleading [16,17], although others have shown a high degree of robustness in the method (see e.g., [18]). Within this context it is also argued that misconceptions of the method have led to the delegitimization of the use of CBA as a decision-making tool in transport investment decisions. Others argue that although CBA has its opponents, they are becoming increasingly marginalized in the debate over its use, and that the focus is now mainly

on “how to incorporate distributional concerns and insights from behavioral economics into its use. Supporters of regulation are now weighing in on these debates rather than merely arguing that CBA is inherently biased against regulation” [19], (p. 385). This paper brings new findings to previous studies and the ongoing debate on CBA. It identifies underlying assumptions regarding the use of CBA in policy documents as well as how policy coordination is a relevant factor deserving consideration when explaining why CBA might not be used; indeed, it may actually hinder such assessments as regards policy areas that involve sector coordination. The paper also contributes new findings on CBA pertaining to policymaking on renewable energy, an area that has been under-investigated in terms of the use of regulatory assessments and especially CBA relative to the transport sector, among others.

2. Theory

2.1. Short Introduction to the Development of Regulatory Impact Assessment and CBA

Using the definition from reference [20], a Regulatory Impact Assessment (RIA) is a tool to ensure policy coherence and effectiveness “it expands the range of information available to decision makers to help them make better decisions and presents it in a consistent format. By gathering evidence, exploring assumptions, and systematically identifying and assessing expected impacts, RIA aims to give policy makers insight into the nature of policy problems and the real-world impact of potential responses.” [20] (p. 6).

Hence, policymakers can use an RIA as a tool, combined with political considerations, when choosing policy options that are expected to provide the greatest net benefit to society as a whole. The use of RIA comes from the United States. In 1981, it was introduced as a requirement for this type of analysis in public administration. Reference [19] describes the evolution of cost-benefit analysis in US regulatory decision making and shows how CBA is a central part of a quantified RIA. The agencies were required to show that the benefits of their regulation exceed the costs and provide detailed justifications for the regulations if they do not [19]. Hence, CBA is often seen as a central component in an RIA. Theoretically, CBA may have a broad or narrow interpretation, but in short, CBA is based in welfare-economic theory and emphasizes that the consequences of various effects should be included in an analysis of an investment or policy proposal. It is a method for conducting an economic analysis, performed as a logical sequence of steps where the value of benefits is weighted and compared with the value of costs. There is an extensive literature on how environmental effects can be included in this type of analysis, see for example reference [21].

RIA was later introduced to the EU member states in 2002 as part of the “better regulation initiative” [9]. In 2005, the OECD reported that many countries had adopted various legal forms that require RIA to be included in draft legislation. For example, The Czech Republic, Korea and Mexico have adopted RIA by law. The report also state that RIA is required by a presidential order in the United States, and by prime-ministerial decree or guidelines in Australia, Austria, France, Italy and the Netherlands. In Canada, Denmark, Finland, Japan, Hungary, New Zealand, Norway, Poland, Germany, Portugal, Sweden and the United Kingdom, the use of RIA is based on a cabinet directive, cabinet decision, government resolution or policy directive [22] (p. 13). More detailed information on RIA can be found on the OECD’s webpages, which also provide country reports.

2.2. Policy Coordination

Policy areas have multiple functional linkages in several directions. Functional interactions arise when the substantive problems or activities that two or more institutions address are linked in policy terms [23]. The likelihood of such interaction rises when it comes to complex policy areas, such as policies on energy from renewable sources. For example, the policy domains of energy and transport are closely related in functional terms.

Institutions can work actively with policy coordination, seeking to merge or interlink functions between policies into one policy area. Institutions may interact with one another horizontally at the

same government level, and/or vertically or across government levels [24]. Horizontal and vertical interaction may be more or less symmetrical or reciprocal in nature. Some interactions between distinct institutions are largely unidirectional or asymmetrical; in other cases, interactions may be more symmetrical [25]. For this article, three factors are brought forward that capture the role of the policy integration that is used to explain the empirical case: strategic institutionalization, the direction of policy integration, and assumptions/myths in policy content.

Strategic institutionalization concerns aspects that support or hinder collaboration or integration between institutions. Strategic interactions arise when actors intentionally seek to forge connections between or among institutions in the interests of pursuing individual or collective goals [25]. For example, political and administrative leaders can use the structural design of public organizations as instruments to fulfil public goals [26,27]. Hence, a national government can, by regulation and other instruments, demand or encourage public organizations to work together. The challenge is to develop new supportive structures for shared frameworks into existing institutions. Actors have formal and factual institutional resources at their disposal, which can be used to influence and resist political and societal reform initiatives [26]. It can be assumed that different logics exist that influence organizations' ways of structuring their work and norms and values [28]. Logics are embedded in practices and sustained and reproduced by cultural assumptions and political struggles [29]. A dominant logic comes to exist over time and influences the ways in which actors act. These are translated into rules, routines and network structures, which actors rely on when working in the organization [30,31]. When agencies work together, the organizational culture and its logics can therefore prove a hindrance. Institutions have been developed in individual sectors and support a narrow objective while ignoring the concerns of other sectors or policy domains [32]. However, cooperation includes negotiation processes in which there are winners and losers. Consequently, organizations working together in related policy areas may engage in competition and rivalry rather than cooperation. In order to achieve a successful interaction between institutions, governments need to use the instruments they have at their disposal to minimize such potential rivalry [27].

Direction of integration is related to the adoption of a new policy and the direction the policy takes. When a new policy is adopted, it enters an institutional setting that is already densely populated, and must compete with other norms and perceptions of interest. Indeed, adding a new issue to existing policy agendas is likely to cause conflicts with existing interests [32,33]. Policy integration can involve a two-way process between the components being integrated, with no special privilege given to either. It can also be a one-way direction reflecting specific policy priorities. The concept of "mainstreaming" is used when there is a unidirectional focus, putting one issue into the mainstream of one or many other policy domains and seeking to afford it higher priority [32]. Decoupling can also be identified, meaning that a focus area in a policy is separate rather than being fully integrated in the main policy [34]. This paper has a specific focus on the use of CBA. The the direction of integration in the paper is therefore related to the use of CBA and the direction this priority takes over time in a policy process.

This paper also considers the importance of identifying assumptions and myths in organizations and among actors. Within an organization, there is a systematic use of certain value-infused concepts, slogans and metaphors. Myths may be perceptions that are not necessarily true. These ideas provide legitimacy to the changes that are introduced [27]. In urban planning literature, myths are, for example, related to misunderstandings regarding the methods and means of attaining sustainability [35]. Myths spread through institutions and can change or become firmer when they are interpreted into new organizational contexts [27]. The myth factor in this case is related to organizations' (or actors') understanding and use of CBA as a method to be used when evaluating policy proposals.

3. Materials and Methods

This paper draws on an extensive document study primarily related to Directive 2009/28/EC on the promotion of the use of energy from renewable sources. It has a multi-level design, analysing texts

that describe actions and arguments in documents originating at the EU level, as well as at the national government level in Sweden. The empirical material covers documents, reports, notes, official letters and other public sources from approximately 2003 to 2017. The data collection process was open and extensive. The documents came from various official sources, the Swedish Government and Parliament, The EU, Swedish Agencies. Table 1 presents a description of the type of documents that have been selected for the study.

Table 1. Categorization of type of documents that were selected in the study.

Type of source	Description ¹
Swedish Government Official Reports (SOU series)	Before the Government can draw up a legislative proposal, the matter in question must be analyzed and evaluated. The task may be assigned to a commission of inquiry or a one-man committee. The conclusions are published in the Swedish Government Official Reports series.
Ministry Publications Series (Ds) and Government Office's memorandums.	The government can investigate a question within the Government Offices. Conclusions and proposals are published in the department series (Ds) or as a Government Office's memorandum.
Ordinance explanatory note	The government explain new rules in a particular regulation and give notice of how the regulation is to be interpreted and applied.
Government bills	The government's draft of the bill that will be submitted to the Swedish Parliament.
Swedish Government Offices Yearbook on the work with EU	The yearbook contains a description of the work with EU, decisions and events. The report is presented annually in the form of a letter submitted by the Government to the Swedish Parliament.
Written communications	Written communication comes in various forms: <ul style="list-style-type: none"> - From the Government to the parliament on how to view a question or how they have worked with a particular question - Documents from the Parliament to the Government, informing of what decision has been taken - Communication between the Swedish government to EU institutions
Reports and statements of opinion from the parliamentary committees	Committee reports are proposals from the parliamentary committees. The committees also draft statements on various EU proposals.
Explanatory memoranda on EU proposals	The Government informs the Parliament of topical EU issues by submitting explanatory memoranda to the Parliament. These describe proposals put forward by the EU and the Government informs the Parliament of its opinion on the proposals and in what way it thinks Sweden should work with the proposal.
Records from meetings of the Committee on EU Affairs	The Government is obliged to consult the Swedish Parliament on matters relating to the EU and what line of policy Sweden should take in the EU. This is done at the Committee on EU Affairs.

Table 1. Cont.

Type of source	Description ¹
Annual reports from the Committee on EU Affairs	The annual reports contain yearly summaries of the Committee on EU Affairs activities.
Swedish Laws and EU directives	Laws are rules that everyone living in a country is obliged to comply with.
European Commission, "COM documents"	There are various kinds of COM documents: <ul style="list-style-type: none"> - Proposals for new legislation or amendments to existing legislation - Policy documents such as Green or White Papers - Reports
Reports and statements from government ministries	Reports, speeches, articles and press releases from the ministers and their departments.
Government Agency reports	Reports written by Swedish Agencies. They take various forms. It can be evaluations of government policies and initiatives. Reports can also be used in preparation for new policy proposals.
Annual reports from government agencies	Yearly reports describing the work that have been done at an agency.
Round of opinion, referrals	A government body ask relevant authorities, organizations, municipalities and other stakeholders to submit comments on a proposal.

Note: ¹ Descriptions derived from official webpages of the Swedish government; www.regeringen.se and www.riksdagen.se.

The documents were identified and selected based on a desk-research and systematic selection. Desk searches on government official websites were made using key words that are central in the content of the directive. In addition to the desk searches, a systematic selection was made, in which central documents that might be relevant for the case were identified. For example, annual reports from the committee on EU affairs and annual reports from key agencies. This means that an extensive number of documents that might relate to the Directive 2009/28/EC were collected. The data was analyzed from a process perspective [36] and non-relevant documents were excluded along the way. The empirical data was categorized chronologically, placing the material in a timeline. This presented a starting point of roughly 2003. Each document was identified by its origin and notes were made if any organizations or people were mentioned in the document. The in-depth analysis was influenced by Bacchi's "what is the problem represented to be" approach [37]. A short summary of Bacchi's method is that the reader "asks" the empirical material five questions: (1) what is the problem represented in the document/policy? (2) what presuppositions or assumptions underlie this representation of the problems? (3) what effects are produced by this representation of the problem? (4) what is left unproblematic in this representation of the problem? (5) how/where are dominant problem representations produced, disseminated and defended? These questions are typically used to expose the meaning-creation involved in policy analysis. By using this approach, one can also explore aspects that are not explicitly stated in the document. This approach proved helpful in identifying factors that are central in the theoretical framework, for example the direction of the use of CBA in the policy process as well as myth aspects.

Other qualitative data could have complemented the study, for example interviews with central actors. However, since the material dates back to 2003, it might be difficult for actors to reconstruct events that happened so long ago. The timeframe will have a negative effect on the quality of the information provided in an interview. This motivated the decision to only use written documents as data source.

4. The Swedish Government System

Sweden is a unitary state, with a national government level and a local government level (divided over counties and municipalities). The government system is characterized by governance through objectives with a collective, negotiated decision-making culture. Several different institutional arrangements are incorporated into the system to promote such a culture [38].

This paper emphasizes national agencies and their interactive work with the national government (at both the national and EU levels) when analyzing policy processes and the role of impact assessments and CBA. At the national level, Sweden has a small number of civil servants working at the national government ministers, employing only a small proportion of the civil service. Instead, the vast majority of civil servants are employed by government agencies. The national government sets overall objectives, and the interpretation and implementation of these objectives are decentralized to the agencies. The government can influence agencies and civil servants through different means of control [38]. For instance, it can provide instructions on acts adopted by Sweden's parliament. It can also give instructions on how the agencies may use the economic resources allocated to them by the government [39]. However, the agencies enjoy a constitutionally granted degree of autonomy, which means that formal ministerial rule is forbidden in Sweden.

Due to the increasing importance of the international arena and the fact that Swedish ministries are small, the trend is that civil servants from government agencies are called upon to represent Swedish interests in various international settings [38]. In a legislative process in the EU, there is an interplay between the EU institutions and the member states. In many instances, civil servants of the Swedish government's agencies help formulate national opinions and negotiate EU policy. The agencies use their expert role and have the ability to mobilize interest in their network [38].

Therefore, in the Swedish system, government agencies play a central role in policymaking and are often involved throughout the policy process. They have a strong level of influence in agenda-setting and the preparation of political decisions as well as in implementing policies.

Figure 1 illustrates the relationship between the EU, the Swedish Government and Swedish agencies. The grey box indicates the policy work and the lines show there is an interdependency between the institutions that influences the policy.

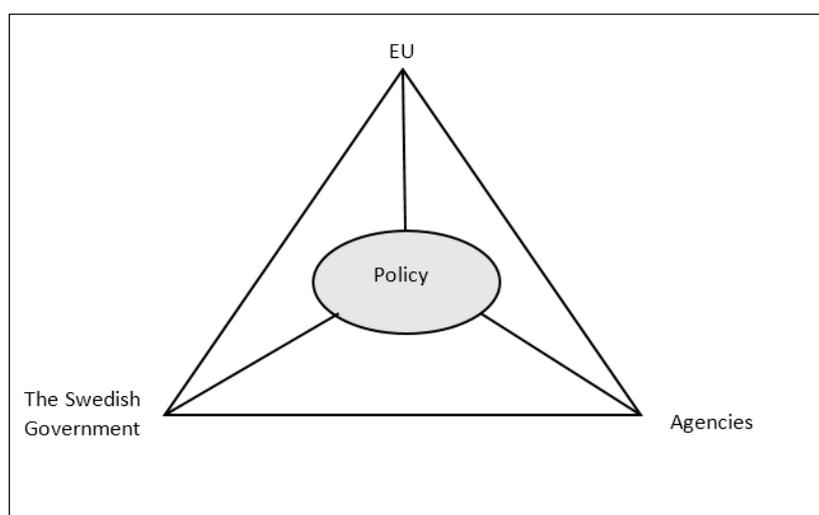


Figure 1. Institutional interdependency in Swedish policy making.

Regarding environmental, energy and transport policies, governing by objectives represents a central means of performing politics. One of the main objectives brought forward by the government since the late 1990s is that Sweden should be a leading country in creating a sustainable society. Over the years, it has continued to reproduce the image of being a frontrunner with regard to sustainability issues:

Sweden will continue to be a leading country in the transition to sustainable development. The government's overall goal of environmental policy is that the next generation to hand over a Sweden where the major environmental problems have been solved. [40] (p. 7)

This view on sustainability is also supported by Swedish agencies. For example, the Swedish Energy Agency (SEA) and the Swedish Environmental Protection Agency (SEPA) have repeated that Sweden should have an active role in negotiations with the EU and other international organizations (see for example references [41,42]).

It also lies within the government's objectives as regards transport, the environment, and energy to include economically efficient targets. In some areas, CBA has been a central tool in analyzing the effects on policy instruments, such as in Swedish transport investment planning since the 1960s [9]. In 1997, the government proposed a regulatory change, which included instructions on the use of RIA in agencies' regulatory work (Prop 1997/98:136). In 2004, a government official report recommended that the agency the Swedish National Financial Management Authority (ESV) should support and evaluate agencies' work on RIA [43]. In 2007, a new directive, 2007:1244, was taken that should strengthen work with impact assessments [44]. The responsibility of RIA was shifted to a new agency, the Swedish Agency for Economic and Regional Growth. Within this agency, a body called the Swedish Better Regulation Council was established. This body assumed the role of reviewing the quality of RIA proposals with effects on businesses. The council also took on the responsibility to (on the request of regulators) review RIAs on EU proposals that might have a significant impact on business in Sweden. Despite these regulatory changes towards the institutionalization of RIA, Directive 2007:1244 only applies to regulatory agencies [9].

This means that performing RIA is not required by law for all agencies, but rather lies within the government's objectives with regard to transport, the environment, and energy to include economically efficient targets [9,10]. Within these policy areas both the EU and the OECD have criticized Sweden for not carrying out RIA in accordance with their recommendations.

5. Results

The empirical findings focus on the national government and agencies' underlying work with the EU Directive 2009/28/EC on the promotion of the use of energy from renewable sources [45]. The directive creates a common framework for the use of renewable energy in the EU to limit greenhouse gas emissions and promote cleaner transport. In order to fulfil its aims, targets were set for all EU countries with the overall aim that renewable energy sources would account for 20% of EU energy and 10% of energy in the transport sector by 2020. Each EU country also had to devise a national action plan for 2020, setting a share for renewable energy sources in transport, heating and the production of electricity.

5.1. Close Relationship between the National Government and Agencies in Discussion of EU Directives

Swedish agencies have played a central role in the preparation phase of the EU directive. Our material dates back to the beginning of the 2000s, since the agencies have had representatives in the Swedish government's negotiations with the European Commission and have participated on different EU committees and expert groups [46]. For instance, the Swedish Energy Agency has been the country's representative for energy issues on several committees. Working on a committee includes data collection and the preparation of instructions for the meeting, expressing the Swedish position at the meeting and covering Swedish interests. They also provide written feedback after meetings [47].

Swedish agencies also take self-initiative actions. For example, the Swedish Energy Agency is a representative in the European Council for an Energy Efficient Economy [48]. Together with similar agencies in other countries, the Swedish Energy Agency additionally arranges workshops with the European Commission. As stated in one document, the purpose of the workshops is to "contribute to the shaping of Commission initiatives so they are based on member countries' experiences and needs" [49] (p.117).

Moreover, at the national level, agencies conduct analyses of the planned initiatives of the European Commission [48]. The agencies encourage the Swedish government to work with a national strategy and emphasize the relevance of such work with the EU. An official inquiry government

report, written by a former agency director, was proposed to the national government. The report recommended national targets and a strategy for further introduction of renewable vehicle fuels [50]. In addition, minor agencies' reports were used as underlying documents for the overall strategy. These reports contained evaluations of different instruments and proposals on actions that could be taken by the Swedish government.

At this time, between 2003 and 2007, the Swedish holding on how to increase and implement instruments that encourage renewable fuels were shaped and defined. This work has more recently been used in negotiations towards the EU directive on renewable fuels (taken by the EU in 2009). In the preparation phase, the agencies play the role of "agenda-setters" and "engines" in the operative work on renewable energy and the promotion of cleaner transport. They also take on roles as advisories and experts in terms of providing written reports and evaluations. A central question is whether impact assessments including CBA were made during this period.

5.1.1. Limited Use of Impact Assessment that Includes Cost-benefit Analysis

The Swedish government has established "evaluation checkpoints" to determine when and how the national strategy of renewable fuels should be evaluated. These evaluations are also the foundation of continuing work with developing instruments to promote renewable fuel. The Swedish Energy Agency and the Swedish Environmental Protection Agency are responsible for conducting the evaluations [51]. Overall, it can be concluded that there is a general sense of skepticism among agencies to measure effects and discuss results in more quantitative terms. The agencies argue that policy measures are often complex, rendering evaluation difficult, and argue that the results are highly unsecure:

The complexity of the adjustment resulting from a package of instruments in the form of general policy instruments and instruments targeted at specific sectors of society makes retrospective assessments of individual instruments is very difficult to implement. To distinguish certain measures to a specific instrument or determine the amount of emission reductions in a sector . . . is many times impossible. [41] (p. 72)

The above quotation is from a report jointly written by the Swedish Environmental Protection Agency and the Swedish Energy Agency. The agencies demonstrate a skeptical approach to assessing instruments using cost-related methods, in particular separately reporting the effects of each individual instrument. The agencies also refer to academic literature indicating that there are other experimental and quasi-experimental techniques that might be used [41]. Similar statements regarding the complexity in measuring effects have been noted over the years, such as in references [52] (p. 10) and [53] (p. 56).

The agencies also seek to strengthen their argument by referencing other countries that have similar views. For example, the Swedish Environmental Protection Agency and the Swedish Energy Agency reference the Netherlands, which at this time had decided against evaluating single climate measures and instead followed up larger climate packages, comparing these with scenarios [41].

The National Institute of Economic Research (NIER), which analyses key instruments in Sweden's climate and energy policy, confirmed the vague cost-effectiveness assessments:

...the problem of assessing the cost-effectiveness of the policy has been difficult in [38] and stopped at the likely effects and theoretical reasoning. This means that the cost-effectiveness of the instruments who has been part of the Swedish energy and climate policy has not been sufficiently explicitly described and evaluated. [54] (p. 10)

Hence, the use of impact assessment was at this time vague among the central Swedish agencies that are active in the policymaking process. However, it is important to recognize that the agencies are aware that they do not conduct sufficient cost assessments, and they call for better evaluation methods [55]. Nevertheless, skepticism regarding the possibility of evaluating instruments in a quantitative way shines through the reports.

5.1.2. Instruments are Argued to be Effective, in Spite of Lack of Impact Assessment Evaluations

Instead of relying on CBA and other impact assessment models, Swedish agencies use “deliberative” and qualitative approaches when analyzing presumed effects. The focus lies in the commitment to local projects, work-processes between the partners in these projects and actions taken in the projects. The following quotation bring forward the relevance of emphasizing local commitment and suggests that measuring the effects of cost-related instruments are more difficult:

“The local commitment for climate work is judged in the long term to be a major driver of a transition to sustainability” [41] (p. 260). . . . “Some environmental effects of subsidies are difficult to calculate especially in the longer term”. [41] (p. 260)

Despite the fact that the agencies argue that there are difficulties in measuring effects, the overall message in these reports is that the proposed instruments and actions taken have provided positive effects that will lead to a more sustainable society:

The instruments that are of importance for the Swedish climate strategy has gradually evolved since the late 1980s. It includes not only decisions on climate policy but largely also in the context of energy policy and to some extent in the transport and waste policy. This means that the instruments that have been important to limit climate change in many cases was introduced to achieve other societal goals. [56] (p. 12)

The quotation illustrates that despite the lack of evaluation of effects, the agencies provide reports to the national government in which they assert that regulatory instruments and overall politics are heading in the right direction.

5.2. *New Coordination Practices May Challenge the Existing (non-) Use of CBA, but Old Assumptions about the CBA Method Remain*

In 2007, the EU 20-20-20 targets for 2020 were determined and an action plan for 2007–2009 was adopted [45]. The package is a set of binding legislation to ensure that the EU meets its climate and energy targets for 2020. It sets three key targets: 20% cut in greenhouse gas emissions, 20% of EU energy from renewables, and 20% improvement in energy efficiency. The European Commission also announced a vision for 2020–2050 with the intention that a new energy action plan be adopted in 2010 with the aim of measures for 2030 and a vision for 2050. Targets should be set such as carbon-free electricity production in 2050 and breaking oil dependence in the transport sector [45].

Since this time there has been a shift in the Swedish government’s approach to impact assessment and CBA. The government body increasingly highlights the importance of using this analysis, as well as more comprehensive analyses of different effects. These arguments have been brought forward to both the EU and national agencies.

The Swedish government points out that there are elements of uncertainty and weakness in the EU’s impact assessment:

The Commission’s calculations are based on the assumption that adequate financing is available for the various investments needed initially, even if the measures are expected to be profitable over time due to reduced energy costs for end customers. [57] (p. 11)

The government argues that the benefits of achieving the objectives must be weighed against the costs, including the cost to achieve these objectives by alternative means. It also stresses that there is a need for further in-depth analysis [57]. Similar statements were proffered two years later:

The Government encourages the European Commission to deepen the analysis of reported policy options, this includes short- and long-term socio-economic effects and begin the design of a climate and energy policy framework beyond 2020 in which the EU Commission’s

consideration of renewable energy included. Structural parts of this framework should be cost instruments leading to sub-optimization is as far as possible avoided and synergies exploited. The framework should be based on an in-depth analysis, including considering how the goals and instruments for renewable energy affects the cost-efficiency in the fulfillment of the long-term goal of climate policy. [58] (p. 8)

The Swedish government further stresses that the national agencies should use CBA, and that they should carry out impact assessments on the proposed measures and instruments. These requirements are found in the Swedish government's first report on the development of renewable fuels, for example, which was written after Directive 2009/28/EC had been adopted [59]. The government has also over time appointed the National Institute of Economic Research to evaluate different policy instruments and policy directions, based on cost-benefit analysis (see e.g., [60]).

When it comes to the attitude towards evaluating the effects of instruments (and especially cost-related effects), the central Swedish agencies in this policy area have demonstrated a similar methodological perspective over the years. Overall, scepticism remains, with some reports in 2007 advancing similar critiques as those found in 2004. The main critique is that it is difficult to evaluate single measures. Instead, it is claimed that other aspects also need to be considered, such as how a means of control design can influence stakeholders and the incentives for adjustments to which the measures give rise [52].

However, at this time one can identify a more heterogeneous perspective on CBA. The empirical documents show that the agencies are taking different stands towards the requirement of performing CBA.

The Swedish Environmental Protection Agency has met the government's demands by procuring external consultants to conduct evaluations that include CBA. This, for instance, was used in the underlying work of the environmental bill in 2009, and the report included an analysis performed by a consulting firm. By procuring external expertise, the agency met the government's demands without needing to change the agency's existing routines or personnel [42,61].

On the other hand, the Swedish Energy Agency worked internally to strengthen CBA competence among its personnel:

During the year [2012], cost-benefit analysis has been a prioritized area at the Swedish Energy Agency. Personnel with this competence has been recruited and methods have been developed...There has been work with creating a process of when, how and why cost-benefit analysis should be included in the agency's work, this by establishing a routine and a checklist. [62] (p. 84)

Reading the document further, it can be seen that the checklist was tested at two departments at the agency, and that three CBAs were conducted in 2012 [58].

A report jointly written by the Swedish Rail Administration, the Swedish Energy Agency, the Aviation Agency, the Swedish Maritime Administration and the Swedish Road Administration has also been provided to the government. This report clearly recommends the guiding role of cost efficiency and provides a long description and discussion on how this should be achieved [63].

Over time, the national agencies have often worked together on joint projects and reports. For example, the Swedish Energy Agency and SEPA share a responsibility to evaluate national plans, and they are often required to write joint reports and bring forward joint statements to the government. Although it is not common, in some reports the agencies outline different stands in a matter. This can be seen for instance in the report "Environment, economy and politics" [59]. The Swedish government gave the National Institute of Economic Research (NIER) the task to (in consultation with the SEPA) draw up an annual report on the environmental policy's socio-economic aspects, including the short- and long-term effects on the targets for environmental quality. However, the Swedish Environmental Protection Agency did not agree with the report's general recommendation, writing a reservation with its own recommendations:

The analysis of climate policy instruments lacks the long-term perspective that is necessary in order to achieve a cost-effective solution to climate change. The Swedish Environmental Protection Agency have a dissenting opinion to some conclusions in the report. These include interaction between climate and energy policy objectives and energy policy objectives more expensive climate policy. The Swedish Environmental Protection Agency also believes that other policy instruments than economic instruments, is insufficiently treated in the report. [63] (pp. 211–212)

Another report, published in 2014, also stresses the differences between the agencies. In this report, the national government explicitly stated that the agencies should express each agency's own perspectives where there are differences between them. This means that the national government was aware that there might be different standpoints. Consequently, the report is more varied than those reports where the agencies were required to provide a common recommendation:

The National Institute of Economic Research, The Swedish Environmental Protection Agency and The Swedish Energy Agency was together appointed by the government to make impact assessment . . . The agencies have different roles, responsibilities and methods for conducting our work. This can affect how well we address the various issues in our findings and conclusions. Therefore, we present below brief each authority's overall mission linked to the issues analyzed in this government mandate. [64] (p.4)

Compared to the evaluations made in the preparation for the EC directive in the early 2000s, one can see a shift in national government agencies' actions and attitudes towards impact assessments and CBA. Indeed, the attitudes have become more heterogeneous. At this time, the National Institute of Economic Research, an agency that supports the use of CBA, has received greater responsibility in evaluating instruments. Oftentimes when the National Institute of Economic Research is involved, the other agencies' contrasting attitudes regarding the use of RIA are evident. However, when the National Institute of Economic Research is not involved in the reports, the differences among the agencies do not shine through. Without drawing too strong a conclusion, this might indicate that the agency with overall responsibility for the report also sets the tone on how the analysis should be performed, as well as which results should be communicated to the government.

Therefore, there are a few examples from this period that indicate how joint projects may be a hindrance when it comes to using impact assessments, including CBA. The empirical material reveals differences among agencies in terms of attitudes towards CBA, but at the same time many of the joint reports that are presented for the government reproduce a skeptical view on its use. One can also note an inconsistency in the writing concerning economic analyses. The final report contains several examples in which the importance of evaluating cost efficiency is stressed. For example:

The valuation of costs to society is associated with great uncertainty. Partly because the transport system and the impact on society change over time and partly because the knowledge about the various effects of traffic is rarely complete as well as the methods used to evaluate these effects. [65] (p. 41)

Besides the final report, a separate report was written containing a plan for evaluation. This is not a detailed handbook but it brings attention to the evaluation of proposals and stresses the importance of using economic analysis. However, the report does not contain any new analyses, only re-citing from existing analyses and reports [66].

6. Discussion: Policy-coordinated and Consensus-Based Policymaking—A Hindrance to Using Cost-benefit Analysis?

Most countries implement new regulations and policies with the aim to steer toward a more sustainable society. When policymakers choose among various regulative alternatives, they require

tools that will allow them to distinguish between the options. Regulatory impact assessment can be a tool in such decision-making processes. Many OECD countries have adopted various legal forms that require an RIA to be included in draft legislation [22]. However, despite this, use of RIA is low in some countries. In reference [7], they show that a low use of RIA is especially found in countries characterized by negotiated decision-making. A specific focus in this paper has been to investigate why the negotiating feature might play a role in the low use of RIA. Documents related to Directive 2009/28/EC on the promotion of the use of energy from renewable sources, were selected in order to analyze the coordination of and interaction between different actors and their positions towards using impact assessment models. The concluding discussion is based on the Swedish context, but might be relevant for other countries as well that have a similar policy making structure.

Swedish governmental culture is influenced by governing by objectives. In this case, the objectives are set by the government and interpretation and implementation of these objectives are decentralized to semi-autonomous agencies. However, political and administrative leaders can use the structural design of public organizations as an instrument to fulfil their own public goals [27]. The findings in this study show several examples of strategic institutionalization used by the national government towards the agencies. For example, the government gives directives that the agencies should work together and come up with joint recommendations. Moreover, the government body uses a negotiating design with emphasis on horizontal interaction [25]. The agencies play a central role in policymaking, as they are both agenda-setters and evaluators. It can be seen that the agencies act on behalf of the government, but also take their own initiative to influence the government, the European Commission and other EU organizations. This finding is in line with other studies on the role of agencies in Sweden [39,67]. In order to understand the non-use of CBA in the Swedish context, one must therefore take account of the role of national government agencies.

The study has identified differences within agencies in their means of relating to CBA and defining cost-efficiency in general. The findings show that there is significant degree of skepticism among some national government agencies to use CBA when evaluating instruments and their effects. These agencies show skepticism to the results yielded from such models. The perspective that CBA is an unreliable method has spread through central institutions and is used in impact assessment discussions. Among the agencies, statements related to problems with conducting CBA and the quantification of measuring effects have been reproduced over time. Hence, in these arguments, examples of myths have also been identified.

By analyzing the direction of integration with the emphasis of using CBA in policymaking, it can be concluded that there has been a shift over time among the agencies that do not use CBA; from acting as a homogeneous unit when it comes to impact assessment, they are increasingly exhibiting more heterogeneous attitudes. This might be explained by the fact that the agencies respond to the government's institutional measurements, such as written instructions demanding the agencies to perform better evaluations. Yet, one must ask if there is a mainstreaming of CBA in the policy process, or whether the agencies are adjusting to the new demands by using decoupling strategies? The empirical data show examples of decoupling rather than mainstream, separating the new routines from existing and not integrating them into the main policy or the organizational work [32,34]. For example, the Swedish Environmental Protection Agency procured a consultant to perform the analysis. This is an example of an adjustment that is made that does not affect the existing organization.

Based on the empirical findings, Figure 2 is constructed to illustrate the work with CBA in coordinated policy practices. The figure is a general model and can be applied to other cases as well. The figure can also be used in practical settings, for example in discussions among policy makers and agencies.

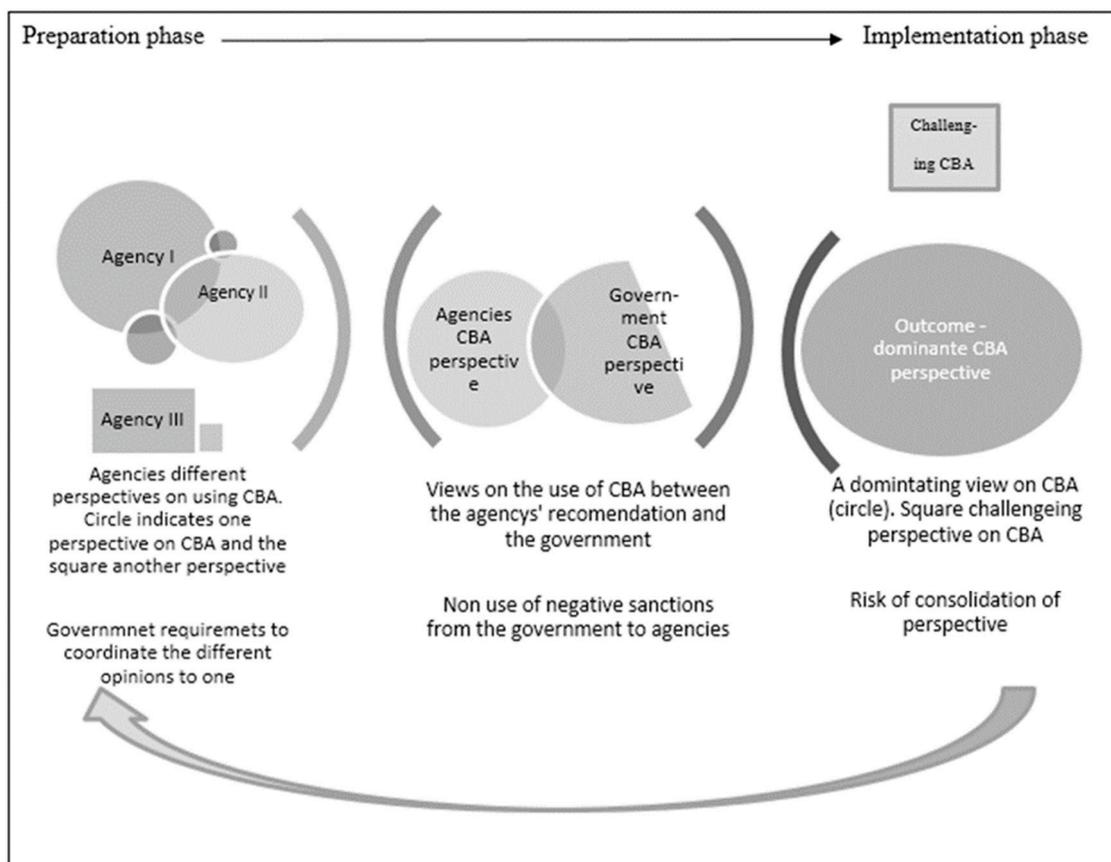


Figure 2. Cost benefit analysis (CBA) in policy coordinated practices.

Figure 2 shows that there are different opinions regarding the use of CBA among different agencies involved in a policy area. The circles represent agencies that demonstrate a skeptical perspective to using CBA, while the squares represent agencies that are more amenable to the CBA method. In the preparation phase of a policy, agencies are required to work together and recommend a joint proposal. The empirical material has shown several examples of joint reports in which one perspective on the CBA method is presented. The second phase indicates this, here presented in a large circle. In this phase of the policymaking process, the challenging perspective regarding the CBA method is vague or not visible. The empirical material provides an example of the national government stressing the importance of CBA to the agencies (and the EU); moreover, the Swedish government has adopted regulations over time that stress the use of impact assessments including CBA [9]. However, it can be concluded that the government lacks (or does not use) institutional instruments such as control mechanisms towards the agencies. Indeed, there are no follow-ups from the government or threats of sanctions when the agencies fail to use CBA. This places the government in an ambivalent role, illustrated by the semicircle in phase 2. Furthermore, the material indicates that cultural elements *within* the agencies are more dominant than formal instructions from the government. The final phase of the policymaking process is illustrated with a large circle, showing that the dominant perspective of CBA is used in the implementation phase of the directive. There are some challenging perspectives, but these are decoupled from the core process.

It can be concluded that in a negotiating context such as this case, the culture and myths that are reproduced within an agency are difficult to change over time. Other studies have shown that when agencies work together, the organizational culture and logics can prove a hindrance [27]. Reference [6] points out that the implementation of RIA, which holds a “logic of economic analysis”, is particularly difficult in political systems that are influenced by negotiated policymaking. This study complements those findings. There are indications in the empirical material that the consensus-based policymaking

design may be hindering in the sense that the dominant “logic of cost-benefit skepticism” may influence and circumvent those agencies and actors that have a positive approach to CBA. Hence, an important conclusion that the paper has shown is that policy coordination must be considered when examining why the use of RIA and CBA is low.

In order to make a transition toward a more sustainable society, policy making should be based on the premises that accurate and understandable information about the issue is available for the policy makers. Sweden is said to be one of the best countries in Europe in terms of sustainability issues and operates at the frontline of taking action to reduce the burden on the environment. However, it is not possible to actually measure if the actions taken by the Swedish government are the most efficient, given the low use of RIA. In this paper, we have tried to show that RIA and CBA are tools that can be used to strengthen the possibility to make informed decisions in a policy making process. RIA comes in various forms, and can be more and less complex. Sometimes, the inclusion of too many considerations makes the cost-benefit analysis so complicated that policy makers are not liable to use it anyway, or there exists substantial uncertainty about the economic parameters and a full CBA might not be the best option [21]. However, such decisions regarding the flexibility of the RIA, should be matched in relation to the specific policy questions that are to be evaluated, not influenced by coordination problems. We therefore encourage future studies investigating and further developing CBA and RIA in relation to policy coordination and negotiated policymaking. As a comment to the result in this study, it should be mentioned that the Swedish government last year initiated an investigation examining how it might improve its work in independent analysis. In this investigation, it emphasised the need for independent analyses and evaluations based on well-developed methods and knowledge and a systemized coordination between the government and agencies [68]. The outcome of this investigation is not yet known, but it indicates an awareness of the problems that exist. A future research project on this area is would be recommended in order to complement the results presented in this paper.

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