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National assessment of sustainable development 2009



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The Assessment has been framed and compiled
by Ramboll Management Consulting

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CONTENTS

Key conclusions of the assessment	5
Recommendations	9
1. Renewal of the strategy concept	9
2. Enhancement of operational indicators	11
3. Further development and piloting of an ex ante assessment framework ..	12
1 Introduction	13
2 Assessment framework	14
2.1 Subject of the assessment.....	14
2.2 Assessment tasks and targets.....	16
2.3 Assessment questions and criteria	17
2.4 Collection and analysis of material	20
2.5 Assessment framework for sustainable development	20
3 Assessment of target setting	21
3.1 Sustainable development as part of sectoral strategies	21
3.2 Coherence of target setting with strategy for sustainable development	23
3.3 Importance of sustainable development in target setting	25
4 Assessment of measures	27
4.1 Preparation of sustainable development programmes	27
4.2 Compliance with the implementation guide	29
4.3 Relationship between the measures and targets set in the strategy for sustainable development	32
5 Assessment of results and impacts	36
5.2 Results of strategy work	66
5.3 State of sustainable development in Finland	67
5.4 Results of strategy work.....	69
6 Assessment of follow-up systems	74
6.1 Sustainable development indicators.....	74
6.2 Follow-up and assessment systems	76
7 Summary	78
Appendix	79
Main sources	82

Key conclusions of the assessment

The key conclusions of the assessment, broken down by assessment area, are as follows.

Setting of targets

- Themes related to the environment, to climate change in particular, and the sustainable use of natural resources have emerged extensively in target setting by administrative sectors. It is characteristic of these themes that, where they have arisen, they are based on national strategies and, in some cases, even international conventions.
- Although the contents of the strategy for sustainable development have gained in importance in public administration, as a governing instrument the strategy has lost rather than gained ground. This is due to the central themes of sustainable development being steered through other strategies, while the strategy's contents are determined by decision-making processes steered separately from the strategy itself. The importance of the strategy for sustainable development lies mainly in the strategy processes' provision of a forum in which actors can discuss the related themes.
- The importance of sustainable development varies greatly by branch/administrative sector. In those branches and sectors where themes are extensively linked to their focus area, sustainable development targets have either become very central (for instance in forest policy) or the importance of aspects related to sustainable development has increased (for instance in transport policy). On the other hand, sustainable development is barely visible in target setting in sectors whose activities have only a narrow connection, through certain measures taken, with sustainable development (for instance in the Ministry of Justice and the Ministry of the Interior).
- Broader viewpoints on sustainable development are rare, that is, viewpoints which assess all activities through all aspects of sustainable development (the environment, social responsibility, global responsibility etc.). Certain themes are highlighted by some administrative sectors according to their own focus area. The integration of various aspects of sustainable development is limited.
- In their strategies, the majority of ministries give at least reasonable consideration to themes related to sustainable development, but very little attention is paid to the conflicts between various targets. Almost no attempt is made by the strategies of the various administrative sectors to analyse these conflicts.
- Target setting within the strategy for sustainable development has been realised so vaguely that it allows the interpretation of a wide array of measures as promoting sustainable development. On the other hand, target setting is so

general that all actors are able to identify elements in the strategy that are also pursued by their own organisations. The problem is that this kind of sustainable development strategy as such has no steering effect on sectors.

- Some actors interpret the contents of sustainable development in a divergent manner from the strategy
- When sustainable development is considered as a broad-based principle horizontally governing all activities, it can be stated that it has been overshadowed by other strategies governing administrative development (cf. the productivity programme or regional policy). The strategy for sustainable development has not been accorded an equivalent level of concreteness, political importance and implementation mechanism (even though the strategy for sustainable development is formally steered by a commission with a high political profile).

Measures

- The implementation instructions applying to the Government's guideline for sustainable development was of no practical import. The achievement of objectives has been most limited with regards to the commitment of senior management and the preparation of sustainable development programmes within central government agencies.
- The number of sustainable development programmes is very small. Excluding one exception, no sustainable development programmes have been prepared by central government authorities. A key reason for this has lain in actors deeming the preparation of a sustainable development programme of their own as unnecessary.
- A number of local agendas or sustainable development programmes were prepared in municipalities in the late 1990s and the early 2000s. The assessment contains no evaluation of the current situation in municipalities or whether the programmes have been genuinely utilised and updated as part of municipal decision-making.
- Although environmental issues in particular have received more emphasis than before in senior management agendas, the strategy for sustainable development has not succeeded in establishing a role for itself as the steering document for inter-administrative activity.
- Actors remain unaware of the strategy and it lacks the credibility required to influence target-setting or argumentation by senior management (in comparison to e.g. the productivity programme, regional policy programmes or strategies on climate change).
- The strategy for sustainable development lacks a clearly defined programme theory that would describe how the desired impacts could be achieved through the measures chosen, and which would define the roles and responsibilities of various parties within this entity. The mere location of the targets, target levels and measures chosen for each area of the strategy are challenging.
- With regards to the strategy for sustainable development, such a programme theory-based analysis would be particularly valuable as it might facilitate the integration of measures taken by various administrative sectors in various target areas. It might at least help identify conflicts, overlaps and shortcomings in such measures.
- Due to the time span of the assessment, the desired impacts of most measures launched after the preparation of the strategy cannot yet be observed. With

regard to measures implemented in a number of key target areas, the impacts will emerge only after several years.

- Promoting sustainable development in the everyday activities of the public administration is particularly reflected in the introduction of Green Office and corresponding systems.
- Strategy processes have brought added value to strategy work. Discussions have helped actors to structure their thoughts and reconcile them with those of other actors. However, the resulting strategy document has been of no great significance from the actors' point of view.
- The nature of the strategy process related to sustainable development is conciliatory rather than creative. Discussion and the resulting consensus forming between the actors are the main reconciliation mechanisms. The strategy includes no proper mechanisms or capability for implementation. In this sense, the strategy for sustainable development is a typical cross-administrative decision in principle.
- The strategy for sustainable development has proven immaterial to directing or launching measures.

Results and impacts

- Based on international comparisons, the state of sustainable development in Finland is good in relation to other countries. Nevertheless, the current situation is ambivalent with regard to the targets set by the strategy. No positive development has been observed in the majority of target areas. However, the current situation is better with regard to environmental than social and economic indicators.
- Finland performs well in terms of SSI, EPI and HDI. Finland's scores are close to the maximum in all the indices and the country ranks top in comparisons between countries. Finland has improved its SSI and HDI scores. Due to methodological developments, the new results of the EPI are not directly comparable with earlier results.
- Development in the majority of target areas has been either negative or non-existent. The economic recession has had a major impact on most targets. The situation is better with regard to environmental targets than social and economic ones. On the other hand, the recession is having positive impacts on a number of environmental targets (for instance energy consumption and greenhouse gas emissions), but negative impacts on others.
- Excluding the years 2005 and 2008, there has been an upwards trend in greenhouse gas emissions and energy consumption. The results of these years have been affected by industrial activity in forestry, the significant share of imported electricity (2005) and the recession that began in 2008. Renewable energy sources' share of energy consumption has not changed significantly over the last few years.
- With regard to point source pressures, nutrient loads from Finland to the Baltic Sea have reduced but diffuse source pressures remain a problem. On the other hand, with regard to acidifying emissions and eutrophying discharges, absolute decoupling from growth in GNP can be observed.
- Indicators on regional and community structure mainly reveal negative development. Regional differences in the dependency ratio have remained considerable. Both the volumes and share of passenger car transport have increased.

- Indicators on the well-being of citizens show both positive and negative developments. The life expectancy of Finns continues to rise. The rise in the retirement age has come to a halt over the last few years. Occupational diseases have decreased and the number of occupational accidents in relation to working hours has remained unchanged.
- The recession has halted the favourable development with regard to the number of people with low employment potential. Alcohol consumption and the number of deaths attributable to alcohol continue to increase dramatically. The unemployment rate of immigrants has decreased by almost 50% since the early 1990s and the number of school children whose first language is other than Finnish or Swedish is growing steadily. The decrease in voting activity has come to a halt over the last few years. Participation of young people in social organisational work in the traditional sense decreased during the 2000s.
- With regard to all five key economic indicators, the recession has put an end to previous, favourable developments. At the moment, estimating the impacts of the recession and their scale is characterised by major uncertainty.
- Finland's public development cooperation expenditure is moderately increasing but Finland remains far behind the target level set by the UN (0.7 % of GNP). The majority of capital flows of Finnish enterprises are still directed towards Europe and North America.
- The level of R&D expenditure has remained unchanged over the last few years, while the number of patents granted has decreased.

Follow up and assessment systems

- Significant efforts have been made in strategy work related to sustainable development in order to develop follow-up and assessment systems. The most important efforts have been indicator work carried out by the indicator network and the ENVIMAT project.
- Indicator work is a core element of strategy work related to sustainable development. Through such indicators, the strategy for sustainable development has been enhanced and the contents of target areas have become more concrete, but the utilisation of indicators in decision-making has been very low.
- With regard to validity, the core problem is the vagueness of some of the targets/target areas of the strategy: it is difficult to discern what the indicator should describe. This problem concerns the general vagueness of target setting rather than the indicator work itself.
- The utilisation of indicators in decision-making has been very low. Indicator work has not produced indicators facilitating operative decision-making but measures that describe the state of sustainable development at macro level and by target area.
- Indicators are least suitable for describing the social aspect of sustainable development. With regard to the ENVIMAT model, the situation is similar in the sense that this model expressly reflects the relationships between economic and environmental impacts. When used as a tool for assessing sustainable development, the model's current shortcomings are therefore expressly related to the social aspect.
- The ENVIMAT model primarily facilitates environmental policy planning

Recommendations

In the following, three strategic proposals for promoting the achievement of targets set in the strategy for sustainable development in public administration are presented to the National Commission on Sustainable Development.

I. Renewal of the strategy concept

Grounds

Based on the assessment, the steering effect of the current strategy is low and actors are sceptical about the usefulness of strategy work. The current strategy for sustainable development is a compilation of themes highlighted by various actors, many of which are not relevant to all actors. In addition, most key themes are promoted by actors' own programmes and processes, implemented outside the strategy for sustainable development. Instead of providing guidance in sustainable development policy terms, to most actors the strategy for sustainable development primarily appears as a compilation of sustainable development targets set by disparate organisations. There have been attempts to deploy the strategy through sustainable development action programmes, but programme work has not been properly coordinated and, with a few exceptions, practically no action programmes have been prepared within the state administration.

Recommendation

At national level, it is not necessary to compile all measures related to sustainable development into a single programme or strategy document. The national strategy should be a concise document that:

- (a) Clearly defines the *targets and target levels* of Finnish sustainable development
- (b) Defines *the principles* of sustainable development that must be followed in policy planning
- (c) Defines *the roles and responsibilities* of the actors in the implementation of the strategy
- (d) Presents *a model for monitoring the achievement of the targets*.

Thus, the strategy document will define *the principles and practices* safeguarding the achievement of the targets set in the strategy for sustainable development, but will not define the measures required to implement the strategy. Responsibility for the measures and their planning will remain with administrative sectors and other actors, who will report on them in accordance with their own, normal practices. Based on the strategy, the measures supporting it and follow-up data, the task of the National

Commission on Sustainable Development is to ensure that the principles of sustainable development are complied with in policy planning and that administrative sectors receive information on how they have been progressing in achieving the targets set by the strategy. Administrative sectors would report to the Commission on the implementation of the practices agreed upon in the strategy and on the development of sector-specific indicators providing information on the targets. Thus, the tasks of the National Commission on Sustainable Development would include the following:

- Setting and measurement of targets
- Planning of processes and practices, ensuring that aspects relating to sustainable development are taken into consideration in policy planning
- Follow-up of, and communication on, progress

Responsibility for the following will remain with administrative sectors and other actors:

- Planning of measures
- Reporting on measures in accordance with their own, customary reporting practices
- Introduction of practices (for instance, ex ante assessment of plans)
- Utilising follow-up data in their own planning processes

This kind of strategy concept would also streamline the strategy process, while reducing overlaps in reporting and unnecessary reporting to bodies to which the actors would not normally report.

Risks and preconditions

- Unless the perceived importance of the strategy is enhanced, the renewal of the strategy concept will not lead to significantly improved results. If sustainable development cannot be accorded greater political importance, thereby enhancing the strategy's role in sectoral decision-making, the renewal of the strategy concept will have little effect.
- The Ministry of the Environment coordinates the strategy for sustainable development. A sector-based ministry generally has great difficulty in coordinating inter-sectoral programmes. In addition, this has promoted the image of sustainable development as a strategy focusing solely on environmental issues. The Ministry of the Environment has faced particular challenges concerning its credibility with regard to the social aspects of sustainable development. However, since the state administration lacks a clear corporate steering function – which would cover the coordination of programmes of this kind – the Ministry of the Environment remains the most reliable quarter from which sustainable development can be coordinated within the state administration. In this context, outsourcing coordination tasks has not been assessed as an option. However, there is no specific reason to believe that such a procedure would enhance the governance of the strategy.

2. Enhancement of operational indicators

Grounds

It is stated in the Government's Guidelines for Sustainable Development that “the national indicator network will develop indicators for measuring the progress of sustainable development within state and municipal organisations and in the measures they take.” Such work has not led to the generation of indicators serving operational decision-making but measures providing macro-level information on the state of sustainable development by sub-sector (for instance, greenhouse gas emissions). Although the development of such indicators has been important in rendering the strategy for sustainable development more concrete, their usability in organisational decision-making is rather low.

Recommendation

In addition to the existing indicators, a set of indicators should be prepared that provides more direct information on the results and impacts of operational measures (for instance, emissions produced by new cars vs. greenhouse gas emissions). These types of indicators would provide a more effective tool for the follow-up of the strategy. They would also support policy planning within various administrative sectors.

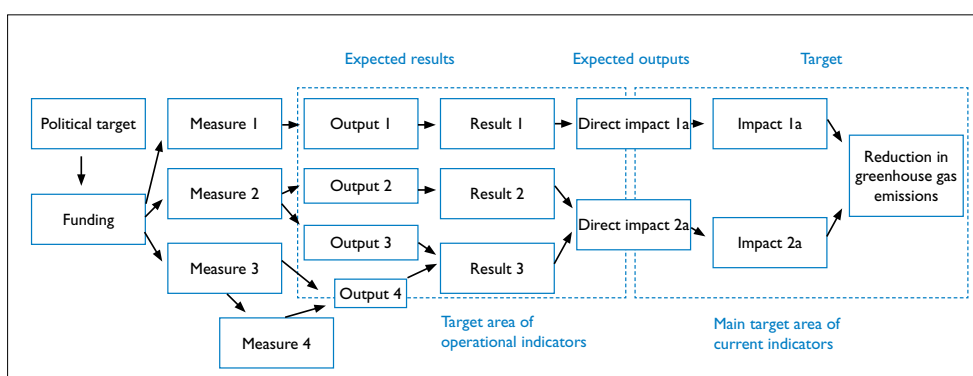


Figure 1. Development of operational indicators.

In practice, this implies the replacement of macro-level indicators on effectiveness with output and impact indicators related to the measures in question.

Risks and preconditions

- Binding the indicators more closely to the operational level requires the clarification of various theme areas under the current strategy. In some respects, the targets set by the current strategy are insufficiently clear for indicator work to be launched on their basis. In addition, indicator work must not be detached from target setting. In fact, defining indicators is fundamental to target setting: indicators provide the content of targets
- The development of the indicators would strengthen the preconditions for their introduction while facilitating the easier and more effective follow-up of the strategy's implementation. However, this alone will not be sufficient to ensure the indicators' systematic introduction.

3. Further development and piloting of an ex ante assessment framework

Grounds

During the national assessment of sustainable development, the assessors, in cooperation with the Ministry of the Environment, have been developing a pilot version of an ex ante assessment model for use in Finland. The assessment framework is intended to be used as a policy planning tool. Ex ante assessment may improve the quality of the preparatory phase of decision-making processes and ensure that sustainable development aspects are considered. In the long term, the main objective is to integrate sustainable development in decision-making processes while promoting coherence between various measures. The assessment framework would create a key mechanism in the implementation of the strategy for sustainable development, prepared according to a novel strategy concept (see above).

Recommendation

The draft version of the assessment framework (Appendix 1) should be further developed through piloting, after which it could be used as an implementation tool with respect to the strategy for sustainable development.

Risks and preconditions

- In the event that the ex ante assessment of policy planning is further developed, the assessment framework should be integrated with other tools wherever possible. The development of various, separate assessment frameworks would not be appropriate.
- Since the assessment framework has been based as closely as possible on the thematic divisions, targets and indicators of the strategy for sustainable development, the usability of the assessment framework is substantially dependent on the quality of both the strategy and the indicators chosen. In particular, some of the indicators must be reassessed prior to the introduction of the assessment framework.

1 Introduction

In its meeting of December 2004, the Finnish National Commission on Sustainable Development decided to launch a process aiming at a new national strategy for sustainable development. To prepare this strategy, a broad-based, multistakeholder Sustainable Development Strategy Group was established. The Group's mandate was adopted at the Commission's meeting of March 2005. The Strategy Group was tasked with preparing a proposal for a national strategy for sustainable development, to be submitted to the National Commission on Sustainable Development by 31 May 2006.

The Strategy Group met on 10 occasions between August 2005 and May 2006. In addition, a meeting with sustainable development researchers was organised. In September 2005, together with the Parliament's Environment Committee, the National Commission on Sustainable Development organised an international strategy seminar. Within the Strategy Group, three smaller working groups were formed to draft basic documents on the protection and use of natural resources, on well-being, and on a sustainable economy. At the same time, experts from different branches were also heard. The Finnish national Indicator Network of sustainable development took part in the strategy work, by identifying development challenges in the early phase of the work and producing follow-up indicators based on instructions received from the Strategy Group during the process.

The draft strategy was submitted for an interim review to the March 2006 meeting of the Finnish National Commission on Sustainable Development. It also underwent a wide consultation round in March-April 2006. At its meeting of 12 May 2006, the Sustainable Development Strategy Group unanimously approved the proposal for a national strategy for sustainable development and follow-up indicators.

Furthermore, at its meeting of 13 June 2006, the Finnish National Commission on Sustainable Development also adopted the Strategy Group's proposal. In addition, the revised EU Strategy for Sustainable Development was approved by the European Council in June 2006.

Implementation and monitoring of the reviewed EU Strategy for Sustainable Development sets requirements for Member States and various actors. The National Strategy for Sustainable Development will be assessed every two years and will be linked to the EU's assessment process. The renewed EU Strategy emphasises closer links and co-ordination between the EU and national sustainable development policies. The national assessment performed herein will form part of the above assessment work.

This assessment has been carried out by Ramboll Management Consulting. A steering group was appointed, whose members were Sauli Rouhinen, Annika Lindblom and Jarmo Muurman of the Ministry of the Environment and Per Mickwitz of the Finnish Environment Institute SYKE. Annika Lindblom was substituted by Jonas Rorarius in August 2009.

2 Assessment framework

2.1

Subject of the assessment

This report assesses how well the targets set in the National Strategy for Sustainable Development (2006) and the EU Strategy for Sustainable Development (2006) have been achieved in Finland.

The vision of the National strategy for Sustainable Development is to ensure well-being within the limits of the natural environment's carrying capacity, both nationally and globally. The objective is to create sustainable well-being in a safe and pluralistic society that promotes participation, and in which all citizens take responsibility for the environment. With respect to these aims, the starting point is that the key guidelines of the Strategy form the foundation for drafting Government and policy programmes. The timeline for achieving the targets extends beyond current generations, to around 2030.

From the Finnish perspective, the most significant development trends and challenges of sustainable development are associated with climate change, and adaptation to rapid global economic and national demographic changes. Globally speaking, in addition to climate change the most important challenges are related to global poverty and inequality as well as population growth. The sustainable resolution of these national and global challenges requires simultaneous and mutually supportive short and long-term policy measures at Finnish, EU and global level.

According to the Strategy, society will be actively developed in a way which enables Finland to adapt flexibly to the changing global operating environment and cultural diversity. Success in a changing world requires that Finland develop further as a knowledge and innovation society which promotes the utilisation and development of its national strengths: education and know-how, technology, good governance, equality, a high level of environmental protection, and the sustainable use of its natural resources.

The following figure concisely lists the target areas of the Strategy for Sustainable Development.

Aspects of society such as the national economy and economic instruments, education and training and research and development are considered means of attaining the targets listed above and of safeguarding sustainable development. They are thus not considered goals as such.

The European Union's Sustainable Development Strategy is based on the principle that the economic, social and environmental effects of all policies should be examined in a coordinated manner and taken into account in decision-making.

The revised EU Sustainable Development Strategy was approved by the European Council in June 2006. The most important targets of the Strategy are related to climate change and clean energy, transport, sustainable production and consumption

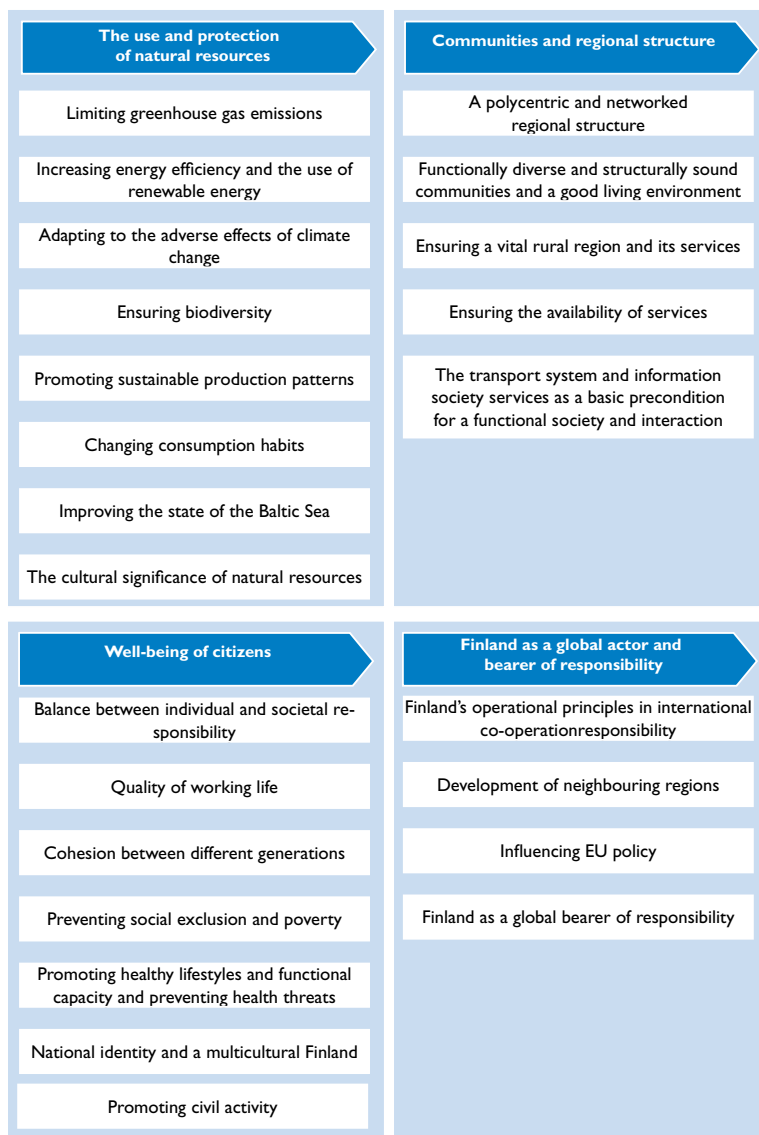


Figure 2. Theme-based objectives of the National Strategy for Sustainable Development in short.

patterns, management of natural resources, public health, social exclusion, demography and migration, and global poverty and development challenges. In order to identify new cost and resource-effective methods of production and consumption, the Commission is of the view that the EU and Member States must continue making investments in research and technology.

One of the main objectives of the Strategy is that the EU, Member States at national, regional and local level, civil society and business life should concentrate on the same priorities and ensure coherence between different policy areas.

With respect to key challenges, the Commission believes the following must be attended to:

- Climate change and clean energy
- Sustainable transport
- Sustainable consumption and production patterns
- Management of natural resources
- Public health
- Social exclusion, demography and migration
- Global poverty

Assessment tasks and targets

The Government Programme and the National Strategy for Sustainable Development obliges various actors to implement the following measures:

Taking the sustainable development guidelines into account in the programmes of various actors

- The objective is that the sustainable development guidelines presented in the Strategy be taken into account in the programmes and strategies of various administrative sectors and in those of other actors involved in the Strategy. Within the framework of the Finnish National Commission on Sustainable Development, a process shall be initiated in which various actors, both in co-operation and separately, promote the Strategy's proposals.

Preparation of sustainable development programmes

- Central government agencies will be obliged, and municipalities encouraged, to prepare sustainable development programmes for their activities. To support these programmes' implementation, the National Commission on Sustainable Development prepared an implementation guide that has been delivered to state and regional organisations.

Cooperation between administrative sectors

- The national strategy for sustainable development will be implemented through cooperation between administrative sectors.

Monitoring of the success of sustainable development policy

- The success of the sustainable development policy will be monitored by means which include national indicator work. Sustainable development indicators will be developed and updated in the national indicator network between various administrative sectors.

Assessment of the National Strategy for Sustainable Development

- The National Strategy for Sustainable Development will be assessed every two years, and will be linked to the EU's assessment process. The Finnish National Commission on Sustainable Development will report to the Government on the results of the assessment.

Development of impact assessment.

- As a continuation of the Strategy, a systematic model will be developed to enable assessment of the Strategy's impacts at national, regional and local level. This will allow a comparison of impact assessment between different programmes. An integrated assessment of the impacts of sustainable development will be included in the policy programmes and plans resulting from the strategy.

In support of the strategy's implementation, the National Commission on Sustainable Development has prepared an implementation guide delivered to state and regional organisations. The guide consists of four key target areas:

Commitment of management

- The management of ministries and the related organisations will commit themselves to promoting sustainable development in their respective administrative sectors; the guidelines for sustainable development will be included in sectoral and sub-organisation strategies and programmes within the administrative sectors of various ministries;

Encouraging municipalities to prepare sustainable development programmes

- Municipalities will be encouraged to prepare sustainable development programmes covering their activities, and to include the Government guidelines for sustainable development in municipal strategies. They will also be encouraged to network both locally and regionally;

Implementing sustainable development in everyday activities

- Public organisations will implement sustainable development in their everyday activities and in their working and operational environments

Assessment and follow-up

- The assessment and follow-up of the implementation of the Government guideline will be organised, as will the long-term assessment and follow-up of the impacts of implementation and costs/savings. It has been agreed that the first interim assessment of the implementation will be discussed in a Commission meeting during the autumn of 2008.

The objective of this national assessment is to provide an estimate of how well the above-mentioned targets set in the strategy for sustainable development, and the requirements and targets related to the strategy's implementation, have been achieved. Thus, the objectives of the national assessment can be summed up in the form of two assessment tasks, based on which the objective of the assessment is to answer the following questions:

- (a) How well have the above-mentioned requirements and targets related to the implementation of the strategies been achieved?**
- (b) How well have the targets set by the strategy been achieved both as a whole and by theme area?**

In addition, the assessment includes an evaluation of key future challenges concerning the above-mentioned themes. As a part of the assessment a toolkit for administrative sectors will be created, facilitating the consideration of aspects related to sustainable development.



















2.3

Assessment questions and criteria

The assessment questions have been grouped into sub-categories as presented below:

- (1) Target setting: How extensively have the guidelines of the strategy for sustainable development been taken into consideration in the strategies and programmes of administrative sectors and other actors?
- (2) Measures: How well have the measures required by the strategy been implemented and how successful has the implementation of the strategy been?
- (3) Results and impacts: How well have the targets set in the strategy been achieved as a whole and by theme area?
- (4) Follow-up and assessment: How well does the follow-up and assessment system supporting the strategy facilitate its implementation?
- (5) Future challenges and development paths: Which are the key future challenges in various administrative sectors and sectors of society with regard to achieving the targets set by the strategy?

The following chart presents the assessment areas, broken down by assessment question. In addition, the chart presents assessment criteria for each question.

Aspect of assessment	Assessment questions	Assessment criteria	Material used
Target setting Coherence of target setting	How well have the guidelines of the strategy for sustainable development been taken into consideration in administrative sectors' own strategies and programmes?	 The guidelines presented in the strategy have been considered clearly and comprehensively in target setting within the administrative sector; sustainable development is referred to in target setting.  The guidelines presented in the strategy have been partly considered in target setting within the administrative sector, but target setting has no clear connection to sustainable development guidelines  The guidelines presented in the strategy have not been considered or have been considered to a very limited extent; sustainable development is not referred to in target setting	Ministries' key strategy documents Kohti kestäviä strategioita (Towards sustainable strategies), a document prepared by the Ministry of the Environment Interviews of representatives of ministries' managerial groups
	What is the level of coherence between the targets set in the strategy for sustainable development and the other targets of each administrative sector?	 Target setting lends clear support to the achievement of targets set in the strategy for sustainable development; the sustainable development perspective is clearly represented in target setting  Target setting does not lend support to the achievement of goals set in the strategy for sustainable development or partly conflicts with these goals  Target setting frequently conflicts with the targets set by the strategy for sustainable development and/or target setting is in conflict with the sustainable development targets	Ministries' key strategy documents Kohti kestäviä strategioita (Towards sustainable strategies), a document prepared by the Ministry of the Environment Interviews of representatives of ministries' managerial groups
	What is the level of importance of targets set for sustainable development in relation to other targets within the administrative sector?	 Sustainable development targets clearly steer target setting within the entire administrative sector and are of a major importance in comparison to other targets in the administrative sector  Target setting in the administrative sector mainly coheres with sustainable development targets but the importance of sustainable development targets varies  Sustainable development targets are clearly subordinate to the administrative sector's other targets; the importance of the sustainable development perspective is limited in general target setting	Ministries' key strategy documents Reports provided by key actors Kohti kestäviä strategioita (Towards sustainable strategies), a document prepared by the Ministry of the Environment Interviews of representatives of ministries' managerial groups
Measures Implementation of measures required by the strategy	How many central government agencies and municipalities have prepared sustainable development programmes?	 All central state agencies and the majority of municipalities have prepared a sustainable development or corresponding programme  The majority of central state agencies and some municipalities have prepared a sustainable development or corresponding programme  Only a small number of central state agencies and municipalities have prepared a sustainable development or corresponding programme	Reports provided by key actors Estimates based on interviews and surveys
	To what extent have the actors taken the implementation guidelines prepared by the National Commission on Sustainable Development into consideration?	 The implementation guide has been considered in a comprehensive manner with regard to sustainable development targets and measures  The implementation guide has been considered with regard to only some sustainable development targets and measures  The implementation guide has been considered only partly with regard to the administrative sector's sustainable development targets and measures and/or the guide has not been utilised	Estimates based on interviews and surveys
	How well have the measures chosen promoted the targets set in the strategy for sustainable development?	 Measures taken by actors have promoted the achievement of sustainable development targets and the role of these measures in the achievement of targets is clear  Measures taken have had only a minor impact on the targets and/or the connection between the targets and these measures remains partly unclear  Measures taken have had no impact on the targets and/or the connection between the measures and the targets remains unclear	Reports provided by key actors Summary based on the reports provided by actors, interviews and analysis of document material Estimates based on interviews and surveys



















Aspect of assessment	Assessment questions	Assessment criteria	Material used for assessment
Results and impacts Achievement of targets as a whole and by theme area	How well have the objectives of the Strategy for Sustainable Development been implemented as a whole and by theme?	 Progress can be observed in nearly all target areas and theme areas  Progress can be observed in most target areas and theme areas  Progress can be observed in only some target areas and theme areas	Summary based on the reports provided by actors, interviews and analysis of document material
	What results promoting the achievement of the strategy's objectives have resulted from the strategy work?	 The strategy process has launched the planning of sustainable development targets and measures  The strategy process has provided tools for the planning of sustainable development targets and measures  The strategy process has had no significant impact on the planning of sustainable development targets and measures	Summary based on the reports provided by actors, interviews and analysis of document Estimates based on interviews and surveys
	What is the state of sustainable development in Finland and how has it developed?	 75% of the indicators show positive and/or sustainable development  50% of the indicators show positive and/or sustainable development  25% of the indicators show sustainable development	Indicator data
Follow-up and assessment Follow-up and assessment of the achievement of the targets	Do the follow-up indicators adequately facilitate the implementation of the strategy?	 Most stakeholder groups have used the indicators and consider them important and useful in the follow-up and assessment of sustainable development  Some stakeholder groups have used the indicators and consider them important and useful in the follow-up and assessment of sustainable development  Only a small proportion of stakeholder groups consider the indicators important and/or useful in the follow-up and assessment of sustainable development or they are not aware of, or have not used, the indicators	Analysis of document material Estimates based on interviews and surveys
	How well does the current follow-up and assessment system facilitate the implementation of the strategy?	 Most stakeholder groups consider the follow-up and assessment system an important part of the strategy's implementation. The data provided by the system can be easily utilised in the planning and implementation of sustainable development measures and/or this data has also been so utilised  Some stakeholder groups consider the follow-up and assessment system an important part of the strategy's implementation or that the data provided by the system can be easily utilised in the planning and implementation of sustainable development measures, but there is no proof that the data has been so utilised  Only a small proportion of stakeholder groups consider the follow-up and assessment system important with regard to planning sustainable development, or the system has not been used	Analysis of document material Estimates based on interviews and surveys
	How comprehensive, reliable and up-to-date is the data available on the status of sustainable development?	 Most stakeholder groups consider the data provided by the follow-up and assessment system comprehensive, reliable and up-to-date and the data has been used in planning sustainable development targets and measures  Some stakeholder groups consider the data provided by the follow-up and assessment system comprehensive, reliable and up-to-date in the planning of sustainable development targets and measures, but their use of the data varies  Only a small proportion of stakeholder groups consider the data provided by the follow-up and assessment system comprehensive, reliable and up-to-date in the planning of sustainable development targets and measures, or they do not use the data	Analysis of document material Estimates based on interviews and surveys

Figure 3. Assessment areas broken down by assessment question and criteria.

2.4

Collection and analysis of material

The assessment was based on five types of material:

- Documentary material
- Reports from member organisations of the National Commission on Sustainable Development
- Interviews
- Indicator data
- Statistics and previous research and studies

Reports on the implementation of the strategies, submitted by ministries and other actors involved, formed the core material for the assessment. These reports provided a starting point for the assessment and the information obtained was complemented by other methods for collecting and analysing material. A request for reports, distributed to actors within the National Commission on Sustainable Development, was prepared at the beginning of the assessment, in cooperation with the Ministry of the Environment. An observation grid was created for analysing the reports. This grid was used to locate uniform data based on the reports and for providing data in a form facilitating analysis. The reports were analysed using both quantitative and qualitative methods.

A total of 27 interviews were carried out during the assessment. Appendix 2 contains a list of the interviewees.

The assessment of results and impacts was based on indicator data gathered by the indicator network. This indicator data was complemented to some extent by other research and statistical material. However, Chapters 5.1 and 5.2 of the assessment are mainly based on the indicator data as such. One of the objectives of the assessment was to gather follow-up data and estimates produced as a result of strategy work related to sustainable development.

2.5

Assessment framework for sustainable development

During the national assessment of sustainable development, the assessors, in cooperation with the Ministry of the Environment, have been engaged in developing a pilot version of an ex ante assessment model for use in Finland. The assessment framework is intended for use as a policy planning tool. Methods used in other countries were analysed to form the basis of development work.

Appendix 1 contains the draft version of the pilot assessment framework.

3 Assessment of target setting

With regard to target setting, the following questions were considered during the assessment:

1. To what extent were the guidelines of the strategy for sustainable development taken into consideration in administrative sectors' own strategies and programmes?
2. What is the level of coherence between the targets set by the strategy for sustainable development and other targets within each administrative sector?
3. What is the importance of targets set for sustainable development in relation to other targets within the administrative sector?

In addition to analysing how well the foci of the strategy for sustainable development are reflected in the actors' strategies, the importance of the strategy in target setting was also analysed. In other words, the extent to which the strategy for sustainable development has governed target setting and affected the priority of targets in internal target setting by actors.

3.1

Sustainable development as part of sectoral strategies

Subject of assessment

The following is a description of the extent to which the guidelines for sustainable development have been taken into consideration in administrative sectors' own strategies and programmes.

Observations

A host of themes related to sustainable development have emerged in administration and are extensively reflected in the strategies prepared by various administrative sectors. These themes include climate change in particular, the related themes of renewable energy and energy efficiency and the sustainable use of natural resources. The well-being of citizens also belongs to certain elements of the strategy for sustainable development and nearly all administrative sectors are aiming to promote the fulfilment of the related targets through their activities.

In the assessment of strategies prepared by various ministries subsequent to 2006, it was noted that nearly all of the strategies mentioned the concept "sustainable

development”, while all of them referred to the term indirectly. In turn, the extent to which the theme of sustainable development is discussed in the strategies greatly varies, as does the scope of such discussions. For instance, within the Ministry of Transport and Communications and the Ministry of Agriculture and Forestry, sustainable development has been highlighted at strategy level whereas it is paid significantly less attention in the guidelines provided by the Ministries of the Interior, Justice, and Finance. However, these differences are understandable when considered from the viewpoint of various administrative sectors: there are many interfaces with the strategy for sustainable development within the administrative sectors of the Ministry for Transport and Communications and the Ministry of Agriculture and Forestry, but far fewer within the Ministry of the Interior’s administrative sector.

In their responses to the request for reports issued to the ministries and other members of the National Commission on Sustainable Development, actors reported a total of over 300 targets related to sustainable development. Because the concreteness and level of these targets varied greatly, the value of a quantitative analysis of the targets is limited. The most concrete targets were clearly defined, describing some of the elements of sustainable development and including a consideration of the required measures (for instance, the development of education supporting sustainable choices). The vaguest targets included taking sustainable development into consideration in the actor’s own activities, or labelling the organisation’s own targets as sustainable development.

The most important target areas, or those most frequently mentioned, were as follows:

- Sustainable consumption and production
- Well-being of citizens
- Mitigation of climate change
- Sustainable regional structure

Although measures directly related to mitigation accounted for over 10 per cent of all measures, the number of indirectly related measures was at least two-fold. Climate change has become the central basis of a number of varying targets. In addition, many of the targets have multiple bases (for instance, the reintegration of regional structure).

Conclusions

Themes related to the environment, and climate change and the sustainable use of natural resources in particular, have emerged extensively in target setting by administrative sectors. It is characteristic of the theme areas that have emerged that they are based on their own national strategies, and in some cases even on international conventions. The relationship between targets related to well-being and the strategy for sustainable development is particularly vague. In other words, these targets are mainly being pursued outside the strategic framework for sustainable development.

Another salient feature is that certain theme areas are highlighted by some administrative sectors according to their own focus area. In turn, broader viewpoints on sustainable development are rare, that is, viewpoints based on which all activities would be assessed across all aspects of sustainable development (the environment, social responsibility, global responsibility etc.).

The themes which have emerged in administration are mainly environmental. A division seems to exist between environmental theme areas and social issues, with organisations focusing on social themes paying only limited attention to environmental ones in target setting, and vice versa.

Evaluation



Many sustainable development themes have emerged in administrative activities and are reflected in the administrative sectors' own strategies. However, a broader perspective on sustainable development based on which all activities would be assessed across the entire spectrum of sustainable development is rare. For some administrative sectors, sustainable development is the key starting point for their entire strategy, whereas in others the main focus is on a certain component of sustainable development or reference to it is confined to the mere mention of the term in their strategy. Most ministries cover the themes related to sustainable development to at least a reasonable extent in their strategies.

3.2

Coherence of target setting with strategy for sustainable development

Subject of assessment

The following discusses the level of coherence between the targets set by the strategies for sustainable development and the other targets of each administrative sector.

Observations

The strategy for sustainable development states that “The fact that the social, cultural and economic aspects of sustainable development have increasingly gained a foothold alongside environmental considerations can be regarded as a clear development trend in sustainable development policy. When planning policy measures, we expect the mutual and mutually supportive interaction of such measures. It could be said that the time is ripe for the preparation of a strategy that takes the various dimensions of sustainable development into consideration in equal measure.”

The assessment revealed that the integration of various sustainable development aspects remains relatively limited. In other words, this would involve a method taking environmental perspectives into consideration when promoting well-being, or considering questions of social or global responsibility when promoting the sustainable use of natural resources. The ministries and other actors assessed tended to consider sustainable development from the perspective most natural to their own administrative sector.

Although sustainable development targets have been considered extensively in the strategies of various administrative sectors, little attention has been paid to the coherence of target setting. From the viewpoint of coherence, the problem is not that target setting includes conflicting targets but that such conflicts are not dealt with at all.

With respect to target setting by ministries, the fundamental question relates to how situations are handled in which two targets conflict. A typical example would be the conflict between economic and sustainability targets (for instance, the need for smooth traffic flows pitted against the environmental hazards arising from traffic). With regard to coherence in target setting, a key problem arises from the vagueness of target setting (the interpretation of targets). This gives rise to the “everything is sustainable development” problem, wherein all activities are interpreted as being in line with sustainable development. Only a few interviewees were able to identify features of target setting within their own organisation that might be poorly compatible

with the themes of the strategy for sustainable development. This poses a problem for the strategy, since such a framework is hardly conducive to steering in target setting. Sustainable development would thereby at once be all things and nothing.

The candy store dilemma poses another challenge in the assessment of target setting. This dilemma refers to a situation in which each actor is able to cherry pick the elements of the strategy which best serve the needs of its own organisation, leaving the remainder to other actors (“our task is to ensure economic growth; other dimensions belong primarily to other actors”).

The strategy for sustainable development includes a wide range of targets, from the prevention of social exclusion to economic growth, and from the themes of global responsibility to quality of working life. In general, the strategy has been interpreted in such a way that various organisations view themselves as implementing various elements of it. Consequently, while some actors focus on promoting economic growth and development, others concentrate on themes related to quality of working life or preventing social exclusion, in line with their own interests and sector.

The strategy for sustainable development offers each actor elements which can be viewed as matching the actor’s own objectives. In contrast, sustainable development perspectives, whereby organisations focus on e.g. economic or social issues while also assessing their activities through other aspects of sustainable development, are relatively rare

Conclusions

The integration of the various aspects of sustainable development remains limited. Ministries and the other actors assessed typically focus on the sustainable development perspective most natural to their own organisation, paying less attention to other perspectives.

Generally speaking, target setting is well in line with sustainable development. However, this is partly due to the vague nature of target setting, allowing a wide array of measures to be interpreted as promoting sustainable development while, on the other hand, targets are set at so general a level that all actors can identify elements of the strategy which coincide with the objectives of their own organisation. The problem lies in a lack of genuine steering power of this kind of a strategy.

Very little attention is paid to conflicts between various targets. Few attempts are made to analyse such conflicts within the strategies of various administrative sectors.

Evaluation



Target setting by member organisations of the National Commission on Sustainable Development is generally in line with the targets set by the strategy for sustainable development. However, a comprehensive conception of sustainable development, whereby all activities are analysed from various perspectives of the strategy, is rare. Some actors even interpret sustainable development in a way that deviates from the strategy. In addition, conflicts in target setting are paid scant attention.

Importance of sustainable development in target setting

Subject of assessment

The importance of sustainable development may be considered from two perspectives:

1. What is the importance of *the measures required by the strategy for sustainable development* in target setting?
2. What is the importance of *the strategy for sustainable development* in target setting?

The latter of these two questions considers how the strategy for sustainable development has affected the first question, that is, the importance of measures required by the strategy for sustainable development in target setting by various actors.

Observations

From the viewpoint of sustainable development targets, actors may be divided into four groups as presented in the four-fold table below.

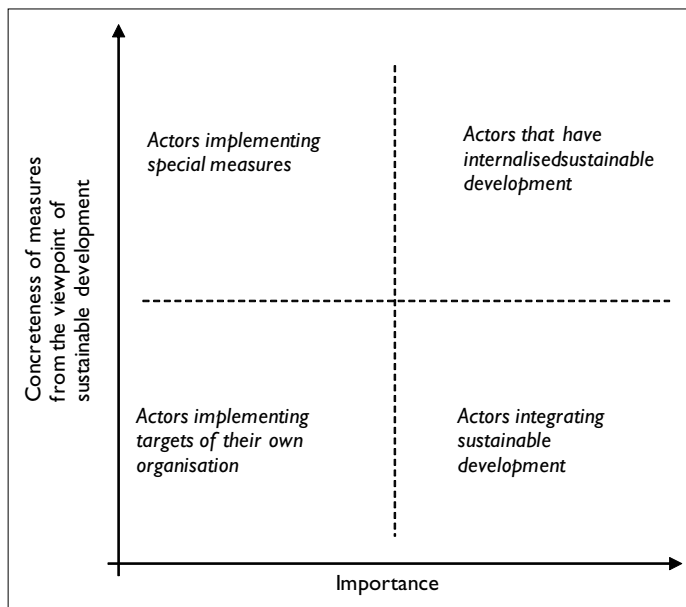


Figure 4.

Most actors are positioned either in the left lower or right lower quadrants, meaning that they try to take account of sustainable development targets in their target setting (lower left quadrant) or that the sustainable development perspective has been integrated in their target setting (lower right quadrant). An example of the latter is

provided by the Ministry of Transport and Communications' target setting concerning traffic policy. In comparison to other targets, sustainable development targets have been highlighted in the guidelines. When various ministries are considered, the importance of the themes of sustainable development also looms large in target setting by the Ministry of Agriculture and Forestry, Ministry of the Environment, and Ministry for Foreign affairs, as well as the Ministry of Social Affairs and Health when the target areas related to well-being are at stake.

Conclusions

The importance of sustainable development varies greatly by branch/administrative sector. In branches/administrative sectors where the theme areas of sustainable development are extensively linked with the sector's focus areas, sustainable development targets have either become very central (for instance, in forest policy) or such aspects have attained greater importance (for instance, in traffic policy). On the other hand, sustainable development is barely visible in the target setting of sectors whose activities rarely intersect with sustainable development targets (for instance, in the Ministry of Justice and the Ministry of the Interior).

When sustainable development is considered as a wide-ranging principle horizontally governing all activities, it can be regarded as having been overshadowed by other strategies governing public administration (cf. productivity programme or regional policy). The strategy for sustainable development has not been accorded the equivalent concreteness or political importance and implementation mechanism (even though the strategy is formally steered by a commission with a high political profile).

Evaluation



The importance of the strategy's contents has increased in public administration, but as a governing instrument the strategy has less rather than more prominence. This is due to the fact that key sustainable development themes are managed through other strategies, while the contents of the strategy for sustainable development are determined by decision-making processes steered separately from the strategy. The importance of the strategy for sustainable development lies mainly in the process by which it provides a forum in which actors can discuss the related themes.

4 Assessment of measures

With regard to measures, the following questions were examined by the assessment:

1. How many central government agencies and municipalities have prepared sustainable development programmes?
2. To what extent did the actors take consideration of the implementation guidelines prepared by the National Commission on Sustainable Development?
3. How have the selected measures promoted the targets set under the strategy for sustainable development?

4.1

Preparation of sustainable development programmes

Subject of assessment

The Government Programme of Prime Minister Vanhanen's second cabinet includes the following outline: "Central government agencies will be obliged and municipalities encouraged to prepare sustainable development programmes for their activities." The following considers the extent to which sustainable development programmes have been prepared by government agencies and municipalities.

Observations

The Government Programme and the implementation guidelines for the Government Programme's outlines for sustainable development encourage municipalities, and oblige central government agencies, to prepare sustainable development programmes covering their activities. Municipalities are encouraged to prepare and update sustainable development programmes through adherence to the Aalborg commitments and other best practices implemented by municipalities. In addition, the creation of sustainable development networks has been encouraged between municipalities that are geographically or functionally close to each other, and between municipalities and other local and regional actors.

Approximately 300 municipalities have prepared a local sustainable development programme (a Local Agenda 21). The preparation of local agendas was mainly achieved in the late 1990s and early 2000s. During the assessment, no data was gathered on how extensively local agendas have been updated.

In 2001, the Association of Finnish Local and Regional Authorities prepared the outlines of sustainable development, according to which sustainable development work must be developed in municipalities and within the Association. The Association

has promoted sustainable development work in municipalities through development projects, the first of which was implemented in 1992–1994. This project resulted in a publication entitled “Kestävän kehityksen käsikirja kunnille” (The Manual of Sustainable Development for Municipalities). The next project, implemented in 1997–1998, resulted in the publication of a number of guidelines, including a set of local agenda guidelines “Täältä kestävyteen” (From Here to Sustainability).

Organisation	Sustainable development programme	Environmental or corresponding management system
Ministry of Social Affairs and Health	👎	👎
Ministry of Employment and the Economy	👎	👍
Ministry of Education	👎	👍
Ministry of Agriculture and Forestry	👎	👍
Ministry of Finance	👎	👎
Ministry of Justice	👎	👎
Ministry of Defence	👎	👍
Prime Minister's Office	👎	👎
Ministry of the Environment	👎	👍
Ministry of Transport and Communications	👍	👍
Ministry for Foreign Affairs	👎	👎
Ministry of the Interior	👎	👎
The Association of Finnish Local and Regional Authorities	👍	-
The Finnish Confederation of Professionals STTK	👎	👎
Finnish Forest Industries	👍	👍
The Federation of Finnish Enterprises	👎	👎
The Finnish Association for Environmental Education	👎	👍
Friends of the Earth Finland	👎	👎
Finnish Centre for Health Promotion	👎	👎
Service Centre for Development Cooperation	👎	👍
Rural Women's Advisory Organisation	👎	👍
Finnish Sports Federation	👎	👍
Akava-The Confederation of Unions for Professional and Managerial Staff in Finland	👎	👎
The National Council of Women in Finland	👍	👎
The National Union of University Students in Finland	👎	👍
Confederation of Finnish Industries EK	👎	👍
Finnish Society for Environmental Social Science	👎	👎
The Finnish Sami Parliament	👍	👎
The Evangelical Lutheran Church of Finland	👎	👍
Region of North Karelia	👎	👎

Figure 5. Sustainable Development programmes in 2009.

Only a few sustainable development programmes have been prepared by central government agencies. The request for reports sent to members of the National Commission for Sustainable Development included an enquiry on the situation concerning the preparation of sustainable development programmes. Members were also asked whether their organisations used an environmental management, or another corresponding, system.

Of the ministries, only the Ministry of Transport and Communications had prepared a sustainable development programme. Five ministries use an environmental management system or a corresponding application. Most ministries have not considered it necessary to prepare a sustainable development programme of their own, many because they consider sustainable development to be an integrated part of other programmes. The Ministry of Finance is in the act of preparing a sustainable development programme.

Preparation of sustainable development programmes does not number among the targets of the GSD (Government Strategy Document) follow-up.

Conclusions

With one exception, no sustainable development programmes have been prepared by central government agencies, mainly due to the actors considering this unnecessary.

A number of local agendas or sustainable development programmes were prepared by municipalities in the late 1990s and the early 2000s. The assessment provides no evaluation of the current situation in municipalities or whether these programmes have been genuinely utilised and updated as part of municipal decision-making.

Evaluation



The preparation of sustainable development programmes has been very limited and the actors have not considered such preparation necessary.

4.2

Compliance with the implementation guide

Subject of assessment

The implementation guide for the Government's guidelines for sustainable development consists of four groups of targets:

1. The management of ministries and their subordinate organisations should commit itself to promoting sustainable development within the respective administrative sectors; the guidelines for sustainable development will be included in sectoral strategies and programmes and in the strategies and programmes of organisations subject to various ministries;
2. Municipalities are encouraged to prepare sustainable development programmes for their activities and to include the Government guidelines for sustainable development in municipal strategies, while networking both locally and regionally;
3. Public organisations should implement sustainable development in their everyday activities and in their working and operating environments;

4. An assessment and follow-up of the implementation of the Government guidelines will be organised. Similarly, the long-term assessment and follow-up of the impacts of implementation and costs/savings will be arranged.

The targets in group 2 have been discussed in the previous chapter. Group 4 will be discussed in greater detail in Chapter 6. This subsection primarily discusses the targets in groups 1 and 3.

Observations

Commitment of management

The objective of the implementation guide is to promote the commitment of the management of ministries and organisations in their administrative sectors as well as officials in various sectors to the vision, target framework, principles and political guidelines of the strategy with respect to all key theme areas. This will help these actors form a view of the importance of the above-mentioned issues with respect to their activities. The principles and targets presented in the national strategy for sustainable development will be included in the performance-management system and other management systems of organisations within the administrative sectors of various ministries.

In addition, the implementation guide encourages the aforementioned management to ensure that issues related to sustainable development are dealt with in a cross-departmental manner in the work of managerial groups and other strategic working groups. If necessary, a special working group or network of officials should be established in ministries, capable of lending support to contact points and to the continuity and coherence of sustainable development policy.

The interviews reveal that the strategy has remained a distant issue for senior management. Although environmental issues in particular have received more emphasis than before in senior management agendas, the strategy for sustainable development as such is of no importance.

"Over one hundred strategies have been adopted by the Council of State [Government decisions in principle]. This is just one of them."

- Representative of ministerial management group -

"This strategy will have no impact; what will have an impact is more general awareness of environmental issues. But has this resulted from the strategy? Definitely not!"

- Representative of ministerial management group -

Many representatives of ministerial management groups also refused to be interviewed, which is generally exceptional with regard to the assessment of administrative sectors' own programmes. As such, this may imply that these persons are either unaware of the issue or do not consider it important.

Sustainable development in everyday activities of public administration

The objective of the KULTU programme (a programme for the promotion of production and consumption) adopted in 2005 is that state and municipal organisations commit themselves to the continuous improvement of the ecological, social and economic sustainability of their activities and procurements. An additional objective is to increase the annual share of sustainable public procurement. The implementation of these objectives has begun. The working group on sustainable procurement,

steered by the Ministry of the Environment and the Ministry of Employment and the Economy, has prepared an action plan to make public procurement greener.

The aim of the local cuisine project, launched by EkoCentria (formerly Lähikeittä) in 2006, has been to increase the share of sustainable food products in public procurement. This project, funded by the Ministry of Forestry and Agriculture, has sought to promote the use of local and organic food in public catering. EkoCentria has cooperated with the Public Procurement Advisory Unit, a joint project of the Ministry of Employment and Economy and the Association of Finnish Local and Regional Authorities, by organising advice for catering managers and other catering professionals

A joint project of the Ministry of Finance and the Ministry of the Environment was launched in 2009, with the objective of promoting the introduction of environmental systems in state administration.

The introduction of the WWF's Green Office or a corresponding system has represented one of the most typical means of promoting sustainable development in everyday public administration activities.

"Our Green Office objective is to reduce paper consumption by a minimum of 5% during the period 2009-2012 and to reduce electricity consumption by 1% each year during the 2009-2012 period. In addition, the consumption habits of personnel are measured regularly by means of a consumption habit index."

Many actors reported that they had either already introduced, or were planning to introduce, the system in question.

Conclusions

The key problems concerning the four groups of targets set in the implementation guide to the Government's guideline for sustainable development relate to the commitment of management and to the preparation of sustainable development programmes as related above.

Although environmental issues in particular have received more emphasis than before in senior management agendas, the strategy for sustainable development has not succeeded in establishing itself as a strategy governing inter-administrative activity. Actors have remained unfamiliar with the strategy, which lacks the credibility needed for directing either the target-setting activities or thinking of senior management (in comparison to e.g. the productivity programme, regional policy programmes or strategies on climate change).

The promotion of sustainable development in everyday public administration activities is particularly reflected in the introduction of Green Office and corresponding systems.

Evaluation



The implementation guide bears no practical significance. The achievement of the related objectives has been most limited with regard to the commitment of senior management and the preparation of sustainable development programmes in central government agencies.

Relationship between the measures and targets set in the strategy for sustainable development

Subject of assessment

This chapter discusses the extent to which the measures launched by various actors have promoted the targets set in the strategy for sustainable development.

Observations

The actors reported over 200 measures aimed at promoting the targets set in the strategy for sustainable development. However, the quantitative review of these measures is not highly meaningful since the nature, scale and duration of the reported measures vary greatly (from the implementation of the national forest programme to distributing guidebooks). In addition, the reported measures cover only part of the measures implemented by the actors.

The measures may be divided into groups based on their nature as presented in the four-fold field below.

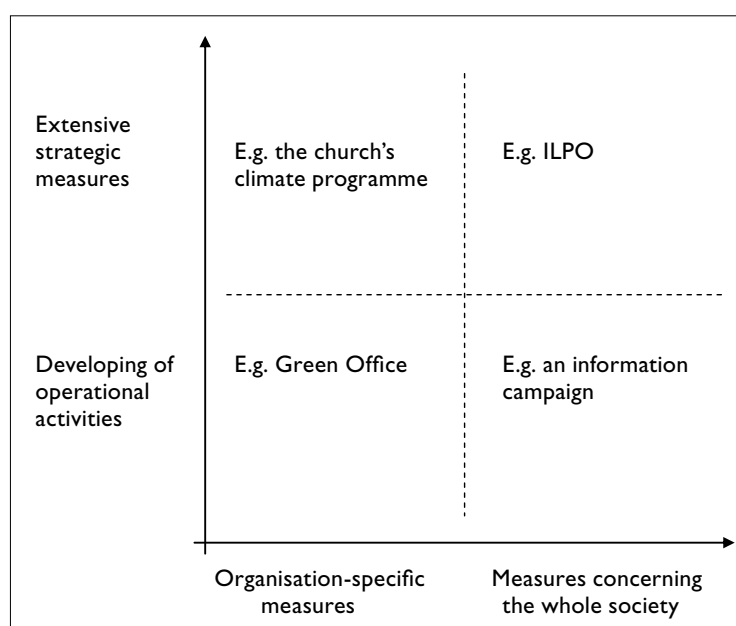


Figure 6. Measures aimed at promoting the targets set in the NSSD.

Most measures reported were either small-scale development projects implemented at organisational level (the lower left quadrant) or extensive strategic projects concerning the whole of society or a certain sector/branch (the top right quadrant). The most typical examples of the organisation-specific development of operational activities were Green Office or corresponding projects for the development of organisations' everyday activities.

The majority of the measures reported were not clearly defined, single or repeating measures but rather practices or principles guiding activities (e.g. "the aim is to consider in all activities..."). The intended duration of the measures' implementation had been defined in less than 50% of cases. A typical word used to describe the measures was "continuous".

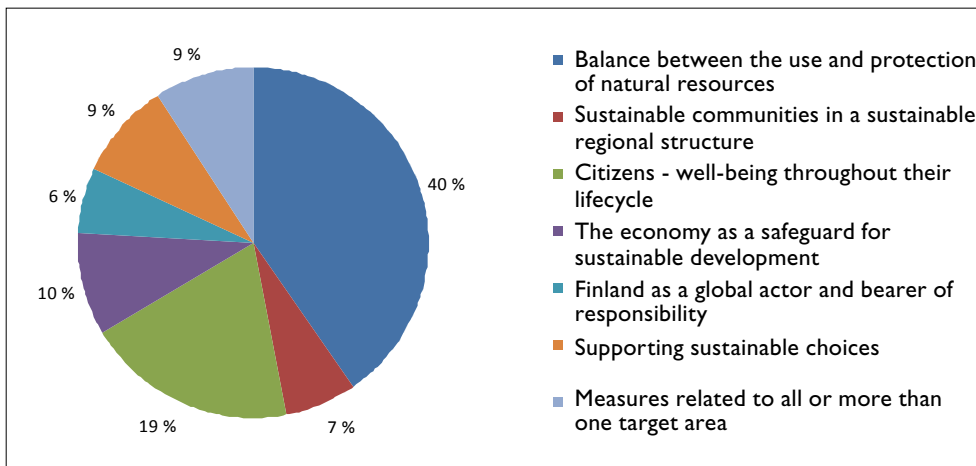


Figure 7. Measures broken down by primary target area.

The figure below shows the measures, broken down by primary target area. The majority of the reported measures relate primarily to the target area “Balance between the use and protection of natural resources”. Fewest measures were related to the target area “Finland as a global actor and bearer of responsibility”. This accords strongly with the results of the target analysis presented in Chapter 3.1. However, the importance of this kind of analysis is limited in the sense that the measures vary in both nature and quality

When considering how the measures launched by various actors have promoted the targets set by the strategy for sustainable development, a key problem originates from the lack of a clear programme theory underlying the strategy. A programme theory refers to a plan for how the desired impacts are to be achieved through the selected measures, and what this will require. A programme theory interconnects the targets set by the strategy, and the related measures and resources.

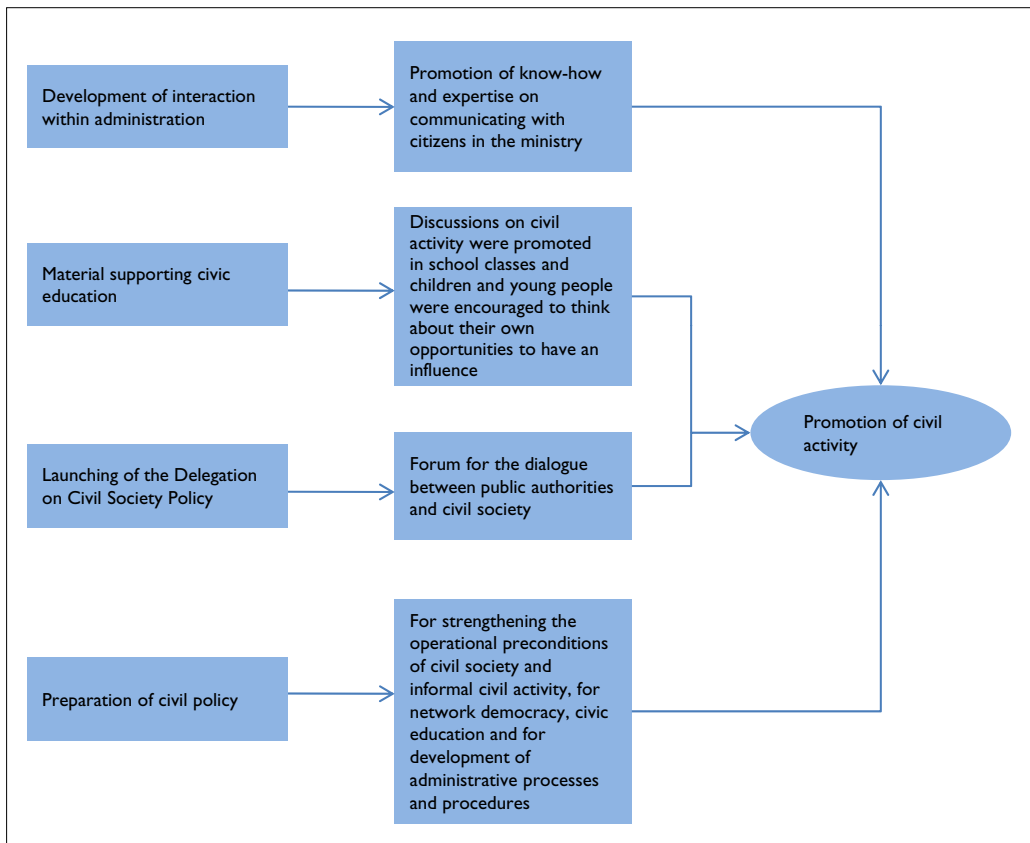
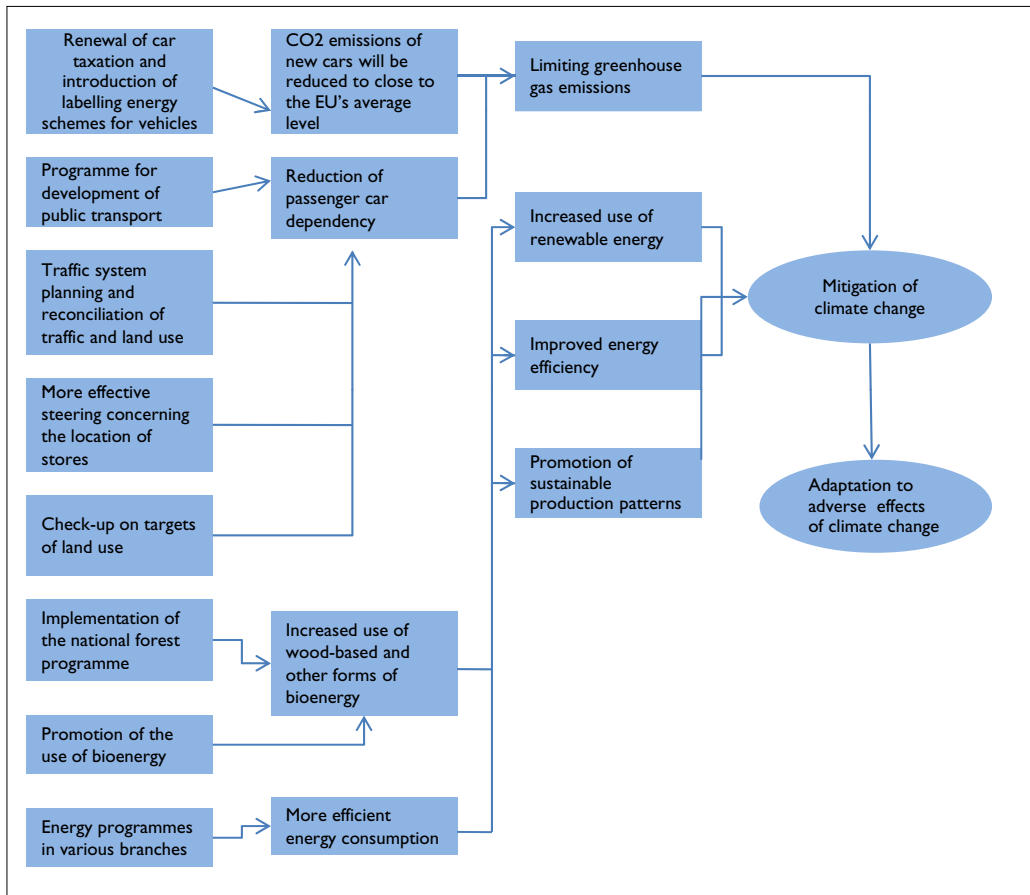
Based on the strategy and targets reported, three examples of programme theories are presented below.

A programme theory describes the chosen strategic path to the desired outcome. It also reveals assumptions about the relationships between various issues underlying the strategy. The lack of a programme theory may also be deemed as reflecting the lack of understanding of the chosen strategy.

Conclusions

In the assessment of the relationship between the implemented measures and the targets set in the strategy for sustainable development, a key problem originated in the lack of a clearly defined programme theory connecting the strategy targets to the selected measures. With regard to the strategy, this kind of an analysis would be particularly valuable since it would facilitate the integration of measures of various administrative sectors in a range of target areas. It might at least help identify conflicts, overlaps and shortcomings in measures implemented by various administrative sectors.

A systematic analysis of the measures and targets also highlighted the structural challenges facing the strategy. Merely locating the targets, target levels and measures chosen for each sector of the strategy proved challenging (for instance, what are the targets, measures, indicators and target levels set by the strategy concerning “the quality of working life” or “prevention of social exclusion and poverty” and who is responsible for the implementation of each measure?)



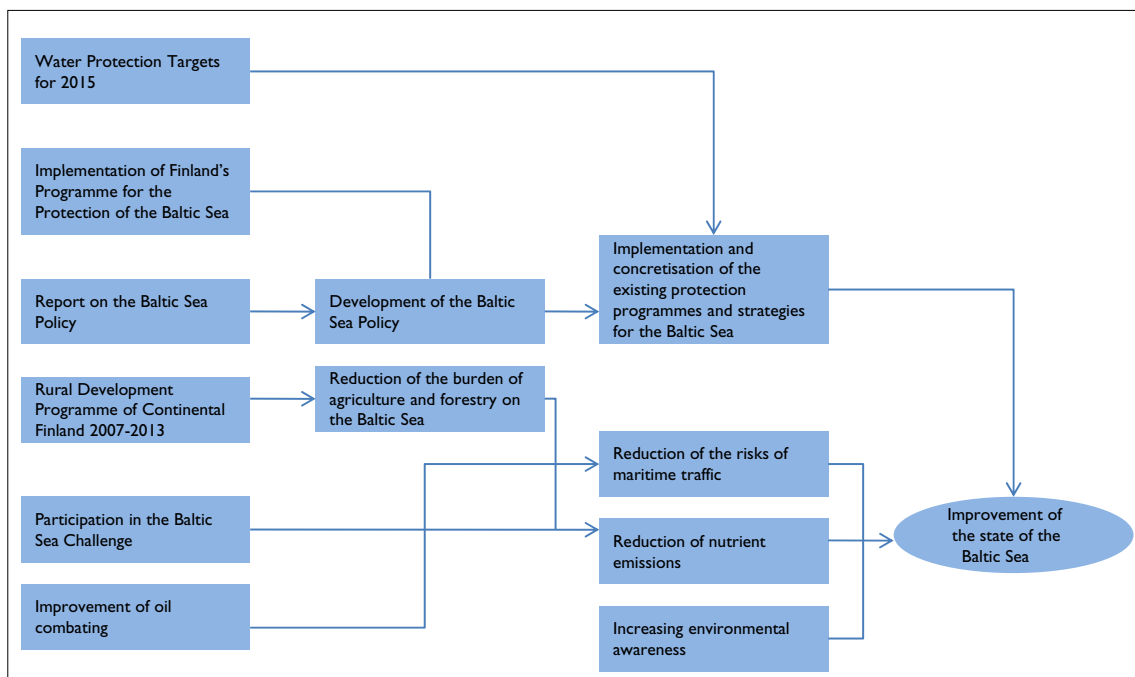


Figure 8. Examples of programme theory models.

Evaluation



Due to the time span of the assessment, the desired impacts of most measures launched after the preparation of the strategy cannot yet be observed. With regard to measures implemented in a number of key target areas, the impacts may be observed only after several years. A more important problem originates from the lack of a clearly defined programme theory that would describe how the desired impacts could be achieved through the selected measures, while defining the roles and responsibilities of various parties within this entity.

5 Assessment of results and impacts

The following questions have been considered when assessing results and impacts:

1. To what extent have the targets set in the Strategy for Sustainable Development been implemented as a whole and by thematic entity?
2. What results, promoting the targets set by the strategy, have been achieved by strategy work?
3. What is the status of sustainable development in Finland and how has this developed?

5.1

Implementation of the targets set in the strategy

Subject of assessment

This chapter discusses the implementation of the targets set in the strategy for sustainable development, by target area. The target level (if applicable) defined in the strategy, observations related to the target area based on the indicator material provided by the Ministry of the Environment and other statistical and research material, as well as conclusions concerning the level of implementation of the targets, are presented for each target area.

Observations by target area

Limiting greenhouse gas emissions

Target

According to the strategy for sustainable development, "Finland is consistently and purposefully reducing its coal intensity and examining how to end the use of environmentally burdening fossil fuels in the long term." According to the Kyoto Protocol, the common target of industrialised countries is to reduce greenhouse gas emissions by an average of 5.2 per cent in comparison to the 1990 level, in the 2008–2012 period. Under the EU's internal burden-sharing, Finland has committed itself to maintaining its emissions at the 1990 level.

Observations

Finland's Energy and Climate Strategy was completed in November 2005 and outlines its plans for implementing the international obligations for limiting greenhouse gas emissions during the Kyoto Protocol commitment period of 2008–2012. The approved strategy focuses on the utilisation of renewable energy sources, energy sav-

ings and the reduction of greenhouse gas emissions. In addition to this, the state is acquiring the emissions units allowed by the Kyoto Protocol, by means of so-called flexible mechanisms. Through the measures outlined in the Energy and Climate Strategy and flexible mechanisms, including EU emissions trading, Finland will fulfil the approved obligations set for it. Otherwise, Finland's greenhouse gas emissions would exceed its obligations under the Kyoto Protocol by around 15 per cent.

Finland's greenhouse gas emissions have fluctuated annually. This fluctuation is mainly explained by the ratio in annual energy consumption of imported electricity and condensate electricity produced nationally by fossil fuels and peat. Although the trend has been a rising one, this growth has been slower than growth in GNP. In 2005, greenhouse gas emissions were exceptionally low due to an industrial stoppage in the forest industry and the high amount of imported electricity. After this, emissions returned to a level exceeding the Kyoto target level. In 2007, Finland's greenhouse gas emissions totalled 78.5 Tn CO₂ eq. (million tonnes of CO₂ equivalent). This exceeds the target level for the Kyoto Protocol commitment period 2008-2012 by over ten per cent.

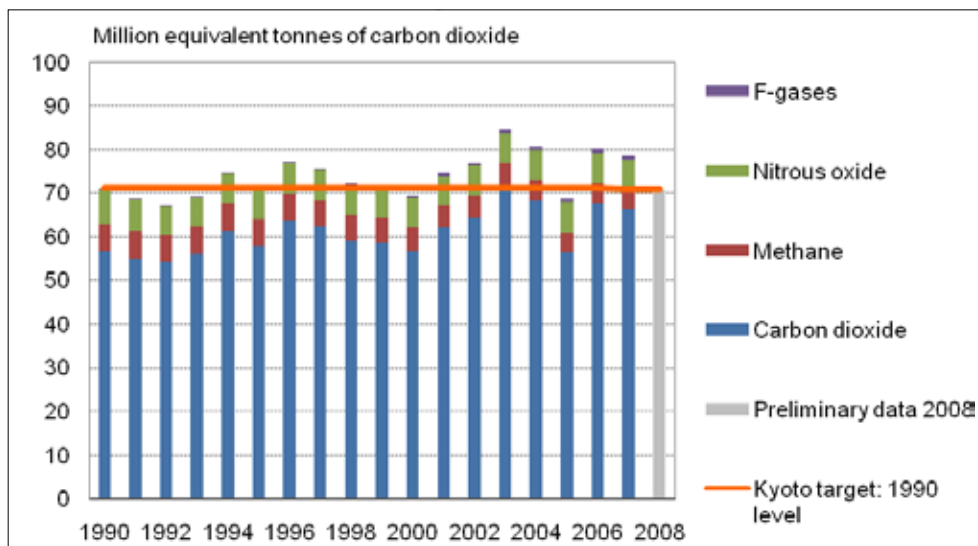


Figure 9. Greenhouse gas emissions 1990–2008. Source: Finland's greenhouse gas emission inventory, Statistics Finland.

The figure 10 describes the distribution of Finland's greenhouse gas emissions, by sector, in greater detail. As shown by the figure, energy consumption is responsible for over 80 per cent of national greenhouse gas emissions. The share of energy production is the most significant in this sector.

The Government Foresight Report on Long-term Climate and Energy Policy (Towards a Thriving Low-carbon Finland, 2009) has stated that the long-term target set by the Council of State would see Finland's emissions cut by at least 80 per cent from the 1990 level, by 2050. This target means that in 2050 Finland's emissions can, at a maximum, equal 14 Mt of CO₂ equivalent - roughly the same amount produced by transport alone at the moment. If the EU adheres to its target of cutting emissions by 20 per cent from the 1990 level by the year 2020, then starting from the 2007 level, Finland would have to reduce its emissions by an average of 2.6 per cent annually until 2020, and by 4.5 per cent annually in 2020-2050, in order to realise the vision set by the Council of State. But if the EU is committed to a more stringent emission reduction rate of 30 per cent until 2020, Finland would have to cut its emissions by about 3.8 per cent annually until 2020 and by 4.1 per cent thereafter. The figure 11

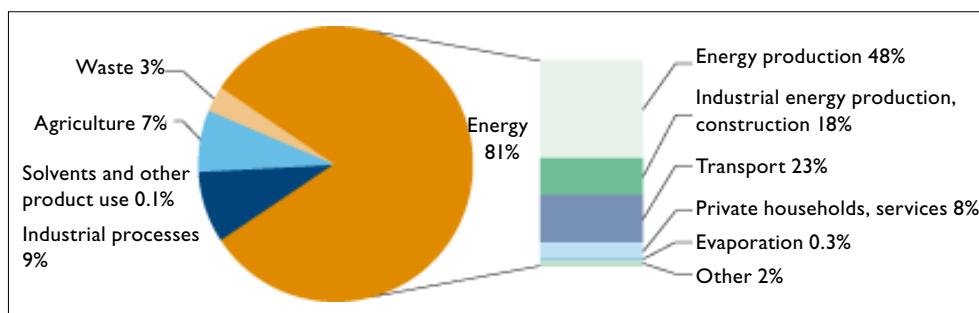


Figure 10. Finland's greenhouse gas emissions by sector in 2007. Source: Statistics Finland, 2009. Greenhouse gas emission inventory.

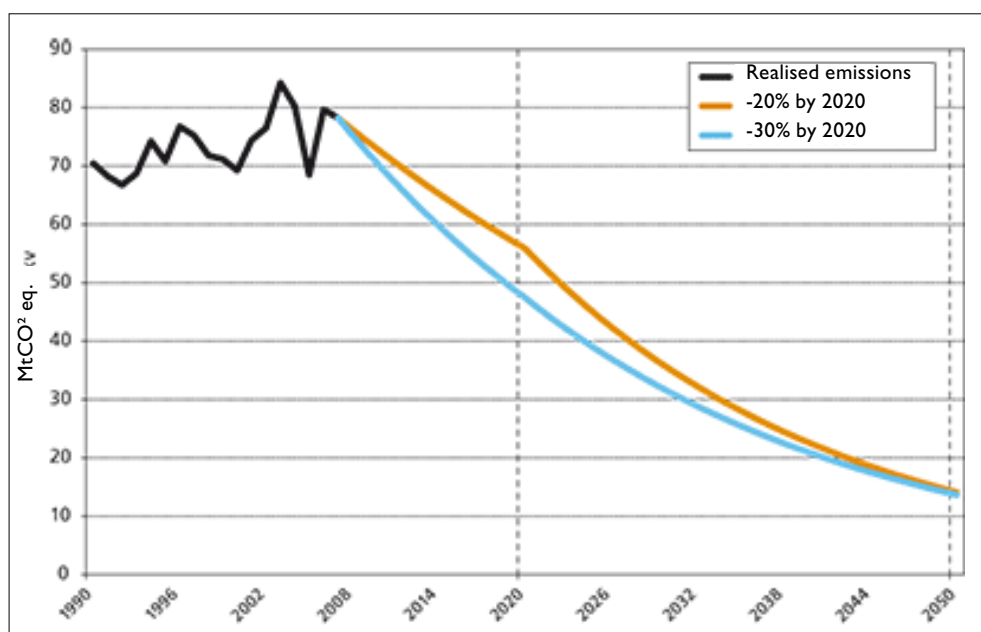


Figure 11. Vision set by the Council of State and various scenarios. Source: Prime Minister's Office.

gives the vision set by the Council of State and various scenarios related to different, possible decisions taken in the EU.¹

Conclusions

According to the preliminary energy statistics, the reduction of emissions in 2008 remained slightly below the target level set by the Kyoto Protocol. The most important reason for this was the economic recession.

Increasing energy efficiency

Target

According to the strategy for sustainable development, "an additional saving of 5 per cent in energy consumption by means of improving the efficiency of current energy saving measures, and through new energy saving measures, is the target for 2015 in comparison with the situation if no measures are taken. The long-term target is to halt the growth and reverse the trend in overall primary energy consumption."

¹ Government Foresight Report on Long-term Climate and Energy Policy (Towards a Thriving Low-carbon Finland, 2009)

Observations

In 2005, the total consumption of energy fell by nine per cent in comparison to the preceding year. This fall resulted from the decreased energy needs of industry on account of industrial action in the forest industry and increased net imports of electricity due to the favourable water supply situation in the Nordic countries. After the year 2005, consumption increased again before falling in 2008 by five per cent on account of the contraction in industrial output and warm weather. In Finland, the output of the forest industry has a significant effect on both total energy consumption and the share of renewable energy of total consumption.

The structure of total energy consumption has remained relatively unchanged for around twenty years. According to the Preliminary Energy Statistics published by Statistics Finland, the share of fossil fuels and renewable energy sources of total energy consumption in 2008 was 46 per cent and 27 per cent respectively. Nuclear energy accounts for 17 per cent of energy production and peat for 6 per cent. Other energy sources, including net imports of energy, cover 4 per cent of total energy consumption.

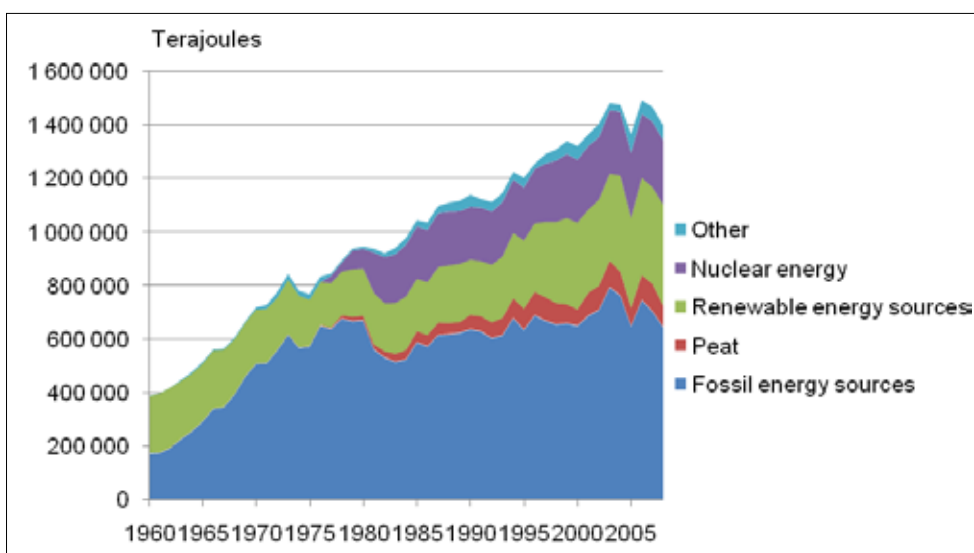


Figure 12. Total energy consumption 1960–2008. Source: Statistics Finland, Energy Statistics

The task of the broad-based Energy Efficiency Committee appointed by the Ministry of Employment and the Economy was to assess and propose measures that could achieve savings of 37 TWh in final energy consumption and a saving of 5 TWh by the year 2020. The following measures, for which the greatest annual energy savings could be calculated, have been proposed in the Committee's report.

- Some 8.5 TWh of energy can be saved by 2020 by introducing new private vehicle technology and speeding up the renewal of the existing car stock. Electric cars are included in the figure. In order to make this a reality, several measures are needed, including the staggering of vehicle taxation, monitoring of the impact of staggered car taxes, and energy efficiency classifications for cars.
- Energy consumption will be reduced by 4.9 TWh by 2020 by means of stricter energy regulations for new building projects, to be implemented over the next few years, and through requirements to be extended to renovation construction.

- A total of 2.8 TWh of energy can be saved in 2020 within sectors not covered by the emissions trading scheme, by means of substantially more challenging and broad-based energy efficiency agreements combined with research and innovation activity.
- At least 2.1 TWh of energy can be saved by means of energy efficiency requirements for equipment, with household equipment accounting for more than half of the total.

Implementation of the measures described above will generate savings amounting to approximately 18.3 TWh, i.e. half of the savings objective. ²

Conclusions

In Finland, energy consumption per capita is one of the highest in the EU. Energy consumption is increased by the cold climate, sparse population, industries that consume a great deal of energy and a high standard of living. Due to the economic recession, energy consumption decreased significantly in 2008. In November, the production of all main industries decreased. Production within the forest industry decreased throughout the year, particularly affecting electricity consumption.

Increasing the use of renewable energy

Target

According to the strategy for sustainable development, *“efforts will be made to significantly increase the proportion of renewable sources of energy and biofuels over the next 10–15 years. The aim is to at least triple the amount of wood chips made from forestry waste, as well as cultivated biomass, recycled fuels and biogas used in primary energy, from about 2 per cent in 2004 to more than 6 per cent over a period of 15–20 years.”*

Observations

Finland is one of the world’s leading users of renewable sources of energy, especially bioenergy. The objective of the national energy and climate strategy is to increase the use of renewable sources of energy and their share of energy consumption. Renewable energy sources provide one fourth of Finland’s total energy consumption. However, the obligations proposed by the EU require that Finland increase renewable energy’s share of final consumption to 38 per cent by 2020. Approximately 80 per cent of renewable energy used in Finland consists of bioenergy which is produced as a by-product of the forest industry. Consequently, increased use of bioenergy is strongly dependent on the functioning of the forest industry. The decrease in the national output due to structural changes in the forest industry suggests that substituting renewable energy forms should be increased significantly in the future.

It is stated in the report of the Feed-in Tariff Working Group appointed by the Ministry of Employment and the Economy that “in 2006, renewable energy sources covered 93 TWh of final energy consumption. Achieving the target set in the National Climate and Energy Strategy would require an increase of some 25 TWh in the exploitation of renewable energy by 2020. Wind power’s share of the required increase is estimated at approximately 24 per cent if approximately 6 TWh of electricity is produced from biogas. The share of biogas would be around 1 per cent, if around 0.15 TWh of electricity and another 0.15 TWh of heat was produced from biogas in 2020”³

² Ministry of Employment and the Economy: The report of the Energy Efficiency Committee: Proposal for energy saving and energy efficiency measures, 2009

³ Final report of the feed-in tariff working group. A proposal concerning feed-in tariffs for electricity produced using wind power and biogas, the Ministry of Employment and the Economy, 2009.

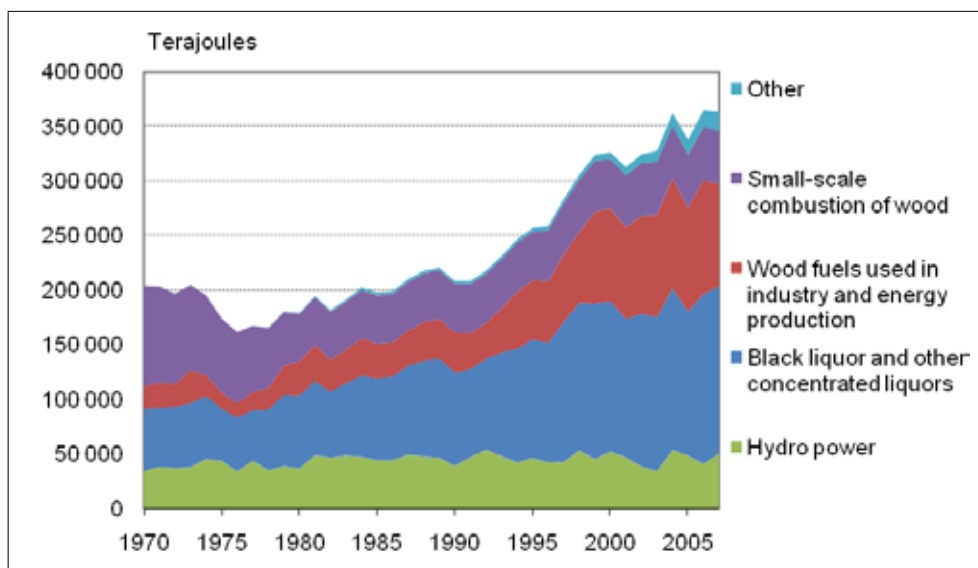


Figure 13. Use of renewable energy sources 1970–2008.
Source: Statistics Finland, Energy Statistics.

Conclusions

Due to decreased output in the forest industry, more investment is needed in more efficient substitution by renewable energy forms and the related research and development activities. In practice, investments must be promoted by increasing the share of hydropower, wind and solar energy, heat pumps, biogases, recycled fuels and biofuels in transport.

Ensuring biodiversity

Target

According to the strategy for sustainable development, *“the decline in Finland’s biodiversity will be halted by 2010, and the favourable development of Finland’s natural environment will be established in the period 2010–2016.”*

Observations

In Finland, the greatest human induced impact on biodiversity occurs through efficient forestry management and agriculture. According to the latest Assessment of Threatened Species in Finland (2000), about 10 per cent of Finland’s living species are threatened. Some 37 per cent of threatened species are forest species and 28 per cent are species living in traditional rural environments. Coastal construction and transport also affect nature and its biodiversity by breaking up natural areas and changing the living conditions of species and nature types. According to an expert opinion concerning the year 2010, the number of threatened species will increase in all habitats. This increase will be greatest in forests and rural environments.

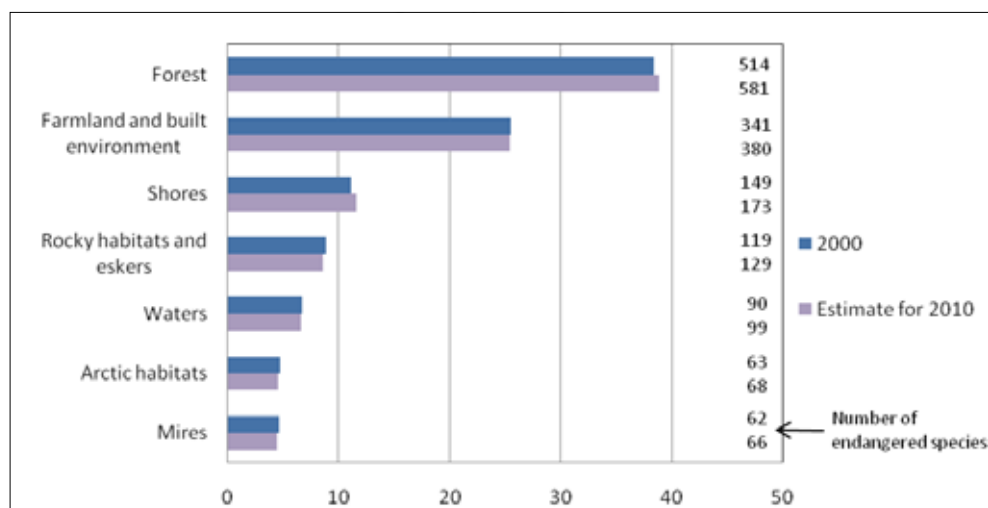


Figure 14. Endangered species by habitat. Source: Evaluation of the National Action Plan for Biodiversity in Finland (2005).

Conclusions

No current indicator data on the theme area is available. A new assessment of threatened species will be published in 2010. According to expert opinions, the number of threatened species will increase until 2010.

Promoting sustainable production patterns

Target

In promoting sustainable production patterns in the national economy, absolute decoupling is being sought with regard to both the burden on the environment and the use of energy and natural resources. Absolute decoupling means that as Finland's economy grows, the environmental impacts will decrease or, at a minimum, will not intensify. However, the target set is that the Finnish economy will grow while environmental hazards decrease. Impetus for this is provided by a target according to which non-renewable natural resources must be utilised as eco-efficiently as possible.

Observations

With respect to the burden on the environment, acidifying emissions (sulphur and nitrogen oxides) have decreased steadily from the beginning of the 1990s. In particular, the decrease in sulphur oxide emissions has been significant due to stricter regulations concerning environmental issues. With respect to nitrogen oxides, the decrease has not been as significant, since the majority of emissions are produced by transport. The effects of new vehicle technologies and purification requirements for exhaust gases have been undermined by the increase in traffic performance.

With respect to emissions causing eutrophication, the most significant substances are phosphorus and nitrogen. The decrease in phosphorus emissions has resulted from renovations of municipal waste management plants and closures of smaller plants or their integration into larger ones. However, nitrogen emissions have not decreased as required in the Water Protection Targets. Decreasing phosphorus emissions contributes most to the condition of water bodies.

The majority of carbon dioxide emissions result from the use of fossil fuels in energy production and transport. The amount of carbon dioxide emissions fluctuated in the 2000s. The years 2005 and 2008 were clearly exceptional, due to industrial action in the forest industry and the economic recession.

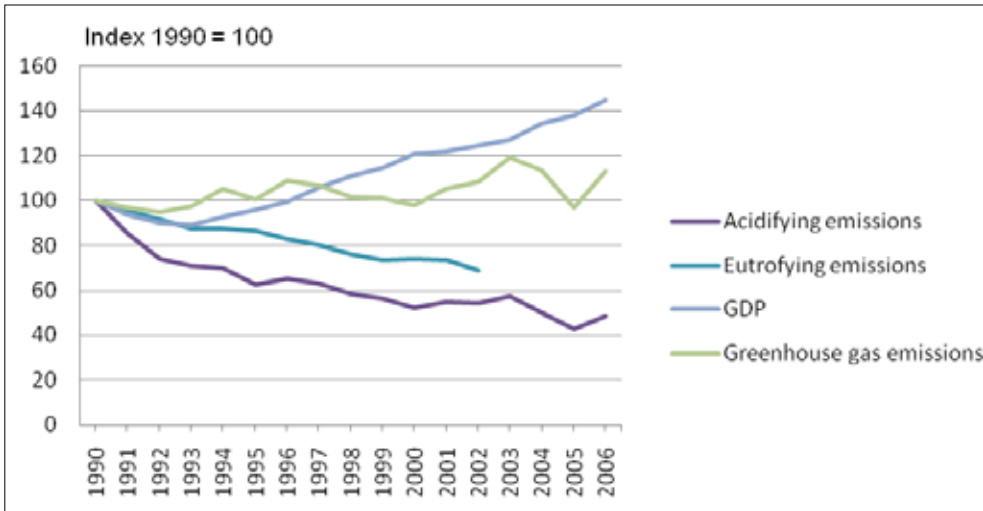


Figure 15. Acidifying emissions, eutroifying discharges and greenhouse gas emissions in relation to economic growth 1990–2006. Source: Statistics Finland, Finnish Environment Institute.

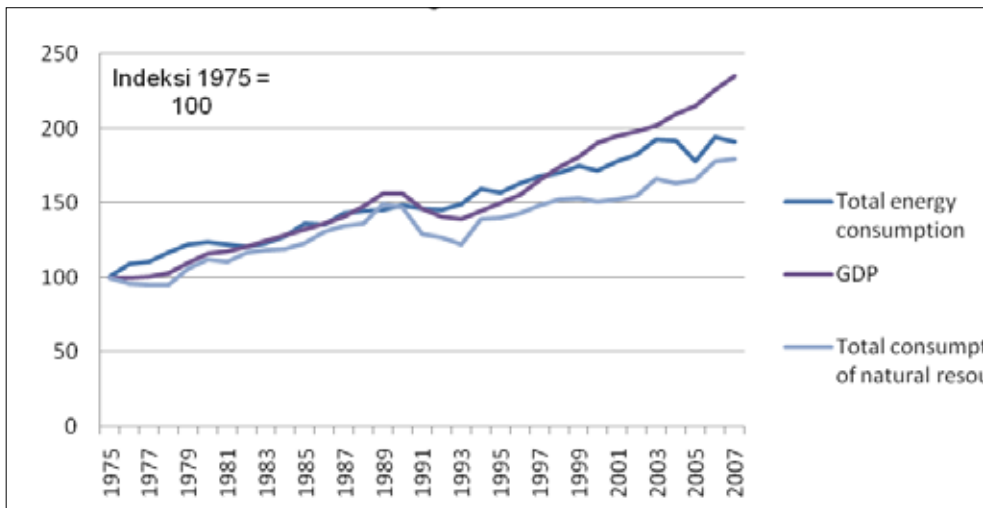


Figure 16. Energy and natural resource consumption in relation to economic growth 1975–2007. Source: Thule Institute (2009), Statistics Finland.

Statistics on the energy and natural resources consumption ratio show that the total consumption of energy and natural resources has grown at a slower rate than the economy.

When assessing trends in the consumption of natural resources in Finland, both domestic and imported direct material input and hidden flows are considered. Direct material input together with domestic hidden flows form the material on which the burden on the environment is based. In addition to this, hidden import flows, consisting of direct material input and hidden flows used for the manufacture of imported products abroad but not included in the final product, must be considered in a comprehensive assessment. For some time, hidden flows of imported products have been the fastest growing group. Despite a slight fall, hidden flows of imported products continued growing after 2006.

It is stated in the ENVIMAT model assessing the environmental impacts of material flows caused by the Finnish economy that "based on the analysis performed, the Finnish economy consumes as high a quantity of natural resources abroad as at home.

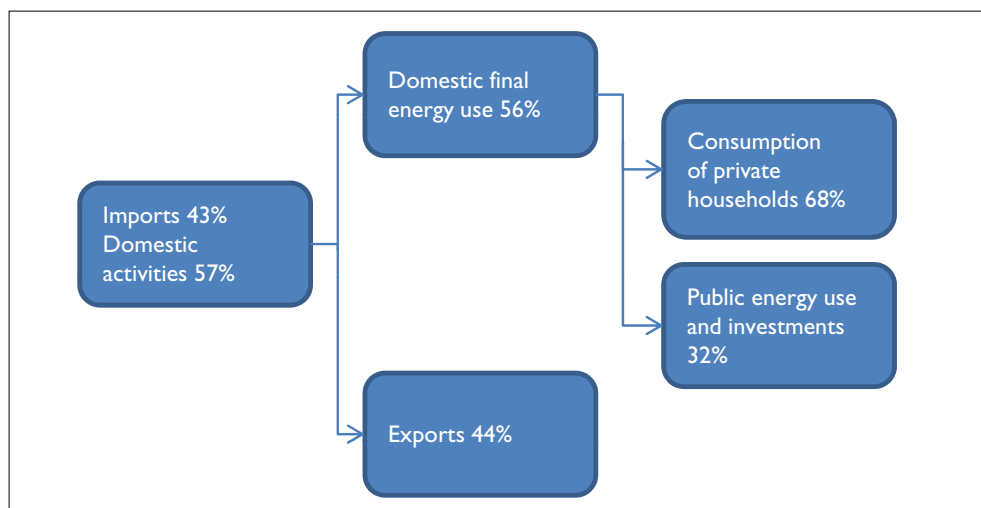


Figure 17. Breakdown of greenhouse gas emissions of Finnish national economy (124 Mt CO₂ eq.) by sector in 2005. Source: Assessment of the environmental impacts of material flows caused by the Finnish economy using the ENVIMAT model 2009, Finnish Environment Institute.

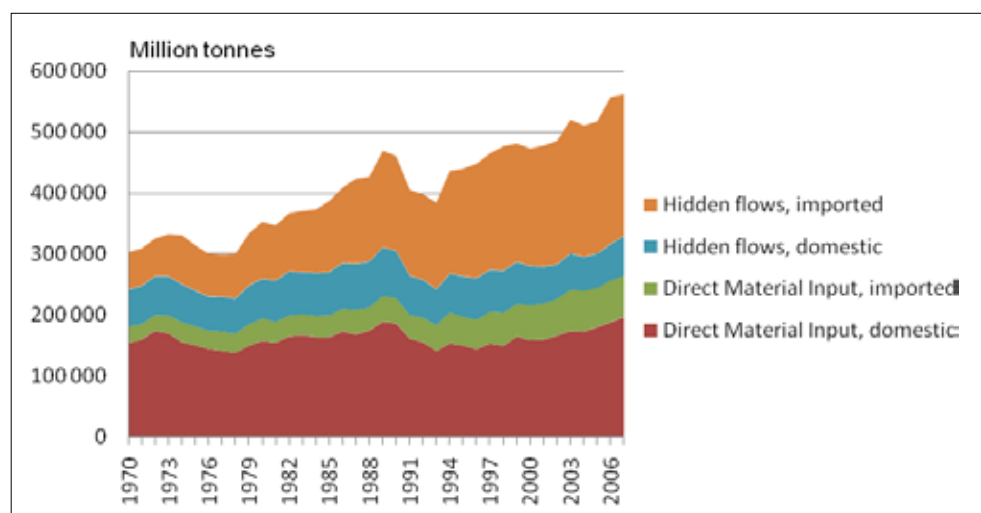


Figure 18. Use of natural resources. Source: Thule Institute (2009).

Roughly half of the total consumption of natural resources for the Finnish economy is due to exports. The greatest domestic flows are created by building minerals (34%) and abroad by ores used in the metal industry (22%).”

Finland’s consumption-based material flows are large in international comparison due to high demand for material in construction. Finland’s high material flows are based on its material-intensive production structure, its large share of exports and high consumption of natural resources in the construction of houses and transport routes.

Conclusions

As for the burden on the environment, it seems that absolute decoupling has been attained, while in the consumption of energy and natural resources, relative decoupling has been achieved, i.e. the growth in the consumption of natural resources is slower than economic growth. The absolute decoupling sought has not been attained for the time being. Due to the global economic recession that began in 2008, Finland’s consumption of natural resources will decelerate. Developments after the recession will depend largely on the downturns’ impacts on production structures and markets.

Changing consumption habits

Target

According to the strategy for sustainable development, “material-intensive consumption will move in the direction of service use, for example, repair, maintenance, rental and cultural services. New means will be explored of helping enterprises and consumers jointly develop new environmentally friendly services and of influencing the environmental properties of products.”

Observations

Changes in consumption habits can be monitored e.g. by analysing service use’s share of private household consumption, since service use is considered environmentally friendlier than normal products. Statistics show that the consumption of services remained relatively unchanged throughout the 2000s, despite an improvement in people’s environmental awareness and attitudes.

It is stated in the conclusions of the Finnish Environment Institute’s ENVIMAT report that, according to the lifecycle approach, service production still accounts for more than one-fourth of the greenhouse gas emissions of the Finnish economy. Although the emission intensity (the ratio of emissions to economic output measures) of service provision is lower than that of industrial products, the greatest negative impacts are due to the volume of service utilisation. The provision of services that are used the most, such as housing, those of the wholesale and retail trades, education and health care, produce greenhouse gas emissions that correspond to those of main industries.

Conclusions

Consumption habits have not changed significantly in recent years. Services’ share of total expenditure by private households is not a valid indicator of this, since the share of services also includes services whose burden on the environment can cause significant harm. Thus, changing consumption habits by affecting attitudes and awareness seems insufficient, while no adequate economic instruments have been brought to bear on the issue.

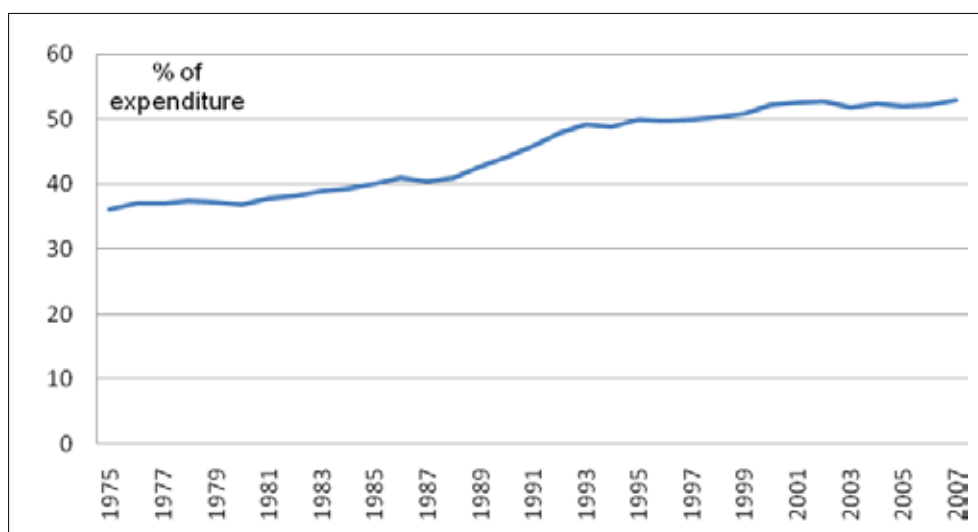


Figure 19. Proportion of household expenditure on services. Source: Statistics Finland.

Improving the condition of the Baltic Sea

Target

According to the strategy for sustainable development, improving the condition of the Baltic Sea will be promoted by specifying and implementing the existing programmes and strategies for its protection. Finland will also take the initiative with other countries in the Baltic Sea region and the EU, in order to reduce nutrient emissions and the risks posed by sea transports.

Observations

Finland's share of the total nutrient load on the Baltic Sea amounted to approximately 10 per cent during 2001-2006. The annual load consists of approximately 4,600 tons of phosphorus and 50,000 tons of nitrogen. Within the framework of the Baltic Action Plan (BSAP), Finland has committed itself to reducing its annual phosphorus emissions by 150 tons and its nitrogen emissions by 1,200 tons.

Indicator data on improving the condition of the Baltic Sea is often restricted to quantitative surveying of various negative impacts.

It is proposed in the conclusions of the report of the Advisory Board for Sectoral Research (The economics of the state of the Baltic Sea: Pre-study assessing the feasibility of a cost-benefit analysis of protecting the Baltic Sea ecosystem) that cost-benefit analysis be used in the implementation of environmental policy aimed at improving the condition of the Baltic Sea.

It is stated in the report that "cost-benefit analysis can be used in preparing the environmental policy concerning the Baltic Sea. Identifying the benefits of ecosystem services in monetary terms may be used to provide incentives and justification for protecting and maintaining the quality of these services. Inherent uncertainty surrounds the results of protection measures. This uncertainty should be communicated to policy makers and the general public in such a way that the necessary actions are taken in time. In addition, the current environmental policies (legislation, taxes, and subsidies) should be evaluated critically and alternative policy instruments designed and studied (emissions trade, voluntary agreements). Cost-benefit analysis may also be used to show whether the benefits of protection exceed the costs in the long run.

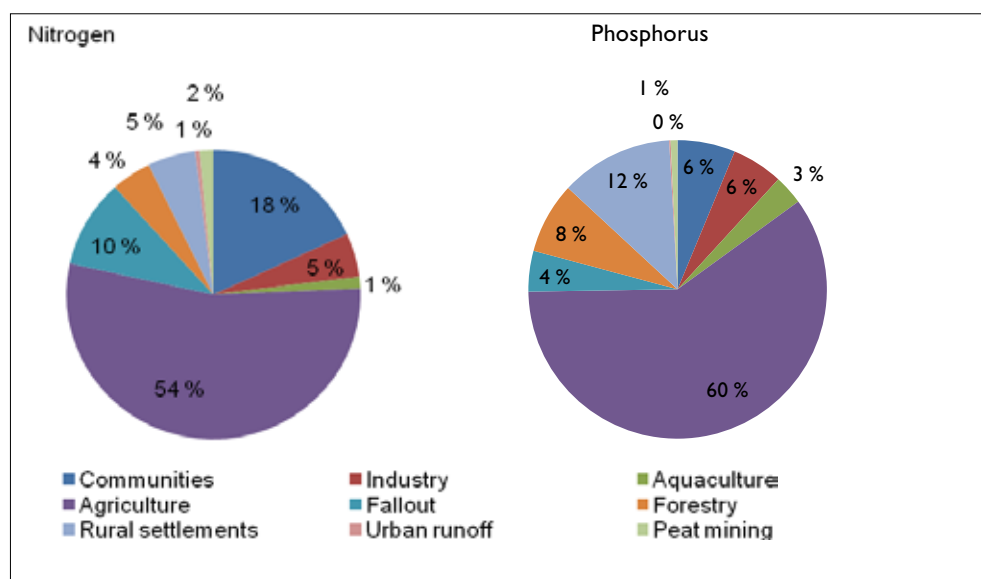


Figure 20. Nutrient load to the Baltic Sea 2000–2006. Source: Finnish Environment Institute.

The Baltic Sea countries have a common interest in improving the condition of the marine ecosystem through cooperation, in the most cost-efficient manner possible.”⁴

Conclusions

Although Finland’s share of the total phosphorus and nitrogen load in the Baltic Sea is small, it causes significant eutrophication in its area of influence along the coastal line and in the inner archipelago. Agriculture is the single most important source of nutrient loads in the Baltic Sea. The importance of agriculture as a source of nutrient load is emphasised by the fact that the share of point sources, such as industry and fish farming, has decreased. Abatement of phosphorus from municipal/industrial wastewaters is efficient in Finland and only a small amount of its phosphorus load originates in wastewaters.

A polycentric and networking regional structure

Targets

According to the strategy for sustainable development, “the starting point for the development of regional structure is the balanced development of resources in Finland’s regional and community structure. Finland’s objective is polycentrism, in other words strengthening a strong, cohesive urban network with a functional work distribution so that various centres and regions are mutually supportive.”

Observations

The development of the regional structure has been studied based on statistical data on changes in the regional population. With respect to migration volumes, the beginning of the 2000s was the peak era of our mass migration history.

The regional distribution of the Finnish population has changed significantly over the last few decades. A large slice of the population has moved from rural areas to cities and their commuting areas. The centres of the largest urban areas have grown the most, while sparsely populated rural areas have lost the most inhabitants. Most people have migrated from villages, small villages and sparsely populated areas. The increase in the population living in urban areas is due to both migration and the fact that existing settlement is incorporated into expanding urban areas. Although the population has concentrated in the greater urban areas, the urban structure will not necessarily become denser: the population has moved to sparsely populated areas surrounding the cities. Competitive transport solutions are difficult to organise in sparsely populated areas.

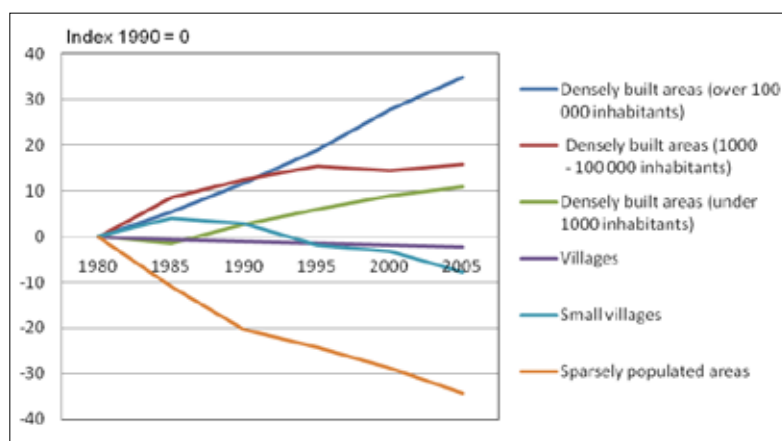


Figure 21. Relative change of population in different types of regions in Finland. Source: Finnish Environment Institute/ YKR.

4 The economics of the state of the Baltic Sea: Pre-study assessing the feasibility of a cost-benefit analysis of protecting the Baltic Sea ecosystem, Sektoritutkimuksen neuvottelukunta: kestävä kehitys, 2009

Changes in the regional population reflect internal migration. This indicator is based on the data available from the Monitoring System of Urban Structure, YKR. The indicator divides regions into six classes: sparsely populated areas, small villages, villages and three classes of urban area according to their population size. The topmost class includes the largest centres, with a population of more than 100,000 in 2005.

Conclusions

Regional differences have grown in recent decades. While the population has concentrated in cities and their commuting areas, the population in rural areas has fallen. The regions remaining between the cities are weaker in terms of development. The proportion of young people in growth areas is greater than average, while the population is ageing in regions of negative migration. In addition, production and employment are strongly concentrated.

There are no sufficient indicators reflecting the development of regional structure and providing a basis for the appropriate assessment of the impacts of urban planning. With regard to targets related to sustainable development, analysing merely regional changes in population cannot be considered a sufficient indicator.

Functionally diverse and structurally sound communities and a good living environment

Target

A dense urban structure is important to sustainable development as it reduces traffic, while saving energy and natural areas outside urban areas. It is characteristic of a dense urban structure that basic services forming part of everyday life are available as close as possible to residents. It is stated in the strategy for sustainable development that “the aim is to ensure the availability of daily consumer goods in different parts of cities and rural areas so that car dependency is also reduced.”

Observations

Changes in urban structure confront various groups of residents with diverse challenges. With regard to the availability of services, the most important target groups include families with children and the ageing population.

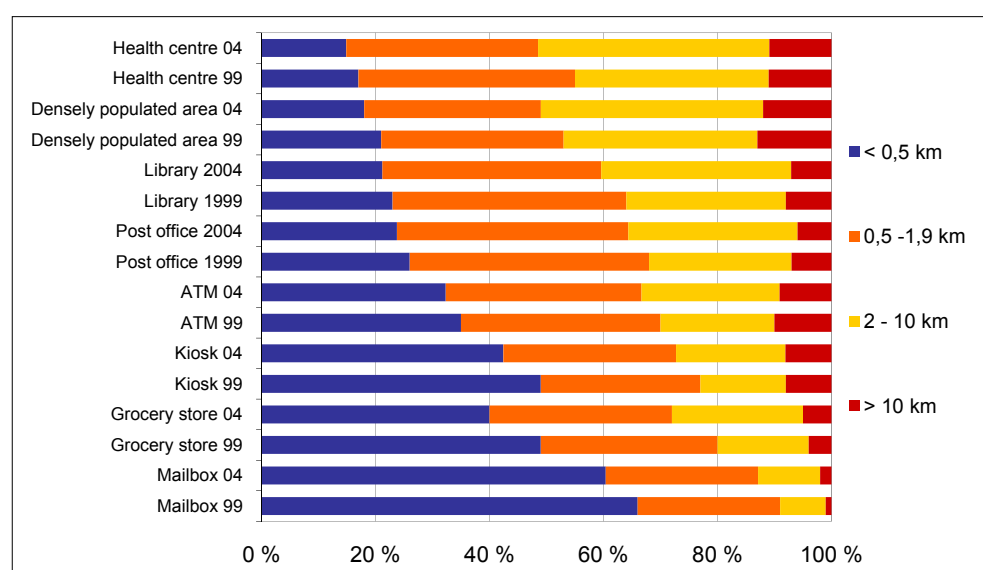


Figure 22. Distance of certain services from homes of people aged 15–74: A comparison between 1999 and 2004. Source: Interview and Survey Services, Statistics Finland.

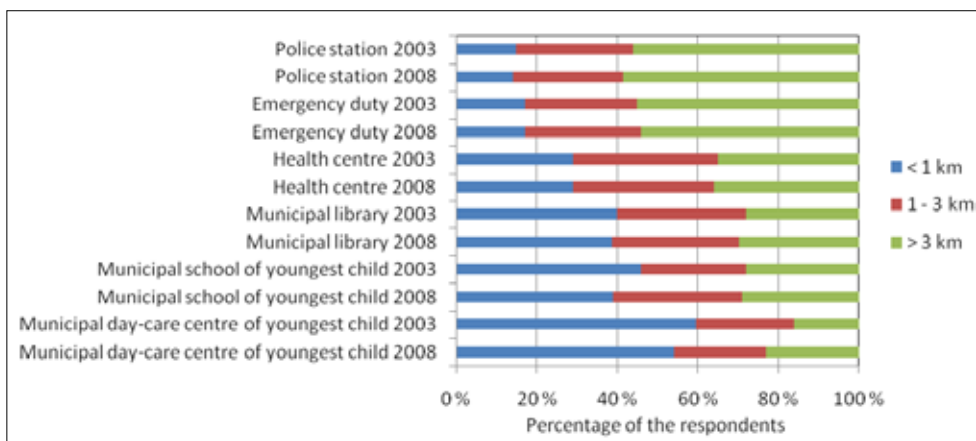


Figure 23. Distances from homes to services: A comparison between 2003 and 2008. Source: Ministry of Finance, Quality Barometer for Public Services 2008.

Population ageing in particular poses challenges to structural planning in urban areas, since commercial services will greatly reduce in sparsely populated areas. The trend is towards an increase in the number of large retail units located outside residential areas. Consequently, ageing people, the disabled, children and those who do not have a car will experience difficulty in reaching the basic services they need.

Increased distances may result from various simultaneous developments: the community structure is decentralised, services are centralised and/or decentralised. In addition, habits in service use change. Residents demand that some services are provided as local services whereas others may be provided farther away without causing harm. For instance, online services decrease the need for services provided locally and online shopping may have an impact on the location of stores and post offices in the future.

Conclusions

Based on the indicator data, the distance from home to services has changed. The number of those living at a distance of less than 0.5 kilometres from services has decreased for all basic services. On the other hand, the number of those living at a distance of 2-10 kilometres from basic services has increased. The service quality barometer supports the observation that distances to services have increased on the whole. This indicator data does not, however, reflect the changes in the community structure in full. These may also result from attempts to obtain economies of scale and agglomeration due to structural changes in the services sector. In addition, the indicator does not take a stand (particularly regarding families with children and the ageing population) on which services should be provided as local services and which could be located further away from home without causing significant harm.

Ensuring a vital rural region and its services

Target

The Government's goal is to maintain a populated and living countryside. It is stated in the strategy for sustainable development that increasing the vitality of rural areas could mitigate the adverse effects caused by the changing age structure of the population and the trend towards concentrated living.

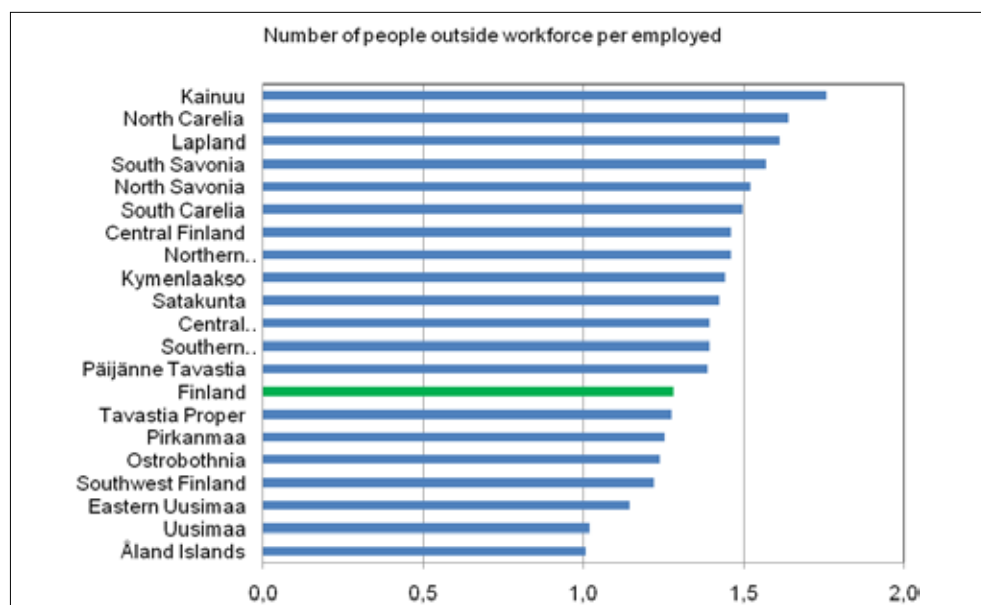


Figure 24. Economic dependency ratio by province 2006. Source: Statistics Finland.

Observations

The economic dependency ratio correlating with the employment situation describes the ratio of the unemployed and those outside the workforce, to the employed. In addition to the employment situation, the ageing of the population in particular is contributing to the increased dependency ratio. Broken down by region, the economic dependency ratio is most unfavourable in net emigration regions and in regions with high rates of unemployment.

In 2006, the national average dependency ratio was 1.28 persons per employed person. This situation was most unfavourable in Kainuu, North Karelia and Lapland where the economic dependency ratio was over 1.60 persons per employed person. The dependency ratio was most favourable in 2006 in the Åland Islands and Uusimaa.

Conclusions

The dependency ratio provides an accurate reflection of how the vitality of rural regions has degraded and the differences between regions have grown. The economic dependency ratio significantly exceeds the national average in net emigration areas and in regions where unemployment rates are high. As the economic dependency ratio increases, tax incomes of municipalities in the region decrease and actors in the municipal sector find organising welfare services more difficult. Achieving a regionally balanced dependency ratio requires that employment be promoted in Northern and Eastern Finland.

Ensuring the availability of services

Targets

It is stated in the strategy for sustainable development that “in order to ensure the availability of public services, a national municipal policy will be created to handle the balanced development of the municipal economy and to level out the differences between municipalities, with the target of ensuring good and equal availability of public services throughout the country. Co-operation between the public, private and non-governmental sectors in service production will be a necessity in the future as well.” Furthermore, according to the strategy,

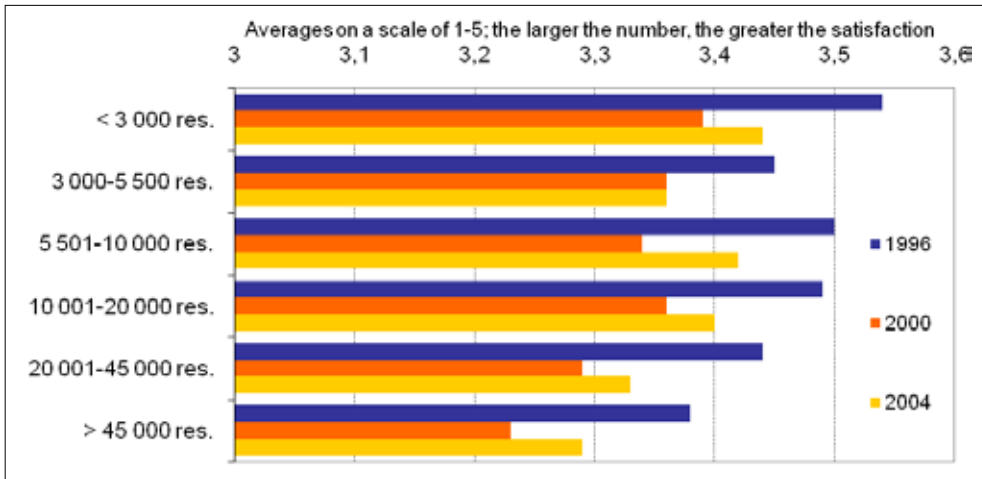


Figure 25. Municipal residents' satisfaction services: A comparison by size of municipality. Source: Association of Finnish Local and Regional Authorities, KuntaSuomi 2004-survey.

"the aim is to secure the availability of daily consumer goods in different parts of cities and rural areas so that car dependency is also reduced."

Observations

The effects of an ageing population are particularly emphasised in regions of net emigration. An ageing population increases the need for local services, health care and public transport services. On the other hand, growth centres have problems in the organisation and availability of services for families with children, such as day care and school services. Based on index data, municipal residents' general satisfaction with services has increased from 2000 to 2004, while general satisfaction with municipal services was clearly lower in 2004 than in 1996. The satisfaction with services of residents in small municipalities of less than 3,000 residents was greater, whereas residents in larger municipalities with more than 45,000 residents were the least satisfied. Municipal residents living in the centres of municipalities or in urban downtown areas were more satisfied with municipal services than those living at the peripheries.

Conclusions

Municipal residents' satisfaction with services has increased since the beginning of the 2000s. It is significant, however, that municipal residents living in both sparsely populated areas and suburbs or peripheries of city centres are the most dissatisfied with municipal services. So far, indicator data does not reveal how measures aiming at a municipal and service-structure revamp have affected municipal residents' satisfaction with services.

The transport system and information society services

Target

According to the strategy for sustainable development, *"preventing car dependency and halting the growth in passenger car use will be made a target of transport planning. The competitive position of public transport, cycling and walking in relation to passenger cars will be improved."*

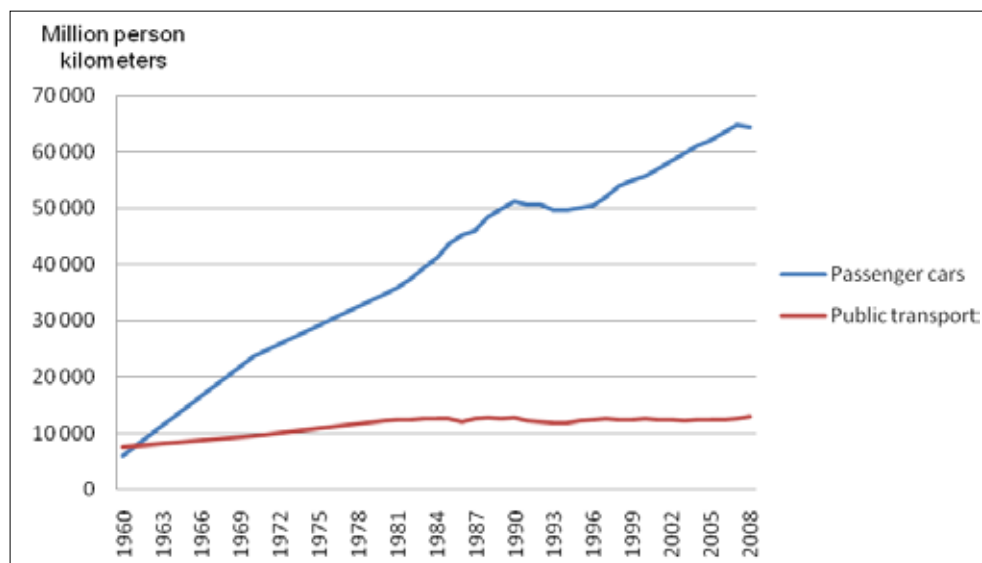
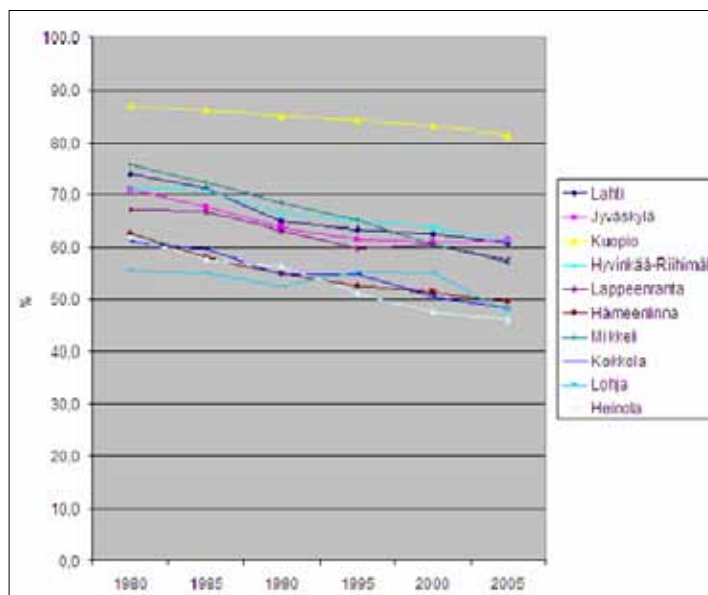


Figure 26. Development of public and passenger car transport. Source: Finnish Road Administration.

Figure 27. Proportion of those living in an area with a population density allowing viable public transport (>20 inhabitants/ha), broken down by city. Source: Finnish Environment Institute, material TK 2005 in the report of the Advisory Board for Sectoral Research (15/2009) Verkottuneen aluerakenteen ominaisuudet – analyysikatsausraportti Osa II (Characteristics of the networking regional structure – analysis report part II, in Finnish).



Observations

The concentration of regional structures and, in particular, the decentralisation of the community structure in growing urban areas is making it more difficult to maintain and develop the transport system and basic services. Growing city centres require strong pressure directed at the organisation of transport and communications services so that passenger car use can be reduced, thus decreasing the resulting risks and negative impacts associated with energy consumption, climate and traffic safety. Transport related to commuting, use of services and leisure, as well as general increases in wealth and lifestyles based on a preference for passenger car use, are contributing to the increased motorisation of society.

The traffic performance of passenger cars has increased during the past 25 years, from 35 million kilometres to 65 million kilometres. During the same period, the number of passenger cars has more than doubled. In turn, public transport's share

of all transport has decreased during the same period, due to a preference for private cars, deteriorating public transport service levels and increased costs.

Conclusions

There is no evidence that the growth in passenger car use is coming to a halt.

Quality of working life

Target

It is stated in the strategy for sustainable development that *“the target is to improve the wellbeing at work of employees and make it easier to reconcile work and family life. Strengthening the positive aspects of work alongside personal development at work, career development, innovativeness and good leadership will promote the success of enterprises and employee health and well-being in today’s rapidly changing working life.”*

Observation

Indicators on the number of occupational diseases and accidents were used in the strategy, to measure the quality of working life. The number of occupational diseases and suspected occupational diseases has decreased significantly during the last ten years. During the period 1996-2007 the number of occupational diseases and suspected occupational diseases decreased from 7,700 to 5,300. In addition, the number of occupational accidents decreased from 1998 to 2005, but has begun to increase since then. The number of fatal occupational accidents was 48 in 2007.

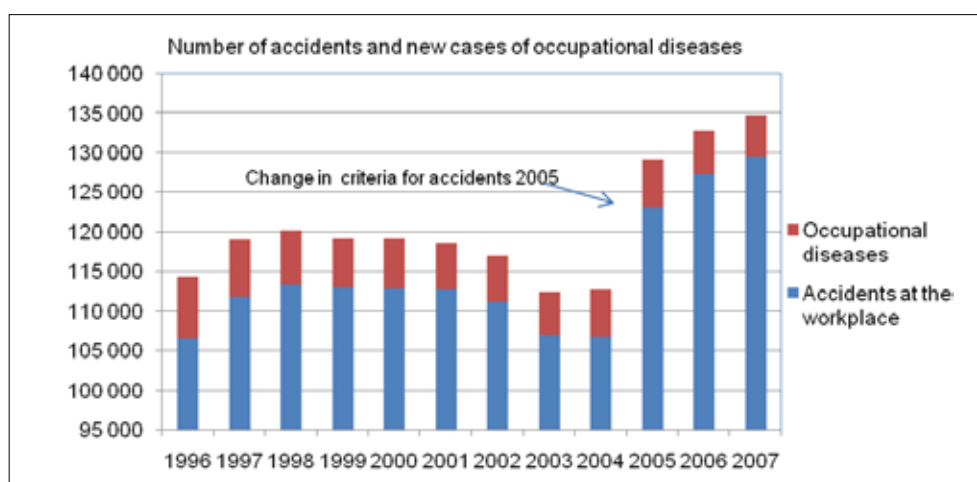


Figure 28. Occupational diseases and accidents. Source: Farmers’ Social Insurance Institute, Federation of Accident Insurance Institutions.

The working life barometer, compiled by the Ministry of Employment and the Economy, measures the quality of working life through four dimensions. Single dimensions have been measured using several indicators, based on which an aggregate score has been calculated. To facilitate analysis, the parameters have been graded on a scale ranging from 4 to 10, where 4 is the lowest and 10 is the highest score. As can be noted from the table below, the quality of working life, as experienced by wage and salary earners, remained relatively unchanged during the reference period 2004-2008. The impacts of the economic recession that began in 2008 have not affected the working life barometer yet, since the interviews for 2008 were held in September and October. Thus, it can be assumed that the scores will deteriorate significantly in 2009.

	2004	2005	2006	2007	2008
Equal treatment in the workplace	7,59	7,56	7,53	7,60	7,66
Job security	8,88	8,81	8,87	8,94	8,81
The employee's resources in proportion to the requirements of the work	7,71	7,69	7,66	7,63	7,77
Encouragement, innovativeness and trust	7,81	7,73	7,74	7,79	7,82
Average	8,00	7,92	7,93	7,97	8,01

Source: Working Life Barometer October 2008 – Publications of the Ministry of Employment and the Economy

Conclusions

The frequency of accidents at work, i.e. the number of accidents in relation to working hours, did not increase in the 2000s. When the number of accidents is considered in relation to working hours, there have been no significant changes in the number of accidents over the last few years. However, indicators measuring the quality of working life are insufficient as a whole. Factors related to mental stress caused by work and well-being at work cannot be analysed by merely measuring the number of occupational diseases and accidents in the workplace. In this assessment, the analysis has been complemented by the working life barometer, based on which the quality of working life remained quite stable during 2004-2008.

Cohesion between different generations

Target

According to the strategy for sustainable development, “future national targets must include a service and income transfer system that provides a strong framework for ensuring intergenerational solidarity based on the needs of different age groups.”

Observations

According to population projections, the Finnish population is ageing faster than the European average. Demographic developments are affected by the birth rate, mortality and developments in migration. As the age structure changes, it is important

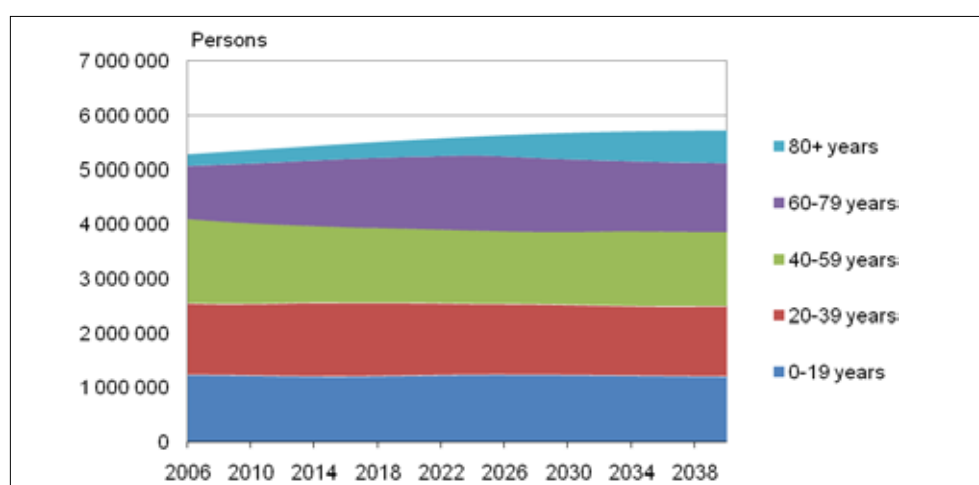


Figure 29. Population growth by age group (2006–2040 estimate). Source: Statistics Finland, Population statistics.

to ensure cohesion between different generations and the well-being of citizens of different ages so that everybody's needs are taken into account. The changes in the age structure may be balanced by supporting immigration, but this is not expected to resolve the existing imbalance in the short term.

Conclusions

According to the population projection by Statistics Finland, the Finnish population will grow until 2030, after which mortality will exceed births. After this, possible net growth will be due to expected immigration. The population projection used as the indicator needs to be complemented by indicators on immigration. As such, population development provides a rather narrow reflection of the target area.

Preventing social exclusion and poverty

Target

It is stated in the strategy for sustainable development that *“prevention of exclusion will be established as part of normal activities in social, health, education and employment policies. Special attention will be paid to long-term unemployment by means of the reform of active labour policy. Ultimately, pension solutions for seriously disabled long-term unemployed persons will be examined.”* With regard to families with children it is stated that *“schools’ competencies at identifying the children and families that are at risk of social exclusion will be enhanced, and education that takes the individual’s special needs into consideration will be developed. Special attention will be focused on the transition phase between education and working life. The target is for every person to receive a vocational or university education after the completion of comprehensive school.”*

Observations

With regard to long-term unemployment, developments in the 2000s have been two-fold. Since 2005, the number of long-term unemployed fell and employment resulting from employment measures increased. Positive economic growth increased demand for labour force and prevented the lengthening of the duration of unemployment. The recession that began in 2008 has led to a deterioration in this situation, with a particular increase in the number of those left unemployed after employment measures. In 2008, the number of unemployed jobseekers began to soar.

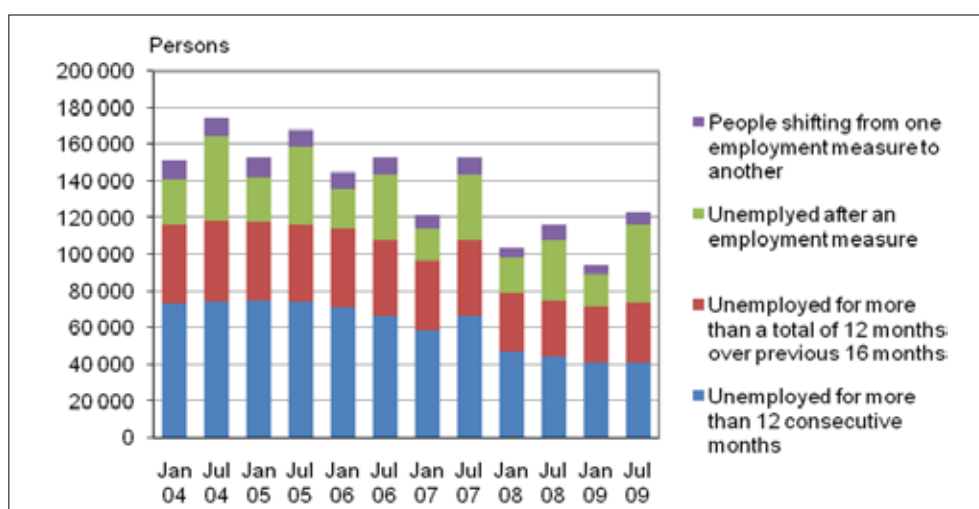


Figure 30. People with low employment potential (January and July). Source: Ministry of Employment and the Economy.

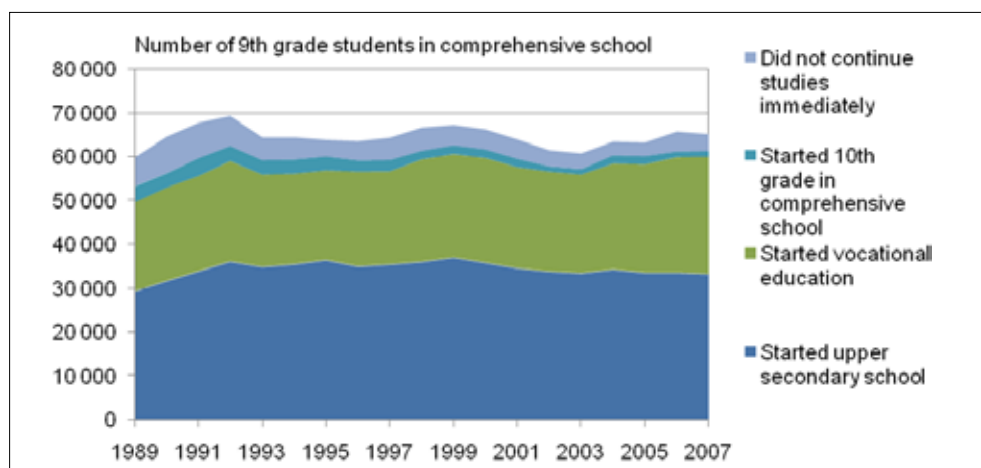


Figure 31. Immediate placement of 9th grade students in further studies. Source: Statistics Finland, Education.

With regard to general education, the situation has remained stable in Finland. Practically all young people complete comprehensive school. In 2007, 51% went on to general upper secondary school, 41% to a secondary level vocational school, and 2% to additional schooling complementing their basic education (10th grade in comprehensive school). Of those who completed their basic education, approximately 6% did not immediately continue their studies at secondary level. This is 0.5% less than in 2006.

The impacts of the economic recession on the risk of exclusion and poverty can also be analysed using other indicators. The figures below show the number of debtors in enforcement during 1989-2009 (situation in September) and the growth in the income gap during 1987-2007. As the figures reveal, the economic recession is particularly reflected in the increased number of debtors in enforcement. The previous rise in such

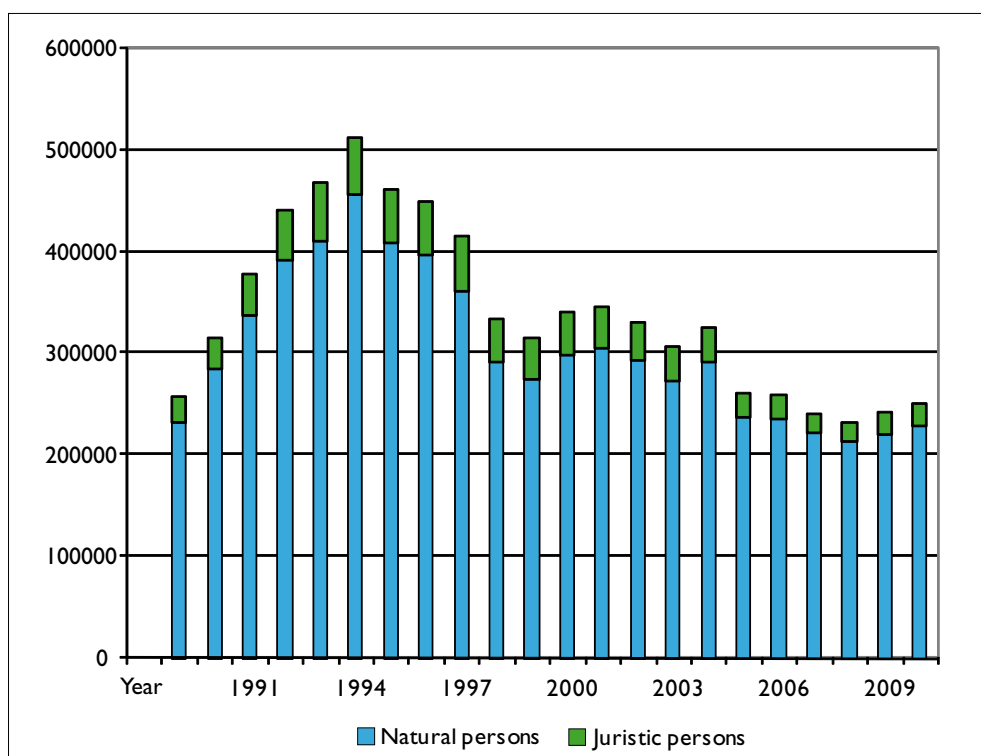


Figure 32. Debtors in enforcement, situation at the end of the year/mont 1989-9/2009. Source: Ministry of Justice, Enforcement Unit.

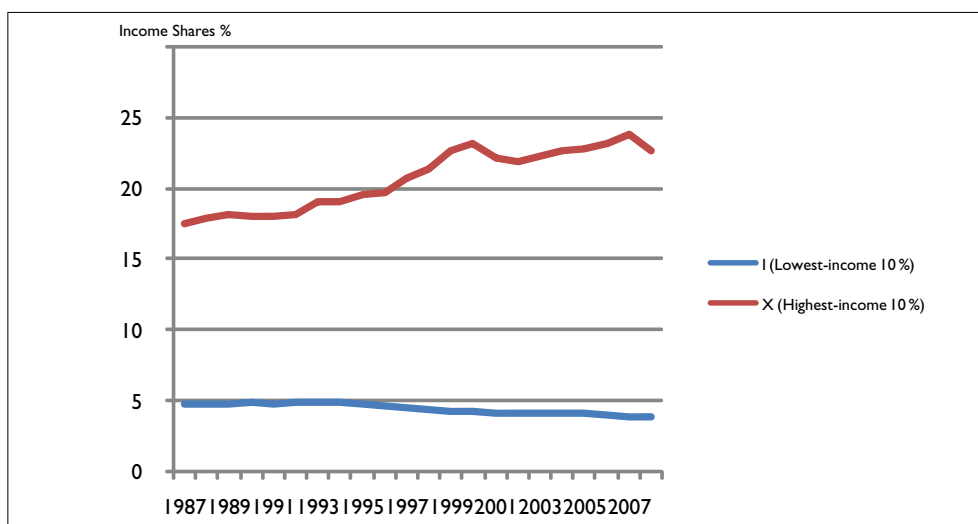


Figure 33. Income shares of decile groups (%) in 1987–2007. Source: Statistics Finland/ Income Distribution Statistics.

debtors in enforcement was seen during the recession of the 1990s when the total number of debtors in enforcement exceeded 500,000. The income gap between those with a large income and those with a small one has continued to increase.

Conclusions

The risk of exclusion and poverty has increased as a result of the economic recession. With regard to young people, the level of education has remained stable. With regard to the indicators, youth unemployment should also be analysed separately, since any exclusion affecting these age groups will have a genuine impact on future developments in the dependency ratio.

Promoting healthy lifestyles and functional capacity and preventing health threats

Target

The strategy for sustainable development states that *“the health care and drug service system will be developed in a more integrated direction, so that the available resources can be further focused on identifying and treating people at high risk of becoming ill or socially excluded. Anti-drug policy and health promotion programmes will be directed at influencing the choices of children and their parents in the direction of healthier lifestyle choices.”*

Observations

The consumption of alcohol and the frequency of its adverse effects remain high. In 2006, total consumption of alcoholic beverages amounted to 10.5 litres of pure alcohol per capita. Men are still responsible for approximately four fifths of total consumption but this has also increased among women over the last few years. Alcohol-related illnesses and ailments are the most common cause of death among the 15-64-year-old age group, both among men and women. In 2006, the direct costs to society arising from alcohol consumption amounted to EUR 0.7-0.9 billion. The level of indirect costs was estimated at approximately EUR 3.1-5.8 billion.

Other optional indicators related to this theme area and found in various statistical sources include the share of obese people of working age and the number of those not taking exercise in their free time. As the figure below reveals, the share of obese people has begun to soar, especially among women over the last few years, while the percentage of those not taking exercise has increased. On the other hand, the share of obese persons among men aged 25–64 has begun to fall.

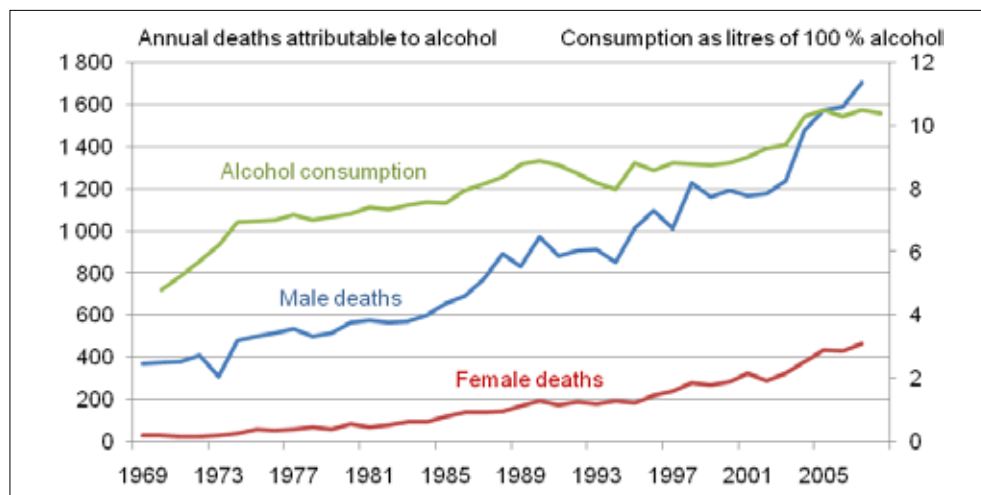


Figure 34. Per capita consumption of alcoholic beverage and deaths attributable to alcohol per gender. Source: National Institute for Health and Welfare/ AVTK.

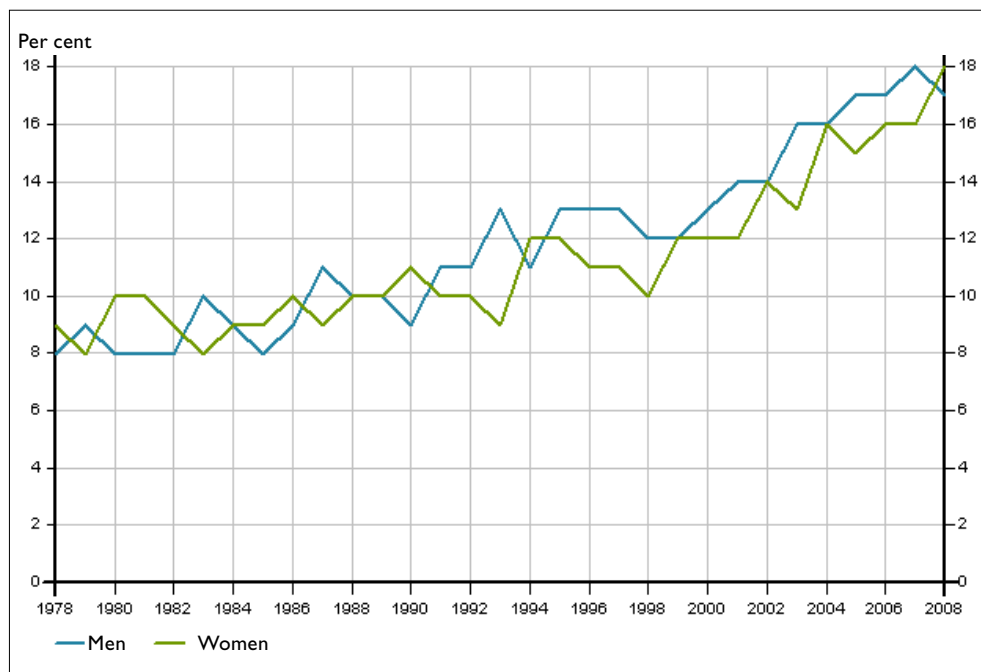


Figure 35. Share (%) of obese (BMI>30) among the age group 25–64 in 1978–2008. Weight and height reported by the respondent. Source: National Institute for Health and Welfare/ AVTK.

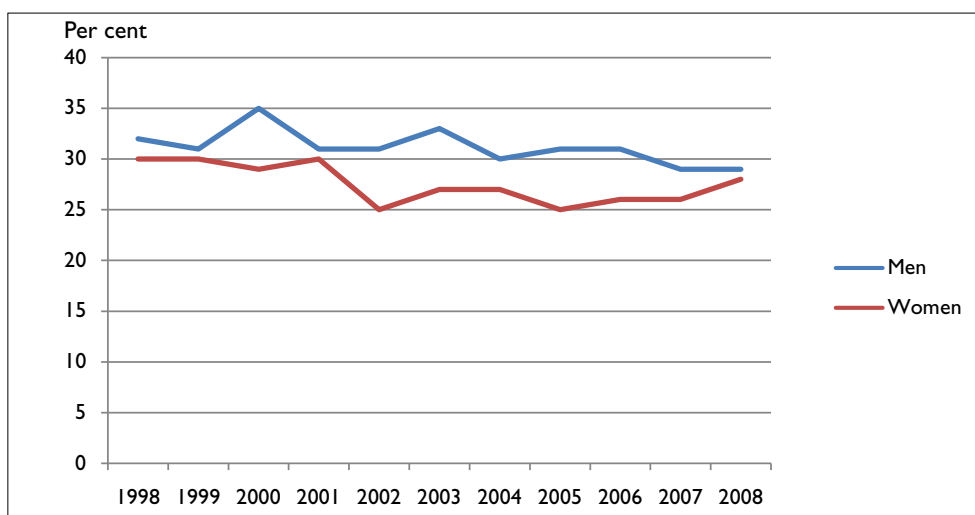


Figure 36. Share of people aged 25–64 not taking exercise in their free time (%) 1998–2008.

Conclusions

Alcohol consumption remains the most significant threat to social well-being and productivity. The national alcohol policy was tightened successfully in the 2000s by revising prices and reducing availability. The latest increase in alcohol tax entered into force on 1 October 2009. An adverse effect of tightening alcohol tax can be seen in the increase in passenger imports of alcoholic beverages. As an indicator, alcohol consumption provides too narrow a reflection of the target area *promoting healthy lifestyles and functional capacity and preventing health threats*. This assessment also considers the share of obese people of working age and the number of those not taking exercise in their free time.

National identity and a multicultural Finland

Target

According to the strategy for sustainable development, “*faster integration of immigrants and language acquisition is essential in terms of the well-being of immigrants, and the balanced development of society and the economy. The target for immigrants of working age is their entry into working life and placing their competence and education at the disposal of Finnish society. In particular, the preconditions must be created for integrating young people of immigrant background into society.*”

Observations

Unemployment remains one of the greatest problems facing immigrants. Decreasing unemployment has been one of the key focus areas of Finnish immigration policy. A discussion paper *Does Finland Suffer from Brain Drain*, published by the Research Institute of the Finnish Economy, states that “*The labour market performance of Finnish immigrants is as poor as among immigrants in most Western European countries i.e. their unemployment rate is around twice as high as that of the native population. In Finland, the labour market performance of immigrants is characterised by major regional variations, with some areas faring substantially better than others. Those not born in Finland suffer more from the poor regional employment situation than the native population. The higher the regional unemployment rate of the native population, the greater the difference between the unemployment rates of foreign-born and Finnish-born. Those not born in Finland are some 10 times*

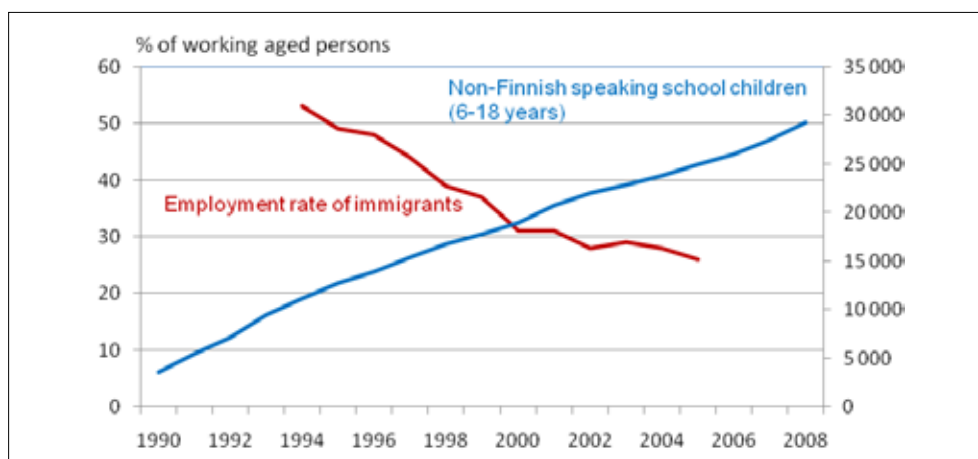


Figure 37. Employment rate of immigrants and number of non-Finnish and non-Swedish speaking school children. Source: Statistics Finland, Ministry of Employment.

*more likely to emigrate: as the immigrant population grows, the most likely result is an ever more internationally mobile Finnish total workforce”.*⁵

Conclusions

The unemployment rate of immigrants closely corresponds to the regional employment situation. As result of the economic recession, it can be assumed that the unemployment rate of immigrants will also soar. Immigration and integration have been subject to a great deal of research, but continuous indicator data is hard to find. The Ministry of Social Affairs and Health is developing an immigrant barometer and integration indicators.

Promoting civil activity

Target

According to the strategy for sustainable development, “the starting point in the development of a welfare society is broad democratic rights for society, individual freedom, freedom of speech, freedom of religion, political rights, and the further development of such rights. Maintaining a conscious and active values discussion in society makes it possible for citizens to participate in determining the priorities of common issues. Sustainable development requires that citizens have equal opportunities to participate, bear responsibility and benefit from the increased choices resulting from development.”

Observations

In a representative democracy, elections are the most important means of participation for citizens. After decreasing for a long period, voting activity in parliamentary and municipal elections has levelled off slightly. With respect to municipal elections, voting activity even increased in the 2000s. However, voting activity has remained low in European Parliament elections.

Other important forums for civil activity include participation in social organisational work. Participation in social organisational work among the 10–29-year age group was measured in 2000 and 2009. Based on the results, it can be stated that young people’s engagement in organisational work and activity is decreasing. Young people consider their opportunities to have an influence as limited and would like to have greater influence over the supply of leisure pursuits in their own region.

⁵ Does Finland Suffer from Brain Drain?, ETLA DP 1153, 2008

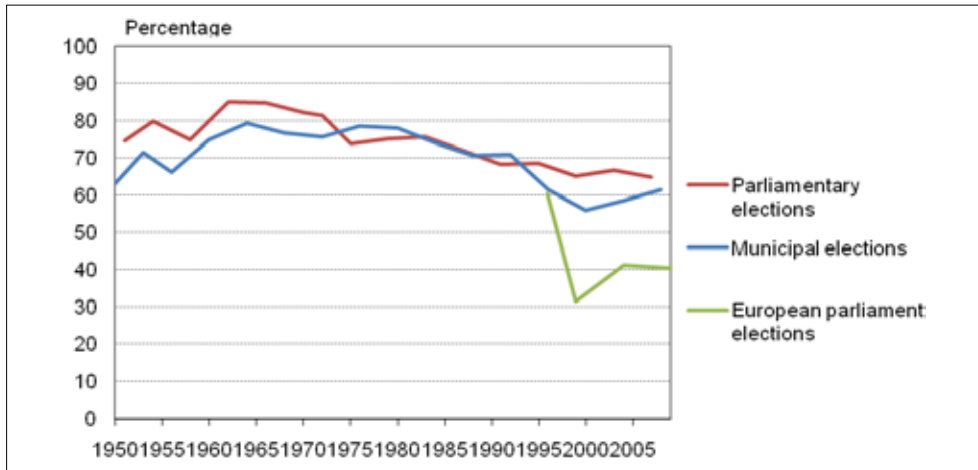


Figure 38. Voting activity. Source: Statistics Finland.

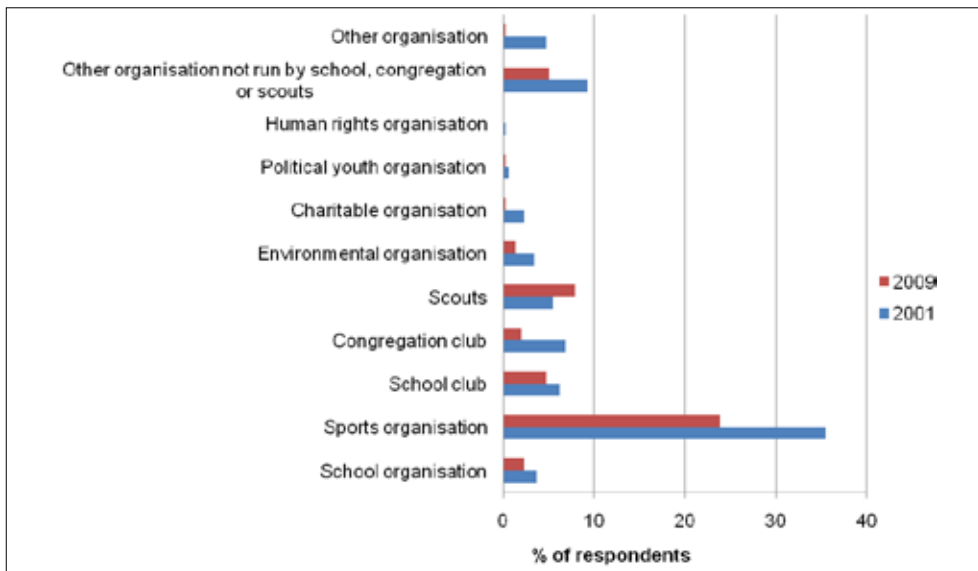


Figure 39. Participation of 10–14 year-olds in organised civic activity in Finland. Source: Ministry of Education, "aika vapaalla" report 2009.

Conclusions

As revealed by the indicator data, the willingness of Finns to engage in civil activity remains at a rather low level. However, the indicators reveal that citizens have equal opportunities to participate in and bear responsibility for the increased choices resulting from development. The indicators do not, however, reveal whether citizens have equal opportunities to benefit from these increased choices. The indicators provide no data on participation through the internet and other informal modes of civil activity.

The economy as a safeguard for sustainable development

Target

It is stated in the strategy for sustainable development that:

“Ensuring a high level of income requires continuous improvement in productivity. Good productivity development, in both goods and service production, requires sufficient well-being of employees and incentives for the growth of human capital and innovation activities.”

“The financing base for the public economy will be improved by furthering well-being at work for people of working age, preventing loss of working capacity, quick access to education and graduation as well as lifelong learning. Controlled work-based immigration will also be needed to supplement the labour supply in areas where there is a shortage of domestic labour.”

“Finland’s target is to offer enterprises and people an operating environment that attracts activity both in and from Finland in the future too. Finland must guarantee a competitive operating environment for its enterprises. This will require functional labour markets, an effective innovation system, sound basic structures (infrastructure) and viable basic services as well as a sound regulation environment.”

Observations

Finland’s GNP has grown steadily since the 1960s, excluding the recession of the 1990s. The strong economic growth that began in the wake of the 1990s recession came to a halt in 2008 upon the commencement of the economic downturn. However, GNP does not reflect every sector of well-being. Economic well-being can also be analysed using the ISEW (Index of Sustainable Economic Welfare) and the GPI (Genuine Progress Indicator) which consider factors affecting the national economy more extensively than GNP, such as domestic work, parenthood, depletion of natural resources, environmental hazards etc. These indices do not indicate as favourable a development as GNP.

The declining economic dependency ratio, particularly affected by changes in the national demographic structure, is one of the major challenges facing the public finances. With a dependency ratio of only around 100 (one non-employed person per employed person) in the early 1990s, a peak of 148 was reached in 1994 as a result of the recession. By 2008, the dependency ratio had already fallen to 110, but will increase again as a result of the economic downturn.

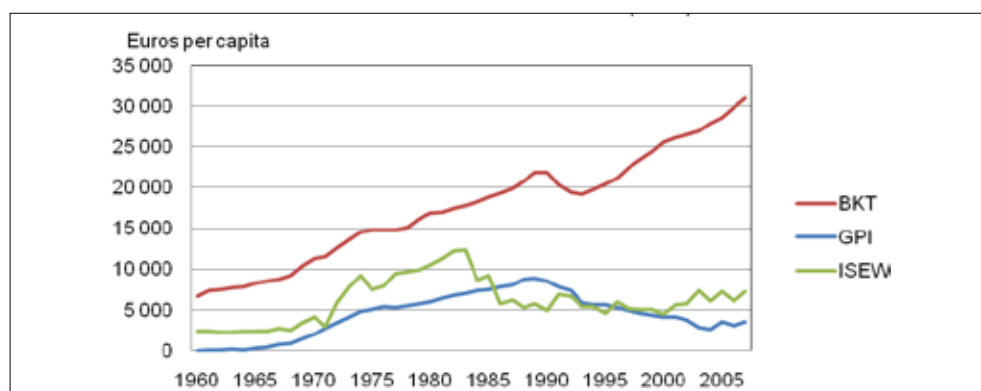


Figure 40. Gross National Product (GNP), Genuine Progress indicator (GPI) and Index of Index of Sustainable Economic Welfare (ISEW) in Finland. Sources: Statistics Finland, Hofftén (2001 and update), Rättö (2009).

The level of public debt soared in the early 1990s as a result of the recession. Despite this growth, public debt has remained under 60 per cent, which is the recommended limit set by the EU. As a result of the recession that began in 2008, Finland's public debt rose to record levels. In March 2009, the public debt amounted to EUR 70.6 billion. However, growing GNP has counterbalanced the relative debt level, for which reason the debt levels of the 1990s recession have not yet been reached.

Naturally, the unemployment rate has corresponded to the above-mentioned indicators. As a result of the recession of the early 1990s, the unemployment rate exceeded 16 per cent and then decreased until 2008, to a low of 6 per cent during the reference period. However, the economic downturn has raised the unemployment rate steeply and, according to estimates, it will continue increasing significantly during 2010.

Conclusions

Key economic indicators show that the Finnish economy recovered rather rapidly after the recession of the early 1990s. However, the economic downturn that began in 2008 has weakened these indicators significantly. It is worth noting that indicators reflecting well-being more extensively (such as the ISEW and GPI) do not seem to follow developments in GNP.

Finland as a bearer of global responsibility

Target

It is stated in the strategy for sustainable development that *“Finland is committed to increasing its development co-operation contribution to 0.7 per cent of gross national income, as agreed in the UN. The quality of development aid must be taken into consideration when increasing the amount.”*

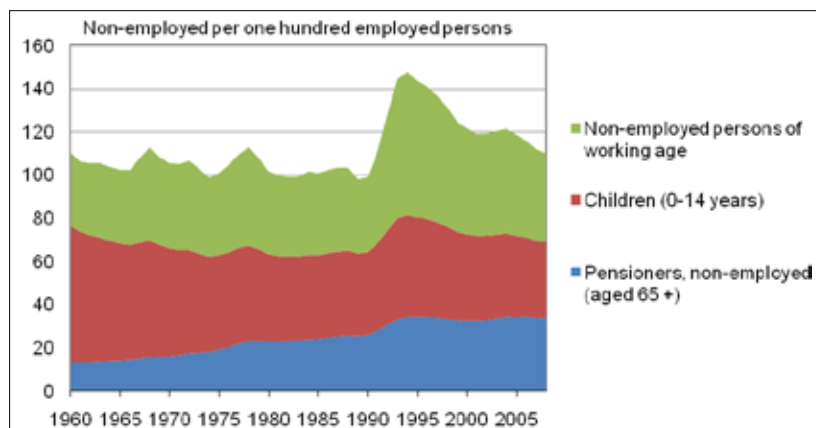


Figure 41. Economic dependency ratio. Source: Ministry of Social Affairs and Health.

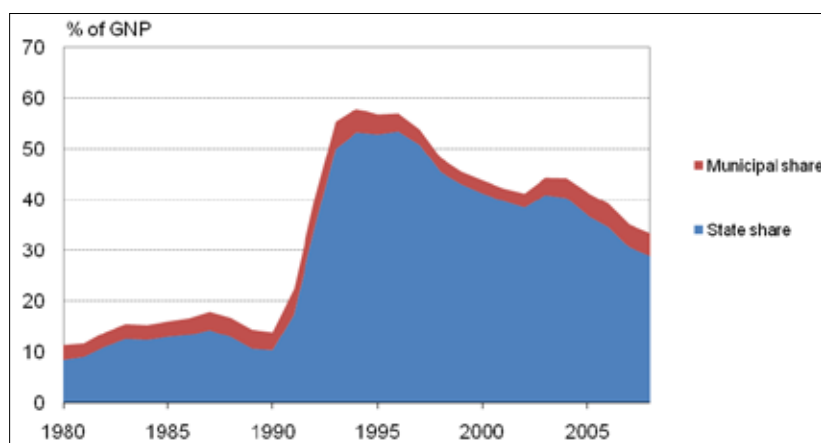


Figure 42. Public debt in relation to GNP. Source: National accounts, Statistics Finland.



Figure 43. Unemployment rate. Source: Statistics Finland.

Finland's contributions will be directed at supporting the recipient countries' own targets, which are determined in a democratic and participatory manner."

Observations

The UN recommends that developed countries set their development co-operation contribution to 0.7 per cent of gross national income. The relative share of development co-operation appropriation exceeded the recommended level in the early 1990s, but decreased rapidly and sharply as a result of the economic recession and has not returned to the recommended level, regardless of the economic revival thereafter. However, in the 2000s, Finland's development policy has given a more robust emphasis to environmental and climate issues, crisis prevention and support for peace processes. Sustainable use of natural resources and environmental protection receive a stronger emphasis than before in development cooperation.

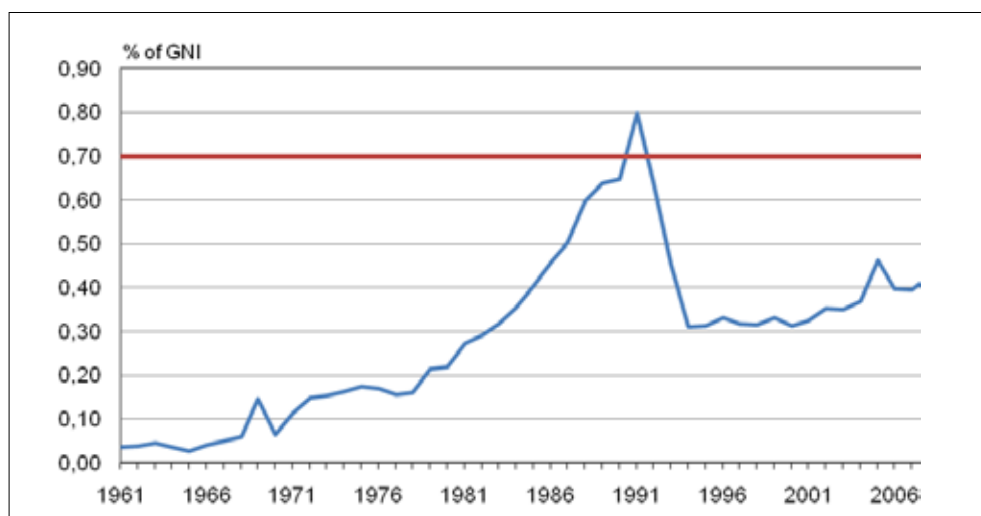


Figure 44. Appropriations for public development co-operation. Source: Ministry of Foreign Affairs.

Conclusions

Regardless of its commitment, Finland has been unable to increase its public development co-operation contribution to the level recommended by the UN.

Supporting sustainable choices

Target

It is stated in the strategy for sustainable development that *"measures will be promoted to allow industry to renew and produce innovations and business that observe the principles of sustainable development. This will reinforce the success of Finnish industry and further employment and the retention of high quality human capital in Finland."*

Observations

The share of Finland's R&D expenditure in relation to GNP is among the highest in the EU member states, second to Sweden only. Its share of R&D expenditure increased sharply until the early 2000s, since when it has stabilised at a level of approximately 3.5% of GDP. In 2007, Finland's R&D expenditure totalled EUR 6.2 billion, of which EUR 4.5 billion was allocated to private sector actors. The electronics industry's share alone totalled EUR 2.5 billion.

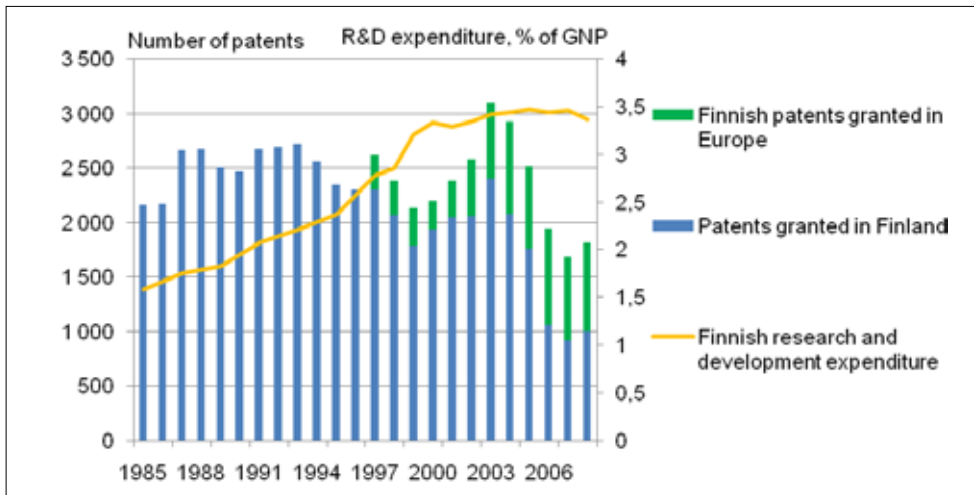


Figure 45. Research and development expenditure and patenting. Source: Statistics Finland, Finland's National Board of Patents and Registration, Eurostat.

Conclusions

According to the indicator data, Finland is among the leading European countries with respect to R&D activities. The indicator data does not, however, reveal the share of R&D funding used to develop genuinely sustainable innovations and business activities.

Conclusions

The following table presents a summary of developments, broken down by target area. The arrows in the summary reflect changes in the indicators. Thus, the direction of the arrow does not say anything about the permanence of the change or the reasons underlying it. For instance the year 2008 has been exceptional with respect to greenhouse gas emissions and energy consumption, due to the recession. The most important issues related to the interpretation of the indicators are presented under the NB-heading.

Results of strategy work







Target area	Development	NB
Limiting greenhouse gas emissions		The impact of the recession is significant.
Increasing energy efficiency		The economic recession reduced energy consumption significantly in 2008. In November 2008, production in all major industrial branches took a downward turn. Production in the forest industry decreased throughout the year, which particularly reduced energy consumption.
Increasing the use of renewable energy		Decreased production in the forest industry has significant effects.
Ensuring biodiversity	n/a	Indicator data is unavailable on the target level.
Promoting sustainable production patterns		With regard to the use of energy and natural resources, absolute decoupling has not been attained.
Changing consumption habits		Consumption habits have not changed significantly over the past few years. Increasing the share of services is somewhat problematic as a target, since service provision accounts for over one-fourth of lifecycle greenhouse gas emissions in Finnish GNP.
Improving the state of the Baltic Sea		Total nitrogen and sulphur discharges have been reduced but the development of eutrophication in the Baltic Sea has seen no improvement.
A polycentric and networked regional structure		The only indicator available for the assessment is population change, which cannot be considered as sufficiently representative of the entire target area.
Functionally diverse and structurally sound communities and a good living environment		The only indicator available for the assessment is distance to services, which cannot be viewed as sufficiently representative of the entire target area.
Ensuring a vital rural region and its services		
Ensuring the availability of services		
The transport system and information society services as a basic precondition of a functional society and interaction		
Quality of working life		In addition to the Ministry of the Environment's indicator, the Finnish Working Life Barometer has been used in the assessment. Based on the barometer, the quality of working life has slightly improved over the last few years.
Cohesion between different generations		The only indicator available for the assessment is population changes broken down by age group, which cannot be considered sufficiently representative of the entire target area. In addition, target setting has been very vague.
Preventing social exclusion and poverty		
Promoting healthy lifestyles and functional capacity and preventing health threats		Indicator on alcohol consumption and its detrimental effects needs to be complemented by other national health indicators. In addition to the Ministry of the Environment's indicator, indicators on obesity and physical activity have been used in the assessment.
The national identity and a multicultural Finland		Indicator data is not up-to-date.
Promoting civil activity		Civil activity of citizens remains at a low level.
The economy as a safeguard for sustainable development		
Finland as a global actor and bearer of responsibility		
Supporting sustainable choices		Indicator data does not reveal the share of R&D expenditure allocated to innovations and business development that are genuinely sustainable.

Figure 46.

Evaluation



Development in most target areas has been either negative or nonexistent. The economic recession has had a major impact on most targets. The situation is better with regard to environmental targets than social and economic ones. On the other hand, the recession has a positive impact on a number of environmental targets (for instance, energy consumption and greenhouse gas emissions), but a negative impact on others.

5.3

State of sustainable development in Finland

In December 2008, the Sustainability Society Foundation, SSF, a Dutch organisation, published an international comparison on the level of sustainability in 151 countries. Finland ranked fourth in this comparison, following Sweden, Switzerland and Norway. The tool used for the assessment was the Sustainable Society Index, SSI, comprising 22 indicators grouped into five sustainable development categories: personal development, a healthy environment, a well-balanced society, sustainable use of resources and a sustainable world. The index was published for the first time in 2006 and is updated by the SSF every two years. In 2006, Finland ranked sixth in the comparison.

The Environmental Performance Index, EPI, developed by Yale and Columbia universities, measures the efficiency of environmental policies in various countries. The EPI builds on measures relevant to two core objectives: 1) reducing environmental stresses on human health; and 2) protecting the vitality of ecosystems and the sustainable use of natural resources. The implementation of environmental policies is assessed based on underlying indicators that are compared with a previously set target and then converted to a proximity-to-target measure. Finland's EPI index was 91.4 in 2008. The maximum value of the index is 100.

In the comparison between countries, Finland ranks fourth after Switzerland, Sweden and Norway. Niger is at the bottom of the list, ranking 149. The EPI index provides comprehensive information on the efficiency of the countries' environmental policies. Countries ranked top in this comparison have made investments in sustainable infrastructure and launched policy measures decreasing the environmental impacts of

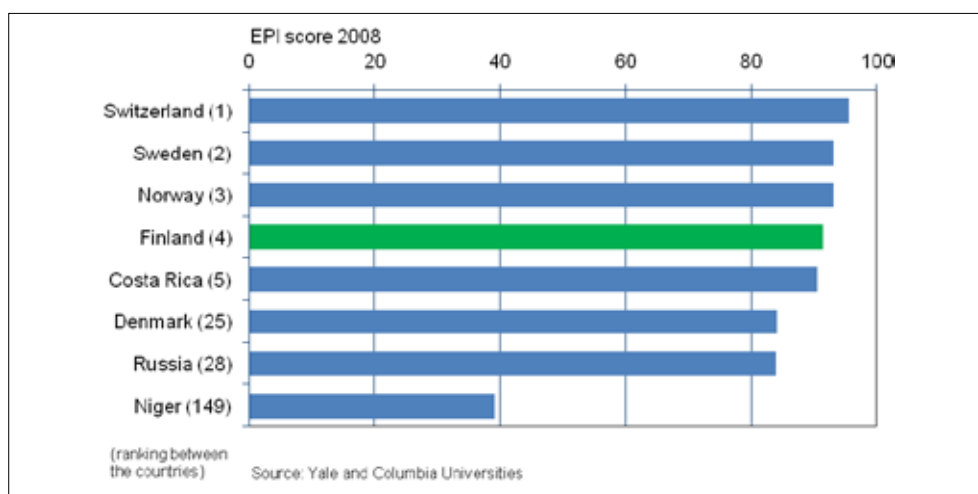


Figure 47. Environmental Performance Index (EPI).

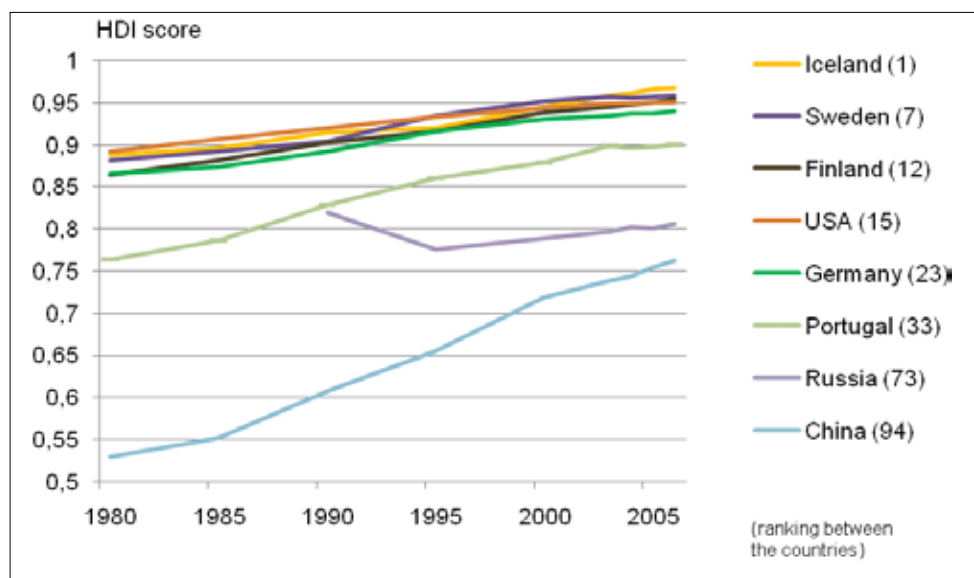


Figure 48. Human Development Index. Source: UNDP, Human Development Indices. A statistical update 2008.

economic activities. According to the EPI results, good governance is connected to sound environmental policies.

In addition to economic parameters, the Human Development Index (HDI), among others, has been used to measure the development of countries' well-being. The HDI measures a country's average performances with respect to three dimensions of human development: longevity (life expectancy from birth), knowledge and standard of living (GDP per capita).

The Human Development Index was presented in 1990, and Finland has always performed well in the comparisons. HDI updates for the year 2006 were calculated in 2008, and Finland scored 0.954, the maximum score being 1. In the comparison between countries, Finland ranked 12th. When the indicators are considered separately, Finland ranks fourth in education, 21st in life expectancy and in gross domestic product per capita at purchasing power parity. Iceland, Norway and Canada were the top performers in the comparison. Sierra Leone ranked lowest, at 179th.

Conclusions

Finland's level of sustainable development can be considered high in international comparisons. Finland performs well both in the SSI, EPI and HDI. Finland's scores are close to the maximum in all indices and the country ranks top in international comparisons. Finland has improved its SSI and HDI scores. Due to methodological developments, the new results of the EPI are not directly comparable with those published earlier.

Although Finland performs well in international comparisons, the situation changes slightly when the state of sustainable development is considered in relation to the targets set in the strategy for sustainable development. The trend has been rising with regard to greenhouse gas emissions and energy consumption, excluding the years 2005 and 2008. The results of these years have been affected by the industrial action in the forestry industry, the high share of imported electricity (2005) and the recession that began in 2008. Renewable energy sources' share of energy consumption has not changed significantly in recent years.

With regard to point source pressures, nutrient loads flowing from Finland into the Baltic Sea have reduced but diffuse source pressures remain a problem. On the other

hand, with regard to acidifying emissions and eutrophying discharges, an absolute decoupling from growth in GNP can be observed.

Indicators on regional and community structure mainly reveal negative development. Regional differences in the dependency ratio have remained substantial. Both the volume and share of passenger car transport have increased.

Indicators on the well-being of citizens show both positive and negative developments. The life expectancy of Finns continues to rise. While the retirement age has been rising, this rise has come to a halt over the last few years. Occupational diseases have decreased and the number of occupational accidents in relation to working hours has remained unchanged.

The recession has halted the favourable development in the number of people with low employment potential. Alcohol consumption and alcohol-based mortality rates continue to increase dramatically. The unemployment rate of immigrants has decreased by almost 50% since the early 1990s and the number of school children whose first language is neither Finnish nor Swedish is growing steadily. Over the last few years, the decrease in voting activity has levelled off. Young people's participation in social organisational work in the traditional sense fell during the 2000s.

With regard to all five key economic indicators, the recession has brought the previous favourable developments to an end. At the moment, any estimation of the impacts of the recession and their scale would be characterised by major uncertainty.

Finland's public development cooperation expenditure is moderately increasing but Finland remains behind the target level set by the UN (0.7 % of GNP). The majority of capital flows from Finnish enterprises are still directed towards Europe and North America.

The level of R&D expenditure has remained unchanged in recent years, while the number of patents granted has decreased.

Evaluation



Based on international comparisons, the state of sustainable development in Finland is good in relation to other countries. However, a more ambivalent situation obtains with regard to the targets set by the strategy for sustainable development. No positive development has been observed in the majority of target areas. The current situation is better with regard to environmental indicators than social and economic ones. This is mainly due to the economic recession.

5.4

Results of strategy work

Subject of assessment

This chapter discusses how the strategic process has promoted the planning of sustainable development targets and measures. The related assessment is based on the survey and reporting request sent to member organisations of the National Commission on Sustainable Development as well as on interviews.

Observations

The work itself has been considered the most important result of strategy work. In other words, the value of the process has been deemed higher than the value of the actual result, i.e. the strategy document. Most respondents experienced difficulty in

analysing the role and contribution of the strategy for sustainable development and strategy work in their own target-setting and measures.

Most actors in the Commission viewed their opportunities of engaging in strategy work as good. A total of 70% of the respondents assessed their opportunities as being good or very good. With respect to opportunities to influence decisions, however, only 30% consider their opportunities to influence the direction of the strategy targets as good. Over a fourth of the respondents considered strategy work useful with respect to their organisation's activities.

"Maybe this has helped structure the discussion and kept the issue to the fore; of course these matters are already on our agenda"

"Strategy work as a process is highly meaningful. It helps actors to understand what is going on and promotes the issue in question. However, putting the targets into practice is problematic. In practice, this is a question of resources and attitudes. Sustainable development should be made more concrete; nowadays, there is a variety of different manifestos."

"The Commission on Sustainable Development used to be led by the Prime Minister, which is no longer the case. Being led by the PM (or some other influential actor) would make the Commission more credible".

"Too many overlapping processes relate to sustainable development. Opinions on the usefulness of strategy work are rather sceptical at present."

"It has provided opportunities to hear about the plans of other actors and to discuss the matter"

"This has been a valuable discussion forum, I don't believe that terribly many people have even read the strategy"

"It certainly hasn't done any harm"

"It is both the strength and weakness of sustainable development that it includes everything and affects everything. It is difficult to distinguish what has been achieved through the theory of sustainable development from the matters which would have been highlighted by rational actions in any case."

- Quotes from the survey and interviews -

The following table includes the opinions of actors within the Commission of the added value provided by the strategy concerning target setting within their own organisation.

Added value provided by the strategy for sustainable development in the setting of targets?		
+	+/-	-
The strategy has made the concept of sustainable development more concrete, steered the development of the related activities and the promotion of sustainable development in defence administration. (Ministry of Defence)	With regard to the Ministry of Social Affairs and Health, the targets related to social sustainability, which is our substance area, have been highlighted. As the strategy is renewed, sustainable development factors will be analysed more extensively. (Ministry of Social Affairs and Health)	The interpretation of sustainable development presented in the national strategy for sustainable development differs from the Kuntaliittos' interpretation, even though the common aim at the beginning of the work was to create a strategy reconciling the dimensions of sustainable development. Due to this, our opportunities to influence how the targets set by the strategy were directed and the benefits resulting from the strategy process remained rather limited. (Association of Finnish Local and Regional Authorities)
The strategy provides essential support for the controlled promotion of sustainable development in the administrative sector. (Ministry of Education)	Although the Ministry of the Environment is responsible for the coordination of sustainable development and the related policy planning, in many substance areas sustainable development is still considered a rather separate, upper-level process in relation to target setting in environmental policy. On the other hand, the Ministry of the Environment is viewed as being engaged in policy-making related to sustainable development, regardless of the related strategies. In addition, the Ministry engages in other inter-administrative strategy and programme work whose connection to the strategy for sustainable development is evident, creating significant mutual synergies.	The objectives of Friends of the Earth generally promote sustainable development. Thus, the national strategy has not created any additional value with regard to this. (Friends of the Earth Finland)
We have utilised the strategy in campaigning (promotion of environmental education): influencing decision-makers based on the targets set by the strategy. (The Finnish Association for Environmental Education)	Created added value in internal discussions. (The Finnish Confederation of Professionals STTK)	
Target setting: a facilitator of discussion and a tool with regard to both internal activities and cooperation with other actors. (Service Centre for Development Cooperation)	A good background document. (Confederation of Finnish Industries EK)	
It has helped to direct our work. The church receives strategic guidelines e.g. from other churches in ecumenical contexts. (Ev. Luth. Church)	As the Government Programme was under construction, we commented on the sustainable development targets and set out our own sustainable development targets. (Finnish Sports Federation)	
Has provided background information on central issues related to sustainable development and has thus had an impact on the contents of annual events. (Finnish Society for Environmental Social Science)	Provided support to the development of the strategy for sustainable development. Provided information on current national and international processes. (Finnish Forest Industries)	

Figure 49.

Most respondents believe that strategy work related to sustainable development has contributed to their work, but that the strategy has not provided any direct guidance or prompted the significant re-assessment of targets.

The following table includes the opinions of actors within the Commission of the added value provided by the strategy in launching and implementing measures.

Added value provided by the strategy for sustainable development in launching and implementing measures?		
+	+/-	-
<p>A cooperation network on sustainable development in defence administration has been founded as a result of the strategy. The renewal of the administrative sector's sustainable development programme has been launched. The related work concentrates on the strategic foci of sustainable development within the administrative sector. The objective is to integrate the principles of sustainable development with the activities of defence administration. <i>(Ministry of Defence)</i></p>	<p>The strategy for sustainable development lends support to the promotion of the sustainable use, protection and management of renewable natural resources, and the launch and implementation of measures. However, the majority of measures will be launched and implemented in any case, since renewing natural resources is only possible when their use is sustainable. <i>(Ministry of Agriculture and Forestry)</i></p>	<p>The implementation of measures requires additional funding from the Finnish state. So far, no such funding has been available. <i>(The Sami Parliament)</i></p>
<p>The state administration's programme work on sustainable development is a concrete example of a measure arising from the strategy for sustainable development. This project has been promoted vigorously at every level of the state administration. In addition, in early 2009 the Ministries of Environment and Finance launched a joint project called "ympäristöjärjestelmällä kestävää tuottavuutta" (sustainable productivity through environmental systems), whose objective is to publish a proposal for a model supporting the implementation of a management and assessment system directed at public sector organisations by October 2009.</p>	<p>The strategy for sustainable development (2006) and the so-called KULTU-programme (the programme on sustainable consumption and production, 2005) were prepared during two consecutive years and have lent significant support to each other. It is difficult to estimate the importance of the strategy for sustainable development to the launch of kultu-measures, but it has definitely not impeded these measures either.</p> <p>In addition, the launch of the so-called Baltic Sea – Stern research project for the protection of the Baltic Sea and its impacts can be considered as being at least partly based on the strategy for sustainable development and the discussions conducted within the National Commission on Sustainable Development in 2006-2007. <i>(Ministry of the Environment)</i></p>	
<p>When the strategy for sustainable development was implemented in 2007, it was also possible to implement a visionary contemporary project on sustainable development, during which visions of a sustainable society were created. This process has generated ideas and food for thought for various environmental and development organisations. <i>(Friends of the Earth Finland)</i></p>	<p>The setting down of common guidelines facilitates motivation and cooperation. <i>(Service Centre for Development Cooperation)</i></p>	
	<p>Has provided background information on central issues related to sustainable development and has thus had an impact on the contents of annual events. <i>(Finnish Society for Environmental Social Science)</i></p>	

Figure 50.

The majority of both interviewees and respondents regard the strategy work as having contributed to the launch of certain measures. However, they also believe that most measures would have been implemented regardless of the strategy.

Conclusions

Strategy work has created added value through the related strategy processes. The related discussions have helped the actors to structure their thoughts and reconcile them with those of other actors. However, the resulting strategy document has been of no great importance from the actors' point of view.

The strategy process related to sustainable development is conciliatory rather than creative. Discussion and the resulting mounting consensus between actors are the main conciliatory mechanisms. The strategy includes no proper mechanisms or capability for implementation. In this sense, the strategy for sustainable development is a typical, cross-administrative decision in principle.

Evaluation



The primary added value of strategy work has emerged in the form of strategy processes, rather than in terms of the end result. As a discussion forum, this has helped the actors to structure the theme area of sustainable development on a cooperative basis. However, the strategy for sustainable development has had no greater significance in terms of directing or launching measures.

6 Assessment of follow-up systems

With regard to follow-up systems, the following questions were considered during the assessment:

1. Do the follow-up indicators sufficiently facilitate the implementation of the strategy?
2. How well does the current follow-up and assessment system facilitate the implementation of the strategy?
3. How comprehensive, reliable and up-to-date is the available data on the state of sustainable development?

Questions 1 and 3 have been considered in Chapter 6.1 and question 2 in Chapter 6.2.

6.1

Sustainable development indicators

Subject of assessment

This chapter analyses how effectively the follow-up indicators facilitate the strategy's implementation and how comprehensive, reliable and up-to-date data on the state of sustainable development is.

Observations

Finland's sustainable development indicators are being used to monitor and assess the implementation of sustainable development goals in Finland. This set of indicators is intended for the illustration of the various areas of sustainable development in the most diverse and comprehensive manner possible.

The first national set of sustainable development indicators was published in 2000. "Signs of Sustainability" included 83 indicators. These indicators were divided into ecological, economic and socio-cultural subcategories. They were then used to monitor and evaluate the national sustainable development strategy published in 1998.

The indicator set was updated twice in the early 2000s (in 2002 and 2004). In 2004, the framework of indicators was also revised to better reflect the concept and challenge represented by sustainable development. Theme indicator leaflets were also introduced in the beginning of 2004, in support of the work of the National Commission for Sustainable Development.

The current indicator set was published in the summer of 2006, together with the new national strategy for sustainable development. 34 key indicators were integrated

into the strategy. A wider set of follow-up indicators was also developed during the indicator process and these indicators will be used when needed to monitor the strategy. National indicator work is carried out through cooperation between several ministries and research institutes. Since 1997, a special working group called the indicator net, whose members come from all ministries and a few research institutes, has assumed responsibility for this work. Statistics Finland has played a central role. The chairmanship is held by the Ministry of the Environment and practical issues (collection of data, graphs and interpretations) are attended to at the Finnish Environment Institute.

When assessing the usability of the indicators, the core criteria are as follows:

- Validity: the indicators measure what is set as a target
- Governance: it is known what should be done on the basis of the trends indicators show
- Relevance: important data or statistics that must be followed
- Timeliness: the data is available when needed

With regard to validity, the core problem lies in the vagueness of some of the targets/target areas of the strategy: it is difficult to tell what the indicator should describe. Examples of such target areas include "cohesion between different generations" and "Finland as a global bearer of responsibility". In such cases, the problem concerns the general vagueness of target setting rather than indicator work.

With regard to validity, it can be observed that environmental indicators are generally more effective than social ones. For instance, occupational diseases have been used to indicate the quality of working life and alcohol consumption as an indicator of healthy lifestyles.

In general, the interviewed persons considered indicator work to be an integral part of strategy work and regarded the development of indicators as important. However, with regard to the governance and relevance of the indicators, the assessments were more critical.

"A number of indicators have been developed for measuring sustainable development. But no indicator or indicator set is in general use. Indicators are mainly used for learning about and understanding sustainable development, rather than in decision-making as they should be."

"Indicators do exist but they are ponderous."

"There has been much controversy concerning the role of the indicators. Analysis of the data resulting from the indicators is often difficult. The results may lead the analyst in a certain direction."

Although the indicators are considered important, they are not utilised in decision-making in practice. This is partly due to the poor usability of the indicators. The goal of indicator work has not been to produce indicators that facilitate operative decision-making, but measures describing the state of sustainable development, by thematic area at macro level.

The indicator sets have been chiefly based on relatively recent statistical data. Data availability has proven problematic with regard to some indicators only.

Conclusions

Indicator work is a core element of the strategy work related to sustainable development. Through these indicators, the strategy for sustainable development has been enhanced and the contents of the target areas have become more concrete.

With regard to validity, the core problem is the vagueness of some targets/target areas of the strategy: it is difficult to tell what the indicator should describe. This problem is more related to the general vagueness of target setting than indicator work.

Indicators have seldom been used in decision-making. Indicator work has not produced indicators facilitating operative decision-making, but measures that describe the state of sustainable development at macro level, by target area. The usability of such indicators in organisational decision-making is rather low.

Evaluation



Indicator work has been widely considered as a core element of the strategy work related to sustainable development and has rendered the strategy more concrete, but the usability of the indicators in organisational decision-making is somewhat limited. In part due to the vagueness of target setting, the validity of some indicators remains dubious.

6.2

Follow-up and assessment systems

Subject of assessment

This chapter considers how effectively the current follow-up and assessment system facilitates the implementation of the strategy.

Observations

The follow-up and assessment system for sustainable development consists of the following elements

- Sustainable development indicators
- Reporting on the implementation of the strategy to the National Commission on Sustainable Development
- Developing the ENVIMAT model
- National assessment

The national sustainable development indicator network has developed indicators aimed at measuring the progress of sustainable development in state and municipal organisations. These indicators were developed in cooperation with the inter-ministerial network secretariat for sustainable development. Observations related to the indicators were presented in the previous chapter.

Progress in the implementation of the National Strategy for Sustainable Development (2006) will be assessed every two years, and the results will be reported to the

National SD Commission. This will be linked to the assessment process conducted for the EU Strategy for Sustainable Development.

In addition to indicator work, the most important processes under the assessment of the strategy for sustainable development relate to developing the ENVIMAT model and the national assessment in question. This report provides no evaluation of the national assessment.

The aim of the ENVIMAT project is to define the life cycle environmental impacts of the material flows used for production and consumption in the Finnish economy, and allocated to various activity sectors and product groups. In addition to domestic environmental loads, the project also takes account of the impacts, on the environment outside Finland, of imported raw materials and goods. Life cycle environmental impacts have been allocated to both domestic consumption and exports. The aim has been to create a realistic overview of the impacts caused by domestic consumption and investments and the share of production exported for use by others.

The objective of the ENVIMAT project has been to create a tool with which the relationships between environmental impacts and economic effects, due to the use of natural resources in Finland, can be assessed. This project has concentrated on environmental impacts, even though the ENVIMAT model also enables the assessment of effects on added value and employment in various sectors, and the products and services produced therein.

Conclusions

In strategy work related to sustainable development, significant efforts have been made to develop follow-up and assessment systems. Key efforts in this respect have been the indicator work carried out by the indicator network, and the ENVIMAT project.

With regard to the indicators, Chapter 6.1 states that the indicators are weaker with regard to the social aspect of sustainable development. With regard to the ENVIMAT model, the situation is similar in the sense that the model expressly reflects the relationships between economic and environmental impacts. When used as a tool for assessing sustainable development, its shortcomings are expressly related to the social aspect. The ENVIMAT model facilitates the planning of environmental policy. Its potential, for instance in planning the mitigation of climate change, is significant since the effectiveness of mitigation measures can be assessed in the national economy. Such an assessment would be consumption-based so as to take account of employment and added value.

Evaluation



In strategy work related to sustainable development, significant efforts have been made to develop the follow-up and assessment systems. Examined as a whole, this entity is the most successful part of the strategy work. During follow-up, either less emphasis has been placed on the social aspects of sustainable development or these have been overshadowed, for other reasons, by quality-related issues.

7 Summary

A summary of the assessment, broken down by assessment question, is presented in the chart below. The grounds for each assessment can be found in the assessment sections of each chapter in this report. Conclusions and recommendations based on the assessment are presented at the beginning of the report.













Aspect assessed	Assessment questions	Assessment
Target setting Coherence of target setting	How effectively have the guidelines of the strategy for sustainable development been taken into consideration in administrative sectors' own strategies and programmes?	
	What level of coherence is there between the targets set by the strategy for sustainable development and other administrative targets?	
	What is the importance of targets set for sustainable development in relation to other administrative targets?	
Measures Implementation of measures according to the strategy	How many central government agencies and municipalities have prepared sustainable development programmes?	
	How extensively have the actors considered the implementation guidelines prepared by the National Commission on Sustainable Development?	
	How effectively have the chosen measures promoted the targets set by the strategy for sustainable development?	
Results and impacts The achievement of targets set as an entity and by theme area	How effectively have the targets set by the Strategy for Sustainable Development been implemented as a whole and by thematic entity?	
	What results, promoting the targets set by the strategy, have been generated by strategy work?	
	What is the state of sustainable development in Finland and how has it developed?	
Follow-up and assessment systems Follow-up and assessment of the achievement of targets set	Do the follow-up indicators adequately facilitate the strategy's implementation?	
	How does the current follow-up and assessment system facilitate the implementation of the strategy?	
	How comprehensive, reliable and up-to-date is the data available on the state of sustainable development?	

Figure 51. Summary of the assessment.

Appendix I

Sustainability assessment tool

During the national assessment of sustainable development, the assessors, in cooperation with the Ministry of the Environment, have been developing a pilot version of an ex ante assessment model for use in Finland. Methods used in other countries were analysed for the basis of the related development work.⁶

The assessment framework is intended for use as a policy planning tool. Ex ante assessment can improve the quality of the preparatory phase of decision-making processes, while ensuring that aspects related to sustainable development are considered. In the long term, the main objective is to integrate sustainable development with decision-making processes and promote the mutual coherence of various measures.

The target areas defined in the strategy for sustainable development, alongside key indicators, formed the starting points for developing the assessment framework, which was to cohere as closely as possible with these starting points. One starting point indicated that the framework should take the form of a checklist while including the grounds for the assessments presented and descriptions of the mechanisms by which effects can be obtained.

Based on these starting points, the assessment framework described on the following page was prepared. Its assessment factors are grounded in the targets and indicators of the strategy for sustainable development. In this respect, the assessment framework matches the effectiveness of the strategy. The assessment framework includes six elements for each assessment factor.

The first of these elements is *likely impacts*, describing the likely change related to the assessment factor (for instance, the average CO₂ emissions of new cars will fall below 130 g/km in 2015)

The second element of the assessment framework is the impact mechanism, referring to the mechanism by which impacts are obtained (for instance, changes in taxation have impacts on consumer behaviour).

The third element is recognised risks. This refers to factors that potentially prevent the expected impact (for instance, the more frequent use of cars producing fewer emissions).

The fourth component describes the direction of the impact, on a scale ranging from very negative (-3) to very positive (+3). Zero is used to describe a situation where the measure has no effect on the assessment factor in question.

The fifth element defines the probability of the impact, assessed on a scale from 1 to 3.

The final element defines the sustainable development index of the assessment factor in question, based on the direction and probability of the impact.

The assessment framework is available in a draft version only. Prior to its introduction, the framework should be piloted and further developed based on the experience gained during the piloting phase.

⁶ Ks. Kestävän kehityksen arviointityökalut - käytäntöjä Euroopan maista (<http://www.ymparisto.fi/download.asp?contentid=112460&lan=fi>)

Assessment factor	Likely impact	Impact mechanism	Recognised risks	Direction of the impact	Probability	Sustainable development index						
USE AND PROTECTION OF NATURAL RESOURCES												
Greenhouse gas emissions	Average CO2 emissions of new cars will fall below 130 g/km in 2015	Changes in taxation have impacts on consumer behaviour.	Wider use of cars producing fewer emissions	<table border="1"> <tr> <td>+3</td> <td>+2</td> <td>+1</td> </tr> <tr> <td>-1</td> <td>-2</td> <td>-3</td> </tr> </table>	+3	+2	+1	-1	-2	-3	3 = great 2 = moderate 1 = small	Impact x probability
+3	+2	+1										
-1	-2	-3										
Total energy consumption												
Use of renewable energy sources												
Proportion of endangered species by habitat												
Acidifying emissions and eutrophying discharges												
Use of non-renewable natural resources												
Nutrient load to the Baltic Sea												
COMMUNITIES AND REGIONAL STRUCTURE												
Distance to services												
Amount of passenger transportation												
Coherence of regional structure												
Regional differences in dependency ratio												
Citizens' satisfaction in services												
WELL-BEING OF CITIZENS												
Retirement age												
Quality of working life												
Exclusion and poverty												
Healthy lifestyles												
Integration of immigrants												
Voting activity and civil activity												
ECONOMY AS A SAFEGUARD FOR SUSTAINABLE DEVELOPMENT												
Competitiveness of enterprises												
Productivity of production of goods and service provision												
Dependency ratio												
Public debt												
Unemployment												
FINLAND AS A GLOBAL ACTOR AND BEARER OF RESPONSIBILITY												
Resources of development cooperation												
Development of neighbouring regions												
Availability of new technologies and IT solutions in developing countries												
SUPPORTING SUSTAINABLE CHOICES												
Resources of R&D activities												
Production and distribution of information supporting sustainable choices												
Changes in attitudes and values												

Appendix 2

Interviews

Name of interviewee	Position	Organisation
Mr Juhani Turunen	Undersecretary of State	Ministry of Finance
Mr Vesa Vihriälä	Secretary General of the Economic Council of Finland	Prime Minister's Office
Ms Anni Rimpiläinen	Senior Adviser	Ministry of Transport and Communications
Ms Saara Jääskeläinen	Senior Officer	Ministry of Transport and Communications
Mr Jarmo Vaittinen	Permanent Secretary	Ministry of Agriculture and Forestry
Ms Johanna Niemivuo-Lahti	Senior Officer	Ministry of Agriculture and Forestry
Ms Katja Matveinen-Huju	Senior Officer	Ministry of Agriculture and Forestry
Mr Antti Kivipelto	Director of the Community and Environment Unit	Ministry of Defence
Mr Kari Välimäki	Permanent Secretary	Ministry of Social Affairs and Health
Mr Klaus Halla & Mr Reijo Väärälä	Director of Development / Deputy Director-General	Ministry of Social Affairs and Health
Ms Ritva Viljanen	Permanent Secretary	Ministry of the Interior
Mr Hannu Vainonen	Planner	Ministry of Education
Mr Olli Mutttilainen and Mr Harri Mäkinen	Director-General of the Administrative Unit/ Director of Finance	Ministry of Justice
Mr Matti Nummelin	Environmental Adviser	Ministry for Foreign Affairs
Mr Mika Honkanen	Senior Officer	Ministry of Employment and the Economy
Mr Risto Ranki	Industrial Counsellor	Ministry of Employment and the Economy
Ms Hannele Pokka	Permanent Secretary	Ministry of the Environment
Ms Helena Säteri	Director General, Director of the Unit	Ministry of the Environment
Mr Timo Tanninen	Director General, Director of the Unit	Ministry of the Environment
Mr Benny Hasenson & Ms Anna-Kaisa Auvinen	Adviser (environmental issues)	Confederation of Finnish Industries EK
Ms Pia Björkbacka	Adviser, Business and Economic Policy	Central Organisation of Finnish Trade Unions (SAK)
Ms Helena Aatinen	Head of Communications	Finnish Forest Industries Federation

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