

# Executive summary

## Proposed focus areas for environmental policy

Several steps along the way to sustainability have been taken since the last in-depth evaluation of Sweden's environmental objectives in 2008. Despite this, the assessment in the present evaluation is that 14 of the 16 environmental quality objectives adopted by the Swedish Parliament (the Riksdag) will not be achieved by the target year 2020. In the light of what has emerged from this year's analysis, the Swedish Environmental Protection Agency wishes to draw particular attention to three proposals for focus areas for policy in the immediate future – three focus areas that could result in further steps being taken towards attaining the environmental objectives.

### 1. ENSURE THAT DECISIONS ALREADY TAKEN ARE IMPLEMENTED

For several of the environmental quality objectives, policy instruments have been decided on but are not being implemented in full, impeding progress towards the objectives. As well as clear signals from the Government and the Riksdag about the importance of implementing decisions already taken, there is a need for resources for initiatives in the areas of communication, knowledge and skills development, regulatory supervision, planning, and priority-setting support for various stakeholders in society. It needs to be signalled from the highest level that such initiatives are important.

### 2. DEVELOP STRATEGIES FOR SUSTAINABLE CONSUMPTION

The prospects of realising most of the environmental quality objectives and the generational goal will be affected by the high and rising level of consumption, as long as it involves growing use of natural resources, problems of waste and a significant impact on climate. The welfare of society has to be achieved with less pressure on the environment. One means of bringing about such a change is a greater emphasis on putting a price on adverse environmental impacts and highlighting the benefits of good environmental quality. It needs to be easy to do the right thing.

### 3. COMMUNICATE AND INFORM MORE EFFECTIVELY ABOUT THE OPPORTUNITIES ENVIRONMENTAL EFFORTS REPRESENT

The environmental quality objectives and the generational goal will be achieved more easily if all stakeholders pull in the same direction. All policy areas need to be involved in efforts to create a better environment. This requires knowledge,

insight and awareness of environmental problems and possible solutions. The generational goal can be a useful starting point in lending visibility to environmental issues and their relationship to the overall development of society. Dialogue between the business sector and public agencies needs to be developed so as to promote mutual understanding. More can be done to bring good practice examples of environmental action in Sweden to the attention both of the Swedish public and of decision makers, businesses and other stakeholders, in Sweden and abroad. Good communication is also crucial to successful implementation of existing policy instruments and measures.

## Environmental Protection Agency evaluates the environmental quality objectives and generational goal

Every four years, an in-depth evaluation is undertaken of Sweden's 16 environmental quality objectives and the generational goal. This is the third such evaluation since the Riksdag introduced the environmental objectives system in 1999. This year, 2012, is the first time the Swedish Environmental Protection Agency has been responsible for the exercise, and also the first time the new generational goal has been included. The in-depth evaluation has been conducted in collaboration with county administrative boards and some thirty central government agencies, together with stakeholder and environmental organisations.

As well as assessments and forecasts relating to both the environmental quality objectives and the generational goal, the evaluation includes analyses that cut across the different objectives: an analysis of synergies and goal conflicts affecting environmental action, a review of available policy instruments, and a progress report on environmental efforts at the regional and local levels.

### **New, stricter assessment criteria**

Assessments of whether the environmental quality objectives can be achieved by 2020 have not changed since the annual progress report earlier this year. In the present report, considerably more space is devoted to trends in the environment and the underlying analyses.

The assessments are guided more than in previous years by **actual decisions** putting in place conditions – in the form of policy instruments and measures – for meeting the objectives. This is in line with the new basis for assessing progress, set out in the Government Bill *Sweden's Environmental Objectives – For More Effective Environmental Action* (2009/10:155). Earlier interpretations of the prospects of achieving the desired state of the environment were freer, in that agencies' assessments took into account the **possibility of creating** conditions in the form of instruments and measures. With the new way of assessing progress,

decisions taken and measures introduced by policymakers and in different sectors will rapidly be reflected in assessments of whether the environmental quality objectives will be achieved.

## The 16 environmental quality objectives – most not expected to be met by 2020

Of the 16 environmental quality objectives, 14 will not be met by 2020. The assessment is that the state of the environment which these objectives describe cannot be achieved in time. Nor will conditions be in place that will enable the environment to recover, allowing that state eventually to be brought about. The policy instruments decided on so far are not enough, and it does not look as if sufficient measures will be implemented by 2020.

The objective *A Protective Ozone Layer* will be achieved, partly thanks to the binding international agreements contained in the Montreal Protocol. *A Safe Radiation Environment* is close to being met, thanks in part to a high level of ambition in the areas of supervision and control.

For most of the other environmental quality objectives, it is difficult to assess whether conditions for meeting them will be created by 2020, partly because the effects of policy instruments are not easy to judge. Inadequate implementation of policy instruments is a problem in the case of over half the objectives, and for several others sufficient instruments have not been adopted. For only a third of the objectives is the difficulty considered to be a result of Sweden not being in a position to take the necessary decisions itself.

In addition, progress towards most of the environmental quality objectives is affected by changes taking place in other areas of society or economic sectors. There is also competition with other policy objectives. The clear conflicts that exist between different interests, such as land use and resource use resulting from lifestyles and consumption of goods, need to be handled at the political level.

The specific shortcomings in the effectiveness and implementation of policy instruments vary widely between instruments and environmental quality objectives. It may be a matter of inadequate supervision, knowledge or competence, or equally of environmental aspects not being given priority when a balance is struck between different interests.

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### The 16 environmental quality objectives

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No	Reduced Climate Impact	No	Good-Quality Groundwater
No	Clean Air	No	A Balanced Marine Environment, Flourishing Coastal Areas and Archipelagos
No	Natural Acidification Only	No	Thriving Wetlands
No	A Non-Toxic Environment	No	Sustainable Forests
Yes	A Protective Ozone Layer	No	A Varied Agricultural Landscape
Close	A Safe Radiation Environment	No	A Magnificent Mountain Landscape
No	Zero Eutrophication	No	A Good Built Environment
No	Flourishing Lakes and Streams	No	A Rich Diversity of Plant and Animal Life

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## The generational goal – will not be achieved on present trends

The generational goal reads as follows: *“The overall goal of Swedish environmental policy is to hand over to the next generation a society in which the major environmental problems in Sweden have been solved, without increasing environmental and health problems outside Sweden’s borders.”*

This goal is elaborated on in seven bullet points, which describe the direction of the changes in society needed within one generation, by 2020, if the environmental quality objectives are to be achieved. The conclusion drawn from the in-depth evaluation is that the generational goal will not be met. Positive trends can be noted and possibilities exist, but this goal is very much dependent on policy decisions affecting the overall development of society.

### First attempt to evaluate the generational goal

The generational goal encompasses the issue of the environment in a broader sense than the sum of the environmental quality objectives. To realise it, conflicts between different policy objectives have to be resolved. How an evaluation of this goal should be undertaken has not been self-evident. Methods for follow-up and evaluation need to be developed.

This first attempt to follow up and evaluate the generational goal largely assumes the form of a discussion of trends and developments in society and their significance for the environment. The Environmental Protection Agency has chosen to take as its starting point the societal trends with environmental implications studied in the European Environment Agency's assessment of global megatrends. The intention is that, in future too, progress will be assessed in the light of knowledge of major trends in society, knowledge that can be sought from research institutes and the like, rather than through the usual indicators used for the environmental quality objectives. More overarching indicators for the generational goal need to be developed.

### **Trends affecting the prospects of achieving the generational goal**

Trends influencing the environment more than others, both in Sweden and globally, are the high and rising level of **consumption** (and production) and a changing **climate** (which is largely due to increased consumption). Technological advances enable us to reduce pressures on the environment, for example through more efficient energy use and new environmental technology – but the beneficial effects are being swallowed up by the rise in total consumption. Sustainable development is still a long way off, and yet it is essential that it be achieved.

SOME AREAS IN WHICH CHANGE IS NEEDED:

- **Decouple growth and environmental pressures, and put a price on the environment**  
One of the clearest conflicts between environmental and other policy objectives is that between economic growth and sustainable use of resources. New measures of welfare could be useful. Our consumption needs to become environmentally more sustainable. If we can put a price on adverse environmental impacts, it will help to make both production and consumption more sustainable. The Government's initiative to develop a milestone target regarding the valuation of ecosystem services is an important step.
- **Integrated approach to physical planning**  
An integrated approach to planning, rather than sector-specific efforts, is crucial to conserving and ensuring sustainable use of ecosystems. Such an approach also has a part to play in conserving, taking account of and using biodiversity and natural and cultural values.
- **Collaboration between business, public agencies and citizens**  
New forms of collaboration and citizen participation can have significant effects in land use planning. They can promote efficient use of resources and help to protect, conserve and enhance areas of high conservation value.

- **Sweden's environmental impacts abroad need to be made visible**

Greater visibility needs to be given to the pressures Sweden places on the environment and human health in other countries. This is particularly true of those arising from imported products, but also of the impacts of exports and of Swedish companies' and institutions' operations abroad. This dimension must be better integrated than at present into the design of future strategies, policy instruments and measures. Valuable work is now under way to quantify the global environmental pressures associated with Swedish consumption, particularly in terms of greenhouse gas emissions. This work needs to be developed and extended to additional areas.
- **Safeguard ecosystems**

Agriculture and forestry must be undertaken with due consideration for what ecosystems can withstand in the long term. The resilience of ecosystems must not be undermined and their capacity to deliver ecosystem services must not be put at risk.
- **Better labelling and management of chemicals**

Chemicals need to be labelled more clearly than at present, and management of chemicals hazardous to health and of pharmaceuticals must be improved. The precautionary principle is essential if we are to avoid repeating old mistakes relating to substances that entail hazards to health and the environment.
- **More research and development required**

Further research and knowledge development are called for. Key areas for study include drivers for a greener economy, links between consumption and environmental impacts, environmental and health effects of substances in the environment (including drug residues), links between indoor environment and health, and valuation of ecosystem services.

## National control over progress towards the environmental objectives

Sweden has full control over measures that can be decided on at the national, regional or local level within the country. This is also true of policy areas in which the EU sets minimum standards. When EU legislation or global agreements regulate the level of ambition, national control is limited. On the other hand, through the EU, international conventions and bilateral cooperation, Sweden can influence environmental action in other countries, with potential benefits for our own environment. Areas in which Sweden has a high degree of national control include physical planning, protection of natural areas and cultural heritage, and the transition to renewable energy. Chemicals, air pollution and marine eutrophication are examples of fields where national powers are considerably more limited.

## Synergies and goal conflicts

The assessment that emerges from the in-depth evaluation's analysis of possible synergies and goal conflicts between the environmental quality objectives, and between them and other societal interests, is that there are more potential synergies than conflicts. Synergies are chiefly identified among some of the environmental quality objectives, involving goals such as *Zero Eutrophication*, *Reduced Climate Impact* and *A Rich Diversity of Plant and Animal Life*. Synergies between environmental objectives and other policy areas primarily exist in relation to public health, forestry policy and energy policy. At the regional level, attention has been drawn to the fields of public health, health policy and accident prevention.

Potential synergies between environmental quality objectives and other policy areas may not be realised, however, when the broader objectives are broken down into detailed operational goals, owing to the division of responsibility for different issues between different stakeholders. Collaboration can help to clarify causal links and prevent conflicts.

Goal conflicts primarily exist between certain environmental quality objectives and other policy areas such as forestry, energy, regional development and economic policy.

Trends in society have major implications for the prospects of meeting the environmental quality objectives. The strongest such trends are unfortunately the ones with the greatest negative impacts on protection of the environment. These include trends such as increasing consumption and globalisation. An interesting approach to build on is to identify which stakeholders could curb the effects of negative trends and reinforce those of positive ones.

## Policy instruments

### – our tools in safeguarding the environment

Assessing the effectiveness of a policy instrument is often a complex business. Further evaluation and research into policy instruments in the environmental field are needed to provide a more complete knowledge base for assessments of the environmental objectives. Three of the key criteria for judging an instrument's effectiveness are goal achievement, cost-effectiveness and dynamic effectiveness.

**Administrative instruments** in the shape of regulatory arrangements under the Environmental Code form the foundation for Swedish environmental policy. They include, above all, permitting, supervision and the issuing of regulations. Beyond the scope of the Environmental Code, there are provisions governing such matters as planning and building, chemicals, agriculture and forestry, and environmental health. Agreements and rules at the international and EU levels are assuming growing importance for many of the environmental quality objectives, for example *A Non-Toxic Environment*.

**Economic instruments** serve either as carrots (including things like tax relief, grants and other forms of support) or as sticks (such as taxes and charges), all with the common aim of guiding our actions in a more environment-friendly and sustainable direction. In Sweden, as in other industrialised countries, the great majority of environmental taxes and charges are levied in the areas of energy and transport. But the very same sectors, along with agriculture, also receive most subsidies that could have adverse impacts on the environmental quality objectives and the generational goal.

**Information and communication** can promote a sense of involvement, and contribute to goal achievement and high standards of environmental action. Information can also help to make policy instruments planned or already introduced more effective. There are good examples of information instruments being used in environmental policy, including ecolabelling, advice, education, guidance and dialogue projects.

**Research, development and demonstration** can also serve as policy instruments. Although research alone does not bring about change, technological advances and understanding of the effects of different changes are necessary forms of knowledge and are crucial to our realising different environmental objectives in the long term.



## How are environmental efforts progressing at the regional and local levels?

Regional environmental action is, on the whole, judged to have developed favourably since the last in-depth evaluation in 2008. Various assignments and policy instruments have contributed to this. The environmental quality objectives have been better integrated into the operations of public agencies and other stakeholders. Progress has been made in all ten areas identified by county administrative boards as important in the last evaluation:

- Step up efforts to develop measures.
- Increase collaboration and coordination.
- Give more support to local authorities.
- Improve communication.
- Ensure that the environmental objectives carry more weight in land use planning.
- Integrate the environmental objectives and involve other stakeholders more effectively.
- Have a clearer focus on regional efforts relating to climate, energy and transport.
- Ensure that natural and cultural environments are mutually reinforcing.
- Further develop follow-up of the environmental objectives.
- Develop county administrative boards' own environmental efforts.

### County administrative boards to focus on measures

In recent years, county administrative boards have been given a clearer responsibility to promote progress towards the environmental quality objectives. In seeking to do this, they are to have more of a focus on measures and action programmes. Such programmes should primarily involve public-sector stakeholders and organisations or companies for which environmental objectives and the regional level are of significance.

The task of developing measures requires a **better understanding** of where resources will do most good and how the environmental efforts of different operators and stakeholders are progressing. The knowledge and skills of environmental objectives coordinators and others need to be developed, for instance regarding **methods, tools and approaches** for use in better integrating the objectives into regular operations, in environmental communication with others, and in planning, evaluation and economic analysis of measures and action programmes.

County administrative boards have a wide range of tasks, not all of them congruent with the environmental objectives. Regional growth, business development and transport are not planned on the basis of those objectives.

More **collaboration and methods development** are needed, both among county administrative boards and with national agencies, to integrate the environmental objectives into different tasks and activities. County administrative boards should

also give greater support to local authorities, and the latter need to cooperate more closely. The county boards' partnerships with regional development councils need to be further developed. The valuable collaboration between county administrative boards and the Swedish Forest Agency within RUS (Regional Development and Cooperation within the Environmental Objectives System) should continue. The environmental objectives need to be better integrated in and to interact more closely with a range of regional tasks, sectors and local government activities.

The exercise of public authority, through **regulatory supervision and permitting**, needs to be made more stringent and developed so as to contribute more to achieving the environmental objectives. The county administrative boards' remit to work towards these objectives could make a greater contribution to environmental action in the business sector, but efforts should be concentrated on sectors where this will do most good.

**Environmental communication** needs to be improved. Given the significance of consumption patterns for the environmental objectives, some involvement by county administrative boards is justified, possibly in the form of support to and cooperation with, among others, non-governmental organisations and the adult education sector. County administrative boards have limited scope to influence patterns of consumption, but this is an important issue. In addition, the Swedish Consumer Agency has a significant part to play in persuading consumers to make better environmental choices.

**Availability of resources** is critical to the pace of environmental action and progress towards the environmental objectives. Resources to coordinate regional implementation of the objectives need to be kept at their present level at least, and in some counties they need to be augmented. In the case of regional tasks with a bearing on several policy goals, better integration of the environmental objectives is called for. In a number of areas, special nationally initiated programmes of measures and similar initiatives are needed.

## Conclusions from the in-depth evaluation

It can be noted, then, that the environmental quality objectives and the generational goal are difficult to achieve. The reasons for this differ between the objectives, and the extent of the gap to meeting them varies. Specific shortcomings in the effectiveness and implementation of policy instruments also vary widely between the environmental quality objectives. It may be a matter of inadequate supervision, knowledge or competence, or equally of the environment not being given priority when a balance is struck between different interests.

One conclusion is that there is a need to improve the processes surrounding the environmental quality objectives, to develop and differentiate policy instruments, and to ensure that such instruments are more effectively implemented. Positive drivers for different stakeholders also need to be turned to advantage, by adjusting policy instruments and incentives.

The prospects of realising the environmental objectives are affected to a large degree by competition and goal conflicts with other policy areas. Much of the growing pressure on the environment can be traced to increased resource use resulting from lifestyles and high consumption of goods. To reverse this trend, political resolve is called for.

### **Priorities are needed for future environmental action**

Various criteria can be used to set the priorities that are needed, internationally as well as nationally, regionally and locally. Should we channel additional resources into the simplest measures, the cheapest ones, those with the broadest effects, or the most important ones from a risk point of view? The Environmental Protection Agency believes that all these criteria have their validity, and therefore highlights three focus areas for environmental policy moving forward:

1. Ensure that decisions already taken are implemented.
2. Develop strategies for sustainable consumption.
3. Communicate and inform more effectively about the opportunities environmental efforts represent.

These three focus areas are described at the beginning of this summary.

### **Need to develop methods and approaches**

In its work on the in-depth evaluation, the Environmental Protection Agency has also identified four areas in which we and others need to continue to develop tools and methods:

#### **POLICY INSTRUMENTS**

- Develop the way we assess the impacts of policy instruments on individual environmental quality objectives.
- Undertake broad analyses and evaluations of the effects of policy instruments, individually and in combination with other such instruments.
- Develop new instruments where there are none or existing ones are inadequate.

#### **THE GENERATIONAL GOAL**

- Develop methods to follow up progress towards the generational goal. This could, for example, involve environmental scanning and collaboration within the environmental sector and with other stakeholders, not least with business and the research community.

- Analyse what the ‘changes in society’ which the generational goal seeks to achieve entail.
- Develop indicators for the generational goal.

#### THE ENVIRONMENTAL OBJECTIVES SYSTEM

- Develop the arrangements for systematic and regular follow-up of the environmental quality objectives. This should be done both within the Environmental Protection Agency and in collaboration with all the government agencies with responsibilities within the environmental objectives system.

#### ENVIRONMENTAL ACTION IN GENERAL

- Analyse the roles, resources and motivations of different stakeholders for environmental action.
- Improve environmental communication and the provision of environmental information, partly by means of better indicators.
- Communicate the reasons for attaching greater weight to environmental aspects in decisions in other areas of society, including the economic value of a sound environment.