2009-02-05



# A sustainable energy and climate policy for the environment, competitiveness and long-term stability

The party leaders of Alliance for Sweden entered into an agreement today on a long-term, sustainable energy and climate policy. The agreement is based on input from the Scientific Council on Climate Issues, the all-party Climate Committee and the Government's dialogue with civil society and the business sector on energy and climate issues. The climate and energy package recently approved by the European Union provides the foundation of Sweden's policy.

This agreement creates conditions for long-term rules for actors in the energy market. At the same time, it clarifies the Government's ambitious goals in the climate area, paving the way for strong Swedish leadership in the ongoing negotiations on a new international climate agreement. It is our conviction that this agreement will be able to win broad support in society, the business community and among the social partners.

Swedish businesses and consumers must be able to rely on there being a secure supply of energy. This requires giving energy companies longterm rules and stable operating conditions. Constantly changing rules lead to insecurity and a lack of investment, which in turn lead to high electricity prices and a failure to make the necessary adaption in response to climate change.

In the light of these considerations, the Government sees the value of an energy and climate policy that enjoys broad support. Accordingly, and on the basis of this agreement, the Government now invites the opposition to join discussions on Sweden's future climate and energy policy.

## Three pillars

Sweden's energy policy – and hence also the basis of Sweden's climate policy – must build on the same three pillars as EU energy cooperation. The policy therefore aims to combine:

- ecological sustainability
- competitiveness
- security of supply

On this basis the Alliance Government is now presenting a way out of fossil energy dependence. Measures to promote renewable energy and more efficient energy use will strengthen Sweden's security of supply and competitiveness and will give Swedish research and entrepreneurship a leading role in the global transition to a low carbon economy.

## Objectives

The year 2020

- 50 per cent renewable energy
- 10 per cent renewable energy in the transport sector
- 20 per cent more efficient energy use
- 40 per cent reduction in greenhouse gas emissions

The latter target applies to the sector outside the European Emissions Trading System and is equivalent to a reduction in greenhouse gas emissions of 20 million tonnes compared with the 1990 level. Two-thirds of these reductions will take place in Sweden and one-third in the form of investments in other EU countries or in flexible mechanisms such as the Clean Development Mechanism (CDM). To achieve these targets the Government will present proposals for advanced economic policy instruments including a higher carbon dioxide tax and fewer or cancelled exemptions. Fuel taxes and other energy taxes may also be increased. Together, these advanced economic policy instruments will make a contribution corresponding to two million tonnes of reduced greenhouse gas emissions.

#### Long-term priorities

#### Heating

The use of fossil fuels for heating will be phased out by 2020. Significant improvements in energy efficiency should be made both in households and industry. District heating and cogeneration enable the use of energy that would otherwise be lost and as efficient use as possible of society's energy resources.

#### The transport system

The policy focuses on successively increasing energy efficiency in the transport system, breaking the dependence on fossil fuels and reducing the impact on the climate. Swedish industry could be world-leading in this transition, through the development of hybrid vehicles, electric cars, biofuels and other innovations. By 2030, Sweden should have a vehicle stock that is independent of fossil fuels.

#### Electricity

Swedish electricity production today is essentially based on only two sources – hydropower and nuclear power. Climate change is now in focus and nuclear power will thus remain an important source of Swedish electricity production for the foreseeable future. To reduce vulnerability and increase security of electricity supply, a third pillar that reduces dependence on nuclear power and hydropower should be developed. To achieve this, cogeneration, wind power and other renewable power production must together account for a significant proportion of electricity production.

#### Vision

By 2050, Sweden will have a sustainable and resource-efficient energy supply and no net emissions of greenhouse gases in the atmosphere.

## Supply

## 3.1 Fossil energy

 Natural gas, which is a finite fossil fuel, may be important for a transitional period – primarily in industry and cogeneration – thus coming under the European Emission Trading System (ETS). The infrastructure for natural gas can thus be developed on a commercial basis and in a manner that supports the gradual introduction of biogas. • Sweden should act to link one of the planned EU-funded pilot plants for Carbon Capture and Storage (CCS) to Swedish primary industries.

# 3.2 Renewable energy

- The certificate system for renewable electricity production will be further developed. A new target, on the level of 25 TWh, should be set for 2020. The long-term direction for the subsequent period is a continued gradual increase of renewable electricity production. The Swedish Energy Agency will be instructed to analyse and shape the way in which the higher level of ambition of the certificate system is to be implemented. In this context, the scope for extending the certificate system market to more countries should be considered.
- Sweden will make use of the opportunities under the Directive on the Promotion of Electricity produced from Renewable Energy Sources to allow other countries to fund investments in renewable electricity production. Practical models to enable such cooperation projects will be rapidly developed.
- A new planning framework of 30 TWh for wind power by 2020 will be established in accordance with the Swedish Energy Agency's proposals circulated for comment. 20 TWh of these will be on land and 10 TWh offshore.
- Authorisation procedures for wind power will be simplified by abolishing "double regulation". At the same time, municipalities will be allowed co-determination by requiring the approval of municipal councils for projects for which licences are sought under the Environmental Code (for example, projects involving large-scale plants or wind farms).
- The large rivers in the north of Sweden and other waterways specified by law will continue to be protected from development.
- The conditions for the development of off-shore wind farms should be particularly studied. This will include looking at network connection regulations, the competing support systems of various coastal states, the conditions for joint projects under the Directive on the Promotion of Electricity produced from Renewable Energy Sources, etc.

# 3.3 Nuclear power

- Applications for increasing power capacity will be assessed as previously.
- The transitional period during which nuclear power will be in use will be extended by allowing new construction at existing sites

within the framework of a maximum of ten reactors. It will be possible to grant permits for successively replacing current reactors as they reach the end of their technological and economic life.

- The Nuclear Phase-Out Act will be annulled. The prohibition against new construction in the Nuclear Activities Act will be lifted. An inquiry will be appointed to design nuclear power legislation that enables a controlled generational shift in Swedish nuclear power.
- An assessment of the impact on society of new nuclear power projects is to be undertaken in connection with the issue of permits. Security of supply will be one of the cornerstones of these assessments.
- Permits for new reactors will be assessed on the basis of legislative requirements for the best available technology.
- Central government support for nuclear power, in the form of direct or indirect subsidies, cannot be assumed.
- The nuclear liability legislation will be adapted to the updated Paris Convention and its Additional Protocols. This means that reactor owners must take greater responsibility for the risks of nuclear power. The issue of unlimited liability is being examined in connection with the inquiry on new nuclear power legislation.
- The inquiry that is looking into the removal of co-ownership of Swedish nuclear reactors will be continued.

# 3.4 Other matters

Peat is a nationally available energy source that is significant for Swedish security of supply. Under certain conditions and to a limited extent, peat can be used with a positive net climate impact. Sweden should take action to ensure that the Intergovernmental Panel on Climate Change (IPCC) and the EU regulatory framework reflect this fact. Peat must be harvested in a manner that takes great account of the landscape and cultural values.

# 4.1 More efficient energy use

 A five-year programme for more efficient energy use will be implemented, based on the Energy Efficiency Inquiry's proposals. The programme will be allocated an additional SEK 300 million per year, supplementing the present policy, and will be funded within the framework of energy tax revenue.

# 4.2 Efficient markets

- Sweden is to help complete the development of an efficient Nordic end-customer market and increasingly closer northern European cooperation on network investments.
- The bottlenecks in the Nordic electricity network and between the Nordic countries and the rest of Europe will be removed. Better conditions for the economically efficient development of off-shore wind farms will be created through improved coordination of electricity networks between the Baltic Rim countries.
- The heating market will continue to be developed, based on sound competition between different types of heating.
- Electricity networks will be developed to enable economically viable investments in new electricity production.
- Sweden will pursue a market-based international energy policy based on solidarity, and will take action to ensure the continued integration of the European market.

# 5. Policy instruments

- General economic policy instruments are fundamental for longterm energy policy; these include carbon dioxide tax, international emissions trading and certificates for renewable electricity.
- Economic policy instruments should be gradually developed and exemptions restricted as far as possible, taking into account the risk of carbon leakage and the competitiveness of the Swedish business sector.
- These policy instruments must be supplemented both by investments in technological development and information and measures to remove institutional barriers to renewal.
- Climate change issues must be met through international agreements and commitments, and as far as possible also through joint cost-effective policy instruments and efficient trade.

## 6. Research, development and demonstration

The Alliance Government has phased out earlier extensive investment grants to existing technology and instead strengthened measures for the development of new energy technology. These measures focus on areas

- that contribute to the achievement of the 2020 targets,
- where Sweden has a national position of strength, and
- where export potential exists.

Three strategic priorities were approved in the Research Bill:

- large-scale renewable electricity production and the development of electricity networks; this includes – in addition to wind power now being produced on an industrial scale – investments in new technology such as wave power, solar power and gasification of biomass
- electric drive systems and hybrid vehicles
- combined bioenergy plants for environment- and climate-adapted production of fuel and other products.

The research policy is therefore well in line with the development areas in this agreement: the traffic system, new renewable electricity production and more efficient energy use.

## 7. Progress review

A progress review will be conducted in 2015 to analyse actual energy balance and cost developments, as well as climate impact in relation to the targets and the state of knowledge regarding climate change. The progress review will not concern the policy's strategic direction but may lead to adjustments to policy instruments and tools.