



New EU Policy on Energy and Climate from a Swedish Perspective

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Gothenburg, February 3, 2026



Key points

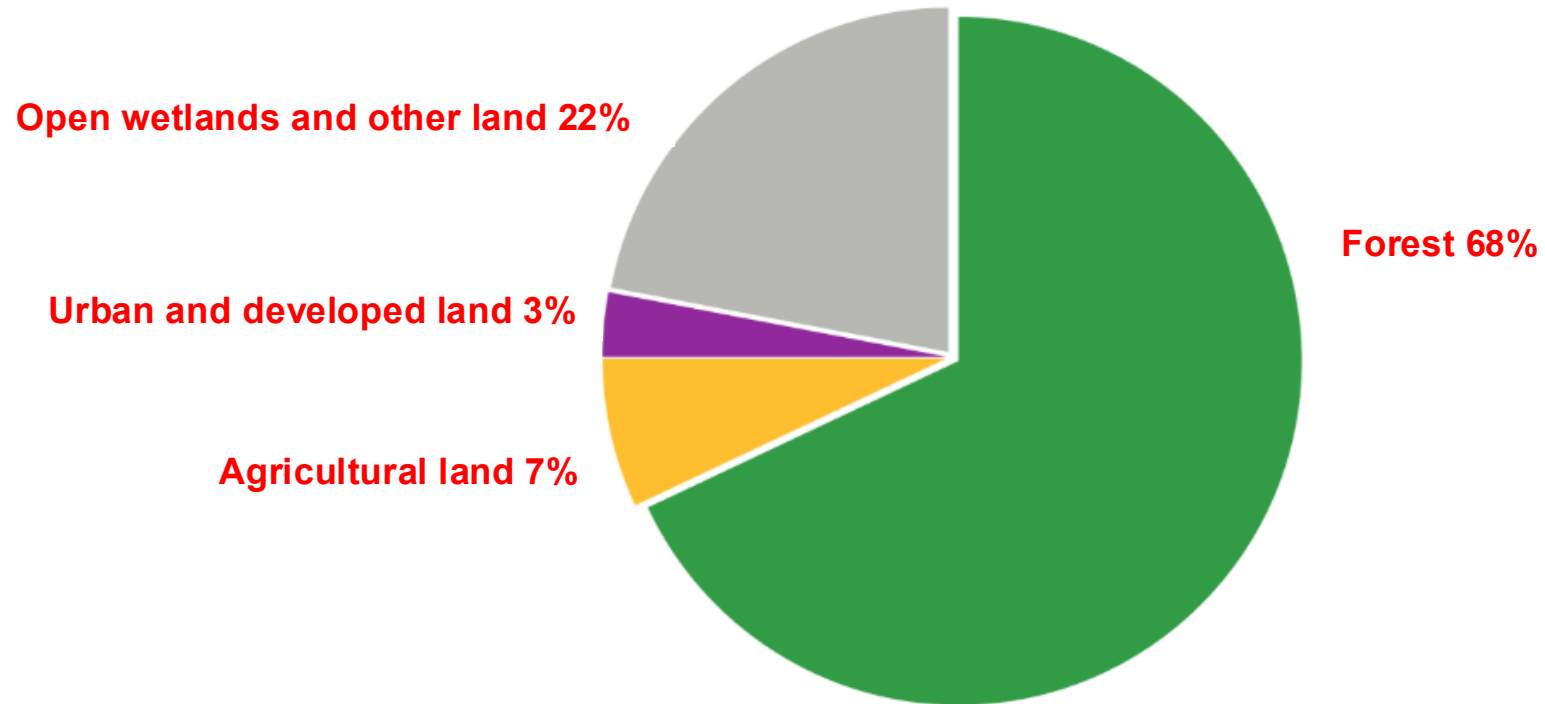
- ❖ Bioenergy in Sweden
- ❖ Examples of how EU-legislation impacts supply and use of biomass
- ❖ Latest national political developments



Bioenergy in Sweden

Sweden in figures

- **Total area: 45 Million hectare**
(As comparison: Germany 36 Millon, Finland 34 Millon and the UK 25 Million)
- **Forest area: 31 Million hectare**
- **Productive forestry land: 27 Million hectare**



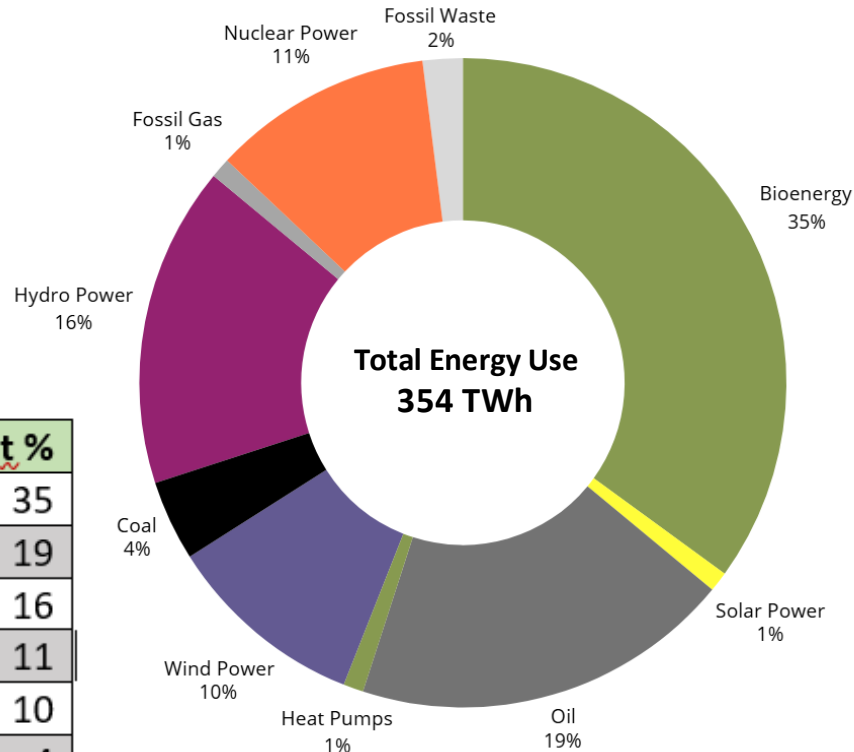
Source: SCB, 2024



Swedish Energy Use 2024

Bioenergy remains Sweden's largest energy source and accounted in 2024 for just over 35 percent of final energy use in Sweden, which is a reduction of about 5 percentage points from 2023, mainly due to the lowered reduction obligation. The total energy use was basically unchanged compared to 2023, and the largest increase was in wind power.

The share of renewable energy (bio, solar, wind and water) amounted to 63 percent.



Source: Swedish Energy Agency, 2025

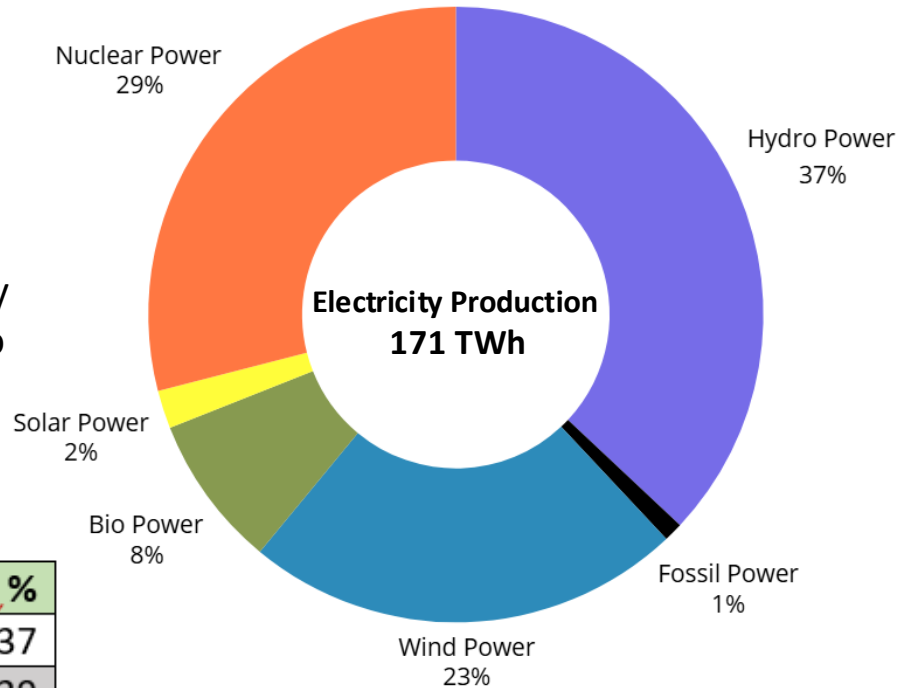
Energy type	TWh	Percent %
Bioenergy	123	35
Oil	67	19
Hydro Power	56	16
Nuclear Power	42	11
Wind Power	35	10
Coal	15	4
Fossil Waste	6	2
Heat Pumps	4	1
Solar Power	3	1
Fossil Gas	3	1
Total	354	100



Swedish Electricity Production 2024

Biopower remains the fourth largest power source and the fossil free share of electricity production amounted to 99 percent, which is a record.

Electricity production in Sweden increased by approximately 7 TWh compared to 2023, while electricity consumption increased by approximately 3 TWh to 135 TWh. Electricity exports amounted to approximately 33 TWh, which was an increase of approximately 4 TWh compared to 2023.



Source: Swedish Energy Agency, 2025

Power Source	TWh	Percent %
Hydro Power	64	37
Nuclear Power	49	29
Wind Power	40	23
Bio Power	13	8
Solar Power	4	2
Fossil Power	1	1
Total	171	100



Heat and Power in Sweden



- There are 266 District heating plants in Sweden (around 40 are planned or under construction) – There is District heating in 285 of 290 municipalities
- Total heat production 52 TWh (annual average) – 99% fossil free!
- 50% of all heat (90% in apartment buildings)
- 120 Combined Heat and Power Plants (CHP)
- Total installed effect is 4 200 MW (Nuclear Power 7 500 MW)
- Electricity production is 15 TWh (annual average) – 8-10 % of Swedish total electricity production
- Electricity production during 4000 hours per year (1 year = 8760 hours)

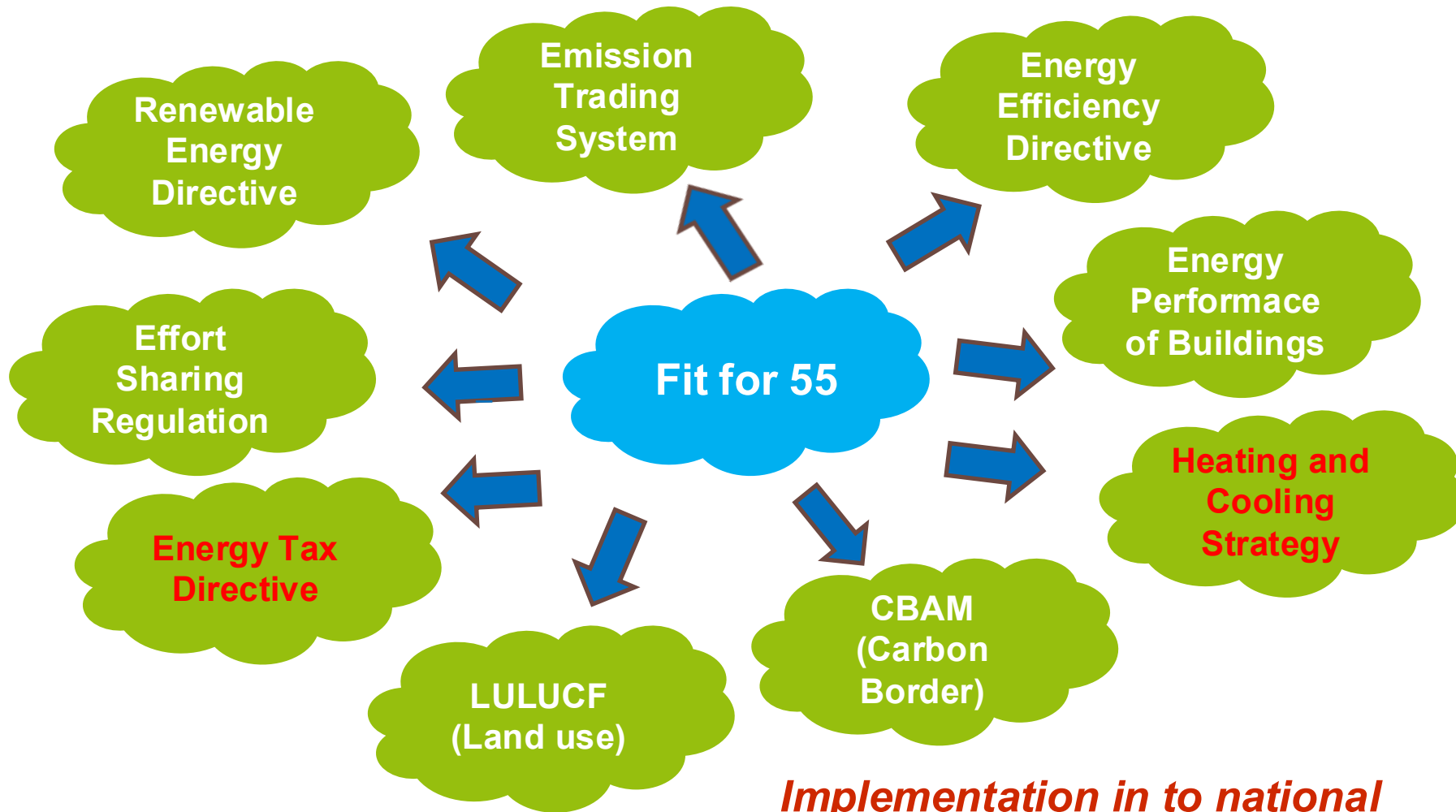




Examples of how EU-legislation impacts supply and use of biomass

Many clouds in the sky...

Fast development of new EU legislation



Implementation in to national legislation – How to do it?

More clouds...



New rules that can cause problems...



- Sweden is **very dependent on forestry and the forest industry**. Around 70 percent of Sweden's land area is covered by forest. Each year, approximately 90 million cubic meters of forest are harvested. Replanting takes place after logging.
- Rules and regulations that reduce logging volumes risk **decreasing the availability of forest residues** (mainly tree tops and branches, "grot") that can be used as bioenergy, i.e. Land Use (LULUCF), Nature Restoration Law (NRL), Renewable Energy Directive (RED III), Deforestation Regulation (EUDR) and the Habitat Directive...

Key identified risks for bioenergy:

- Restrictions on feedstocks (grot, roundwood, stumps, cascading) and new sustainability criterias.
- Increased administrative burdens to show compliance with different directives.
- Continued restrictions on crop-based biofuels and future restrictions for cars using biofuels are other threats.

These concerns must be handled in a constructive manner. "Gold plating" must be avoided!



Example: RED III – Renewable Energy Directive



- *The Renewable Energy Directive establishes common rules and targets for the development of renewable energy across all sectors of the economy. Energy accounts for 71% of total Greenhouse gas emissions in the European Union.*
- *The RED III aims to increase the share of renewable energy in the EU's overall energy consumption to 42.5% by 2030.*
- *Since the introduction of RED, the share of renewable energy sources in EU energy consumption has increased from 12.5% in 2010 to around 25% today. Sweden has the highest share of renewables in its consumption (63% in 2024). Bioenergy's share is 35%.*
- **The revised directive, RED III, was supposed to be implemented by May 21, 2025. In Sweden it was implemented on February 1, 2026.**
- **A lot of discussions om how to define *primary forests, old growth forests and highly biodiverse forests*. Increased administrative burdens.**
- **No special legislation for the cascading principle (there are no support systems that favor “burning of biomass”).**



Latest National Political Developments



A New Direction for Energy Policy

Bill published in March, 2024. The Swedish Government has changed energy policy to meet an increasing demand for electricity in the short, medium and long term, and to ensure a secure energy supply and an effective climate transition.

➤ **Planning objectives**

The planning of the Swedish electricity system will provide the conditions for delivering the electricity needed for increased electrification and to enable the green transition.

The Government currently sees that Sweden should plan to be able to meet an electricity demand of **at least 300 TWh by 2045**.

➤ **Security of supply targets**

The Swedish electricity system must have the ability to deliver electricity where the demand exists, at the right time and in sufficient quantities, to the extent that it is socio-economically efficient.

Unjustified barriers in the electricity system shall be removed in order to create the conditions for an efficient market that promotes competitive prices.

The reduction obligation for petrol and diesel

- The reduction obligation for petrol and diesel was reduced to 6 % biofuel per liter, from 30,5 % diesel / 8 % petrol on January 2024
- The change resulted in a 10 TWh reduction of bioenergy use in Sweden 2024.
- There was an increase the reduction obligation from 6 % to 10 % in June 2025 (both diesel and petrol).
- The reduction obligation is the single most important legislative tool for reducing emissions within the transport sector
- A public inquiry will present a proposal on new rules in May 2026.

District Heating and Cogeneration Strategy

- District heating and combined heat and power play an important role in the energy system of the future. It contributes to an increased robustness of the energy supply.
- A special aid scheme (up to 500 M€) aiming to increase biopower was introduced by the Swedish Energy Agency in December 2025. It will open up in February.





Bio-CCS/U Aid scheme

- The EC has given green light to an aid scheme of €3 billion 2026-2046 for Bio-CCS/U.
- A reverse auction support can be granted to the operator(s) who can offer capture, transport and storage of biogenic carbon dioxide at the lowest remuneration per tonne.
- First plant will open in 2028 (Stockholm Exergi BECCS)

Sweden – A new NATO member

- Strengthened defence capability. As a new member of NATO, Sweden needs to strengthen its energy self-sufficiency. Bioenergy offers substantial opportunities in this regard.
- *“To get rid of our dependence on fossil fuels, we need to invest massively in renewable energy and electrify large parts of our societies.”* (Swedish Defence Commission)



Upcoming conferences

April 16, 2026

**Svebio's Spring
Conference**

Stockholm, Sweden

September 24, 2026

Svebio's Fuel Market Day

Stockholm, Sweden



Svebios Spring Conference, April 24th 2024 in Stockholm



QUESTIONS?



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