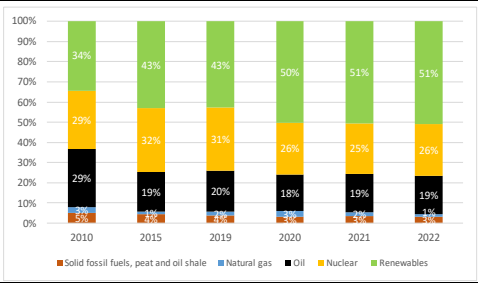




# REPowerEU Two Years on Sweden

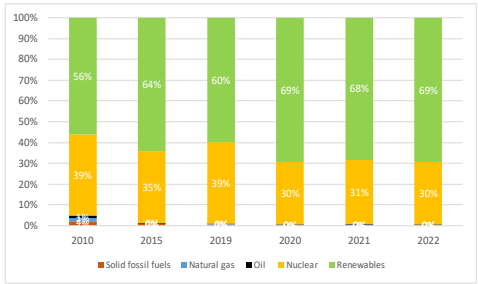
## Key energy figures

Graph 1: Energy mix



Source: Eurostat

Graph 2: Electricity mix



Source: Eurostat

## Save energy

### 1. KEY ENERGY SAVINGS MEASURES

Sweden is implementing energy efficiency measures to contribute to energy security further, such as:

- Sweden has reported an annual investment of SEK 100 million for the local energy advisory services to provide advice on potential energy saving measures, focusing mainly on behavioural changes.

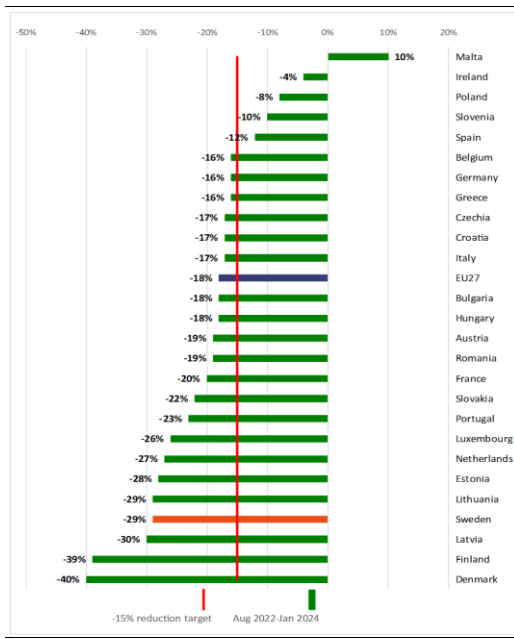
(1) Council Regulation (EU) 2023/706 of 30 March 2023, amending Regulation (EU) 2022/1369

- A new support scheme for energy efficiency in single family houses has been introduced, amounting to SEK 1200 million from 2023-2025.

### 2. GAS DEMAND REDUCTION

Sweden has reduced its gas consumption by **29%** in the period **August 2022 – January 2024**, above the decrease achieved at EU level (18%) and the 15% voluntary gas demand reduction agreed at the EU level <sup>(1)</sup>.

Graph 3: Natural gas demand reduction (August 2022 – January 2024)



(1) Cyprus does not use natural gas  
Source: Eurostat, DG ENER calculations

# Diversify energy supplies

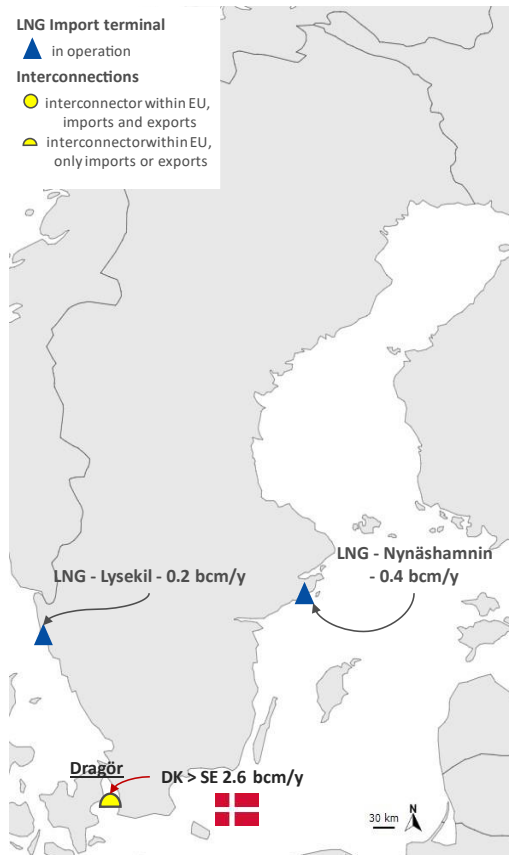
## 1. KEY ACTIONS

Sweden has a high level of energy security, largely due to its low dependence on fossil fuels.

## 2. GAS INFRASTRUCTURE DEVELOPMENTS

In 2022, natural gas accounted for only 1% of gross available energy and 0.1% of gross electricity generation<sup>(2)</sup>. This low consumption, combined with a diversified portfolio of reliable providers (Denmark, Finland, the Netherlands and Norway) contributes to the security of gas supply of Sweden. Following Russia's full-scale invasion of Ukraine, Sweden declared an early warning under the Gas Security of Supply Regulation on 21 June 2022.

Map 1: Cross-border gas infrastructure



Source: European Commission map recreation (based on ENTSO-G)

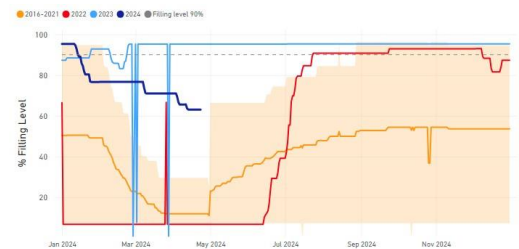
<sup>(2)</sup> Eurostat

## 3. GAS STORAGE

Sweden has **one small storage** facility (Skallen, 9mcm), corresponding to around 1% of its annual gas consumption in 2022, which is used to meet peak demand.

Sweden fulfilled its gas storage obligations last winter, reaching 95.3% by 1 November 2023<sup>(3)</sup>, and ended the winter season with a storage filled at 70.95% by 1 April 2024.

Graph 4: Storage levels in Sweden



Source: JRC calculation based on AGSI+ Transparency Platform, 2024

## Energy platform

- In the **four EU tenders** for joint gas purchase organised **under AggregateEU in 2023**, 113 companies across the EU expressed gas demand of over 54 bcm. 48 suppliers replied with bids of more than 61 bcm, resulting in **over 42 bcm of demand matched**.
- In the **first mid-term tender of 2024**, 19 companies expressed 34 bcm of gas demand for the next 5 years, with **97.4 bcm offered by suppliers**.
- According to the indicative data obtained through AggregateEU, companies from **Sweden** aggregated gas demand of **0.00 bcm** in 2023 under the EU Energy Platform.

## Produce clean energy

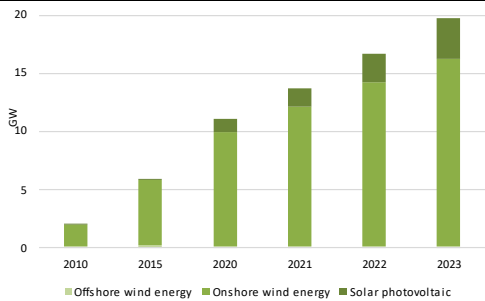
### 1. INSTALLED RENEWABLE ELECTRICITY CAPACITY, IN WIND AND SOLAR

In **2023**, Sweden installed around 3.1 GW of renewable electricity capacity, bringing the total to **40.7 GW** (vs. 34.5 GW in 2021).

<sup>(3)</sup> Regulation (EU) 2022/1032 of the European Parliament and of the Council of 29 June 2022 amending Regulations (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage.

In **2023**, the annual growth rate of installed renewables power capacity rose to **8.2%** compared to 8.0% in 2021 <sup>(4)</sup>.

Graph 5: **Installed solar and wind power capacity (in GW)**



- (1) The renewable power capacity data reflects the capacity installed and connected at the end of the calendar year.
- (2) In 2023, Sweden installed 2 GW of wind power capacity (vs. 2.1 GW in 2021).
- (3) In 2023, Sweden installed 1.1 GW of solar photovoltaic capacity (vs. 0.5 GW in 2021).

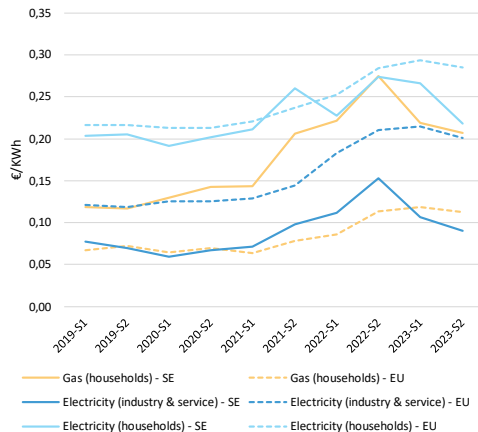
Source: IRENA, Renewable capacity statistics, 2024

## 2. ELECTRICITY INFRASTRUCTURE DEPLOYMENT

**Sweden requires new transmission grid investments and renewal of extensive parts of the existing transmission network.** In its 2022-2031 network development plan, Svenska Kraftnät has identified a need to construct around 800 km of new transmission lines and 25 new substations, and to renew 1 700 km of lines and 45 substations. Two of the largest network development projects are the West Coast programme (to eliminate bottlenecks on the west coast); and the North-South programme (with around 50 different projects to increase cross-zonal capacity between the SE2 and SE3 bidding zones by 2040).

## Energy price developments

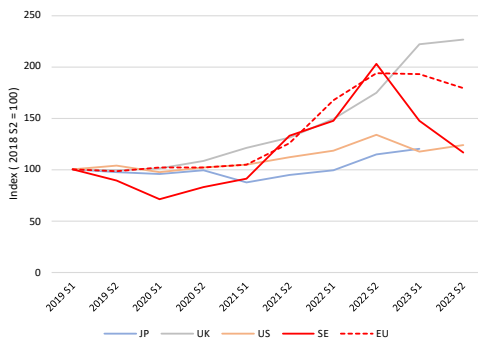
Graph 6: **Sweden's energy retail prices for households and industry & service**



- (1) For industry, consumption bands are I3 for gas and IC for electricity, which refer to medium-sized consumers and provide an insight into affordability
- (2) For households, the consumption bands are D2 for gas and DC for electricity
- (3) Industry prices are shown without VAT and other recoverable taxes/levies/fees as non-household consumers are usually able to recover VAT and some other taxes

Source: Eurostat

Graph 7: **Trends in electricity prices for non-household consumers (EU and foreign partners)**



- (1) For Eurostat data (EU and SE), the band consumption is ID referring to large-sized consumers with an annual consumption of between 2 000 MWh and 20 000 MWh, such as in electricity intensive manufacturing sectors, and gives an insight into international competitiveness
- (2) JP = Japan

Source: Eurostat, IEA

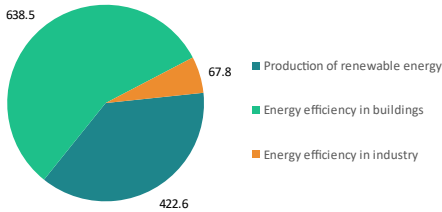
<sup>(4)</sup> International Renewable Energy Agency (2024). Renewable capacity statistics 2024

## Smartly combine investments and reforms in the RRP

### Amended Recovery and Resilience Plan (RRP), including a REPowerEU chapter:

- Approved by Council on 9 November 2023
- Total amount: EUR 3.4 billion
- Amount allocated for energy: EUR 1.1 billion
- Climate tagging: RRP: 43.7 %; REPowerEU chapter: 40 %

Graph 8: **Energy-related investments in the RRP (in EUR million)**



Source: European Commission

### Tangible results: reforms & investments

- **Energy efficiency:** 2 246 000 square meters in multi-dwelling buildings shall be renovated and the supply of highly energy efficient rental and student housing shall increase by 6 720 new dwellings, which will ease access to housing for individuals in the lower half of the income distribution.
- **Renewables, energy efficiency in industry and hydrogen:** The Climate Leap, an investment scheme which shall finance local and regional activities to reduce emissions of carbon dioxide and other gases affecting the climate. The Industry leap, an investment scheme aiming to decarbonise the industry.
- **Infrastructure:** Reform on speeding up the authorisation process in the electricity grid.

## Highlights of the National Energy and Climate Plan

- The **draft updated NECP** was submitted to the European Commission in July 2023.
- Member States are due to submit their **final updated NECP by 30 June 2024**, taking into account the Commission recommendations.
- For more information see the dedicated [webpage of the European Commission on the NECPs](#).

(5) <https://cohesiondata.ec.europa.eu/d/hgyj-gyin>

## Strengthening competitiveness with the Net Zero Industry Act

### Sweden remains highly dependent on non-EU countries for clean energy technologies (particularly for solar PV and wind components).

Sweden has a strong position in battery manufacturing with the first circular battery production gigafactory in Skellefteå. Other manufacturing plants for battery and battery components are in the pipeline, including on anodes, cathodes and separators. An expansion of the factory in northern Sweden is expected to increase battery production capacity to up to 60 Gwh per year. This expansion has received support through the InvestEU programme. Solar PV projects have also received EU funds and Sweden's manufacturing capacity of modules and cells is expected to increase in the coming years. Sweden is already a leader in the EU in mining and will play an important role in supporting the EU's supply of critical raw materials for the manufacturing of clean technologies such as batteries.

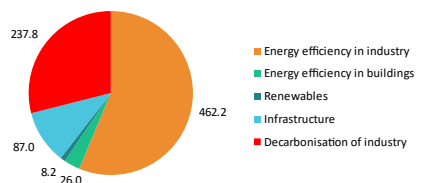
## Other EU initiatives

Cohesion Policy provides significant support to REPowerEU in all EU MS, with a total of EUR 89 billion worth of investments focusing on regions most in need in the energy transition.

Most resources concentrate on energy efficiency in the buildings sector (i.e. 720 000 dwellings across the EU will be renovated and public buildings will decrease their energy consumption by 6000 GWh/year) and on energy infrastructure (i.e. 4.9 GWh of additional electricity storage deployed), followed by renewables (e.g. 9.5 GW of additional renewable energy capacities installed).

Graph 9: **2021-2027 energy-related investments in the Cohesion Funds supporting REPowerEU**

Cohesion Policy energy related investments in SE: EUR 821 million



Source: Cohesion Open Data<sup>(5)</sup>