

# Industrials



Image: Swedish Insitute

## Reinventing the future of production

The industrial sector accounts for over 30 per cent of all global emissions. From steel to cement, chemicals to heavy industry, these hard-to-abate industries must be transformed for the global climate goals to be achieved.

Meeting the goals of Sustainable Development Goal 9 to develop resilient infrastructure and shift to sustainable industrialisation is possible through global commitment and collaboration across industry and geographical borders.

Sweden is already revolutionising traditional industries and advancing innovative technologies for industries of the future; carbon-free steel, emission-free cement, renewable energy technologies, and advanced manufacturing solutions are just part of the story.

Photo: Cemvision



# Sweden's Industrials sector

Sweden's industrials sector is powered by collaboration, sustainability and digital innovation, revolutionising how products are manufactured, distributed, reused, and recycled.

Industrial innovation is part of Sweden's DNA; powered by green energy, open collaboration, and cross-sector investment, industry gamechangers are already turning the impossible into the possible.

- Sweden has more global manufacturing companies per capita than any other country in the world
- Carbon-free steel has been developed by two separate Swedish companies and market-ready steel is expected in 2026
- Sweden's manufacturing sector ranks second in Europe and fifth globally for the highest robot density in manufacturing
- Sweden is home to nearly 50 test beds focusing on factory connectivity, reconfigurable systems, advanced robotics, recycling and packaging, and remanufacturing
- Swedish concrete manufacturers have implemented CCS technology producing concrete with around a 40% lower climate impact compared to standard concrete



# Industrials sector actors

The modern industrial sector needs cross-industry collaboration from actors with specific expertise and knowledge and the technology and solutions to meet the world's most pressing challenges. And critically, this collaboration and innovation needs investment to scale globally.

Sweden brings together local and global players from across industry, academia, and civil society to develop advanced solutions in some of the world's hardest to abate industries.

Below are a few key players in Sweden's industrials sector, read more about them and other companies in the comprehensive Company Directory found on [Sharing Sweden](#).



Photo: ABB

## ABB

A global leader in power and automation technologies that enable utility and industry customers to improve their performance while lowering environmental impact.



Photo: Atlas Copco

## Atlas Copco

A world-leading manufacturer of industry products that focus on delivering production and sustainability efficiencies.



Photo: Epiroc

## Epiroc

A partner for the mining and infrastructure sectors, developing and innovating safe and sustainable automation and digitalisation solutions for the global mining sector.



Photo: Inter-IKEA

## Inter-IKEA

The group of companies that connects IKEA franchisees with suppliers, insights and best practices on decarbonising supply chains and transforming materials.



Photo: Sandvik

## Sandvik

A global, high-tech engineering group providing productivity, profitability, and sustainability solutions for the manufacturing, mining, and infrastructure industries.

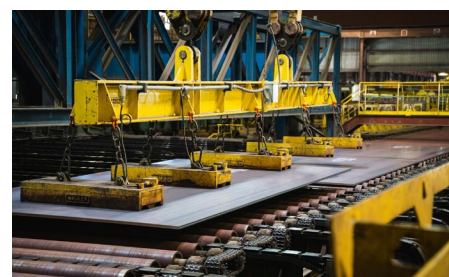


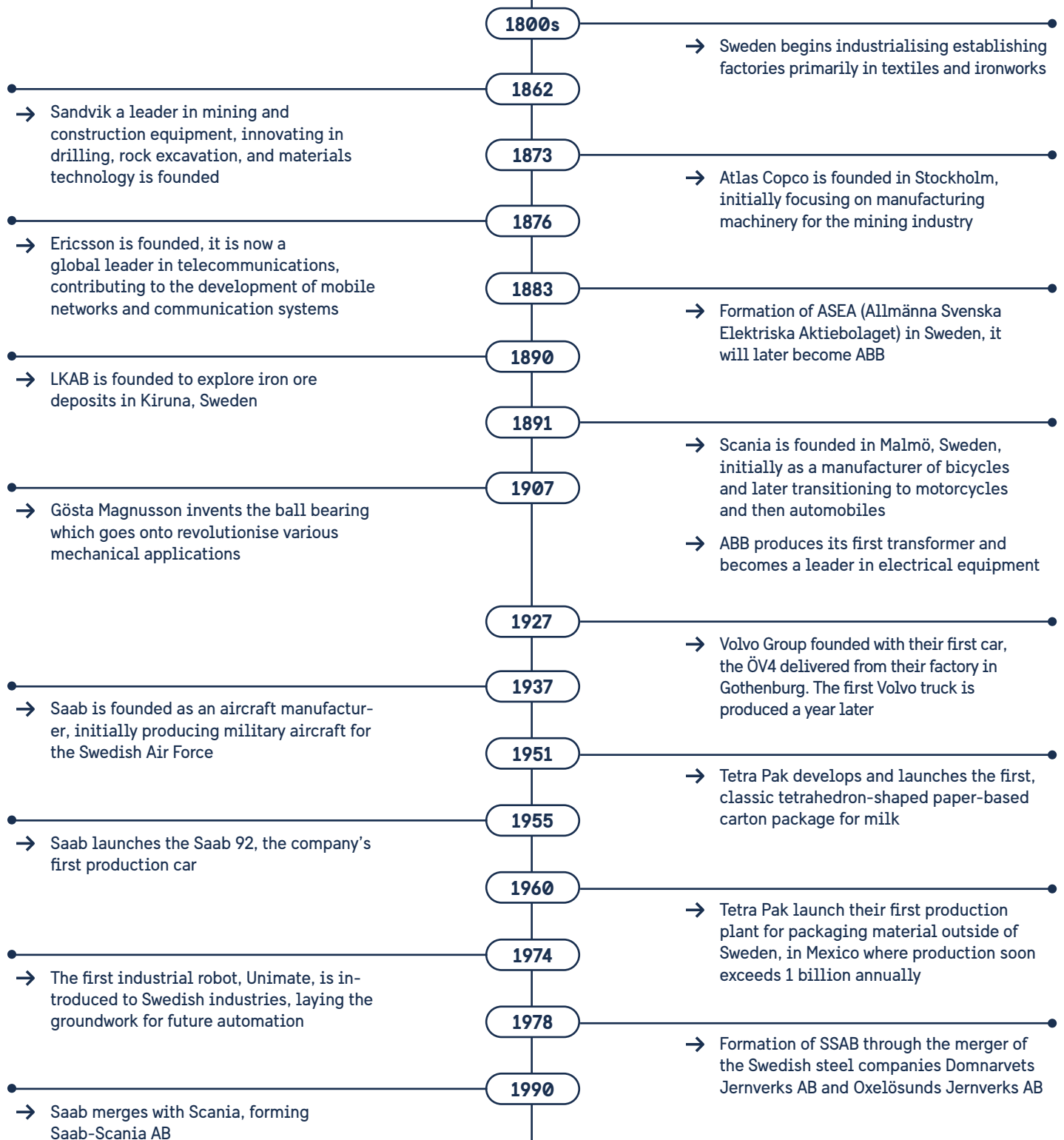
Photo: SSAB

## SSAB

A world-leading steel company with breakthrough fossil fuel-free production technology, the first true steel-making transformation for centuries.



## Milestones in Sweden's industrials history







1990s

- ABB pioneer automation and robotics technology, launching innovations in industrial automation

1997

- Saab is privatised and becomes an independent defence and aerospace company

1999

- The Swedish pharmaceutical company Astra AB merges with the British company Zeneca Group to form AstraZeneca

2000

- Scania becomes a major player in the heavy truck market, with a focus on sustainable transport solutions
- SSAB introduces high strength steel (HSS) products, enhancing performance for various applications

- AstraZeneca's Mölndal site becomes a key centre for research and development centre particularly in the fields of oncology, respiratory diseases, and biopharmaceuticals

2005

- AstraZeneca acquires the biotechnology company Astra Tech, expanding its presence in the medical devices and surgical products market

2008

- LKAB announces a long-term strategy for sustainable mining and production, focusing on reducing CO2 emissions

2013

- Sweden launches the Swedish Industry 4.0 Initiative, focusing on enhancing digitalisation in manufacturing sectors

2014

- SSAB becomes the world's first steel manufacturer to introduce a climate roadmap aiming for carbon-neutral steel production by 2045

2015

- The Swedish Robotics Strategy is launched aimed at increasing investment in robotics and promoting collaboration between academia and industry, aligning with Industry 4.0 principles

2016

- KTH Royal Institute of Technology launches the Digital Manufacturing Research Program, emphasising research on digital technologies and their applications in manufacturing

- Tetra Pak launch the world's first carton package made from plant-based materials

2017

- Epiroc is spun off from Atlas Copco and becomes an independent company, specialising in mining and infrastructure equipment

2020

- Stegra (formerly H2Steel) founded, using green hydrogen to produce high-quality green iron and green steel
- ABB announces its commitment to sustainability with plans to achieve carbon neutrality by 2030
- In response to the Covid-19 pandemic Sweden ramps up the adoption of AI-driven robots and automation solutions to meet the need for contactless and efficient manufacturing processes

2021

- SSAB, Vattenfall, and LKAB deliver the world's first fossil fuel-free steel using HYBRIT technology
- Epiroc introduce the battery-powered E-dumper, showcasing advancements in sustainable mining technology
- LKAB announces a plan to invest in a new underground mine and aims to produce fossil fuel-free iron ore by 2030

2022

- Research initiatives at Swedish universities, including Chalmers University of Technology, begin exploring the implications of Industry 5.0, focusing on the collaboration between humans and intelligent machines

2023

- Tetra Pak reach the milestone of selling 193 billion packages worldwide

- CemVision pilot scale production of the world's first 100% circular, fossil fuel-free, decarbonised cement clinker



# FAQ

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## What are the key industries in Sweden's manufacturing sector?

Key industries include automotive, machinery and equipment, pharmaceuticals, and steel production.

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## How is the Sweden's workforce adapting to modern manufacturing?

The workforce is increasingly focusing on skills in digital technologies, data analytics, and robotics, supported by educational programmes and vocational training initiatives.

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## How is Sweden fostering innovation in manufacturing?

Sweden has the unique quadruple helix, a framework for collaboration between industry, government, civil society, and research institutions and universities. This is facilitating cutting-edge research in manufacturing technologies and processes.

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## What is the manufacturing sectors contribution to Sweden's GDP?

The manufacturing sector contributes approximately 18-20% of Sweden's GDP. This varies slightly based on the year and economic conditions.

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## What is the export value of Sweden's manufacturing industry?

In recent years, the total value of manufactured goods exports has been around SEK 1,500 billion. Manufacturing accounts for a significant portion of Sweden's total exports, often exceeding 90% of total export value.

Sweden has a strong and successful manufacturing/ industrial engineering sector that accounts for roughly 20 per cent of the country's GDP or USD 117 billion, with advanced manufacturing accounting for approximately USD 40 billion of the total.

The automotive sector (including Volvo and Scania) accounted for about 15 per cent of total manufacturing exports in 2021.

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## What is the size of the industrials workforce in Sweden?

The manufacturing sector employs around 700,000 to 800,000 people in Sweden, representing about 12-13 per cent of the total workforce.

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## What sustainability goals are there for the industrials sector in Sweden?

In 2021 the Swedish government set a target for the manufacturing sector to achieve net-zero emissions by 2045, with interim goals for 2030.

## What level of automation does Sweden's industrials sector have?

As of 2021, Sweden had approximately 250 robots per 10,000 employees in the manufacturing sector. This is significantly above the global average of around 113 robots per 10,000 employees.

In 2022 approximately 60 per cent of Swedish manufacturing companies reported using some form of automation in their production processes. This includes both traditional industrial robots and collaborative robots (cobots).





# About Sweden

In global rankings, Sweden consistently ranks as a sustainability, innovation, and equality leader.

# 1st

**Global sustainability  
competitiveness index**

[View ranking](#)

# 2nd

**Most innovative  
economy**

[View ranking](#)

# 2nd

**Annual glass  
ceiling index**

[View ranking](#)

## Innovation and sustainability credentials

- Sweden aims to run 100% fossil fuel-free energy by 2045
- Sweden is supporting industrial decarbonisation and is home to one of the first major projects for hydrogen-based steel production
- The Swedish government has a target to reduce transport emissions by 70% from 2010 to 2030 and is supporting transport decarbonisation through electrification and biofuels
- Two Swedish companies have developed carbon-free steel. Stegra (formerly H2Steel) and Hybrit, a collaboration between mining company LKAB, energy company Vattenfall, and steel company SSAB
- Epiroc have transformed the mining sector with innovative, sustainable, and safe solutions including drill rigs, rock excavation, and construction equipment for surface and underground applications
- Ultra-low carbon, 100% circular cement has been developed and piloted by Swedish company Cemvision
- Stockholm's public transport network is primarily powered by low-carbon energy: 85% of the commuter and underground rail networks are electric while buses are largely powered by biofuels
- Automotive disruptor Einride have created world-leading digital, electric, and autonomous ship-ping technology
- Candela, a Swedish startup, is responsible for developing and launching the world's first electric passenger hydrofoil ferry, cutting route times and emissions
- Sweden has exceptional grid competency with continue investment to meet ongoing demand. Between 2024-2033 approximately 1,500 km of new transmission power lines and 30 new substations will be installed and renewal of over 2,500 km of power lines and about half of the existing 200 substations will be carried out by Svenska kraftnät

## A long history of sustainability leadership and action

- Sweden was the first country to pass an environmental protection act in 1967
- Sweden hosted the first UN conference on the global environment in 1972
- In 1991, Sweden was one of the first countries to introduce a carbon tax, and in parallel continued to grow GDP at a strong rate
- Sweden has an ambitious goal of becoming the first fossil fuel-free OECD nation by 2045
- In 2024, Sweden announced it's position as The Climate Matchmaker, matching climate challenges with solutions across local and regional value chains





Photo: Niclas Vestefjell / imagebank.sweden.se



# Sweden's support ecosystem

Sweden's support systems provide Swedish and international companies with information and connections to financial support, research and development opportunities, and strategic and practical trade and investment advice.

Here are some of the actors within Sweden's support system.

## Financial

**Swedish Energy Agency**

[Visit website](#)

**Vinnova**

[Visit website](#)

**Almi Invest**

[Visit website](#)

**Tillväxtverket**

[Visit website](#)

**Industrifonden**

[Visit website](#)

## Research and incubation

**RISE**

[Visit website](#)

**Base Batteries Sweden**

[Visit website](#)

**SISP**

[Visit website](#)

**Ignite**

[Visit website](#)

**KTH Royal Institute of Technology**

[Visit website](#)

**Lund University**

[Visit website](#)

**KAW**

[Visit website](#)

## Invest and export

**Business Sweden**

[Visit website](#)

**Almi Invest**

[Visit website](#)

**Swedish Energy Agency**

[Visit website](#)



Photo: Henrik Trygg / imagebank.sweden.se



# Team Sweden

Team Sweden is a network of government agencies and other actors primarily focussed on promoting Swedish exports and investments in Sweden. The aim of Team Sweden is to strengthen collaboration and efficiencies based on each organisation's expertise and resources, through working groups that cross sectors, regions, and countries.

## Swedish Institute

The Swedish Institute is a public agency that builds interest and trust in Sweden around the world. They work with Sweden promotion, cooperation in the Baltic Sea region, and global development.

## Media Assets

Find all assets related to the Swedish Institute at [sharingsweden.se](https://sharingsweden.se)

## Sweden on social media





## Almi

Almi Invest makes investments in the early stages of a startup. When the entrepreneurs want to raise capital to develop their business, Almi quickly assesses whether venture capital is the best option or if they should be funded directly.

[Visit website](#)

## Business Sweden

Business Sweden is jointly owned by the Swedish state and the Swedish business sector with a mandate and mission to help international companies gain access to the Swedish market and help domestic ones utilise it as a platform for expansion.

[Visit website](#)

## Embassies

Sweden has diplomatic relations with almost all States in the world. It has embassies and consulates in around half of these. Sweden's foreign representation consists of approximately 100 missions abroad and 350 honorary consulates. Embassies provide information about travelling or moving to Sweden, as well as information about doing business with or in Sweden.

## Enterprise Europe Network

The Enterprise Europe Network (EEN) helps businesses innovate and grow on an international scale. It is the world's largest support network for small and medium-sized enterprises (SMEs) with international ambitions. The Network is active worldwide, bringing together experts from member organisations that are renowned for their excellence in business support.

[Visit website](#)

## Export Credit Agency (EKN)

EKN (Export Credit Agency) is both a business partner and government authority tasked with promoting Swedish exports and the internationalisation of Swedish companies, by insuring companies and banks against the risk of not getting paid.

[Visit website](#)

## Regional investment promotion partners

Sweden's regional investment promotion partners help international companies invest, establish, and expand in Sweden. They offer services on a local, regional, and national level to identify business opportunities. There are 18 regional partners across Sweden.

## Swedish Agency for Economic and Regional Growth (Tillväxtverket)

The Swedish Agency for Economic and Regional Growth (Tillväxtverket) is a government agency under the Ministry of Climate and Enterprise. The agency works across three policy areas: enterprise policy, regional development policy, and rural policy. One of their primary tasks is helping to ensure that EU funds are invested in projects that promote regional growth and employment.

[Visit website](#)





## Swedish Chambers of Commerce

The Swedish Chamber of Commerce has offices in many countries worldwide. They offer guidance for doing business in Sweden, which rules and agreements are in place as well as general information about Swedish business.

[Visit website](#)

## Swedish Energy Agency (Energimyndigheten)

The Swedish Energy Agency (Energimyndigheten) works with the promotion of energy efficiency measures and investments in renewable energy technologies. They are responsible for leading society's transition to a sustainable energy system.

[Visit website](#)

## Swedish Export Credit Corporation (SEK)

The Swedish Export Credit Corporation (SEK) is a state-owned organisation that finances Swedish exporters, their subcontractors, and international customers. They strengthen the competitiveness of Swedish exports, with a vision to make the world more sustainable through increased Swedish exports.

[Visit website](#)

## Swedfund

Swedfund is the development finance institution of the Swedish state, with a mission to combat poverty by investing in and developing sustainable business in the world's most challenging markets. They work in combination with business, organisations, and authorities across the entire investment cycle.

[Visit website](#)

## Vinnova

Vinnova is Sweden's innovation agency, with a goal to open the way for innovation that provides sustainable solutions and strengthens Swedish competitiveness. They support collaborations and provide funding for projects that bring together cross-sector and cross-boundary partners.

[Visit website](#)