Sweden
IKEM - Innovation and Chemical Industries in Sweden

<table>
<thead>
<tr>
<th>Number of companies</th>
<th>Turnover</th>
<th>National contact</th>
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<td>2,521 (in 2017)</td>
<td>€32 (in 2017) billion</td>
<td>Magnus Huss</td>
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<td>Director General</td>
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<td><a href="mailto:magnus.huss@ikem.se">magnus.huss@ikem.se</a></td>
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Direct employees

| 51,300 (in 2017) |

CHEMICAL INDUSTRY SNAPSHOT

A massive exporter

The chemical industry (including oil & refinery, NACE 19, chemicals, NACE 20, pharmaceuticals, NACE 21 and the rubber & plastics sectors, NACE 22) produced 21% of total Swedish exports in 2018, worth approximately €31.9 billion (2018).

Underpinning many other industries

Acting as a foundation for economic development, our industry includes chemicals and chemical products, oil refining, pharmaceuticals, plastics and rubber products, paints and coatings, hygiene products, detergents, agrochemical and other chemical products. Basic chemicals include plastics in primary forms and organic and inorganic basic chemicals.
Providing many jobs

The industry provides about 51,300 full-time jobs in 2,521 companies.

HOW ARE WE DOING?

Strengths

- Well-educated and highly skilled workforce
- Good physical and social infrastructure
- Renowned environmental expertise
- Strong safety and responsibility culture (Responsible Care) in production and distribution
- Very good R&D centres, university and technical university infrastructure
- Highly integrated globally-competitive clusters and chemical parks
- High resource efficiency
- Strong collaboration with trade unions

Weaknesses

- High energy and logistics prices
- Reliance on raw material imports
- High labour costs
- Low acceptance of chemical industry and products by the Swedish public

OUR CONTRIBUTION TO A COMPETITIVE EUROPE

Building a bio-based economy

Sweden does not follow a sectoral industrial policy. However, the government has a national strategy for developing a bio-based economy, which includes research, development and innovation and coordinating the work of research funders, researchers business and potential customers.

Investing in research

Sweden is big in R&D, although a small country. Even though Sweden cannot measure up to the bigger countries in terms of money spent in total or the number of full-time equivalents, a different story is told when one accounts for the size of the economy and population.

Expenditures on R&D amounted to €16.2 million in Sweden in 2017. R&D expenditures have been increasing somewhat over the last couple of years, and represented 3.4% of the GDP in 2017. About 70 percent of research are funded by industry and commerce.

Links with other industries and research/universities

The chemical industry and the forest industry in Sweden are collaborating and in 2014 the strategic innovation program BioInnovation was established. This will hopefully lead to a closer collaboration in the future when cars, wind
generators, medical supplies, cables, colours and materials could be made with Swedish timber as a raw material.

Both the chemical and the forest industries are needed for that to happen. It is also important that the research is relevant to the business community and the surrounding community in order to be useful.

**Opportunities for Growth**

Growth in the Swedish chemical sector is low, despite high R&D activity. A better capacity to create innovation and collaboration between industry and R&D organizations are important to find and seize growth opportunities. The industry has identified innovation as the top common agenda for joint efforts. Policymakers and government are being addressed to find new growth opportunities and secure a good collaboration between government and industry.

An opportunity for Sweden is to build a bio-based economy. Sweden has a unique position to attract investment for this transition, since Swedish timber can be used as raw material.

**Smart specialisation**

As an enabler of all other industrial sectors, the chemical industry is highly integrated to other sectors, and smart specialization is a natural way for a small country like Sweden to compete and succeed amid global competition.

Reference: Based on official statistics from Statistics of Sweden.

Landscape of the European Chemical Industry Website:
http://www.chemlandscape.cefic.org/country/sweden/