



Norway

Norsk Industri

Turnover

€16.1 billion

Direct employees

13,000

National contact



Ole Børge Yttredal

Director General

Ole.borge.yttredal@norskindustri.no

CHEMICAL INDUSTRY SNAPSHOT

An integrated industry

In 2017 Norway's chemical, oil refining and pharmaceutical industry had sales of NOK 157.3 billion (€16.1 billion), of which NOK 94 billion were exports (59.8%). The sector employed 13,000 full-time equivalents, and generated NOK 37.4 billion (€3.8 billion) of added value. Official statistics treat chemicals, oil refining and pharma as a single industry.

Powered by oil and electricity

In an industrial economy dominated by petroleum and mechanical engineering, chemicals forms part of the nation's process industries.

Targeting exports

The chemical industry is export-oriented, and highly exposed to global competition. Though the industry benefits from access to hydro power and is environmentally-friendly, competitiveness is curbed by high wage costs and a strong currency – though falling oil prices have recently eased the pressure.

Between river and sea

Chemical plants are chiefly located along the coastline, close to hydroelectric power plants and deep, ice-free harbours. There are some local concentrations of chemical and other process industries – sometimes in industrial parks or in clusters operating across regional borders. International companies dominate the chemical and other process industry in Norway.

From basic to biotech

Norwegian chemical production centres upon basic inorganics, fertilizers, petrochemicals, polymers, and some specialties and bio-refineries. The pharmaceutical industry is relatively small.

Biotech start-ups are located around the universities in Oslo and Tromsø.

Universities are located in four of the 10 counties with numerous process industry companies. The University of Technology and Science in Mid-Norway has the closest links with the chemical sector.

HOW ARE WE DOING?

Strengths

- Unique combination of indigenous energy resources: hydropower, petroleum and renewables (wind power and biomass)
- 97% renewable electricity
- An electricity surplus yielding competitive power prices vis-à-vis continental Europe
- High energy and resource efficiency – expertise in reducing GHG-emissions
- Low environmental footprint
- Well-educated labour force with appropriate industrial skills
- Cooperation between companies and unions, and lean organisation
- Political stability
- NGOs and politicians back hydro-powered process industries
- Socially sustainable production with strong focus on health and safety
- Globally integrated and export intensive

Weaknesses

- High labour and living costs
- Energy prices are high compared to non-European rivals (notably China)
- Expensive feedstock
- Ageing population
- Location on the fringe of Europe
- Brightest people often drawn to petroleum sector (falling oil prices may alter the trend)

OUR CONTRIBUTION TO A COMPETITIVE EUROPE

Neutral enabling policies

Norway does not have an explicit sectoral industrial policy strategy: Government sets horizontal framework conditions (research, energy, education, infrastructure, environment).

A climate change advantage

The government-appointed expert panel on green competition published, in 2016, a broad set of policy recommendations including support to the development of process industries in Norway using renewable electricity. Government climate ambitions are aligned to those of the EU: the EU ETS price is the main climate-related tax on industrial activities. Norwegian process industries receive free emission and carbon compensations.

Funding for pioneering technologies

Enova, an enterprise managed by the Norwegian State, supports pilot and demonstration installations, and deployment of new technology. Environmental technology development and deployment are also supported, along with SME projects.

Supporting knowledge and innovation

Research policy is not highly industry-oriented, but does embrace biotechnology, climate and energy, nano and materials technology. Two of twelve National Centres of Excellence financed by Innovation Norway promote industrial innovation: Micro and Nanotech and Energy and Climate Change, and Innovation Norway backs one process industry business cluster. Universities are located in four of the 10 counties with numerous process industry companies. The University of Technology and Science in Mid-Norway has the closest links with the chemical sector.

Power for sale

A surge in development of renewable generation, coupled with efficiency improvements in Swedish nuclear plants, has raised the Nordic generation capacity surplus to 25 TWh. Electricity prices are expected to remain compared to Continental Europe.

Landscape of the European Chemical Industry Website:

<http://www.chemlandscape.cefic.org/country/norway/>