

NORTH MIDDLE SWEDEN



SUSTAINABLE STEEL REGION

INNOVATION AND CUTTING EDGE KNOWLEDGE

ESSA Mid-term Conference 2021-05-28

Jernkontoret



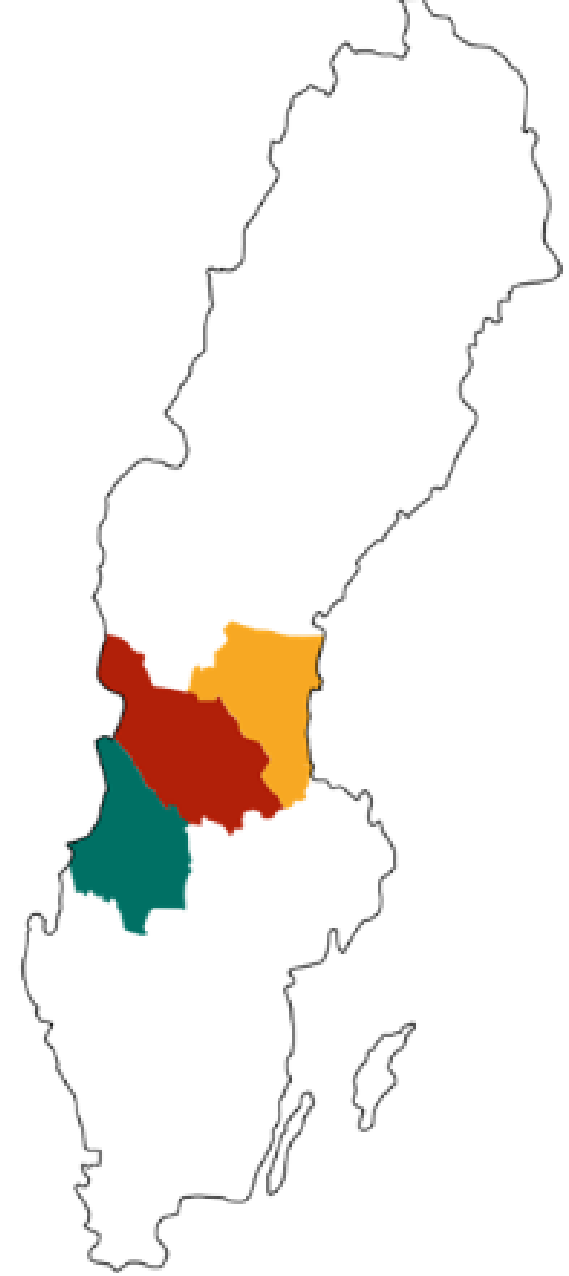
SUSTAINABLE STEEL REGION

- A regional innovation and cluster platform with focus on the excellence of advanced steel
- Focusing on innovations and cutting edge knowledge for a sustainable steel region in North Middle Sweden
- Supports development from the need of industrial transition
- Meet challenges and create possibilities for low carbon and circular economy in steel related industry
- A small and effective organisation with a world wide network of small and medium enterprises, steel industries, institutes, academia and public sector



SUSTAINABLE STEEL REGION

- The organisation established by the Swedish steel association and IUC, a resource for a competitive industry
- Connects different actors in the industrial system
- Guides small and medium enterprises to steel industry, research and innovation system, to create sustainable business with new products and services
- The steel industry is our strongest stake holder
- Supported by regions in North middle Sweden and steel related municipalities



SUSTAINABLE TEEL REGION

The Region

- Dalarna, Gävleborg och Värmland.
- Area: 63 968 km² (1,5 x Denmark),
- Population: 855 220 (0,15 x Denmark)
- Steel Industry: Sandvik, Ovako (x 2 sites), SSAB, Outokumpu (x 2 sites), Erasteel (x 3 sites), Böhler Uddeholm, VoestAlpine
- Totally 9 175 employees of which 5 903 Blue collar, 3 108 white collar och 164 executives.
- **The regional education system produces in average 25 % of #retirees annually.**



TEKNIKKOLLEGE

Teknikcollege is a network of competence centres in which companies collaborate with municipalities and providers of education in regard to technology oriented courses at different levels.

The initiative of Teknikcollege was taken by companies and social partners within the Swedish engineering industry in 2004. Now the social partners in the entire industry (The council of Swedish Industry) are active owners of Teknikcollege.

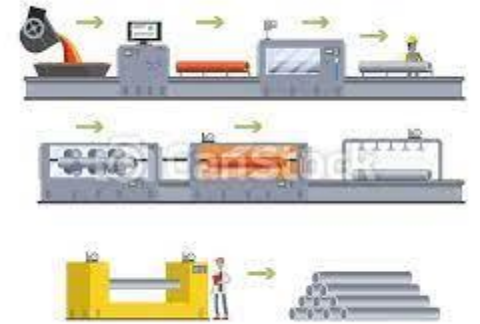
INDUSTRIRÅD – INDUSTRIAL ADVISORY BOARD

Leaders from companies, municipalities, regional covenants, employer organisations, unions, employment agencies, universities and other support actors have formed an industrial advisory board in order to cooperate on skills supply to strengthen the long-term conditions of the industry.

The Board will give preconditions and power to act on a strategic level in order to jointly improve the competence supply situation in the region. The main task is to create conditions for life-long learning and the future competence supply for the industry.



- Industrial programme
 - Process operator, (one of four orientations)
 - Maintenance technology, (one of four orientations)
- Electricity and energy programme
 - Automation, (one of four orientations)
- Technology programme
 - Production technology, (one of five orientations)



- Industrial Technology Base, Starting up in three municipalities.
 - Process operator
 - Maintenance technology



- Maintenance technician for the process industry. 2 years
- Automations engineer. 2 years
- Bergsskoleingenjör Metal and Workshop tech. 3 years
- Bergsskoleingenjör Metal and Workshop tech. 2 years



BERGSSKOLAN



- Process engineer. Starting autumn 2022.



National Level

(Main steel related universities and research institutes)

- Royal Institute of Technology - Stockholm.
- Universities of Luleå, Linköping, **Karlstad**, Örebro, Mälardalen, Chalmers (Gothenburgh), Skövde
- SWERIM (Kista, Luleå) – Steel and Metals Res. Inst.
- RISE (Research Institutes of Sweden)
- Jernkontoret (Branch org., R&D coordination, EU)



Jernkontoret

- North Sweden Mega Projects – “Save the world!”
 - HYBRIT Fossil Free Steel
 - H2green steel
 - LKAB H2 sponge iron process
 - Northvolt Li-ion battery production
 - World’s largest wind mill park

