## Sweden - Strengthening the role of Higher Vocational Education (HVE) for the green transition

Title of inspiring practice	Strengthening the role of Higher Vocational Education (HVE) for the green transition ("Förstärkning av yrkeshögskolans roll i den gröna omställningen")
Geographical area	HVE is a national education form that responds to national, regional and local skills demands. Most measures mentioned are implemented at the national level in Sweden.
Period of implementation	The initiative, involving several actions aiming at strengthening the role of HVE for green transitions, started at the beginning of 2021.
Rationale	HVE in Sweden is a post-secondary VET form that aims at meeting the skills demand of the labour market. HVE is naturally adaptive to the need for competences required to support green transition, but the government has taken several measures to further strengthen HVE's contribution.
	For instance, the contribution of HVE will be monitored as a part of the government's action plan for a circular economy. Furthermore, a commission of inquiry for the future of HVE is tasked to suggest how HVE can increasingly produce the competence needed for the green transition and if that type of education programmes should be given stronger priority in the selection process.
Scope of the practice	Continued Vocational Education and Training.
Educational level	HVET in Sweden is a post-secondary education form that leads to diplomas at EQF level 5 and 6.
Introduction and context	The key stakeholders involved in the practice are the Ministry of Education and Research, the Swedish National Agency for Higher Vocational Education (NAHVE), the HVE providers and the relevant labour market actors.
	The main driver that caused the introduction of this practice is the lack of skills labour in many Swedish economic sectors. Despite being a national trend, studies emphasise that this shortage of labour skills is even stronger in the regions where industry is in the midst of a green transition, as in Northern Sweden where large-scale production of, for instance, car batteries and fossil-free steel production is expanding rapidly. The government is also implementing strategies for a circular economy and electrification of the society. A common bottle neck is the need for more skilled workers to keep supporting the green transition and there HVE in Sweden has an important role to play.
	The objective of this practice is to increasingly contribute to meeting the skill needs for green transition of the industry and public sector and to put Sweden in the forefront of this transition.
	The initiative targets different groups. First, it involves the HVE providers choosing to offer training programmes and courses geared toward climate transition. Second, it targets potential students choosing those programmes and courses, and those willing to move to work in the expanding regions. Finally, it concerns the NAHVE promoting the field of green transition in different ways and the commission of inquiry investigating the future of HVE.
	The opportunities provided by digital learning, when it comes to reducing the climate footprint, should be taken into account when designing HVE for green competences/transition.

Digitalisation and sustainability were overarching priorities in the selection of training programmes to receive state funding.

## Key activities and outcomes

Among the key activities implemented, the NAHVE has decided to fund a large range of HVE training programmes and courses with the aim of producing skills needed for the green transition, such as energy technicians specialised in wind and solar power, technician sustainable battery production, engineering for sustainable construction etc.

Every education provider develops their own syllabuses and learning material, which is used for the specific training programme. The government's strategies for the circular economy and for electrification could serve as inspiration for other countries. The NAHVE method for analysing the labour market needs and calculating the need for study places could also be of interest for actors in other countries involved in skills analysis and anticipation. In particular, this method entails a regular contact with regions, industry representatives and other labour market actors to collect information on labour market needs. The analyses and quantitative targets deriving from this information is then used to select and fund new training programmes each year.

Following a governmental steering and the labour market need for skills, a larger part of the HVE programmes and courses on offer lead to skills for a sustainable development and a green transition. No quantitative follow up is available yet.

Although there is no specific evaluation plan, the programmes will be part of the regular monitoring of the government's strategies and, of course, also to monitor the skills gaps.

One obstacle found in the implementation of the practice is the difficulty of many sectors to translate the overarching skills needs to tangible competence descriptions, detailed enough to design a training programme around.

To overcome this obstacle, a collaboration between different ministries concerned, industry representatives and other relevant actors has been encouraged through the strategic collaboration programmes.

The need for cooperation and coordination is also often stressed as a means to overcome obstacles related to skills gaps. The government has appointed three different coordinators to enhance the societal transition in Norrbotten and Västerbotten regions, where new green industry is developed, for constructing a sustainable society and for the establishment of large plants for green transition of automotive industry.

The relative consensus about the need for climate actions and skills for the green transition and the flexibility of the HVE system has led to the relatively swift development and funding of new relevant training programmes.

No awards were received to the knowledge of the Ministry of Education and Research, but the HVE system is highly decentralised. The HVE as an education institution is recognised and appreciated by industry in general and by the students.

## Other information

Hundreds of programmes are available nationwide. In 2021, there were over 80 000 students in HVE and the same year almost 20 000 students achieved a HVE diploma.

The largest number of programmes are offered in the field of Business Finance, Administration and Sales, along with Manufacturing Technology. Other prominent areas include IT, Hospitality and Tourism, Health Care and Agriculture.

All programmes are at a post-secondary level and qualify for student financial aid from the Swedish Board of Study Support (CSN).

Some programmes charge tuition fees, although most of them are free of charge.

HVE is delivered in cooperation between education providers and those employers and industries affected by the programme. All programmes therefore have a strong emphasis on workplace training.

	Employers and industry representatives play a significant role in the planning of an HVE programme and influence on its content by taking part as lecturers, joining in projects, welcoming study visits and by offering work placements.  The NAHVE is responsible for the selection of training programmes for funding. This is done through a yearly application round with strong competition. The funding decision is limited to a maximum of five education starts.
Contacts and sources	Ministry of Education and Research About HVE on the Government's website: https://www.regeringen.se/regeringens-politik/kunskapslyftet/kunskapslyftet-2020-yrkeshogskola/ Information in English about the HVE system and the work of the NAHVE: www.myh.se/in-english/higher-vocational-education-yrkeshogskolan Information in Swedish on the 2022 priorities from the NAHVE, where sustainability has a strong role: www.myh.se/yrkeshogskolan/ansok-om-att-bedriva-utbildning/ansokan-program/prioriteringar
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