



Why VET is
important for
circular economy
principles in work
processes of
metalworking and
welding?

Welding is expanding

and a regulated occupation, which requires:

- solid and responsible initial VET provision,
- well balanced theoretical and practical training.

Initial VET plays a crucial role

in providing the basic knowledge and skills necessary for the autonomous and responsible performance in the work processes related to welding.

Continuing VET plays significant role in transitioning the skilled workers from the declining occupations in the metalworking (often with high negative environmental effect) to the emerging (sustainable) occupations and workplaces.

Making VET more attractive for the young people by creating VET as socially and ecologically responsible undertaking.

Making VET in the field of metalworking and welding more attractive for girls.

Enriching the content of curricula, making it more interesting, relevant and attractive for young people, fostering the motivation of students to learn.

Opening new space for the VET teachers and trainers to innovate, create and perfection their curricula and training practices.

New areas for VET teachers and trainers of competence development are needed

What are the
**benefits of
circular economy
principles** in the VET
curricula and
practices for the VET
schools?

How to provide VET in the field of welding in sustainable way?

Making sustainability as one of the background objects of key competence necessary for the performance in welding work processes: enabling good understanding of the underlying reasons, principles and value of sustainable work performance.

Using routine **work situations of welding** as examples to explain local, regional and global environmental effects of these situations.

- Teachers and trainers can provide the information about the environmental implications of the different choices of welding regimes and approaches.
- VET students and apprentices can also be given a task to evaluate and measure such implications.

Extensive **integration of the different aspects of environmental sustainability in the learning contents of subjects and modules:**

- product life cycle,
- circular economy,
- energy consumption,
- pollution and emissions.

Creating and raising the awareness and critical attitudes of learners in evaluating the fit of learning workplaces and work processes to the requirements of sustainability and circular economy. Creating **awareness of learners/apprentices** on how the issues of sustainability and environment protection are lived and addressed in the everyday activities of the companies (negative examples can also be a useful resource for learning here).

Establishing **holistic sustainability policy inside the VET school**, which could cover usage of renewable energy sources, energy conservation, local scrap metal and consumables recycling practices, greening of campus and other measures by involving VET students and apprentices (*Pavlova 2017*).

Practicing sustainable way of acting **in the practical training and work-based learning situations** (<https://blog.perfectwelding.fronius.com/en/sustainable-welding-in-practice/>).

Developing **innovative vocational training scenarios** in the field of sustainable welding and metalworking by engaging VET schools, enterprises, professional organizations ([https://greenovet.eu /](https://greenovet.eu/)).

Practicing **extra-curricular activities in promoting sustainable development at the local level**, e.g. students could contribute to the different local initiatives of environment and nature protection by producing different needed welded products of constructions (*Pavlova 2017*).

Pavlova 2017
<https://blog.perfectwelding.fronius.com/en/sustainable-welding-in-practice/>
[https://greenovet.eu /](https://greenovet.eu/)
This factsheet has been designed using resources from Flaticon.com