Lifelong Learning Programme

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GREEN STAR
GREEN skills for enterprises Sustainable Training for Automotive suppliers clusteR

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GT VET

Eco-innovation
From Large Enterprises (GT VET) to SME´s in Clusters (GREEN STAR): A Neglected or an Emerging Relevance?
Background, Relevance, Recommendations

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Relevance of Green Skills

- European Relevance:
  - Lisbon and Europe 2020: Sustainable Development Strategy, sustainable growth, resource efficient Europe,
  - Green Economy as a driver of growth, as a competitive advantage
  - Circular Economy

- Industry / Company Relevance :
  - Resource efficiency
  - Image and market factor
  - Corporate Social Responsibility

- Worker´s Relevance :
  - Upskilling
  - Workplace innovation
  - Health and Safety
  - Private life
  - Future of the children

Affected Jobs by Green Skills

Schmid, CEDEFOP World Congress on TVET, 13-16 May 2012

From GT VET: Greening Technical VET

Sustainable Training Module for the European Steel Industry

to

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- From a global and large scale industry (and single production companies of the steel industry)
  to **small and medium sized regional enterprise clusters and value chains**
- From electric and mechanic technicians (maintenance) to **heterogeneous occupations** along the value chain

Outcomes of the Transfer from GT VET to GREEN STAR

- Useful module for large and small and medium sized enterprises
- Matching demands of the industry with the VET system
- An industry-driven European training module, focusing on skills for environmental sustainability
- Transfer results to other heterogeneous professions
- Use the example of the steel and automotive industry to transfer results to other production industries.

Added value of the training module

- Focus on the workplace experience, implications
- Own responsibility, own project planning and conducting
- Improvement of context knowledge, comprehensive approach for learning and training, generic understanding, identification of parameters for change
- Fostering workplace innovation (bottom-up)
- Improvement of cooperation between company and VET systems
- “Learn-learn-learn” situation for trainees, trainers/teachers, workers/management of involved production sites

General Assessment

The sub-modules fit to the training program of the companies and regions and create a clear added value:

- The module improves through its activity based approach the awareness and skills for self-reliant work, reduction of resources and saving of money
- The training module could be seen as a link for short-termed reaction to technological changes.

Assumptions / Future Relevance

There is a need for a European training module to empower green awareness and green skills in technical apprentices and skilled workers, because we assume

- greening of industry production will remain a mega-trend.
- similar skills required for industry workers, irrespective of the branch, the national system and pathways of vocational training.
- in future national training systems for blue collar workers must comprise green skills.

GREEN STAR Example

The GREEN STAR approach could be seen as an example for:

- Promotion of all forms of eco innovation, including “eco-innovation not technological”
- Promotion of partnerships between businesses, knowledge and skills for green entrepreneurship
- Better use of the role of clusters in support of eco-innovative SMEs.

GREEN STAR Approach

GREEN STAR approach is:

- Overcoming systemic obstacles that hinder collaboration in the value chain between sectors and between countries and business
- Start-up cooperation facilitating the creation of models of service businesses and the reuse of materials, products and waste
- Promotion of intersectional collaboration in order to promote circular economy
- Promotion of a greener European internal market
- Facilitating access to international markets by green entrepreneurs
- Promoting the adoption of technologies for efficient resource management in partner countries through cooperation with European SMEs.

Policy Recommendations: "Green Skills Relevance for the Competitiveness of the European Industry" (I)

- Application of the green content to the **whole learning chain**:
  school -apprenticeship – higher technical education – continuous training – company
- Improvement of the relevance of **cross-sector cooperation** between big companies and SMEs
- The given possibility and added value of **transfer of innovation** processes (from GT VET to GREEN STAR)
- The need to **combine technological** improvement for greener production processes and products **with human resources improvement** of green skills
- The relevance of the **work-based learning approach** to facilitate the transfer of knowledge immediately applicable to production processes.

Recommendations: "Green Skills Relevance for the Competitiveness of the European Industry" (II)

- The relevance of **regional clusters and partnerships**, within and beyond single industry sector clusters: Triple Helix (public authorities, companies, research institutions) plus customers, civil society
  → in a common **social innovation process and regional eco-system**
- To be concrete: Involvement of **committed, concerned and capable stakeholders** in order to achieve **impact**: direct target groups (e.g. companies) plus stakeholders of the learning chain (schools, apprenticeship institutions)

European Platform

Based on the results of GREEN STAR and the personal experience of the involved project partners the partners of GREEN STAR underline the necessity of funding for innovation development and transfer activities:

Based on regional and **cross-sectoral cooperation in Eu**rope, embedding all the relevant **regional actors and stakeholders**, a European platform for exchange, research and development has to be provided.

Social Innovation Process

Companies, employers associations, training institutions and regional authorities

- working together from the beginning of the project / initiative
- guaranteeing
  - the integration of practical relevance
  - the transfer of the results within the regions (within implementing “action plans”)

Supported by science.