Lifelong Learning Programme

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Green Skills along the Value Chain of the Automotive Suppliers Industry

Final Results

GREEN STAR

GREEN skills for enterprises Sustainable Training for Automotive suppliers cluster

GREEN STAR
Leonardo da Vinci TOI n. 2013-1-IT1-LEOO5-03983
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GREEN STAR Partnership

The Consortium coordinated by Confindustria Veneto SIAV consists of a group sharing a common interest in providing SMEs and workers/apprentices with knowledge and experiences for the upskilling of technical green competencies contributing to sustainable innovation. Sustainable transfer and implementation was taken into account right from the beginning of the project by setting up a kind of eco-system for a social innovation process (see Howaldt and Schwarz 2010; Schröder 2012). This means that in the represented European regions companies, training institutions and regional authorities were working together since the beginning of the project guaranteeing not only the integration of practical relevance but also the transfer of the results within the regions (within implementing "action plans"). Beside the integration of the know-how of the coordinator of the blueprint GT VET (Technische Universität Dortmund - sfs) additionally a European institution (EVTA) were integrated to cover the European perspective and transferability.

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Abstract

"Green Skills" are seen as a relevant qualification for the European industry, not only for the sake of the environment but also as a European competitive advantage. Against this background GREEN STAR transferred the *"GT VET - Greening Technical Vocational Education and Training"* blueprint (a steel industry driven sustainable European training module) to the automotive suppliers industry. Two submodules of GT VET were *adapted* ("Energy") or *modified* (Waste"), and an additional submodule ("Life-Cycle Assessment") then completed the GREEN STAR training module of "Green skills along the value chain of the automotive suppliers industry". The transfer of innovation from a big company training module to SMEs and their regional clusters, from the steel industry to the automotive supplier industry, and from mechanical and electrical maintenance occupations to heterogeneous other professions was thus conducted.

GREEN STAR shows on the one hand the necessity of the best available technologies for energy reduction, the importance of reusable and biodegradable materials, but also on the other hand that this has to go conjointly with a human resources improvement of green skills and the awareness of green production and behaviour. It also embeds the involvement of the customers and their purchase decisions by improving their green awareness and the application of the green content to the whole learning chain (school - apprenticeship - higher technical education - continuous training - company).

According to the results of GREEN STAR and the personal experience of the involved project partners, the authors underline the necessity of funding for innovation development and transfer activities based on regional and cross-sectoral cooperation in Europe, embedding all the relevant regional and European stakeholders, establishing a European platform for exchange, research and development.

The outcomes and results of GREEN STAR and GT VET are publicly available through the websites: www.greenskills-project.eu, www.gt-vet.com.

Venice / Dortmund September 2015

European Green Economy Strategy

Today, we stand at the threshold of a great transformation that is taking place in different dimensions at the international, national and local levels. The realisation that traditional growth strategies will only get us so far has inspired new thinking about the way in which modern societies deal with financial, climate and resource scarcity issues. New energy technologies and financial innovation have opened up new industrial and economic possibilities. Smart sustainable initiatives have led to job creation, innovation and local sustainable entrepreneurship. Highly efficient technologies and an intelligent cycle of materials coupled with workers reskilling and upskilling can stimulate a shift in our energy production, transportation and urban development.

It is widely recognised that the opening to a green economy would lead to new frontiers in labour markets, highlighting the great growth prospects and the possibility of eco-Europe becoming a world leader in the industry sector, consequently creating opportunities for new jobs of quality. The European Parliament, on 12 December 2013, in its resolution "Eco-innovation - and jobs growth through environmental policy" proposed special recommendations for a socially responsible transition towards high-quality green jobs by. Member States should make use of the European Social Fund for programmes aimed at up-skilling, training and retraining employees. The Commission and the Member States are invited to intensify their actions for the full implementation of the proposal in the context of the 2020 Strategy and to build a common vision on the different strategic opportunities that eco-innovation provides for the future. At national level Member States are advised to develop strategies to align the skills of the workforce with the opportunities offered by the sector of green technology. This is by examining the different sub-sectors and their needs for skilled labour, recommending promotion of the creative and innovative potential of young people to contribute to sustainable development. Cooperation between Ministries and politics at any level is encouraged also to periodically monitor the implementation of relevant policies and to support regional partnerships for growth, innovation, employment and equal opportunities between women and men as well as cross-border initiatives.

The European Commission supports a plan of action invoking green

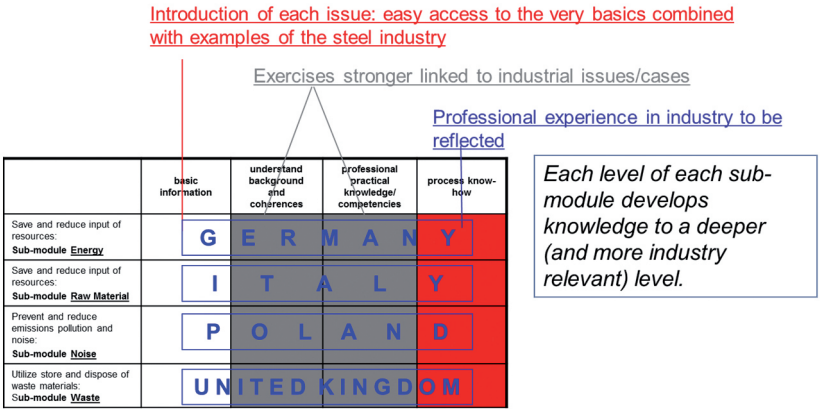
SMEs about the possibilities of growth and the reduction of production costs from the transition towards a green and resource energy efficient economy (European Commission, 2015). It lays down a set of objectives and initiatives taking into account the results obtained from the public consultation (Green Action Plan held in the fourth semester of 2013) to be implemented at European level under the 2014-2020 multiannual financial framework. The Green Action Plan for SMEs proposes to exploit the business opportunities that the transition to a green economy offers, by improving productivity and driving down costs in European SMEs through resource efficiency.

According to the International Labour Office "Skills for new green jobs and adaptation to greener work methods are a concern for many constituents and remain a focus of analysis. […]. A broad range of qualifications is needed for technologically challenging jobs, which are mostly at the intermediate and higher skill levels. Anticipation of future skill needs and forward-looking training policies are a necessity in order to meet the skills demand of the sector. There is a need to update industrial and occupational classifications systems. Education and training policies are important for empowering women and helping them access jobs in renewable energy along the whole value chain, and not just in relatively lower-paid jobs in manufacturing and assembling." (ILO, 2014)

GREEN STAR: Objectives and Context

Against this background, the general aim of the GREEN STAR project is to contribute to the improvement of green skills based on the cooperation between Vocational Education and Training (VET) and the labour market. This was done by using an already existing training program (GT VET), focusing on upskilling existing occupations with green skills, within a regional cluster approach and small and medium sized automotive suppliers industry and the related production and value chain.

The GREEN STAR project transferred, modified and advanced the European training module "Greening Technical Vocational Education and Training (GT VET)" (Schröder/Kaletka 2013) – already developed within a Lifelong Learning Development of Innovation (DOI) project funded by the European Commission. The GT VET training module for the acquisition and development of green skills for electrical and mechanical technicians in the iron and steel sector consists of four sub-modules, each was trained on four subsequent learning levels (see figure below).



GT-VET Sub-modules and Learning Levels

When using the term green skills, GREEN STAR focuses on environmental sustainability. But there are clear benefits in terms of social and economic sustainability, too. As skills are acquired and then applied by individuals in different contexts, skills become green when they are applied in green contexts.

Referring to the O*NET Classification (Dierdorff et al. 2009, p.11/12) GREEN STAR is focusing on new green skills within existing occupations and working activities (green increased demand for occupations), embedding both generic and technical skills. This is in line with the statement, that "many existing occupations and industries will experience greening changes to tasks within their jobs, and this will require adjustments to the current training and qualification frameworks for these occupations" (OECD, CEDEFOP 2014 – Highlights).

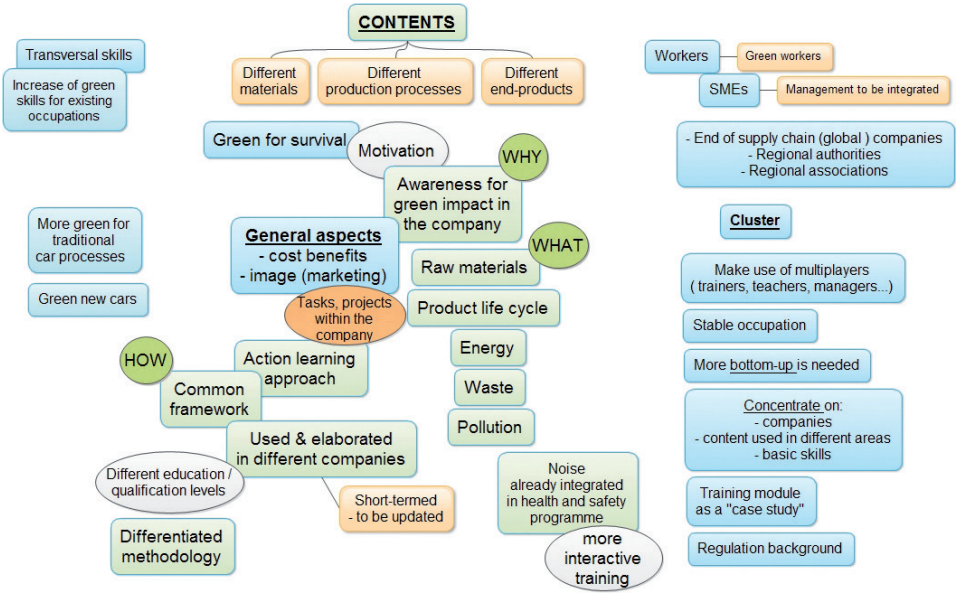
Green skills for technical VET in the automotive supplier industry are technical skills and appropriate awareness which prevent and reduce negative impacts on the individual and environment (neighborhood, employees, air, water and ground) caused or initiated by operations and work in and/or around production. Green skills aim to equip skilled workers with competencies for ecologically and environmentally sustainable behaviour whilst maintaining high health and safety standards.

Since its design, the GREEN STAR project has included the involvement of small and medium-sized enterprises in the definition of contents, training methodologies and the adaptation to the VET systems implemented in the various EU countries. These companies are placed in more or less formal regional clusters in three European regions (Veneto, Cluj and the Basque Country) seen as an economic and educational framework and cluster for the green skills development and improvement. The regional and cluster related collaboration is very important, because of laying the ground for an efficient (e.g. not every SME has to developed and train green skills) and effective (e.g. better quality by combining resources and having a common skills development strategy) training of the transversal green skills.

From GT VET to GREEN STAR

GT VET developed a European training module integrating technical VET programmes with a specific focus on green skills and on sustainable innovation. The contents and structure of the model, subdivided into four key learning units (energy, raw materials, noise pollution, and waste treatment), have been successfully tested and integrated into continuous training programs implemented by the companies involved in the project. The quantification of learning results into ECVET credit points has laid the necessary foundations for adaptation to the reference VET systems and for the transfer of results to other technical professions and industrial sectors.

Generally planned and seen as a blueprint for other industrial professions and sectors the challenge was to transfer and further develop the GT VET training module and concept to the automotive suppliers industry within GREEN STAR. It is a challenge because it is a change 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**.



Therefore, GREEN STAR has a very different and more heterogeneous background for the green skills development involving science, regional authorities (municipalities/chambers), companies and training institutions as well as the European Vocational Training Association.
Together with the relevant partners of GT VET a Focus Group of GREEN STAR delivered the essential context for the development of the GREEN STAR automotive suppliers training module (see figure above).

Taking into account the results of the Automotive Cluster Driven Analysis of Giovanni Bernardi (University of Padua) it became evident, that
- Green skills are no apparent topic, especially in the blue collar sector in the cluster
- Human resources in general are seen as critical (skill shortages, updating of skills)
- Main dimensions for green skills are: energy reduction, transport, materials, emissions (air/water), waste, recycling.

The main challenges are derived from the very different industrial and production background of the automotive suppliers and the given supply chain production. In general the **"SME culture"** is very different to the resources and possibilities of big global companies, mainly characterised by limited and specialised personnel and knowhow resources, a more reactive than proactive personnel development as well as by an on demand (technological) development.

Another challenge is the value/production chain and the different companies, specialised on different parts for the automotive assembling, different technologies and production processes. This makes it difficult to develop "one size fits all modules" guaranteeing equal standards for all the companies.

Drawn deductions of the cluster analysis for the module development are:
- concern about awareness rising of the companies and the workers for green skills
- a clear orientation at the cluster perspective and value chain
- a demand driven "learning chain"
- a consideration of the impact on the (regional) VET systems
- an integration of the assemblers perspective.

Therefore the GREEN STAR module development became a cluster driven and coordinated training approach with companies of the regional clusters integrating module improvement. The contents of the module are demand driven by defined prior environmental issues and recent practical requirements. Awareness raising and specific didactical and pedagogical measures were improved on the basis of the GT VET module.

The main elements of the GREEN STAR approach and methodology

GREEN STAR Approach: SME Cluster Related Development Setting
Main EU recommendations for vocational education and training are delivering the general basis for the module development of GREEN STAR, such as improving company competitiveness by work based learning to increase workplace innovation (Cedefop, 2011).

The particular module development and improvement took part on the background and under participation of the regional clusters of small and medium sized enterprises, characterised by a heterogeneity concerning the used materials, production processes, and end products. Therefore different occupations are also concerned leading to a concentration on transversal skills and the improvement of existing occupations by green skills. Concerning the cluster approach the management of the SMEs and regional authorities have to be involved; the end of supply chain (global companies) has to be encompassed as well.

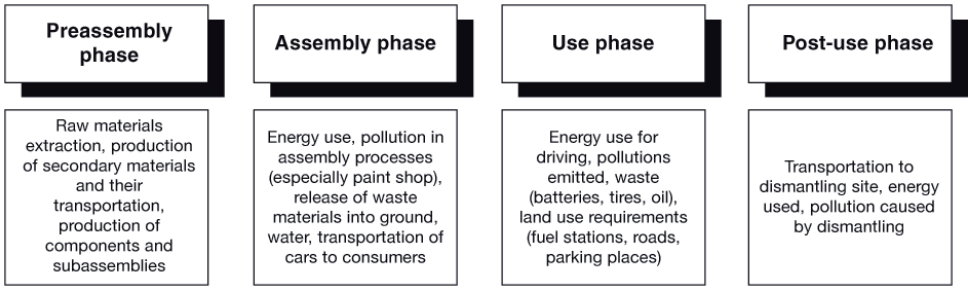
GREEN STAR Approach: Motivation - Why?
The GREEN STAR approach refers to "green" as a relevant competitive factor and not as a "necessary evil". The awareness of green impact in the company is concerned not only under sustainability but cost-benefit aspects, an image improvement and other competitive advantages.

GREEN STAR Approach: Contents - What?
The different production processes of the company clusters are in the focus of the GREEN STAR thematic sub-modules. The discussion of the main green issues of the automotive suppliers industry led to a selection and modification of two given GT VET sub-modules (energy and waste)

and a new value and production chain related topic (life cycle assessment). Three sub-modules of GREEN STAR:

- **Energy** (possibly including references to the ISO 50001)
⟶ modification of GT VET
- **Waste**
⟶ modification of GT VET
- **Life Cycle Assessment (LCA)**
⟶ new development.

The new sub-module LCA is strictly connected with the Energy and Waste processes management inside the company and is of high relevance for the supply and production chain of the automotive industry. This GREEN STAR submodule is added as a new component not part of the GT VET blueprint. "An environmental pressure as to be considered on different phases of LCA imposed on the automotive industry cannot be denied" (Martinuzzi et al, 2011). According to Whitelegg (1993), about 10% of the environmental impact concerning the entire life-cycle of a motor vehicle can be attributed to its production process. About 80% of the impact is associated with the use phase, and the remaining 10% concerns the post-use phase. The following figure shows a simplified model of the life-cycle of a motor vehicle, which also highlights the main green issues associated with each phase:



Simplified model of the life-cycle of a motor vehicle (Martinuzzi et al, 2011, p. 11)

Another important reason which led to taking into consideration the whole production life-cycle (Montalvo et al., 2011) is related to the potential trade-offs with the different phases: improvements resulting from impact reduction in a production phase can lead to an increase in other process steps. By way of example, the replacement of a few metal parts

with plastic ones on motor vehicles provides an advantage in terms of the total weight of the product and, consequently, of fuel consumption rates. However, this change can lead to an increase of criticalities in the component recycling phase.

GREEN STAR Approach: Framework - How?
A common framework for the modules was developed, based on the GT VET European Framework Training Module and the two chosen sub-modules relevant for GREEN STAR as well. This framework is characterised by an action and work based learning approach with specific green tasks and projects to be done within the companies, built on adult related teaching and learning strategies ("andragogy"). Also the four subsequent learning levels were taken over.

The short-term updatable sub-modules could be easily used or adapted in the different automotive suppliers companies, for different production areas and workplaces and for different education and qualification levels.

The module concentrates on the recent and future company needs, developed by making use of multipliers (trainer, teacher, manager. etc.) in a (more) bottom-up and case study way when looking at the stable occupations of workers. Due to the regional cluster approach the regulation background will be considered and integrated.

GREEN STAR Methodology: Action Plan
The development and implementation of the green skills training modules took place within an Action Plan (AP) scheme to allow the GREEN STAR partners, VET institutions and schools to define, implement and report about the results of the adaptation by applying a structured and comparable methodology. Within the Action Plan problem and solution analysis took place as well as the development of a work plan and the necessary budget. The timeframe, outputs, staffing and human resources needs were summarised in the end as well as.

GREEN STAR Methodology: Adaptation to company-based training
Each company, according to the internal needs analysis and supported

by the reference partner in the respective country, developed a training programme general enough to be re-used at EU level and specific enough to be useful within the company strategic objectives. The Energy module was translated and applied from GT VET with no modification. The module Waste was adapted and updated (normative elements and standards adapted). The LCA module was newly developed through the cooperation between the company API and the research center Consorzio Venezia Ricerche (CVR). A sensitisation and training action of the LCA Module was carried out by Confindustria Veneto SIAV involving 25 companies in several seminars co-funded by a regional European Social Fund project.

GREEN STAR Methodology: Adaptation to higher and secondary technical education

The ITS Meccatronico of Vicenza, based in the Veneto region, whose representative participated at the Focus Groups, agreed to test the LCA module within its course "Automation and Mechatronic Systems Technician". The learning methodology integrated a team working assignment with a face-to-face training provided by API and CVR.

The CCI Cluj in cooperation with six secondary technical, theoretical and economic schools in Northwestern Romania tested Level 1 and 2 of the Energy module, as adapted and translated by SINTEROM.

GREEN STAR Methodology: Adaptation to an apprenticeship system

The Region of Veneto within the legal framework described in paragraph 4.2.3, in cooperation with the training agency Forema (silent partner), authorised the test of Level 1 and 2 of Energy, Waste and LCA module as adapted/developed by the each company.

GREEN STAR Methodology: Evaluation

Beside the integration of the internal and external know-how of experts through Focus Groups and Meetings and the literature review the evaluation of different types of activities of the project (partnership and collaboration, project activities and outcomes) was one of the main methodological issues to guarantee the quality of the project processes and results.

The evaluation focused on the following dimensions:

- Meetings' and workshops' participants "perceived effectiveness" (such effectiveness relating both to meeting's and/or workshops' contribution in developing adequate skills and knowledge about energy, waste and/or LCA and to general interest and satisfaction for participation);
- Action Plans *on-going* implementation (basically in terms of compliance between Action Plan expected and actual contents and implementation process);
- *GT VET Blueprint model* transfer impact study (through the *Green Star* modules implementation based on organisation-specific Action Plans);
- Partnership *Added Value* perception.

Conclusions

Training Modules

Energy

The new generations of powder metallurgy equipment acquired by Sinterom in 2014 on a project based with European Funds, coupled with a specific sensitisation and training action funded by the Lifelong Learning Programme allows the company to be competitive in the terms of specific consumptions of gas, electrical energy and also in terms of quality for precision components with the destination for automotive industry. Technological and human resources improvement led to an enormous saving of energy and cost pushing the awareness of the company and its employees at all level for green skills.

Waste

Also environmental related topics are of the interest of the majority of people who took part in the training modules it has to be stated, that waste sensibility at work place is lower than at home level, but waste is assumed as inherent to the industrial activity. Most of the operators are not aware of the complexity of waste management procedures, therefore the operators trained in the basic modules (module 1 and 2) have requested to be trained in advanced modules (module 3 and 4) as well. The practical exercises performed after the theoretical presentation play an important role to fix concepts in the participants´ minds and behaviour. In each of the sessions this point has generated a "live" discussion among participants.

After the training program is finished, the impact of the activity in the environmental performance of the factory should be evaluated by:

- Audit of waste "quality" before and after (improvers measurement)
- Evaluation of spills situation in fluid waste areas
- Number of not or incorrectly labelled material at waste storage area
- Improvement proposals in waste management transmitted to environmental technicians after realisation of trainings.

Life-Cycle-Assessment (LCA)
First short term outcomes were achieved: The company managers participate at an application of LCA, understanding the meaning and the benefits, increasing their competences and thus the competitive advantage toward the customers and within each functional unit.

Intermediate outcomes are going to be achieved after the project phase and are directly influenced by the Action Plan activities: The customer interested to use a bioplastic is able to get a clear and quantitative evidence of the positive environmental impact of the material.

Last but not least, the a further Action Plan is necessary, although there are not sufficient conditions to reach the long-term objective: The increased customer value proposition and the optimised use of LCA method by each unit of the company generate increased market potential opportunities and strengthen current markets shares.

VET System Implementation

Higher Education Italy: The students understood the basic concepts of LCA methodology and its applications. Under evaluation is the possibility to include the module within the training programme of the higher education institution, although some contents shall be harmonized with the specific objectives of an existing course. The presentations of companies' case studies connected with the course (e.g. Mechatronics) could be useful to facilitate the knowledge/application of the LCA methodology to a diverse range of production processes.

Secondary Technical Education in Romania: The main result was the awareness raising among all these high schools students regarding energy savings. The students attending the training were tested, according to the national methodology, in order to measure their achievements:
- 92 % of the students can distinguish between different forms of energy
- 88 % of the trainees know different levels of energy and can sort them into energy sources
- 85 % are able to identify possibilities to save energy.

Additionally, the schools confirmed the content according to levels of the sub-module "energy" fits to the general training.

Apprenticeship System Italy: The lower levels of the modules (1 and 2) are applicable to a wide range of industrial sectors, are well balanced in terms of timeframe in order to raise awareness about the content and to fit within the general training programme. The contents were particularly appreciated both from apprentices and the trainer as they are immediately applicable on the job, although impact in the short and medium run depends from the company organisational habits.

Summary and Recommendations

"Green Skills" are seen as a relevant qualification for the European industry, not only for the sake of the environment but also as a European competitive advantage. The GREEN STAR approach is evidently based on the European policies and strategies: GREEN STAR gives attention to the SME, cluster and value chain related improvement of green skills, based in a regional development of human resources within partnership between companies, public authorities, educational and vocational institutions as well as research institutions. Taking into account the GT VET training module and integrating the knowhow of its main actors GREEN STAR turned out to be a respectable practice example for cross-sectoral cooperation on green skills and a regional social innovation process, embedding the relevant actors (see Schröder 2012).

GREEN STAR transferred the blueprint of the steel industry driven sustainable European training module *"GT VET - Greening Technical Vocational Education and Training"* to the automotive suppliers industry. Two submodules of GT VET were *adapted* ("Energy") *and modified* (Waste"), an additional submodule ("Life-Cycle Assessment") *completed* the GREEN STAR green skills training module along the value chain of the automotive suppliers industry. Within this transfer of innovation the transmission from a big company training module to SMEs and their regional clusters, from the steel industry to the automotive supplier industry, and from mechanical and electrical maintenance occupations to heterogeneous other professions was conducted. The use of GT VET approach, where different levels of content correspond to different levels of competences, was particularly also effective in each of the GREEN STAR Action Plans considered.

The obtained results give evidence to the basic European orientation and the GREEN STAR project approach. GREEN STAR showed on the one hand the necessity of the best available technologies for energy reduction, the importance of biodegradable materials but also on the other hand, that this has to go conjointly with a human resources improvement of green skills and the awareness of green production and behaviour. This embeds also the involvement of the customers and their purchase decisions by improving their green awareness, as showed by the imple-

mentation ("Action Plan") of the involved company API.

Moreover, the application of the green content to the whole learning chain (school -apprenticeship – higher technical education – continuous training – company) was particularly relevant in Italy, where most of the content to enhance green skills were before simply not included in apprentices training programmes, nor in continuous training for small companies. The integration of these contents in the learning chain ensures anticipating future skills requirements and it also fosters cooperation among different stakeholders within the chain.

Finally, a very positive result is represented by the validation of the submodules content and approach also in clusters and industries not directly pertaining to the automotive suppliers, therefore it is opening the application of outcomes to a wider range of sectors.

The added value of the project lies in strengthening the impact of an excellent model on organisations and final recipients working in different sectors and systems, thus extending the geographical and sectoral scope of the results. The introduction of methodologies and contents developed in a sector with a strict environmental regulatory framework will provide the cluster of automotive suppliers, mainly SMEs, with innovative approaches for on-the-job training, thus contributing to the enhancement of the VET role concurring to a smart, sustainable and inclusive growth.

In line with the results of the final European conference of GT VET (with VET stakeholders, social partners, the steel industry as a whole, and other relevant manufacturing industries attending) and the high level round table panel on "Green Skills Relevance for the Competitiveness of the European Industry" GREEN STAR has further developed the GT VET module. The approach and the results of both projects are underlining that this is the right concept for

- pushing green awareness with generic, specific, essential and transversal skills
- new ways of learning and training pathways off the classroom
- a flexible and easy integration into education and training programs, in schools/VET institutions and companies in addition
- sectoral and cross-sectoral cooperation between companies
- a responsive and short-termed integration of new skills - coming from

continuously and rapidly changing (production) technologies - into the workplace, the shop-floor
- and fostering sector, regional and cluster related cooperation and development.

The GREEN STAR approach could be seen as an example for:
1. Promotion of all forms of eco innovation, including "eco-innovation not technological"
2. Promotion of partnerships between businesses, knowledge and skills for green entrepreneurship
3. Better use of the role of clusters in support of eco-innovative SMEs.

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

Against the background of the European Commission focus on competency gaps to be filled, on the anticipation of change, on the transaction and promotion of mobility, on the incentive to create new jobs, the GREEN STAR experience fosters and underlines the following (mainly existing) policy recommendations:
- The relevance of cross-sector cooperation between big companies and SMEs
- The relevance of regional clusters and partnerships, within and beyond single industry sector clusters, not only in form of the so called Triple Helix (public authorities, companies, research institutions) but also by integrating the customers, civil society in a common social innovation process and eco-system
- 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 need to involve committed, concerned and capable stakeholders, coherently with the objectives, in order to achieve impact results. Therefore, not only direct target groups (e.g. companies) shall be implicated, but also stakeholders of the learning chain (schools, apprenticeship institutions)
- The relevance of the work-based learning approach to facilitate the transfer of knowledge immediately applicable to production processes.

According to the results of GREEN STAR and the personal experience of the involved project partners the authors underline the necessity of funding for innovation development and transfer activities based on regional and cross-sectoral cooperation in Europe, embedding all the relevant regional actors and stakeholders, a European platform for exchange, research and development has to be provided.

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GREEN STAR

GREEN skill**S** for enterprises **S**ustainable
Training for **A**utomotive suppliers clust**eR**

www.greenskills-project.eu

The Partnership

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METALEKO LANTEGIEN BIZKAIKO FEDERAKUNTZA

CAMERA DE COMERȚ ȘI INDUSTRIE CLUJ
ÎMPREUNĂ PENTRU AFACEREA TA

REGIONE DEL VENETO

API

EVTA

BRUSS

SINTEROM
MEMBRU SCR GRUP

FÒREMA
SVILUPPA LA TUA IMPRESA