



Overcoming skill gaps in the ICT and Green Economy sectors

Chapter 2: How to identify skill gaps in SMEs



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CHAPTER 2: HOW TO IDENTIFY SKILL GAPS IN SMES

This chapter covers the issue of identifying skill gaps in SMEs through effective collaboration between sectors in the ICT and the green economy.

The chapter also aims at identifying and overcoming organisational barriers and obstacles for partnerships between sectors.

2.1 Overview

The skills gaps affects all actors of the labour, training and education market. While employers have difficulties to find workers with the right skills for their companies, workers and job seekers also find frustrating that their education and training does not easily open the door to work.

Besides, the demanding and changing market forces companies, and specially small and medium enterprises (SMEs), to adapt to the continuing changes to remain competitive. This requires an effective dialogue and collaboration between all the sectors involved in the labour market. Nevertheless, many times all these actors face obstacles to reach to this collaboration, or simply, they do not know how to build a partnership. It also may happen that these actors ignore the profits of building a partnership to join efforts and find common solutions. So, they simply do not participate in existing partnerships.

This usually happens in SMEs, because due to their size or structure, they do not have the tools to launch partnerships or to participate in them.

Finally, it must be clear that skills gap is not only a matter of companies. This matter affects to multiple actors; from public bodies, to training centers, higher education institutions, workers, or jobseekers, for example. An effective collaboration between them will help to reduce the skills gap and to reinforce the labour market.

2.2 Identifying skill gaps: main challenges

Many employers agree on the difficulty to train employees according new market trends and demands to adapt them to these new market challenges. The gap between the supply and demand for skills is other challenge employers face. Skills development is an important





driver of change; it helps to improve the employability of workers, the productivity of enterprises and the inclusiveness of economic growth.

The involvement and collaboration of all stakeholders in the labour and training market is the key to face any barrier on the skills identification, especially in the shifting landscape of ICT and green economy sectors.

A summary of main challenges in the identification of skills gap is outlined below:

- The current economic situation is hampering the growth of many business sectors around Europe. Before the economic crisis, ICT and green economy sectors were powerful and promising sectors, with high levels of turnover generation, job creation and growth rate. These facts have helped them to deal the crisis better than other sectors.

Nowadays, these two sectors are moving so fast that companies need a continuous update of the knowledge and skills. The lack of these skills makes difficult for companies to adapt to changing and newly emerging occupations, and therefore they are missing opportunities.

Skill shortages hamper the transition to a more competitive economy.

- Skills and market policies are not coordinated.

The coordination between sectors will provide stable employment for workers, avoid periods of skill shortages, and make future demand for skills more predictable.

For that reason, it is necessary to promote a fluent communication among stakeholders that builds a sound and permanent discussion platform.

- Changes in certain sectors.

We are facing different challenges. New market niches have emerged in traditional business sectors, like agriculture, and this is translated into new skills. Besides, sectors in decline (e.g. building) have experienced restructuring that requires significant skills upgrading. And those workers moving out of declining sectors into growing ones require retraining.

With this situation, the role of employment services in matching skills and jobs and in retraining workers and jobseekers is really important.

- Occupations change at different rates and in different ways as economies change





There will be far more established occupations requiring skill upgrades than brand new occupations in order to adapt them to new market situations and demands. Over the next decade, labour needs will be concentrated in specific occupations, requiring either intermediate or high-level skills. New policies must be adopted to help meet future demands and to avoid uncertainty among companies, which may not be ready to adapt themselves to all these changes.

Besides, there is a fierce competition not only at European level (e.g. Eastern countries), but also at international level (e.g. India), that makes difficult to companies, especially to SMEs, to adapt themselves quickly to the new skills, and to face the external competition.

- Improving training systems, including lifelong learning.

Training systems need to respond quickly, as demand changes fast. Unfortunately, training offer is not always able to follow market trends due to the continuous changes of the sectors, together with the weak or lack of communication with business sector.

Thus, training programmes are valuable assets, especially those that include information from industries, as they offer training more adapted to companies demands.

- Collaboration between sectors

It is necessary to break the inertia to collaborate between different sectors. Enterprises in most countries and public employment services in a few, and training institutions have proved to be efficient channels for upgrading skills.

This is the conclusion that the report Measuring the impact of University-business cooperation , that has recognized that both the business sector and higher education institutions make an important contribution to sustainable economic growth, employment and prosperity in the EU. Indeed, European institutions have been advising about the benefits of such collaboration, especially between education sector and business sector in the last few years.

One of the Flagship Initiatives of the Europe 2020, the European Union’s ten-year growth strategy, is the “Agenda for new skills and jobs”. It was launched in 2010 and presents a set of actions to help to equip people with the right skills for the jobs of today and tomorrow.





More recently, the cooperation for innovation and the exchange of good practices stated in Union Programme for Education, Training, Youth and Sport Erasmus+)¹ points out that there should be *partnerships between the world of work and education and training institutions in the form of sector skills alliances between education and training providers and the world of work aimed at promoting employability, contributing to the creation of new sector-specific or cross-sectoral curricula, developing innovative methods of vocational teaching and training and putting the Union transparency and recognition tools into practice.*

Working together to find synergies will help stakeholders to identify skills gap, get information about the real situation of all sectors and achieve results to match skills and jobs in an efficient way.

2.3 Experiences and best practices in overcoming barriers among sectors

NeMESI project has compiled different experiences from project partners' countries with the objective of inspiring similar actions in other regions or sectors. Most of these practices have been designed and performed by the business sector and by education and training institutions, but involve different sectors to ensure their success.

The practices designed and launched by the business sector are aimed at identifying workers and jobseekers training needs, mainly (but not only) in the ICT and green economy sector. These practices are House of IT, FutureRegion West Palatinate and Juwi AG of Germany, Key Informant Network on Training for Employment of Spain, NewAnglia Skills Manifesto – Skills for Energy case study of United Kingdom.

In most of the practices, once the information obtained is analyzed, business sector offers the workforce the specific training that better adapts to companies needs. This kind of initiatives usually requires the collaboration of training centers, and in some cases, they receive public investment, so the collaboration between sectors is being effective.

No matter the country of origin of the practice, but all of them make the region where they are launched more visible and help to attract companies to bring further investment to the

¹ Regulation (EU) No 1288/2013 of the European Parliament and of the Council of 11 December 2013 establishing 'Erasmus+': the Union programme for education, training, youth and sport and repealing Decisions No 1719/2006/EC, No 1720/2006/EC and No 1298/2008/EC Text with EEA relevance (DO L 347 de 20.12.2013, http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2013.347.01.0050.01.ENG)





local area, as in the case of House of IT. They also avoid brain drain, as NewAnglia Skills Manifesto – Skills for Energy case study.

There is another practice from the business sector based on the collaboration of companies and business associations from different sectors that differs from the rest of good practices compiled. At Key Informant Network on Training for Employment, a business association prospect and analyses labour market trends through surveys to companies and other professional associations, round-tables with strategic sectors and personal interviews with HR managers. The main information it gets is the skills demanded by companies and the training the workforce needs to meet the companies' demands. After an analysis of that information, the results are transferred to the regional government to design the vocational training for employment of the region. In that way, the regional government has real data to design training form workers and jobseekers.

Within the practices launched by the training and education sector, they mainly consist of adapting the VET systems and higher education curricula to new technologies and the green sector. This is the case of the practices Centers of Vocational Education and Development of Slovakia, Training future eco-professionals of Spain and the Green jobs training policies (within the “Green Jobs Country Report”) of Romania.

Through the creation of new curricula in collaboration of chambers of commerce, business associations, etc., these practices get real information to build sound and effective training programmes that will meet the requirements of the labour market and also the workforce. It is a slow path, but the results help future workers to get a suitable training that will improve their employability, in one hand; and in other hand, it also helps companies to find skilled workers to remain competitive, reducing, therefore, the skills mismatch.

Another practice from the Company Placements Service of Zaragoza University consists on the inclusion of young graduate students in the workplace through training courses adapted to companies' needs and through traineeships. This is organized by a company placement service of a public university that acts as a link between the education and professional world.

Practices promoted by public bodies are national projects aimed at correcting the mismatch between the education system and the labour market. In one of them, the National Framework of Occupations in Slovakia, the result is an extensive database of occupations with descriptions of requirements for individual occupations, used as a bridge between education providers and employers, and that enables effective forecasting of the future labour needs.





Another practice (ISTP – Labour Market Integrated System), also coming from Slovakia, is a database with counseling tools to find a job that includes information about job characteristics, education needed, required skills, job vacancies, etc. This information could be used either by employees, jobseekers or employers.

This kind of practices require the active collaboration of other sectors, from business associations, trade unions, chambers of commerce, to education and training institutions, etc., to collect the market information.

Finally, among NeMESI practices there is also a European project from the Lifelong Learning Programme that identified new role profiles for sustainable ICT functions at European level and developed training guidelines to support VET institutions in developing training courses that are in accordance with these. The aim of the European project Green IT Node is to foster employability and prevent skilled staff shortages in the field of Sustainable ICT.

Although the project is already finished, its results are available at its project website: <http://groupspaces.com/grin-ch/>.

2.4 Lesson learned: recommendations for SMEs

This section is divided into two kinds of recommendations, as it has said before, skills gap is not only a matter of companies, but also of more stakeholders.

2.4.1 Recommendations to SMEs

- Self-diagnosis. Companies should make a regular evaluation of their human resources, in terms of skills and training needs, in order to get a overall picture of their weakness and their strengths.
- Developing forecasting tools to identify skills that companies will need in the short, medium and long term, in one hand, and also to get information about markets evolution, in other hand. This will allow them to be ready to adapt themselves to any market trend or change.
- Improving lifelong learning within the company. Adapting the training offer to the skills demanded by workers and to those that are necessary for the company. Adaptation includes flexibility. Lifelong learning is also a motivation tool that helps companies to retain talent and to be more competitive and efficient in a demanding market.





- Adapting job offers to real company needs to avoid overqualification.
- Discovering the external supports, private and public, each company has to establish for future partnership to reduce skills gap. Analysing public bodies, institutions, training centers, other companies, etc. to build synergies.
- Participating in the detection of training needs for employment. This will help training institutions to adapt their curricula to the company needs, so that students acquire relevant skills that enhance their employability.

2.4.2 Recommendations for other stakeholders

- Improving public guidance services. The role of employment services in matching skills and jobs and in retraining workers and jobseekers is essential.
- Fostering intra-EU labour mobility through a policy action to remove obstacles. Transferring labour and skills from countries where they are less in demand to those where they are needed, intra-EU mobility makes a more efficient use of human resources.
- Definition of skills for each sector or area of expertise. ICT and green economy sectors are extremely wide as they comprise multiple subsectors. Besides, their markets change very fast, so new skills are arising. A clear and a common definition of skills will help to get a clear map of what is needed and consequently to reduce skills gap.
- Improving raise awareness and dissemination among companies, specially SMEs, about all mechanisms available to identify skills.
- Reaching a better communication between teaching staff, students, graduates and labour market actors. A partnership cooperation encourages the transfer and sharing of knowledge and drives innovation. This kind of cooperation helps universities develop curricula that are relevant, equipping graduates with the right skills for the labour market.
- Fostering a stable regulatory framework that gives companies a security in their investments and actions. It will help companies to grow and to increase their human resources.
- Promoting public-private alliances to increase employment and the improvement of some markets.





- Facilitating the information of the training offer of public and private training programmes to both, employers and employees.

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