

DEvEA Project Needs Analysis

1.0 Introduction

Needs analysis for the DEvEA project was undertaken at national, regional and local level by each partner and these findings were complemented by European level analysis undertaken by Groundwork London as the lead partner for this work package. This has enabled the DEvEA project partnership to demonstrate that the specific vocational skills that will be developed via the pilot projects respond to identified needs within the relevant local and sectoral labour markets and also that there is a need amongst the target groups for these projects and for the types of enhanced employability skills that will be supported via the transferred materials.

It is also noted that the Green Economy can be difficult to measure and define as new technologies emerge to deal with the new environmental issues facing the world. These technologies are often 'cross cutting', and in the past have been seen and measured as part of other sectors through the Standard Industrial Classification (SIC) coding system which traditionally has a time lag before being implemented. For the purposes of the DEvEA project, the Green Economy was defined as including the six subsectors listed below:

Renewable Energy (solar, wind, geothermal, marine, including wave, biogas and fuel cell)

Green Building (green retrofit for energy and water efficiency, residential and commercial assessment, green products and materials, and LEED construction)

Clean Transportation (alternative fuels, public transit, hybrid and electric vehicles, car sharing and car pooling programmes)

Water Management (water reclamation, gray water and rainwater systems, low-water landscaping, water purification, stormwater management)

Waste Management (recycling, reuse, brownfield land remediation, sustainable packaging)

Land Management (parks and urban forestry, habitat conservation and restoration, organic agriculture, reforestation and afforestation and soil stabilization).

Although every effort was made to provide comparable data – for example by using International Labour Organisation (ILO) figures to ensure that the unemployment statistics supplied are based on standard methodologies – directly comparable data was not always available at the local level. This was particularly the case in relation to the relevant subsectors of the green economy, with some of the partners – in particular the Polish Environmental

Partnership Foundation – having to undertake additional primary research in this area due to lack of existing published research at national and local level.

2.0 European Level Issues

The target group for the application is unemployed young people and it is widely recognised that youth unemployment is a serious and growing problem across the European Union. The problem is acute in the UK and Poland with over 20% of people aged 16-24 currently unemployed, chronic in Spain at over 50% and significant (but below the EU average) in the Netherlands at 7%.

In the current economic context, it is apparent that many young people – who will naturally have limited experience of the work place – are unable to find work on purely on the basis of vocational or academic qualifications and are missing out to older workers because of a lack of experience. The project will seek to address this issue via a systematic approach to recognising and validating the employability skills acquired through vocationally specific work experience and using this process as a mechanism for improving the potential for young people to market themselves to employers.

In each of the participating countries there is significant youth unemployment alongside large numbers of young people participating in environmental activism and volunteering, which provides an excellent context to support them in developing their employability, both in terms of skills for the environmental sector and 'soft' transferable skills.

This is also a major concern across the EU and the development of effective strategies to tackle youth unemployment will need to form a key element of the Europe 2020 strategy, especially in relation to efforts to achieve the priority of inclusive growth that will foster a high-employment economy and support social cohesion.

However, alongside growing youth unemployment, large numbers of young people are participating in environmental activism and volunteering, which provides an excellent context to support them in developing their employability, both in terms of vocational skills for the environmental sector and 'soft' transferable skills. Furthermore, as well as helping to engage economically excluded young people, the environmental focus of the DEvEA project will support the development of linkages between employment programmes designed to tackle youth unemployment at national and local level and new skills relevant to the transition to a low-carbon, resource efficient European economy.

The transfer of innovation that the project will deliver is necessary because, in the current context of high and persistent levels of unemployment and especially growing youth unemployment, it is apparent that disadvantaged and economically excluded young people require additional support to enable them to develop the skills needed to secure and sustain jobs in emerging occupations in the environmental economy. This is needed in the partner countries because, whilst it is recognised that there is a need to develop innovative ways of tackling youth unemployment, the extent of any specific work to support the development of employability skills within an environmental context has been very limited.

3.0 National Level Summaries

Each partner was asked to respond to a questionnaire (see Appendix I) designed to support the needs analysis work package of the DEvEA project by providing comparable data for each of the participating Member States, as well as information about the local and national contexts in which each of the partners operates. The questionnaire covered labour market issues, sectoral analysis of the 'Green Economy', policy issues and links to national Vocational Education and Training (VET) systems.

The basic rationale of the DEvEA is based around the need to provide enhanced employability support for people in the labour market who are engaged by and involved in environmental issues. Needs analysis was undertaken by each of the partners in order to test, review and update the rationale for the project and also to provide more detailed insight into national and local level needs in relation to the green economy sector in general and issues affecting the employability of young people.

3.1 Netherlands

The Dutch partner in the DEvEA project is the Nieuw-West City District of Amsterdam (SANW) built as part of the post war 'New West' expansion of the City of Amsterdam. SANW has a growing, multicultural population with over half the 135,188 inhabitants residents categorised as minority groups. The yearly family income is 15-20% below the Dutch average, almost a quarter of the families are earning the minimum wage and the proportion of households dependent on welfare benefits is above the national and Amsterdam average. By Dutch standards, unemployment in SANW is very high at over 10% and at national level youth unemployment has grown rapidly from 7% (CBS Statistics, Netherlands, June 2011) when the initial DEvEA application was submitted in February 2012 to 15.5% in April 2013.

This part of Amsterdam is characterised by numerous green spaces, encompassing large open areas and water reservoirs, as well as a wealth of parks and conservation areas. The built up area is dominated by typical post-war middle- and low-rise buildings, many of which are of poor quality. Therefore, in the late 1990s the municipality of Amsterdam decided on a large scale demolishing of the original dwellings and an urban renewal of almost all parts of the city-district. Today over 50% of this vast regeneration programme is executed but, due to the economic crisis, the building schemes have stopped and a many residents are forced to stay in their poor quality houses for at least 10 more years.

When the application was written, the intention was to link the pilot project to green infrastructure work related to the continuation of the urban renewal of SANW. However, for economic reasons - i.e. lack of funds to pay for the redevelopment - much of this work is now not going to go ahead and was not possible to provide a green infrastructure pilot project of a sufficient scale to test the transferred materials in a meaningful way. Nonetheless, one of the impacts of this is that local residents will continue to live in low quality, energy inefficient properties for much longer than previously envisaged. As a result, SANW are developing an energy efficiency advisory service designed to support residents in improving the energy efficiency of their homes through a combination of small scale improvements (radiator panels, window insulation, draft exclusion, etc) that help to reduce their heating bills and improve comfort (i.e. warmth). The Dutch pilot project will train local people to work as 'Green Odd Jobbers', undertaking home visits to advise residents on reducing their energy bills and install energy saving measures that will lead to lower bills, reduced CO₂ emissions and enhanced comfort (e.g. warmer homes).

At national level, the DEvEA project and the SANW pilot fits with the Dutch national government's aim to increase the Dutch economy without negative effects to climate change, water, soil, raw materials and biodiversity, working on the basis that green growth does not pose a threat to business and industry, but instead creates sustainable opportunities for businesses and entrepreneurs.

It also links to Amsterdam's sustainability programme to remain a vital and attractive city in the future, in particular efforts to develop a sustainable, innovative economy. It is difficult to give exact figures of the development of employment in the green economy. Some research has been done, but it is still impossible to say where employment will develop. Some estimates of potential job creation within the Green Economy within the City of Amsterdam are provided below:

Wind Power: The building and installation of wind turbines supplies 15 full time equivalent (FTE) jobs per MW in specialist installation and engineering work, plus 0.4 FTE jobs per MW in maintenance, finance and consultancy. A potential for 270MW of Wind Power in Amsterdam could create approximately 4,000 temporary specialist installation and engineering jobs (lasting for an average of 12 months) and 100 permanent jobs (EWEA, 2009).

Solar PV: Installation of solar PV provides approximately 33 FTE jobs per MW (excluding the production of panels), plus another 9 in sales, supply and research and development. Installation of 1,000 MW of solar PV in Amsterdam would generate 1,280 full time jobs over 30 years (Solar Generation V).

Retrofit of Residential Properties: Industry estimate shows that insulation of houses (floor, wall, roof, glass, etc) provides approximately 27 FTE jobs per 1,000 houses.

District Heating: Building and maintaining Amsterdam's district heating systems will also drive demand for jobs but it is expected that this will primarily be a shift of roles from working in gas to district heating systems. However, detailed figures are not currently available.

SANW will integrate the DEvEA pilot with local initiatives, in particular the local 'Nieuw-West Works!' programme aiming to creating 1000 jobs for Nieuw-West residents and the WerkPunt service that plays a central role in this programme. WerkPunt is designed to bridge the gap between supply and demand in the labour market through training, work experience, job creation, jobsearch and finally job matching and the integration of DEvEA project will mean that the pilot project beneficiaries will have access to these services. The Nieuw-West Pilot on energy coaching will be embedded within WerkPunt and they will be involved in the selection and training of the participants. Although the scope of the DEvEA pilot is quite small (SANW will engage 10 people via the project) is anticipated that it will lead to opportunities to develop further similar activities in partnership with WerkPunt. Also, it is acknowledged that the training and work experience provided is relevant to emerging skills needs in the green economy at local and national level, in particular the retrofit of residential properties. Furthermore, the training and method that will be developed in the pilot, utilising and adapting the materials developed by Groundwork London, could however lead to a standardised training which could then be used in future programmes and projects.

3.2 Poland

The Polish partner is the Polish Environmental Partnership Foundation (PEPF), based in the Malpolska region of Southern Poland. Their mission is to support practical action for sustainable development through partnerships, civil society development, proposing new solutions, as well as promoting tried and tested environmental projects and initiatives. However, this work is undertaken in a context where Poland is lagging behind other EU countries with respect to policies and actions relating to greening the economy. Polish policy and legislation does not provide any official definition of 'green economy' or 'green jobs'. The public administration in Malopolska does not monitor green economy developments in the region and does not assess its role in shaping the labour market.

The DEVEA pilot project in Poland seeks to explore the potential and possibilities for developing and promoting training and vocational skills verification of "soft environmental skills/competencies" related to eco-certification schemes. The project target group comprises graduates of environmental faculties, who are currently unemployed or in employment unrelated to their environmental studies.

The unemployment rate registered by the Polish Labour Office reached 13.4% at the end of 2012. In 2008, the unemployment rate was 9.5% - the lowest rate in history. Since then it has been growing gradually and continues to do so – in March 2013, the unemployment rate reached 14.3% and was 1% higher than a year earlier in March 2012. The unemployment rate in Malopolska is lower than the average for Poland and amounted to 12.5% at the end of March 2013 but the unemployment rate among young people aged 25 or under in was 24.6%, with the highest rate of increase in Poland.

Over the past 5 years, 2.5 million young people (aged 30 or less) decided not to continue with education in order to enter the labour market. Of these 38% were university graduates, 40% had completed secondary education, 14% had completed vocational education and 7% lower secondary or primary education. The highest unemployment rate was recorded among young people (below 25 years of age) – 28.6% whereas the equivalent rate for the over- 45's was only 7.3%.

Among university graduates, 32% graduated from faculties of economics and management, 18% from pedagogy faculties, humanistic studies, and 8% from technical and engineering studies. Environmental studies graduates made up less than 1% of university graduates.

In 2008 the Ministry of Science and Higher Education introduced 'study programmes contracted to meet employers' needs'. The goal was to reduce the discrepancy in the labour market by increasing the number of graduates in

fields and specialisations identified by employers. The 8 priority fields include environmental protection and environmental engineering studies. But a survey of university graduates found that the strategic fields differ in terms of employment prospects. An unemployment rate of 9% was recorded for environmental engineering and environment protection graduates as compared to other priority areas where the unemployment rate was recorded as only 4%.

Despite the lack of emphasis on building the green economy, the environmental sector has nonetheless been an area of growth and development in Poland. The main driver has been membership in the EU, which demands that Poland complies EU regulations and policies related to environmental protection and sustainable development. Furthermore, there is growing recognition in public discourse, however, that there is “greener” employment growth potential in relation to new green professions and specialisations, such as those related to promoting more environmentally-efficient processes and more effective resource use through technological investment and more effective management – professions and specializations that are currently not classified or monitored by public institutions involved in shaping Poland’s labour market. There is certainly more and more evidence that there is a growing demand for “soft” environmental skills, competencies and experience by companies operating in the public sector and households, which can help those interested achieve cost savings through introduction of environmental solutions (both technology and behaviour).

The DEvEA pilot project seeks to combine PEPF’s past experience/know-how of developing, introducing and managing eco-certification schemes in Poland with Groundwork’s experience in providing those out of work with training in environmental skills (based on the Green Doctor programme) and develop new training and vocational experience programmes related to emerging environmental employment opportunities.

Currently – from a practice point of view – environmental standard-setting is driven by large multinational companies which have to comply with high environmental standards in their operations globally, as well as in Poland. Such companies undertake initiatives, projects and programmes aimed at demonstrating and communicating their environmental performance successes. In their desire to achieve greater public credibility, they are increasingly interested in third-party verification through environmental certificates, prizes and actions. PEPF has been actively pursuing cooperation with large companies to promote the practical implementation of environmental norms and standards in the workplace and in the home. One result of these efforts was the development and implementation of a system of third-party verified environmental standards for the office (Green Office), tourism sector

(Green Key), schools (Eco-School), beaches and marinas (Blue Flag), bicycling (Bicycle-Friendly). Organizations meeting the eco-certificate standards from the business, government and voluntary sectors are encouraged by the PEPF to cooperate with one another, exchanging expertise and experience and generating norms or standards with respect to:

- “auditing/verifying” implementation and maintenance of green standards (internally and externally or third party) and
- “championing/motivating” those in a particular employment or domestic situation to practice environmentally-friendly behaviours.

The key need for organizations achieving an externally verified environmental standard is that of putting into place in its organization the means to maintain and improve environmental performance. Experience in Poland and internationally suggests that such improvement cannot be achieved by technological solutions alone. Knowledgeable and motivated customers, suppliers, employees and regulators are needed with an appetite for cooperation and innovation.

Currently, in Poland, there is no training or skills development programme available which focuses on “soft” environmental skills and their practical application (as is the case in the UK for examples). Acquiring relevant skills, experience and expertise is currently largely ad hoc or else organized within the context of specific corporate training programmes, which are customized to the needs and circumstances of the corporate in question.

Polish universities and trade schools do not have easy access to the business sector to organize placements and work experience. The result is that there is a growing mismatch between a growing demand for “soft environmental” skills and vocational programmes, which can systematically deliver relevant training and verify standards through relevant qualifications (as is possible in case in the UK’s NVQ system).

The DEvEA pilot will respond to these issues by using PEPF’s eco-certification programmes as the basis for a work experience programme for graduates with relevant environmental degrees and adapting and adopting materials transferred from Groundwork to provide a mechanism for identifying, developing and validating the ‘soft’ environmental and workplace skills developed by participants.

3.3 Spain

The Spanish partner is Gestion Integral de Energias Renovables (GIENAL) a private sector renewable energy engineering company serving the region of

Andalucía. The majority of their work is related to the installation and maintenance of solar photovoltaic systems, solar thermal, air conditioning, biomass heaters, under floor heating, cogeneration heaters and plumbing and electricity systems that meet new EU directives on safety and energy efficiency. GIENAL also provides training for the Andalucía government for long term unemployed people in the areas of photovoltaic installation.

Andalucía is a major European hub for the renewable energy sector and the industry is a major employer across the region. However, in common with the rest of Spain, unemployment is a chronic and persistent problem, affecting young people in particular. At the national level, the unemployment rate has steadily increased from January 2008, when it stood at 8.6%, to 17.9% by the end of 2009 and 26.0% by the end of 2012. Unemployment is even higher in Andalucía, with the rate increasing from 18.3% in 2008 to 35.9% in 2012, with figures for the major metropolitan area of Sevilla of 14.8% in 2008 and 35.9% in 2012.

For young people, the unemployment rate for those aged 16-24 is 55.1%, which is clearly a very high figure. However, this is exacerbated by the fact that the rate has risen so dramatically (from 19.7% in 2007) even when the number of young people in the labour market is actually falling. The Spanish population is rapidly aging and the number of young people is decreasing – both in absolute numbers and as a proportion of the labour force – and is anticipated to continue to decrease over the next years. Never in the history of Spain has there been such a big imbalance between the working population aged 30 to 45 with several years of work experience, and those under 30 years of age, who need to gain experience.

According to the ILO, green economy in Spain now represents 2.4% of GDP and is equivalent in size to the entire Spanish primary sector (agriculture, fishing and livestock). It encompasses some 61,000 companies, employing more than 400,000 workers. It is quite heterogeneous, with a contribution to the economy of €25 billion.

Renewable energies is the second largest sub-sector within the Spanish green economy, employing more than 100,000 people and achieving growth in the number of jobs created of 3,005% from 1998 to 2009. The Autonomous Community of Catalonia and the Community of Madrid have the highest concentration of employment in the sector (19% of total each), due to the base-effect that concentrates large companies in the cities with the highest economic activity. Other communities with a high share of employment in the sector are Andalusia (12%) and Valencia (11%).

There is great potential for further job creation in this sector – the ILO estimates that renewable energies in Spain could generate over 125,265 jobs by 2020, provided that 20% of primary energy production will be from renewable sources. However, policy issues, including the current moratorium on renewable energy subsidies and the fiscal measures for energy sustainability have led to instability. The lack of a stable policy environment for the sector has caused increasing levels of caution amongst companies in relation to hiring new staff and an expectation that workers (including existing and newly hired) staff will have the skills to work across a range of renewable and energy efficient technologies, enabling companies to be flexible enough to respond to changing technological, market-led and policy demands.

The GIENAL pilot project is designed to respond to these issues (on a small scale) by integrating work experience and employability support (based on the transferred materials from Groundwork London) with vocational courses to update the skills of unemployed electricians and plumbers to enable them to install domestic solar photovoltaic (electricity generation) and solar thermal (hot water) systems.

It is difficult to extrapolate from national or industry wide labour market analysis the precise issues affecting target groups for the DEvEA project at highly local level at which the pilot project will operate. Similarly, the project will only realistically be relevant to the skills needs of relatively local employers (Andalucía is a very large region, equivalent in size to some smaller European countries).

To overcome this issue, we undertook some basic primary research, based on a survey of 22 small-scale renewable energy employers from GIENAL's professional networks within Western Andalucía. Companies were asked to rate from 0 to 10 (0 implies that there is no need and 10 that there is greatest need) their recruitment needs and the training requirements of their existing staff and potential new recruits.

Sector specific training on renewable energies (8.3) and energy efficiency (7.9) was the most valued necessity. However, other skills were also prioritised, such as training in the field of best available technologies (7.0), environmental regulations (6.8), knowledge of environmental management systems (6.7) and generic environmental awareness training (6.7).

Discussions with the respondents indicated that they were not concerned about lack of 'workplace' or 'employability' skills as the prevailing view was that the decline in the local construction sector means that there is a ready supply of labour with relevant basic skills. Although most respondents took the view that a work placement could be a valuable experience, this was

based on the understanding that placements would be linked to training for specific renewable energy technologies and that the primary purpose would be to gain practical experience in the application of technical skills acquired through up-to-date training, rather than to acquire generic workplace and employability skills.

These issues will be reflected in GIENAL's pilot project, which will focus on providing solar photovoltaic and solar thermal training for unemployed workers with core construction skills (electrical and plumbing), with courses linked to work experience opportunities based around the latest installation technologies and techniques.