



European Employment Observatory

EEO Review: Promoting green jobs throughout the crisis, 2013

Belgium

Robert Plasman

Co-authors: Jamila Bouajaja, Laureline de Wind, Sarah Flament

DULBEA, Department of Applied Economics

Université libre de Bruxelles

January 2013

National articles are the sole responsibility of the author(s). The contents of this publication do not necessarily reflect the position or opinion of the European Commission or ICF GHK. Neither the European Commission nor any person/organisation acting on behalf of the Commission is responsible for the use which might be made of any information contained in this publication.

1. Introduction: employment in the green economy

There are numerous general studies that highlight a lack of data with regard to the evolution of green employment and the job-creating potential of green-related sectors. There was renewed interest in the issue in 2010 when, following the opinion published by the Central Economic Council (*Conseil Central de l'Economie*) and the National Labour Council (*Conseil National du Travail*) in July 2009¹, three studies were produced on green jobs,² but there has been a distinct lack of further consideration since then.

According to Eurostat, between 2008 and 2010, the proportion of green jobs increased from 0.60 % to 0.86 % in Belgium. This share then fell to 0.77 % in 2011, representing a 9.66 % decline in the growth in green jobs from 2010 to 2011³. The definition of a 'green job' used to calculate these percentages is, however, somewhat narrow⁴ and if one were to look instead at the Federal Planning Bureau's study which defines the notion of green job more broadly, it would indicate that the eco-industry's share of total employment increased from 1.5 % to 2 % from 1995 to 2005. According to the Planning Bureau, the biggest green sector employers were waste treatment companies, accounting for more than a third of all eco-industrial employment. Another important indicator is the number of companies and establishments that are EMAS (Eco-Management and Audit Scheme) certified, and this grew by 23 % between 2007 and 2011⁵.

At sector level, the **construction** industry has significant potential for green employment. Jobs in the construction industry represented 6.1 % of all employment in 2012⁶, or 277 200 jobs, and around 11 % of these are likely to be green, primarily people employed within public transport infrastructure and energy efficiency.⁷ According to a survey conducted in 2010, some 70 % of the sector's entrepreneurs stated that they were active in sustainable construction.⁸ During the crisis, from 2008 to 2012, construction sector employment maintained an annual average growth rate of 0.78 %, as opposed to employment in general which increased annually by no more than 0.52 %.⁹ The Planning Bureau anticipates that 9 500 new jobs will be created in the sector by 2017. This should include an increasing

¹ Central Economic Council – National Labour Council (July 2009); Brussels Observatory of Employment (November 2010).

² Federal Planning Bureau (2009); Higher Council for Employment (2010); IDEA Consult (2010) (study commissioned by the Federal Public Service Employment, Labour and Social Dialogue).

³ EUROSTAT data available from the website of FPS Employment, Labour and Social Dialogue.

⁴ This denotes just two broad areas of activity, namely pollution management and resource management (which corresponds to economic activities in NACE Rev. 2 section E 'Water supply; sewerage, waste management and remediation activities').

⁵ Eurostat.

⁶ Own calculations on the basis of statistics from the Federal Planning Bureau (May 2012).

⁷ Construction Confederation (2011).

⁸ Survey conducted by IDEA Consult, Construction Confederation (2011), p.13.

⁹ Own calculations on the basis of statistics from the Federal Planning Bureau (May 2012).

proportion of green jobs.¹⁰

Various studies have estimated the number of jobs in the **renewable energies** sector.¹¹ It seems there were 6 925 jobs directly related to this sector in Belgium in 2009, 65 % of which were in Flanders. If you include indirect jobs and those related to solar panel installation, Flanders would, in fact, have 20 000 sector-related jobs.¹² The Belgian wind sector apparently also created 6 225 direct and indirect jobs in 2011 alone.¹³

Finally, while employment in **agriculture** fell by 11.7 % from 2008 to 2012, the number of organic farms continued to increase, with an annual average growth rate of 5.5 % between 2000 and 2010. In 2010, organic farms represented 3.6 % of the total utilised agricultural area. This rate varies substantially from region to region, however; the figure is 6 % in Wallonia and 0.6 % in Flanders.¹⁴

2. Selection of green employment promotion strategies and programmes with low-carbon / environmental objectives or activities

The issue of green employment can be looked at in one of two ways. On the one hand, you can analyse ‘green’ measures aimed at boosting the economy and employment (direct actions) or on the other, you can consider actions in which the main objectives are environmental but which also have an impact on jobs (indirect actions). In this report, we shall focus primarily on actions targeted directly at creating green jobs.

Apart from the difficulties related to the actual definition of a ‘green job’, the plethora of actors in Belgium makes it difficult to gain a comprehensive overview of the issue. Although the Federal Government is responsible for coordinating environmental policy with the European Union, it is the regions that are responsible for the environment and nature conservation. Responsibilities for education, vocational training and employment are shared between the federal, regional and community levels. Energy-sector responsibilities are also shared between the different levels of government: the federal level is responsible for nuclear energy, pricing, energy taxation and offshore wind farming, while the regions are responsible for policy on the rational use of energy and renewable energy development. It is the same for the transport sector, where the Federal Government is responsible for fuel tax and company cars, producing regulations governing the car industry and the management of large publicly-owned companies such as SNCB; the regions handle the building and maintenance of roads and waterways, ports and airports, public and school transport.¹⁵

Strategies linking employment and the environment seem to be situated more at the regional level. The Walloon Region launched the Marshall Plan 2. Green in 2009, with employment-

¹⁰ For example, new buildings have to fulfil ever more rigorous energy efficiency criteria (cf. the EPB Regulation described in Section 3), and thus increasing numbers of new building construction-related jobs (43 % of sector activity) will be green.

¹¹ WWF (2009), Federal Planning Bureau (2009), Agoria (2010) in Federal Planning Bureau (2012).

¹² Bilsen V., S. Devisscher, D. Sanders, M. Van Hoed, M. Bosmans, F. Leblanc and A. Soete, p. 71-72, (May 2010).

¹³ Deloitte (December 2012).

¹⁴ Statistics from the websites of FPS Employment, the Federal Planning Bureau and the report of BioForum.

¹⁵ Higher Council for Employment (June 2010).

environment alliance measures estimated at a total of EUR 1.27 billion over the next four years.¹⁶ In Brussels, the Government has launched the Employment-Environment Alliance initiative as one of the priority areas identified in the Sustainable Urban Growth Pact (PCUD). In Flanders, a green objective can be seen in the Flemish Government's strategy, particularly with the Flemish Climate Policy Plan (VKP), the Flemish Energy Efficiency Action Plan and the New Industrial Policy for Flanders White Paper (NIB), although this has not resulted in the implementation of any new measures in recent years. The greening of the economy will require a change in skill sets, and it will be crucial to offer training courses that can provide people with green skills. This is particularly true in the construction sector, where a broader range of skills will be needed if the new technical requirements are to be met (eco-construction, renewable energy, new insulation techniques, etc.). In addition to in-company training, the public employment services (VDAB in Flanders, Actiris in Brussels and FOREM in Wallonia) are now playing an important role, diversifying their green job-related training and including 'green modules' in existing training courses.

At federal level, the government agreement (December 2011) mentions an ecological transition and green job creation objective, but the Di Rupo Recovery Plan (July 2012) contains no actions in this regard.¹⁷ With the aim of promoting synergies between the federal and regional authorities, the Federal Minister of Employment, M. De Coninck, has called for negotiations to be organised with the regional ministers. In addition, she has met with the unions to organise green employment training.¹⁸

In terms of the social partners, the former Minister of Employment, J. Milquet, proposed including a green dimension in the inter-professional negotiations.¹⁹ During the last inter-professional agreement (2009-2010), the only green element was related to the introduction of ecocheques. Out of a concern to integrate environmental issues into union practice and create jobs in sectors favourable to the environment, however, there has been an inter-trade union network to raise awareness and provide training on environmental and climate issues in the three regions since the late 1990s. This has resulted in the 'RISE' (in Wallonia), 'BRISE' (in Brussels) and 'Arbeid en Milieu' (in Flanders) platforms being established: platforms helping and training trade union representatives on environmental issues.

Finally, in the context of the 2007-2013 European Cohesion Policy, projects financed in Belgium are benefiting from a total budget of EUR 3.129 billion, of which EUR 1.356 billion is being financed by the European Union via the ERDF and ESF structural funds and EUR 1.672 billion is coming from the federal bodies. By the end of the current programming period, 2 200 companies and 27 research centres will have been supported, along with 25 skills centres. In all, 26 000 jobs should thus have been created. A number of these projects

¹⁶ Estimated on the basis of initial budgets of the Marshall Plan 2.Green, 2009, own calculations, (see Appendix 2).

¹⁷ A measure to reduce the contributions paid for green jobs could, for example, form a driver of growth in this sector, although this does require agreement as to what a green job is.

¹⁸ Response from Mrs De Coninck to a question raised by André du Bus (Senator), January 2012. It should also be clarified that the 2009 Employment Plan of the former Minister for Employment, J. Milquet, included an employment/environment alliance objective. It is possible that the 2010 institutional crisis blocked the creation of synergies between the federal and regional authorities.

¹⁹ Press release of the former Federal Minister for Employment (Milquet) (September 2010).

are related to the environment, in the areas of development research (biotechnology and green chemistry), economic regeneration (creating an economic hub for sustainable development in Wallonia) and training (developing green urban spaces, biodiversity conservation, horticultural production and eco-construction).

3. Detailed description of practices

There are numerous environmental policies that are creating green jobs: public investment in green technologies, subsidies to organic agriculture, improved public transport, support for renewable energies, etc. We describe below three measures which, by means of regulation, subsidies or the 'green certification' system, are all encouraging energy efficiency and the production of renewable electricity.

Amendment to the Regulation on Energy Performance of Buildings (EPB) (Brussels, Flanders, Wallonia)

In response to Directive 2002/91/EC of the European Parliament and of the Council on the energy performance of buildings (amended in 2010 by Directive 2010/31/EU), the country's three regions adopted different by-laws requiring that new buildings (individual dwellings, grouped houses, apartment blocks, etc.) comply with specific global energy efficiency criteria. The latest by-laws date from 2008 in Wallonia²⁰, 2009 in Brussels²¹ and 2012 in Flanders²². According to estimates from the Belgian Construction Federation, the energy renewal of existing buildings (excluding wall and floor work) should provide jobs for a total of 13 500 people over the next 10 years.²³ More rigorous criteria will result not only in an increase in green jobs but also in a greening of existing employment, given that these regulations have an impact on the working methods and kinds of activities required by these jobs (technological modifications, choice of materials, replacing the maintenance of heating systems with that of a far more substantial ventilation system in passive houses, etc.).

Reduced support for energy-saving investments (Federal)

The crisis and the need to reduce the public debt have forced the federal and regional authorities to reduce their support for the greening of the economy. The Federal Government has been offering a 40 % tax rebate on amounts invested in energy-saving work such as boiler replacements, solar panel installation, double glazing and other insulation work. As from the 2013 tax year (2012 income year), the tax rebate for low-energy, passive and zero-energy dwellings has been removed, along with all tax rebates for energy-saving costs, with the exception of loft insulation, where the rebate has simply been reduced.²⁴ In 2009, the Central Economic Council and the National Labour Council estimated that the replacement of 10 000 old boilers, the technical renovation of half of Belgium's housing stock and the replacement

²⁰ Walloon government by-law dated 7 April 2008 establishing the method of calculation and requirements, authorisations and penalties applicable to the energy performance and internal environment of buildings (12 MB).

²¹ Brussels Region government by-law dated 5 May 2011 amending different implementing regulations for the order dated 7 June 2007 on the energy performance and internal environment of buildings (9 MB).

²² Flemish government by-law dated 8 September 2012 amending the by-law on general provisions for energy policy of 19 November 2010.

²³ Construction Confederation, p. 25 (2011).

²⁴ Law dated 28 December 2011 on different provisions.

of all single glazing with double glazing could create work for 34 700 people for one year.²⁵ This measure will reduce public spending in this regard but will also most likely cause a slowdown in the growth of a sector that has strong employment potential.

‘Green certification’ (Federal, Brussels, Flanders, Wallonia)

To achieve the Belgian target of 13 % of final energy consumption coming from renewable sources by 2020, the federal and regional governments have put in place a system of green certification. Through this system, electricity suppliers are required to purchase, at a minimum price, the renewable energy produced by private individuals or companies that have renewable energy-producing infrastructure: solar, wind/water, biomass energy, or even cogeneration. This measure has been criticised by both the unions and the business federations since its very inception. In fact, electricity suppliers are passing on the higher cost at which they must buy to consumers, i.e. households and companies.²⁶ The employment effects of this measure are therefore mixed: the total number of jobs in the wind sector has grown by 74 % since 2007²⁷ and nearly 100 000 solar panel installations on Belgian territory²⁸ have clearly created jobs, but the increased cost of energy has also quite possibly resulted in job destruction.

The following paragraphs describe different actions aimed directly at green job creation.

‘Energy scanners’ project²⁹ (Flanders)

Commenced in 2007, the *‘Energiesnoeiers’* (‘energy scanners’) project consists of training the low-skilled long-term unemployed in different energy-saving activities. They thus become ‘energy scanners’, offering households free installation of low-cost water and energy-saving devices plus advice on how to save energy. The services being provided by this project are gradually being expanded to cover insulation work (roofs, walls and floors) and recycling. To enable this expansion to take place, the training courses offered – which are conducted in coordination with the VDAB – are also being diversified. More than 30 social economy organisations are currently involved in the project in around 75 % of the communes of Flanders. In 2011, around 34 000 households benefited from advice enabling them to reduce their energy bills and/or get their roofs insulated. Moreover, the project has got around 4 000 people back to work. These workers are employed by the social economy companies and these companies work in cooperation with external partners, particularly in the building and construction sector, with housing corporations, the Public Social Welfare Centres (CPAS) and communes as well as the Flemish Government. The project falls within the framework of the CE-CLIC (Energy Check for Low Income Households) project, which is being funded by the European Commission under the Intelligent Energy Europe (IEE) programme. It also benefits four other countries: Austria, Germany, Hungary and the United Kingdom. For the current project phase, from 15/04/2011 to 14/10/2013, the anticipated European financing is

²⁵ Higher Council for Employment (June 2010).

²⁶ Collard F. in Les analyse du CRISP en Ligne (19 December 2012).

²⁷ Deloitte, (December 2012).

²⁸ CREG, p. 13 (October 2011).

²⁹ Internet: <http://www.komosie.be>, <http://www.ec-linc.info/>, Government of Flanders (May 2011).

EUR 806 636. The Flemish Government has scheduled an additional grant for this target group for 2012/2013.

The Marshall Plan 2.Green (Wallonia)

The Marshall Plan 2.Green was adopted in 2009 in order to boost Walloon economic recovery. This structural plan involves six major themes or areas and two cross-cutting dynamics³⁰ and represents an investment of EUR 2.72 billion. The cost of the programme³¹ is spread over the 2010-2014 period and comprises two components: one will be supported from the Walloon regional budget (EUR 1.62 billion, or 58.5 % of the programme) and the other from alternative financing³² (EUR 1.15 billion, or 41.5 % of the programme). The ordinary financing represented 4.2 % of the Walloon budget in 2010³³. The most significant themes in terms of investment are Area IV (creating an environment conducive to creating high-quality jobs and activities) and Area V (promoting future strategies: employment-environment alliances); together they represent 53.1 % of the total budget.³⁴

1. Policy initiative

The Marshall Plan 1.0 was initiated in 2005 with the aim of offering Wallonia a structural recovery strategy. The budgets covered the 2006-2009 period. In order to continue this strategy for Walloon recovery, the Marshall Plan 2.Green was launched for the 2010-2014 period, incorporating an employment-environmental alliance dimension ('green' focus). One of the areas is entirely devoted to this alliance (Area V). In addition, several employment-environment alliance policies are to be found in other areas and in the cross-cutting dynamics. In order to give a clearer vision of the Marshall Plan 2.Green's specific measures and objectives related to the employment-environment alliance, we have identified the elements of the plan that relate to this alliance and summarised them in two tables.³⁵ Employment/environment-related initiatives as a whole are estimated to account for EUR 1.27 billion over four years, i.e. 45.8 % of the total Marshall Plan 2.Green. The area devoted entirely to the employment-environment alliance (Area V) represents an investment of EUR 879.6 million over four years (almost one-third of the total Marshall Plan 2.Green investment, and nearly 70 % of the total green initiatives). This area is made up of EUR 279 million of ordinary financing and EUR 600 million of alternative financing. Area IV represents another significant theme, with investment of EUR 352.5 million (almost 13 % of the total Marshall Plan 2.Green investment and nearly 28 % of the total green initiatives, of which EUR 350 million is alternative financing).

³⁰ See Appendix 1.

³¹ The different budgets presented relate to the 2009 agreement. We have used these amounts in order to give an overall view. The budgets may therefore change.

³² Alternative financing comprises 'loans taken out by third-party institutions and the interest and write-down of which are partly or wholly covered by the Walloon Region, for the whole duration of the loan.' One of these third-party institutions is Société Wallonne pour la Gestion d'un Financement Alternatif (SOWAFINAL). Source: Cipriano S., (August 2011).

³³ Cipriano, S., Op. cit.

³⁴ See Appendix 1.

³⁵ Based on the initial budgets. See Appendix 2 and Appendix 3. Given the impossibility of isolating some budgets from other areas of the Plan specific to employment-environment objectives, these have been estimated on the basis of indicative elements in the text and the quantified summary.

Area V is structured around five main objectives (each in itself covering a whole series of desirable concrete actions). The most important measures in budgetary terms are the following: actions aimed at creating a high-quality offer through innovation, training actions on alliance skills, and the creation of Employment Creation Support (APE)/Vocational Transition Programmes (PTP) (measure 2, EUR 121.4 million); actions relating to sustainable investment in Walloon housing through specific measures aimed at private individuals and at the public sector (measure 3, EUR 629 million); and actions relating to sector policies in areas of green jobs research, economics, training and creation (measure 5, EUR 121 million). The other measures in the 'green' area are marginal compared to these (EUR 8.1 million for measure 1, multiannual plan setting quantitative objectives and environmental standards and multi-sectoral contract, and for measure 4, other alliances).

The aim of Area IV is to encourage the Walloon region to establish an environment conducive to creating activities and jobs. EUR 350 million will be invested in the clean-up and decontamination of sites. The remaining funds will be used to launch a pilot eco-zoning project.

The focus will also be placed on human capital with an estimated EUR 30.5 million of investments. This relates to mobilising people in the education sector around these issues and reinforcing the supply of 'green' training.

Finally, the Plan anticipates some other initiatives with 'green' potential in other areas, such as creating competitiveness clusters devoted to environmental technologies, and promoting sustainable development across all public policies.

2. Assessment

One of the specific features of this plan is its aspiration for regular evaluation in order to give better direction to the tools used in the recovery strategy. These evaluations are of two kinds: annual monitoring reports and specific evaluations.³⁶ As it is not possible to include all of the actions involved, we will present some of the most relevant that have been implemented.³⁷

Within Area I (human capital), several actions have been implemented.³⁸ Activities to promote green skills have been carried out: 5 106 job seekers have participated in awareness-raising sessions on sustainable construction and renovation, 973 job seekers have tested out different skills/professions (skill trials) related to the alliance, and 145 985 hours of 'green' training have been organised in skills centres. In order to better respond to the market needs: 2 126 alliance-related skills tests have been completed, 707 910 hours of 'green' skills training have been organised by FOREM, 42 376 green hours have been provided in block-

³⁶ Specific evaluations are planned: on the one hand, a global end-of-period evaluation (by IWEPS) and on the other, thematic evaluations (on certain specific points of the Plan).

³⁷ For this, we refer the reader to two evaluations conducted. The first relates to 2010: Public service of Wallonia (February 2011). This report notes the progress made during 2010, with the amounts provided, and makes specific recommendations. It should be noted that the amounts provided are in line with a specific terminology (means of action, means of payment and budget consumption). For more information on this terminology, please refer to Cipriano S., *Op. cit.*. The second relates to Public Service of Wallonia (March 2012). Unfortunately, this report is not as detailed as the former. The figures provided in this section relate to the second study.

³⁸ Between January 2010 and December 2011.

release training (IFAPME), and new master's courses have been created (sustainable worksite management, production management, etc.).

Within Area II (competitiveness clusters), a sixth competitiveness cluster has been launched ('GREENWIN') in relation to chemistry and sustainable materials. This project will absorb EUR 60 million and will create an estimated 1 903 jobs.

Within Area III (scientific research), the ERABLE programme for energy efficiency and renewable energies has been launched. The Walloon Government will finance 16 projects. The RELIABLE programme on smart, sustainable electricity grids is also up and running.

Within Area IV (creating jobs and activities), 7 sites have been confirmed for decontamination and one worksite has commenced; 14 other projects to clean up polluted sites have already begun (projects launched under the first Marshall Plan). The eco-zoning experiment has also been launched.

Within Area V (employment-environment alliance), the multiannual plan has been approved and the multi-sectoral contracts signed. Several accreditations have been launched ('sustainable building', 'companies' quality' and 'eco-systemic company'). The 'Ecopack' project is being designed (interest-free loan and grant). A number of grants have been merged (housing, energy and eco-loans). A total of EUR 15 million has been set aside to support innovative environmental technology companies. The 'clean engines and sustainable mobility' incubator has also been launched. SPW has conducted a series of energy audits on Wallonia's main buildings.

The employment-environment alliance (Brussels)

The Brussels Government intends to create new environment-related jobs through the Employment-Environment Alliance (AEE). The Sustainable Urban Growth Pact (PCUD), which was signed in 2011 and which set out the government's objectives and commitments³⁹, states that the environment forms one of the Plan's five priority areas⁴⁰.

3. Policy initiative

The Employment-Environment Alliance is structured around three areas: sustainable construction and renovation (Area I), water (Area II), and resources and waste (Area III). It is not possible to give the plan's budgetary vision for a number of reasons. First, not all of the areas have been established yet. Second, the defined actions have not all been budgeted for. Third, it is a plan in constant evolution. Although Areas I and II are up and running, the list of actions could yet be added to, depending on the proposals emerging from the Monitoring Committee. Finally, the list does not include all employment-environment incentives. In fact, existing environmental actions will be perfected and continued (energy grants, centre of reference for construction, incentives for greater environmental investment, etc.). A specific feature of this alliance is the clear way in which its objectives are defined, including concrete

³⁹ Commitment one: to encourage dialogue between the social partners alongside their cooperation with public actors; Commitment two: to encourage operational cooperation between business, employment, vocational training and skills training operators; Commitment three: to mobilise resources and public and private operators with a view to increasing jobs in Brussels and ensuring sustainable urban growth.

⁴⁰ The four other priority areas: 1) international development, 2) business and hotel and catering trade, 3) non-profit, public administration and outreach services; 4) innovative sectors.

actions. These actions are determined through cooperation between the public and private sectors, following specific workshops on particular themes.⁴¹ Another specific feature is its Monitoring Committee, made up of representatives of the Government, the social partners and the Belgian Construction Confederation. It should be noted that some of the actions in the different areas may be implemented jointly where appropriate.⁴²

The Government launched Area I (sustainable construction and renovation) in 2009. This has multiple objectives: training workers, developing the market, investing, etc., and these objectives have been transposed into 44 concrete actions⁴³, e.g. adapting the training plans to the challenges of sustainable construction (action 4), increasing the training supply for very small, independent companies and workers (action 21), and promoting research and development (R&D) in sustainable construction materials (action 38), etc.

Area II (water) commenced in 2011.⁴⁴ Brussels is facing a number of major challenges with regard to water. Renovation of the sewers and distribution network as well as the wastewater and rainwater collection project thus account for more than EUR 1.5 billion spread over 20 years (2010-2030). The cost is estimated at EUR 350 million between 2010 and 2014, financed by means of a EUR 168 million loan from the European Investment Bank (EIB). Other ‘water’ plans will be considered (problems of ground impermeability, storm water basins, etc.). This area will enable Brussels-based companies and residents to benefit from the resulting opportunities. Thirty-five concrete actions have been identified and divided among specific objectives⁴⁵: raising corporate awareness of public contracts in the water sector (action 5), facilitating the access of Brussels-based construction companies to the water market (action 11), and better matching supply and demand in the labour market for the water sector (action 25), to name but a few.

Area III (waste) is not yet up and running. The design phase (identifying needs and concrete actions) should be completed by the start of 2013.

⁴¹ Area I: the social economy, teaching, training, enterprise support tools, access to financing, research and innovation, excellence and technical references on the methods to be implemented; Area II: 1) enterprise support tools and market adaptation, 2) research, innovation and technical references on implementation, and 3) integration, training and teaching.

⁴² Areas I and II: green roofs, cisterns, etc.; Areas II and III: de-contamination of soil, sludge treatment, etc.

⁴³ Actions are classified under objectives. See Appendix 4.

⁴⁴ It revolves around two sectors: the grey network and the blue network. Definitions are given in Alliance Emploi Environnement (AEE) Eau (Employment-Environment Alliance, Water); *Grey Network*: ‘Set of large and medium-sized urban systems for water management in town. These systems relate to the network for managing the water consumed, i.e. from the drinking water distribution system to the wastewater management system, including the treatment of waste-water on the one hand, and rainwater management via storm water basins on the other.’ *Blue network*: ‘Set of compensatory measures linked to better water management from an environmental and sustainable perspective. This relates both to work on the hydrographic networks and work carried out at the homes of private individuals as well as urban planning measures. The blue network expands the scope of intervention of the blue network stricto sensu to all worksites involved in sustainable construction and urban planning that includes a “water” dimension from an integrated management and prevention aspect.’

⁴⁵ Actions are also classified under objectives like Axis I. See Appendix 4.

4. Assessment

We do not, at this stage, have enough information to evaluate the programme. The office of the Regional Minister for Employment has advised us that an evaluation will be available in February 2013.

4. Conclusion

The lack of a precise definition of the term ‘green job’ and the multiple actors involved in Belgium at the different government levels (federal, regional, community, etc.) make it difficult to provide a complete overview of the issue of green employment. The lack of synergies between the federal and federated bodies also forms an obstacle to establishing an integrated strategy for green job creation in Belgium.

At the federal level, an objective to develop green jobs can clearly be seen in the last government agreement. The July 2012 recovery plan, however, seems to lack any concrete actions in this regard. Moreover, the financial crisis has obviously not been favourable in this respect, with some areas of support for the greening of the economy being reduced. There is, nonetheless, a desire to strengthen synergies among the Federal Government, regional authorities and unions in order to provide, in particular, increased training for green jobs. The social partners’ desire to incorporate environmental issues into union practice and develop green employment has been firmly established since the 1990s, through the inter-trade union networks in each of the three regions. The priority now, however, is to produce the 2013-2014 inter-professional agreement, and the main concern is to maintain wage indexing and workers’ purchasing power. This tense backdrop clearly leaves little room for green job creation, despite the unions’ sensitivity towards the issue.

A green objective is also visible in all of the regional strategies. The Marshall Plan 2.Green and the Employment-Environment Alliance concretely establish this desire to green the economy and employment in Wallonia and Brussels. The ‘Energy Scanners’ project also demonstrates the Flemish concern to create green jobs.

This report has not mentioned all of the environmental actions aimed indirectly at promoting green jobs, such as aid to organic farming and green science promotion policies (Advanced Environmental Technology Centres in Brussels and Wallonia, and the Flemish Strategic Initiative for Sustainable Chemistry).

Finally, although environmental policies and the greening of the economy can contribute to creating jobs, they can also have the opposite effect (car industry⁴⁶). Moreover, environmental policies may have undesirable effects, such as the increased electricity costs that are being passed on to consumers and companies as a result of ‘green certification’. Nonetheless, a recent study by the Planning Bureau simulated a number of different possible scenarios that would achieve the objective of 100 % renewable energy in Belgium by 2050. According to its estimates, renewable routes would all create more jobs than would be destroyed in relation to the baseline scenario: between 20 000 and 60 000 jobs could be created by 2030.⁴⁷

⁴⁶ Brussels Employment Observatory of Employment, (November 2010).

⁴⁷ Federal Planning Bureau, (December 2012).

There is, in all cases, a need for further and more up-to-date research on this issue in order to grasp the multiple interactions.

5. Bibliography

EU background documents

- Commission Communication, *Innovating for sustainable Growth: A Bioeconomy for Europe* [SWD(2012) 11 final], COM(2012) 60 final, 13/02/2012

Data

- BFP: Federal Planning Bureau, Internet: <http://www.plan.be>
- Eurostat, Internet : <http://epp.eurostat.ec.europa.eu>
- Federal Public Service - Employment, Labour And Social Dialogue, Internet: <http://www.emploi.belgique.be/>

Other documents

- *Accord de gouvernement*, Coalition agreement), December 2011.
- Bilsen V., Devisscher S., Sanders D., Van Hoed M., Bosmans M., Leblanc F. and Soete A., *Green jobs Final report*, IDEA Consult, May 2010.
- BioForum Wallonia, *Le Bio en chiffres 2011*, (Bio 2011 in figures), Internet : http://www.bioforum.be/fr/pdf/37-Le_Bio_en_chiffres_2011.pdf
- Brussels-Capital Region, *Un développement régional durable au service des Bruxellois* (Sustainable regional development to serve Brussels), Coalition agreement 2009-2014, 12 July 2009.
- Brussels Observatory of Employment, *Les emplois verts à Bruxelles: analyse exploratoire* (Green jobs in Brussels: exploratory analysis), November 2010.
- Central Economic Council and the National Labour Council, *Avis concernant la thématique des emplois verts* (Opinion on the topic of green jobs), CCE 2009-1091 DEF CCR 10, 14 July 2009.
- Cipriano S., *Plan Marshall 2.vert: un regard budgétaire* (The Marshall Plan 2.Green: a look at budget), working paper of IWEPS n°1, Augustus 2011.
- Collard F., ‘Certificats verts: à poursuivre ou à réformer?’ (Green certificates: to continue or reform?), in *Les analyse du CRISP en Ligne* (Online reports of the Centre for Socio-Political Research and Information, CRISP), 19 December 2012.
- Construction Confédération, *Rapport annuel 2010-2011: Les emplois verts dans la construction* (Annual report 2010-2011: green jobs in the construction sector), 2011.
- CREG (Electricity and Gas Regulation Commission), *La capacité de production d'électricité installée en Belgique en 2010 et son évolution* (Production capacity of electricity in Belgium in 2010 and its evolution), study (F) 111013-CDC-1113, 13 October 2011.

- Deloitte, *Macro-economic impact of the Wind Energy Sector in Belgium Report*, December 2012.
- Energy Check for Low Income Household. Internet: <http://www.ec-linc.info/>
Consulted in January 2013.
- Federal Planning Bureau, *The Belgian environment industry (1995-2005)*, working paper 7-09, June 2009.
- Federal Planning Bureau, *Perspectives économiques 2012-2017* (Economic forecasts 2012-2017), May 2012.
- Federal Planning Bureau, *Towards 100% renewable energy in Belgium by 2050*, December 2012.
- Government of Flanders, *Towards a greener labour market policy: an initial policy exploration*, May 2011.
- Higher Council for Employment, *Rapport 2010* (Report 2010), June 2010.
- Koepel van milieuondernemers in de sociale economie (Network of environmental social entrepreneurs) Internet: <http://www.komosie.be>, Consulted in January 2013.
- Milquet J., *Un plan européen et un plan belge pour la création des emplois 'verts' et pour le 'verdissement' de l'économie* (A European and Belgian plan for green job creation and for the 'greening' of the economy), Press release of the former Federal Minister for Employment, September 2010.
- Public service of Wallonia, *Plan Marshall 2. Vert – rapport annuel 2010* (The Marshall Plan 2.Green; annual report 2010), February 2011.
- Public service of Wallonia, *Plan Marshall 2. Vert – rapport synthétique de suivi* (The Marshall Plan 2.Green: summary report of monitoring), March 2012.

6. Appendixes

Appendix 1: Initial budgets relating to the Marshall Plan 2.Green depending on the type of funding (in EUR millions and relative shares)

	Financing	Alternative financing	Amounts in million euros	Relative share
Axis I - An asset to be developed: human capital	337	-	337	12.2%
Axis II - Strengthening strategies for competitiveness clusters and business networks	388	-	388	14.0%
Axis III - Strengthen scientific research as driving force for the future	142	-	142	5.1%
Axis IV - A priority aiming to establish an appropriate framework for creating businesses and quality jobs	167	425	592	21.4%
Axis V - A new strategy for the future: Employment-Environment Alliances	279	600	879	31.7%
Axis VI - Combine employment and social well-being	297	125	422	15.2%
CCT 1 : Promote sustainable development across all public policies	5.25	-	5.25	0.2%
CCT 2 : Improve the effectiveness of the public partner and promote a Walloon awareness as a source of	5	-	5	0.2%
Total	1,620.25	1,150.00	2,770.25	100.0%
Total (share)	58.5%	41.5%	100.0%	

Source: Marshall Plan 2.Green, 2009, own calculation.

Notes: * Axis or Priority area. ** CCT = Cross-cutting process.

Appendix 2: Marshall Plan 2.Green: Budget 2010-2014 relating to the employment-environment alliance (in EUR millions and relative shares)

Objectives and measures	Amounts in million euros	Relative share
Priority area V: A new strategy for the future: Employment-Environment Alliances	879.6	69.4%
Measures 1: Multi-year energy saving and sustainable construction plan and a multi-sectorial contract	4.637	0.4%
Measures 2: Create the optimal conditions for development with a quality offer	121.416	9.6%
Measures 3: Improve the attractiveness of sustainable investments (or eco-investments) in the housing industry	629	49.6%
Measures 4: Consider other employment-environment alliances	3.5	0.3%
Measures 5: Improve sectorial policies and initiatives in terms of research, economy, employment and training in other green jobs	121.047	9.5%
Priority area I: An asset to be developed: human capital	30.47	2.4%
Measures 1: Measures 1: Collectively mobilise those involved in education, professional training and employment	6.63	0.5%
Measures 3: Satisfy market requirements by improving the training offer and facilitating the placement of job seekers	23.84	1.9%
Priority area II: Success to be built on: strategies for competitiveness clusters and business networks	-	-
Measures 2: Introduce a 6th competitiveness cluster dedicated to "Environmental Technologies	-	-
Measures 3: Contribute to the development of business networks	-	-
Priority area III: Strengthen scientific research as driving force for the future	-	-
Measures 1: Coordinate the research efforts of all bodies in Wallonia and Brussels	-	-
Measures 4: Encourage the integration of research into companies' innovation strategies	-	-
Priority area IV: A priority aiming to establish an appropriate framework for creating businesses and quality jobs	352.5	27.8%
Measures 2: Mobilise the Walloon Region to develop large-scale economic activity	352.5	27.8%
Priority area VI: Combine employment and social well-being	/	/
/	/	/
Cross-cutting process 1 : Promote sustainable development across all public policies	5.25	0.4%
Measures: Mobilise public services for sustainable development	5.25	0.4%
Cross-cutting process 2 :Improve the effectiveness of the public partner and promote a Walloon awareness as a source of motivation	/	/
/	/	/
Total	1,267.820	100.0%
whose direct measures	910.070	71.8%
whose indirect measures	357.750	28.2%

Source: Marshall Plan 2.Green, 2009, own calculation.

Notes: * The amount of Axis V comes from the synthesis of the Marshall Plan 2.Green. ** The budget of the measures which belongs to other axes but which are related with employment-environment alliance have been estimated on the basis of the text and the summary figures. *** The direct measures are those which belong to the 'green' pillar of the Plan (Axis V and elements of Axis I). The indirect measures are those which already existed in the Marshall Plan 1.0 or which primarily refer to environment and have an impact on employment (sanitation of polluted sites in Axis IV or cross-cutting process 1: Promote sustainable development across all public policies). **** We kept the numbering of the text for readability.

Appendix 3: Objectives, measures and detailed budgets Marshall Plan 2.Green relating to the employment-environment alliance

Marshall Plan 2.Green
Priority area V: A new strategy for the future: Employment-Environment Alliance
<p><u>This priority area is totally dedicated to Employment-Environment Alliance</u></p> <p>Objectives: 1) Support a new sustainable and united economic model through employment-environment alliances 2) Position Wallonia as a pioneer for sustainable development while creating employment that cannot be relocated</p> <p>Budget: EUR 879.6 million</p>
Measures 1: Multi-year energy saving and sustainable construction plan and a multi-sectorial contract (Budget: EUR 4.637 million)
<p><u>a) Develop a multi-year plan defining quantified objectives and standards in terms of energy savings</u> (Budget: EUR 0.967 million) (for energy savings and renovation of existing buildings)</p> <p>Actions: Define the incentives and appropriate financing mechanisms, develop a public communication and awareness campaign, adopt strict energy performance standards for buildings and examine inspection methods for the standards.</p> <p><u>b) Draw up and supervise the implementation of a multi-sectorial contract</u> (Budget: EUR 3.670 million)</p> <p>Actions: Continue the consultation initiative with the sectors and set up working groups for every priority construction site: strengthen and structure the offer and continue to stimulate demand), appoint a coordinator for the supervision / implementation stage, and examine the best way to incorporate sustainable criteria.</p>
Measures 2: Create the optimal conditions for development with a quality offer (Budget: EUR 121.416 million)
<p><u>a) Develop innovation</u> (Budget: EUR 4.946 million)</p> <p>Actions: Promote research projects and finance technology innovation partnerships in the sustainable construction sector. Attainment target: 5 calls for tenders for the period</p> <p><u>b) Include the development plan for skills for Employment- Environment Alliance jobs and other green jobs</u> (Budget: EUR 55.970 million)</p> <p>Actions and quantified attainment target: development of training centres and promotion of green jobs (7 875 beneficiaries), development of a advise offer and in particular the opportunity to trial green jobs (1 740 beneficiaries), development of a training offer (559 350 hours), continuous analysis of the needs of companies and people (10 jobfocus jobs and 5 000 screenings), vocational training initiatives (1 996 250 hours), development of a sandwich course (48 000 hours), and awarding of eco-climate cheques to small companies so that they can train their workers (170 000 cheques).</p> <p><u>c) Create employment by awarding green employment promotion aid (APE) and professional transition programmes (PTP).</u></p>

<p>Marshall Plan 2.Green</p> <p><i>(Budget: EUR 60.500 million euros)</i></p> <p>Quantified attainment target: 780 APE / PTP</p>
<p>Measures 3: Improve the attractiveness of sustainable investments (or eco-investments) in the housing industry (Budget: EUR 629 million)</p>
<p style="text-align: center;"><u>a) Measures aimed at individuals</u></p> <p style="text-align: center;"><i>(Budget: EUR 179 million)</i></p> <p>Actions: Structure the ‘energy’ and ‘housing’ subsidies and eco-loans with a view to encouraging investments to improve the energy efficiency (50 000 subsidies), and develop the third party investor system to help individuals by pre-funding eco-renovations to their housing. Support this demand-side policy through a strong and appropriate communication strategy (particularly through energy issues) (2 000 households involved).</p> <p style="text-align: center;"><u>b) Measures targeting the public sector</u></p> <p style="text-align: center;"><i>(Budget: EUR 450 million)</i></p> <p>Actions: Continue the renovation plan for the public housing stock (5 500 housing units over 5 years), develop collective boiler rooms in public housing and establish a large solar thermal system facilitator (10 projects supported), implement the UREBA (Rational use of Building Energy) plan through a comprehensive energy management strategy for buildings, conduct pilot projects in eco-construction and eco-renovation in the public housing sector and create and distribute a ‘Rational Energy Use’ handbook for use by managers of Public Service Housing, and speed up the building and renovation procedures for public housing, in particular those for disabled people.</p>
<p>Measures 4: Consider other employment-environment alliances (Budget: EUR 3.5 million)</p>
<p><u>Quantified attainment target: At least 3 other alliances</u></p> <p><i>(Budget: EUR 3.5 million)</i></p>
<p>Measures 5: Improve sectorial policies and initiatives in terms of research, economy, employment and training in other green jobs (Budget: EUR 121.047 million)</p>
<p style="text-align: center;"><u>a) Improve green research</u></p> <p style="text-align: center;"><i>(Budget: EUR 48.130 million)</i></p> <p>Actions: Establish a ‘WISD’ (Walloon Institute for Sustainable Development), a centre of excellence dedicated to sustainable development, Invest in R&D in terms of renewable energy sources, Adopt a research programme on smart technologies to manage the electric network</p> <p style="text-align: center;"><u>b) Develop the green economy</u></p> <p style="text-align: center;"><i>(Budget: EUR 57.917 million)</i></p> <p>Actions: Conduct a study relating to the new ecosystem-based economic mechanisms (industrial ecology) and create a partnership with recognised foreign institutions; award special innovation grants and involvement in the Walloon Prize for Entrepreneurship with an ‘Enterprise and Sustainable Development’ section (125 grants and 5 prizes awarded); strengthen competitiveness of Walloon companies through the raising of their Eco-conception and Eco-design awareness (500 companies); improve</p>

Marshall Plan 2.Green
<p>individual financial support for spin-offs, start-ups and innovative companies involved in environmental technologies (100 companies); improve the ‘sustainable development’ focus in themed incubators (15 companies); create 6 operational ‘clean engines’ companies ; support the development and participation of approved companies in the social economy sector in the process of sustainable development and the ‘green’ economy; create waste grants (at least 10 grants); launch a call for tenders in construction eco-materials (max 15 projects); establish an ‘ecosystem-based companies’ label (500 companies awarded) and create a land registry of ‘dormant’ Walloon public funds (concept that the Government will define) or those invested without ethical criterion in order to invest them through one or more ethical fund(s).</p> <p style="text-align: center;"><u>c) Improve training initiatives</u> (Budget: see Area I) cf. Area I</p> <p style="text-align: center;"><u>d) Begin a job creation scheme for green jobs</u> (Budget: EUR 15 million) Actions: promotion APE et PTP (220).</p>
Area I: An asset to be developed: human capital
<p>This area is partly <i>directly</i> dedicated to <u>Employment- Environment Alliance</u> (integrated strategy of areas I and V)</p>
<p>Objectives: 1) create jobs and 2) increase partnerships and synergies between education and training bodies. Estimated budget: EUR 30.47 million directly dedicated to Employment-Environment Alliance</p>
Measures 1: Collectively mobilise those involved in education, professional training and employment (Estimated budget: EUR 6.63 million)
<p>Within this strategy, the following steps are part of the Employment-environment alliance:</p> <p style="text-align: center;"><u>c) Promote and develop technical and scientific jobs and the industries that involve them</u> Increase interest in scientific and technical jobs with young people, the general public and the business world Quantified attainment target: 52 500 people benefiting from awareness initiatives 15 % of which in green jobs.</p> <p style="text-align: center;"><u>d) Improve and increase advice</u> Develop an advice offer and job trials which helps job seekers to choose a promising job based on firm and practical information about performing this job. Attainment target: 11 600 beneficiaries 15 % of which are in green jobs</p> <p style="text-align: center;"><u>e) Guarantee maximum accessibility to training centres for everyone</u> Continue to develop the skills centres with the target of 3 729 000 skill centre hours 15 % of which are in green jobs</p>
Measures 3: Satisfy market requirements by improving the training offer and facilitating the placement of job seekers

Marshall Plan 2.Green
(Estimated budget: EUR 23.84 million)
<p>Within this strategy, the following steps are part of the Employment-environment Alliance:</p> <p><u>b) Identify the needs of job seekers and companies and consequently adapt the vocational and basic training offer and improve access to employment</u> Analyse skills acquired and those required: 40 jobs continuously analysed 25 % of which are in green jobs and 40 000 people screened 12.5 % of which are in green jobs. Adapt the basic and vocational training offer: 3 024 025 vocational training hours including 1 446 250 hours in green jobs and 550 000 pre-vocational training hours in green jobs.</p> <p><u>c) Develop sandwich course training and make job-based courses more widely available</u> Target: 160 000 training hours 30 % of which are in green jobs.</p>
Priority area II: Strengthening strategies for competitiveness clusters and business networks
<p>This area is partly linked indirectly to employment-environment alliance: Objective: implementation of a new industrial policy based on networking and in particular, competitiveness clusters (Budget: unknown)</p>
Measures 2: Introduce a 6th competitiveness cluster dedicated to ‘Environmental Technologies’ (Budget: unknown)
<p>The next measure is partly the employment-environment alliance:</p> <p><u>a scientific study will be launched in order to identify promising industries where Wallonia may excel on a European or international scale in terms of environmental technologies</u></p>
Measures 3: Contribute to the development of business networks (Budget: unknown)
<p>The next measure is partly the employment-environment alliance:</p> <p><u>Creation of an ‘ecoclusters’ platform.</u></p>
Priority area III: Strengthen scientific research as driving force for the future
<p>This area is partly linked indirectly to employment-environment alliance: Objective: investment in scientific research to achieve the European objective Budget: unknown</p>
Measures 1: Coordinate the research efforts of all bodies in Wallonia and Brussels (Budget: unknown)
<p>The next measure is partly the employment-environment alliance:</p>

Marshall Plan 2.Green
<u>Establish a development and investment strategy for research by defining cross-cutting strategic themes such as renewable energies, new technologies, etc.</u>
Measures 4: Encourage the integration of research into companies' innovation strategies (Budget: unknown)
The next measure is partly the employment-environment alliance: <u>Development of a strategic innovation plan for Walloon companies paying particular attention to eco-innovation</u>
Priority area IV: establish an appropriate framework for creating businesses and quality jobs
This area is partly linked indirectly to employment-environment alliance: Objectives: Support the growth of companies, establish an appropriate framework for creating businesses and Launch a true Walloon plan for SMEs Estimated budget: EUR 352.5 million
Measures 2: Mobilise the Walloon Region to develop large-scale economic activity (Estimated budget : EUR 352.5 million)
a) <u>Clean up polluted sites and rehabilitate sites to be redeveloped</u> b) <u>Continue to install facilities for economic activities on designated sites</u> included: Launch a pilot study on creating eco-zones
Priority area VI: Combine employment and social well-being
/
Cross-cutting process 1: Promote sustainable development across all public policies
Objective: Incorporate the sustainability aspect in all regional policies Budget: EUR 5.250 million
Measures: Mobilise public services for sustainable development (Budget: EUR 5.250 million)
<u>Incorporate environmental, social and ethical clauses in regional public procurements, establish a sustainable purchasing and environmental</u>

Marshall Plan 2.Green
<u>management policy, promote short supply chains and local and regional companies, establish a 'sustainable development' opinion unit, etc.</u>
Cross-cutting process 2 : Improve the effectiveness of the public partner and promote a Walloon awareness as a source of motivation
/

Source: Marshall Plan 2.Green, 2009, own calculation.

Appendix 4: The employment-environment alliance (Brussels): Objectives and sub-objectives of Axis I and II (sustainable construction and renovation; water)

Objectives and under-objectives of Axis I and II	
Axis I sustainable construction and renovation	Axis II water
Measures 1 : Master	
Plan of action 1.1 : Inform	Plan of action 1.1 : Identify markets and jobs
Plan of action 1.2 : Train	Plan of action 1.2 : Identify future jobs
Plan of action 1.3 : Support	
Measures 2 : Train workers	
Plan of action 2.1 : Incite	Plan of action 2.1 : Identify training programs to develop
Plan of action 2.2 : Structure supply	
Plan of action 2.3 : Strengthen supply	
Measures 3 : Sell	
Plan of action 3.1 : Explore	Plan of action 3.1 : Characterise procurement
Plan of action 3.2 : Convince	Plan of action 3.2 : Avoid unfair competition
Plan of action 3.3 : Reassure	Plan of action 3.3 : Inform firms
Measures 4 : Honour orders	
Plan of action 4.1 : Stimulate innovation	Plan of action 4.1 : Facilitate integration of standards and new technologies
Plan of action 4.2 : Cover the whole sector	Plan of action 4.2 : Facilitate realisation of public works
Measures 5 : Be recognised by the market	
Plan of action 5 : Be recognised by the market	Plan of action 5 : Improve accessibility of companies to procurement
Measures 6 : Develop	
Plan of action 6.1 : Manage its growth	Plan of action 6.1 : Support innovation
Plan of action 6.2 : Facilitate extension	Plan of action 6.2 : Experiment
	Plan of action 6.3 : Integrate innovation
Measures 7 : Invest	
Plan of action 7.1 : Inform	/
Plan of action 7.2 : Support	
Measures 8 : Recruit	
Plan of action 8.1 : Promote from the youngest age	Plan of action 8.1 : Encourage vocations
Plan of action 8.2 : Adapt devices	Plan of action 8.2 : Bring companies and world of training together
Plan of action 8.3 : Train job seekers	Plan of action 8.3 : Supply labour market
Plan of action 8.4 : Supply labour market	
Other	
Measures 9 : Cross-disciplinary actions	/

Source: The employment-environment alliance, Axis I and II.