

GREEN JOBS

SUCCESSES AND
OPPORTUNITIES
FOR EUROPE



The Greens | European Free Alliance
in the European Parliament



GREEN
NEW DEAL

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BOOSTING JOBS AND ECONOMIC RECOVERY

Unemployment is one of Europe's most pressing problems. More than 25 million Europeans - more than 10% of the active population - are out of work. The situation faced by young people is even bleaker, with almost one in four young adults aged under 25 jobless. In the hardest-hit European countries, like Greece or Spain, more than half of all young people are unemployed and austerity policies are merely exacerbating the situation.

Jobs

NEXT EXIT

At the same time, the climate and environmental crisis is becoming increasingly serious. Scientists are more certain than ever that human activity is changing our climate and are stressing the dangers of not taking action to stop the rot. Meanwhile, economists are warning us that the longer we wait before taking action, the more it will cost us to do so.¹

But there is a way out: **by greening our economies, we can provide high-quality green jobs to fight unemployment and at the same time combat climate change and environmental decline.** The EU can only benefit from such efforts. Remaining a 'green leader' would enable the EU to generate exports worth an additional €25 billion per year, cut energy bills by as much as €350 billion per year by 2050,² reduce our dependency on imported energy and resources purchased at volatile prices, and boost Europe's security of supply.

If we can ensure the strong involvement of social partners, establish targeted training and education programmes and implement ambitious, stable policies designed to foster innovation and green investment, millions of sustainable **high-quality green jobs can be created, many of them in local small and medium-sized enterprises throughout Europe.**

This brochure aims to inform you about **Europe's opportunities for creating green jobs** and the **efforts of the Greens/EFA in the European Parliament to boost green employment.**

The second part of the brochure describes some of the **successes in creating green jobs across Europe.** Green jobs in Europe are certainly no utopian dream: they are already a reality!

¹ Nicholas Stern, 2007. The Economics of Climate Change. The Stern Review.

² European Climate Foundation, 2010. Roadmap 2050: a practical guide to a prosperous, low-carbon Europe.

WHAT ARE GREEN JOBS?

The definition of a 'green job' is any professional activity that helps to protect the environment and fight climate change by saving energy and raw materials, promoting renewable energies, reducing waste and pollution or protecting biodiversity and ecosystems.

Developing sustainable patterns of consumption and production generates potential to create new jobs and Developing

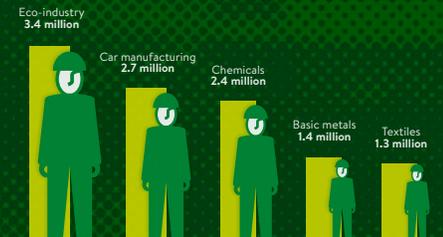
sustainable patterns of consumption and production generates potential to create new jobs and transform existing ones into high-quality green jobs, not only **in virtually all sectors**, but also **across the entire value chain, from research to production, distribution and servicing**; in **new high-tech sectors** such as renewable energies; **in traditional industries** like manufacturing and construction; in **agriculture and fisheries**; and in service sectors such as **catering, tourism, transport and education**.

In our view, **green jobs provide decent work** which in turn guarantees adequate **social protection, sufficient incomes, healthy working conditions**, respect for workers' rights, and individuals' participation in decisions that affect their lives.

³ Developing the job potential of a new sustainable economy, European Parliament resolution, adopted on 7 September 2010, Rapporteur: Green MEP Elisabeth Schroedter.

The Greens/EFA in the European Parliament are working hard to create more green jobs in Europe. For instance, in 2010, an initiative by a Green MEP prompted the European Parliament to adopt a strong resolution calling for the exploitation of the full job potential of a sustainable economy whilst ensuring decent work and a socially just transition.³ The Green demands presented in this brochure are all reflected in that resolution.

NUMBER OF JOBS IN THE EU



Figures for EU-27, 2008. Source: European Commission 2011: EU environment policy supporting jobs and growth

So-called 'eco-industries' include all activities linked to the production of technologies, products and services that help to measure, prevent or correct damage caused to water, air or soil and offer solutions to environmental problems such as waste, noise and damage to ecosystems. Examples include waste and water management, air pollution control, recycling, renewable energy generation and biodiversity protection.





CREATING GREEN JOBS

IN NEW AND
TRADITIONAL
BUSINESSES

The literature suggests that **investing in a sustainable economy will create and retain large numbers of jobs in both emerging and traditional sectors.** So there is strong evidence to suggest that the green transition will, on balance, have a positive impact on employment, reflecting the fact that sustainable economic activities like saving energy or farming organically are more labour-intensive than the activities they replace.⁴

The exact number of people in green jobs is hard to estimate because people's definitions of 'green job' differ. Furthermore, there is a dearth of standardised data, especially outside ecological sectors, where green jobs are spread throughout Europe in companies intent on improving their environmental performance.



Figures for EU-27. Source: ECORYS, 2012. The number of jobs dependent on the environment and improving resource efficiency

Since 2008, numerous jobs have been created in **the renewable energies** sector. In 2009/2010, around 1 million jobs were counted in the sector, which has proven to be crisis resilient. Even between 2010 and 2011, an increase in the number of jobs was recorded, bringing the total to 1,186,000.⁵ If Europe adopts ambitious climate policies, the sector's potential will be even greater. The European Commission calculated in 2011 that an additional **3 million jobs could be created by 2020,⁶ and 6 million jobs could be reached by 2050** if the aim of achieving 100% of energy from renewable sources is adopted.⁷

⁴ CE, GHK, IER, 2011. Studies on Sustainability Issues – Green Jobs; Trade and Labour; Final Report for the European Commission, DG Employment.

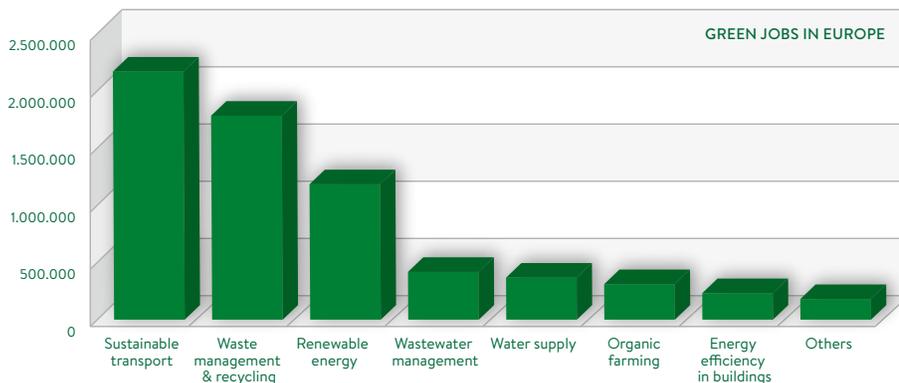
⁵ EurObserv'ER, 2012. The State of Renewable Energies in Europe, 12th EurObserv'ER Report.

⁶ European Commission, 2011. COM (2011) 31 final, Renewable Energy: progressing towards the 2020 target.

⁷ European Renewable Energy Council, 2010. RE-thinking 2050. A 100% Renewable Energy Vision for the European Union.

Improving **resource efficiency could create** between **1.4 and 2.8 million jobs** in Europe.⁸ In addition, some **14.6 million jobs depend directly on ecosystems and biodiversity**, including in forestry, agriculture and fisheries.⁹ **Greening these sectors would increase the number of people in work.** For instance, organic agriculture is estimated to employ 10–20% more people per hectare than conventional farming.¹⁰

The example of the steel industry shows how the green transition also helps to retain jobs in traditional, declining industries. Wind turbines require quality steel, and this demand is opening up new market niches for the industry and safeguarding jobs.



Sources: Figures for EU-27. Sources: Transport, including: Public transport (2008: 1,200,000): UITP, 2008. Public transport: The smart green solution!; Rail (2004: 900,000): European Commission, 2008. Towards an integrated European railway area. Waste management & recycling, wastewater management, water supply, others (biodiversity, air, soil and groundwater, noise and vibration) (2008): ECORYS, 2012. The number of Jobs dependent on the Environment and Resource Efficiency improvements, Renewable energies (2011): EurObserv'ER, 2012. State of Renewable Energies, 12th Euroobserver Report. Organic farming (2007): ECORYS, 2012. Energy efficiency in buildings (2009): ECORYS, 2012.



photo: ©monkeybusinessimages

⁸ GWS, 2011. Macroeconomic modelling of sustainable development and the links between the economy and the environment, Report for the European Commission, DG Environment prepared by Cambridge Econometrics, the Institute of Economic Structures Research, the Sustainable Europe Research Institute and the Wuppertal Institute for Climate, Environment and Energy.

⁹ FEMM, GHK, Ecologic Institute, IEEP, 2011. The Social Dimension of Biodiversity Policy.

¹⁰ Sustainlabour, 2013. Green Jobs and related policy frameworks. An overview of the European Union.



EXPLOITING THE FULL JOB POTENTIAL

photo: @tinabelle

The full potential of green employment can only be exploited if long-term legal and financial framework conditions guarantee sustainable investment and encourage innovation.

*The Greens in the European Parliament are actively pushing for the adoption of such frameworks. Where **energy savings are concerned**, we have successfully garnered majority support for the attainment of ambitious, binding targets by 2020¹¹ and 2030. EU governments have so far declined to ratify these targets, but the Greens will continue to push for their acceptance in a bid to create jobs on a massive scale. After all, effective energy efficiency measures could create or retain **2 million green jobs** in Europe.¹² Many of these jobs concern the renovation of buildings, one of the sectors worst affected by the economic crisis. Moreover, these jobs would be **non-transferable and would be created in local small and medium-sized enterprises.***

The Greens/EFA also managed to impose tougher rules governing **EU expenditure on sustainable projects that contribute towards job creation**. For example, we successfully defended mandatory investment by European regions in energy savings and renewable energies. Poorer Member States in particular will be able to spend more EU funding than before on climate and environmental protection measures. One recent report suggests that spending the EU's regional development funds on green investment would generate more jobs than spending the same amount on the kinds of activities funded in the past.¹³ Moreover, the Greens have successfully safeguarded rules governing the investment of **EU funds in organic farming and sustainable fisheries**.

In addition, with regard to the EU's new rules on **public procurement**, the Greens successfully fought for mandatory consideration of environmental, social and fair trade criteria and for the possibility of mandatory eco-labels. **All these Green achievements could significantly boost the creation of green jobs.**

Only if the policies promoting a green transition are stable will green jobs be created and retained in the long run. For example, in Spain, which in 2008 was still a European leader in renewable energies, successive central governments have drastically cut support programmes in this sector since 2009, and it is primarily these cuts which have resulted in the number of jobs in the sector nationwide having halved since then.¹⁴

¹¹ Energy Efficiency Directive, report adopted by the European Parliament on 11 September 2012, Rapporteur: Green MEP Claude Turmes.

¹² European Commission, 2011. SEC (2011) 779: Impact Assessment accompanying the Energy Efficiency Plan.

¹³ GHK, 2011: Evaluating the Potential of Green Jobs in the next Multi-annual Financial Framework.

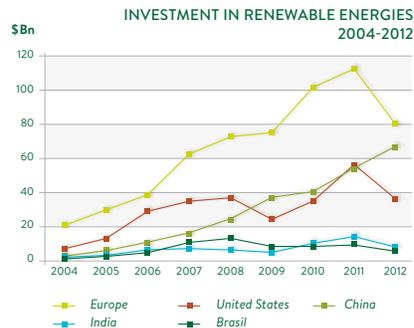
¹⁴ Data by Spanish renewable energies industry associations UNEF, Protermosolar and AEE. Compiled by the newspaper Cinco Dias.



photo: ©eliandric

SAFEGUARDING COMPETITIVE ADVANTAGES

The European Union has to invest in a sustainable economy now if it is to retain its leading position in the development and production of ecological goods. For a long time, Europe has been the world leader in environmental protection and sustainability and has dominated global competition in renewable energies. But now other economies are catching up. For example, since 2011 Europe's investment in renewable energies has declined, whereas China's has steadily increased in recent years.



Source: Frankfurt School-UNEP Centre/BNEF, 2013. *Global Trends in Renewable Energy Investment 2013*

Europe can only hold on to its global leadership if it invests now - and on a massive scale - in a sustainable economy, adopts ambitious environmental legislation and prioritises climate and environmental protection in its budget. Only then will a large proportion of the globally forecast green jobs be created in Europe.

In this context, the Greens in the European Parliament have put forward a strategy for a Renaissance of Industry for a Sustainable Europe (RISE) designed to use sustainability to lever Europe's global competitiveness and create a wide range of high-quality green jobs.¹⁵

*Furthermore, the **Greens are actively supporting innovative companies which invest in efficient, sustainable products.** For example, most refrigeration and air-conditioning systems still rely on 'super greenhouse gases' which cause exceptionally serious damage to our climate. Fortunately, environmentally friendly alternatives are available, and more than 400 European manufacturers and businesses are already working with them. Based on an initiative by a Green member, the European Parliament has now introduced phase-outs of these harmful gases.¹⁶ As up to 90% of the systems using these highly damaging gases are imported, these bans will benefit European manufacturers of sustainable alternatives and boost green jobs.*

¹⁵ Reindustrialising Europe to promote competitiveness and sustainability, European Parliament resolution, adopted on 15 January 2014, Rapporteur: Green MEP Reinhard Bütikofer.

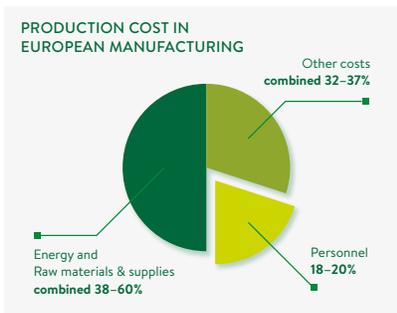
¹⁶ EU Regulation on fluorinated greenhouse gases, inter-institutional agreement adopted by the European Parliament on 12.3.2014, Rapporteur: Green MEP Bas Eickhout.



**DRIVING
DOWN COSTS,
PROMOTING
DECENT
WORK**

photo: ©Mordolff

For a long time now, European businesses have tried to compete globally by cutting labour costs, e.g. wages and social security contributions. However, **the costs of the materials and energy consumed in the production process are often many times higher than labour costs.** Accordingly, achieving savings on energy and material consumption, which constitutes a core aim of greening businesses, will generate competitive advantages in the future.



Source: Greenovate! Europe, 2012. Guide to resource efficiency in manufacturing

On average, labour only accounts for 18-20% of overall production costs in European manufacturing companies, whereas raw materials and supplies account for 30-45% and energy costs for 8-15%.

Energy savings and a more efficient use of resources help to force down production costs and save factories from closure, whilst at the same time guaranteeing workers suitable remuneration. Many trade unions and work councils have recognised this and are committed to promoting energy- and resource-efficient production as a way of easing the pressure on labour costs.

The Greens have been placed in charge of drafting a raw materials strategy on behalf of the European Parliament that will focus on achieving even greater resource efficiency and on re-using and recycling resources to create jobs, boost competitiveness and protect the environment.¹⁷

¹⁷ An effective raw materials strategy for Europe, European Parliament resolution, adopted on 13 September 2011, Rapporteur: Green MEP Reinhard Bütikofer.

WORKERS'
RIGHTS
ARE
HUMAN
RIGHTS

**A SOCIALLY
JUST GREEN
TRANSITION**

For us as Greens it is **crucial that green jobs promote decent work** with adequate social protection, sufficient incomes, healthy working conditions, respect for workers' rights and individuals' participation in decisions that affect their lives.

Ensuring decent working conditions in new sectors such as renewable energies can prove challenging. A study by the European Metalworkers Federation (EMF) on the wind energy sector in Germany, France, Spain, the Netherlands and Denmark concludes that competitive pressures, inadequate worker representation, temporary employment contracts and skill shortages are all detrimental to working conditions.¹⁸ Evidence is mixed, though, for research conducted in Germany and Spain has found the quality of jobs in the renewable energy sector to be good,¹⁹ whereas in the waste management industry unhealthy working conditions and low pay are problematic.

Furthermore, environmental change demands flexibility. Workers need to be sure that they are safeguarded by effective workforce representation and social security guaranteed by the respective Member State's system.

The Greens/EFA in the European Parliament regularly meet trade union and workforce representatives to discuss how to ensure decent work in green sectors and a socially just transformation in which workers play a full partnership role and are not unfairly disadvantaged by changes. Moreover, the Greens are pressing hard for strong social security systems in Europe, especially during the green transition and for workers between jobs.

¹⁸ European Metalworkers' Federation (EMF) and PCG: The European Wind Energy Sector: Green and Social? New Pathways for Workers Representation in the European Wind Sector.

¹⁹ International Labour Organisation, 2013: Sustainable development, decent work and green Jobs. International Labour Conference, 102nd Session.



**THE
RIGHT
TO
TRAINING
AND
EDUCATION**



The Greens in the European Parliament are calling for a broad education and training initiative for green jobs across all skill levels. **The green transition must offer opportunities for everyone: young and old, male and female, highly or lesser skilled, jobless and employed.** All workers are entitled to training and lifelong learning.

Vocational training and education programmes must ensure that a worker who has spent, say, 30 years working in coal mining can acquire the skills required to land a green job. This is absolutely essential if the job potential of the green transition is to be fully exploited. Employers, workers and governments are jointly responsible for devising coherent education and training strategies. A first step will entail identifying new and future skill needs and pinpointing workers' skill gaps.

*The Greens in the European Parliament succeeded in ensuring that employment and training measures funded with EU money have to take account of the shift to a green economy. **We are also fighting hard to promote workers' fundamental right to training and to expand democratisation in the workplace.** After all, innovation and creativity occur not only in research facilities, but also on the shop floor when workers propose new ideas.*

WOMEN IN GREEN JOBS

The potential for creating green jobs is particularly high in certain sectors, like construction, the production of solar and wind power facilities and research into energy- and resource-saving technologies. These sectors are all traditionally male-dominated in EU Member States and the prejudices of employers and colleagues are often so deeply entrenched that many women still face the threat of discrimination. At the same time, young women today persist in only rarely choosing professions involving mathematics, computer science, the natural sciences and technology.



The Greens/EFA in the European Parliament are strongly advocating female participation in the green economy. Take, for example, two initiatives put forward by Green MEPs: a European Parliament resolution on gender aspects of the economic and financial crisis²⁰ and a call for an EU initiative promoting gender balance in male-dominated sectors.²¹ The Greens also succeeded in ensuring mandatory consideration of gender equality when EU money is spent on regional development and social projects, because studies we commissioned on this topic have shown that gender parity is still far from a reality.

²⁰ The impact of the economic crisis on gender equality and women's rights, European Parliament resolution, adopted on 17 June 2010, Rapporteur: Green MEP Raül Romeva.

²¹ Developing the job potential of a new sustainable economy, European Parliament resolution, adopted on 7 September 2011, Rapporteur: Green MEP Elisabeth Schroedter.



SUCCESS STORIES: GREEN JOB CREATION IN EUROPE

**GREEN JOBS ARE NO
UTOPIAN DREAM.
PROGRESS TOWARDS
MORE SUSTAINABILITY
HAS BEEN MADE IN
MANY PLACES ACROSS
EUROPE, CREATING JOBS.**

THE VILLAGE OF ANAVRA, GREECE: SUSTAINABLE LOCAL DEVELOPMENT FOR JOBS AND PROSPERITY

ACTIVITIES:

Sustainable local development creates full employment and prosperity

WHERE ARE JOBS BEING CREATED?

Organic & livestock farming, local production of renewable energy, eco-tourism

WHO?

The local community and authorities, farmers, local businesses, the local technical college

SUCCESSES:

Zero unemployment, a larger population, additional village income totalling €60,000 a year, new public infrastructure, a better quality of life

Website:

www.anavra-zo.gr/en



photo: ©Stamatis Lagkanis

The remote mountain village of Anavra in southeastern Greece has very successfully harnessed the job potential of a green transition. Between 2000 and 2010, the municipality saw its **unemployment rate drop to zero, its population almost double** from 300 to 550 inhabitants, **and its citizens' quality of life improve**. Anavra's green transition even attracted worldwide attention, **transforming the previously poor, isolated village into a model of sustainable local development**. The village's transformation began in the mid-1990s,

ringing in major changes in a number of sectors.

Traditional livestock farmers turned towards **integrated, organic farming**, establishing three farms with a total of 25,000 animals, including sheep, goats, cows and pigs, all grazing freely in the mountains. The villagers also set up a public abattoir with a certified organic section and meeting the relevant international quality standards.

At the same time, in an effort to produce its own energy, **Anavra built a wind farm** comprising 20 turbines generating a combined total of up to 17.5 megawatts, capable of powering 12,500-13,000 homes. Two more wind farms are currently under construction, consisting of 23 turbines with a combined output of 20 megawatts. These projects **are expected to create 20 permanent and 100 temporary jobs**. Any surplus electricity is sold, and **the first wind farm alone has generated additional »**

income for the village of about €60,000 a year. In 2010, the village also teamed up with a local technical college to start planning the construction of a small hydroelectric plant and a biomass distance heating system.

Finally, the village also developed the 240-acre Goura Environmental and Cultural Park, which has bolstered **eco-tourism**, attracting more than 8,500 visitors between 2000 and 2012.

Anavra's sustainable development plan has not only created jobs and boosted private incomes, but also given the local community the means to develop public infrastructure and hence improve its inhabitants' quality of life. For instance, the villagers have built squares and water pumps, a rural medical centre, education and sport facilities, a retirement home and facilities for the homeless. **The village's rates of unemployment and criminality**

are zero, and its youngsters are no longer moving away.

The very positive socio-economic situation of Anavra today is even more stunning bearing in mind how badly Greece has been affected by the economic crisis. In 2012, per capita GDP in Greece was only 75% of the average for the EU as a whole, and in 2013 unemployment there ran at 27.8%, 160% higher than the EU average.

Anavra's success can largely be attributed to strong individual leadership and support provided by EU funds.

According to official estimates, if **Greece manages to nudge its economy onto a sustainable path, it could create 210,000 green jobs**, 27,000 of which would be permanent.



BREMERHAVEN, GERMANY: JOBS FOR WORKERS FROM DECLINING INDUSTRIES

ACTIVITIES:

Creating new jobs for workers from declining industries

WHERE ARE JOBS BEING CREATED?

Wind energy, construction, the engineering and steel sectors and local small and medium-sized enterprises

WHO?

Local and regional authorities, researchers, workers and local businesses

SUCCESSES:

*1,000 wind energy jobs in Bremerhaven,
4,050 renewable energies jobs in the federal
state of Bremen*

Website:

<http://offshore-windport.de/en/home.html>



Under Green leadership, the transition towards a green economy became a priority for the 1998-2005 Social Democratic-Green coalition federal government, which launched the country's energy revolution. According to official figures, 1.93 million people were working in the environmental protection sector in Germany by 2008, 37% more than 10 years before.

Bremerhaven, a coastal city with a population of 120,000 in the state of Bremen, **exploited the greening trend to restructure its economy, which had traditionally focussed on shipbuilding.** In the late 1980s a deep economic downturn hit the city following a sharp falloff in demand and ever stiffer competition from foreign-based companies. This led to extensive job losses (with 3,500 shed through shipyard closures alone) and saw the city's population drop by almost 30%, while unemployment soared to 21% in 1997. In 2001 Bremerhaven City Council decided to try and reverse this trend, simultaneously building »

on its main assets - a skilled workforce, wide-ranging technological know-how in the maritime sector and in manufacturing port facilities - by promoting wind energy, focussing on offshore wind farms in particular.

Numerous steps were taken, including investment in infrastructure, research in the wind sector and the intensified provision of appropriate vocational training. The Wind Energy Agency (WAB), a network of 300 companies and institutes working in wind energy (production, installation and research) was set up in 2002 to serve as a nationwide hub for the offshore wind industry.

These efforts proved fruitful, and **today Bremerhaven has 1,000 workers employed in the wind sector** (the total for the whole of Germany in 2012 was 117,900). Meanwhile, **in the state of Bremen the renewables sector employs no fewer than**

4,050 people. Local small and medium-sized enterprises in the construction, engineering and steel sectors and also other companies manufacturing wind turbine components have benefited, too. Sustained efforts will continue to be required to bring down the high unemployment rate (the level in August 2013 was 11.1%), but the successful development of the wind energy sector has undoubtedly helped to ease the region's problems.

The German Green Party, the Alliance '90/ The Greens, which has been part of Bremen's regional government since 2007, played a key role in pressing for the development of the region's renewables sector.



BRUSSELS AND WALLONIA, BELGIUM: CREATING VIABLE ECONOMIES AND LOCAL JOBS

ACTIVITIES:

Promote the green transition of regional economies, create stable local jobs and maintain the long-term viability of economic sectors

WHERE ARE JOBS BEING CREATED?

Small and medium-sized enterprises in the construction sector, companies and services in the agri-food sector

WHO?

Local and regional authorities, business associations, public interest organisations, trade unions, educational service providers

SUCCESSES:

A comprehensive set of measures launched to address the need for energy savings in buildings: training schemes, exchanges of good practice, funding for individuals and small and medium-sized enterprises, research programmes, technical support

Website:

<http://www.aee-rbc.be/>

<http://nollet.wallonie.be/la-premiere-alliance-emploi-environnement-est-scellee-0>



Since 2009, **Green ministers** in two of Belgium's three Regions, Brussels and Wallonia, **have been pushing hard for the development of so-called 'Employment-Environment' Alliances in a bid to create green jobs.** In Wallonia, these Alliances received a total budget of €879,000,000 under the 'Marshall Plan 2.Green', a framework programme adopted by the Walloon government to mainstream sustainable development across all its policies and reinvigorate Wallonia's economy.

The idea behind the Alliances is that **policies accompanying the green transition**

of economic sectors can create new jobs and maintain these sectors' long-term viability. Special emphasis is placed on energy efficiency in buildings. Almost 50% of buildings in Wallonia were constructed before 1945, are very poorly insulated and cause very high energy consumption. **Any jobs** created as a result of the associated measures **will necessarily be local and therefore cannot be lost through 'delocalisation'.**

The initiative has been developed in close cooperation with all stakeholders of the building sector with a view to transforming it into a sustainable sector. The partners »

are promoting low-energy consumption and environmental improvements to existing buildings, defining targets for renewable energy sources, identifying new skills and launching a renovation plan for the stock of public housing.

This means stimulating the demand for renovation and eco-construction. Concrete measures include training schemes, exchanges of good practice, the funding of schemes for individuals as well as small and medium-sized enterprises, research programmes and the provision of technical support. So far, 2,000 households and 5,500 public buildings have taken part in the initiative, which was only launched in 2011 in Brussels and 2012 in Wallonia. First figures on the number of jobs created are expected to be available soon.

Moreover, the Alliances in Brussels and Wallonia are **tackling other domains, such as water, waste and food**. One of the initi-

atives implemented by Green ministers in Brussels' regional government is promoting **sustainable canteens**. So far 95 canteens serving a combined total of 80,000 meals a day in schools, private companies and public administrations have taken part. The public support provided includes a help desk for canteen managers, various self-assessment sustainability tools, training activities, sustainability audits and funding.

In the Brussels-Capital Region of Belgium, consumer demand for sustainable food has risen steadily in recent years. For example, between 2009 and 2010 demand for organic food increased by 20%. In Brussels, this sector, which currently employs 2,500 people, has the potential to create an additional 3,633 jobs in urban agriculture alone, in domains including farming, food distribution, waste management, information and communication, advising and consulting.



photo: ©Reporters/J.Thys

BURGENLAND, AUSTRIA: LOCAL, GREEN ENERGY AND NEW JOBS

ACTIVITIES:

Boost local employment and growth, reduce dependency on fossil energy

WHERE ARE JOBS BEING CREATED?

Local renewable energy production, sustainable agriculture and forestry, related research and development

WHO?

Strong involvement of citizens, researchers, local small and medium-sized enterprises and farmers

SUCCESSES:

5,560 jobs created state-wide; 1,000 jobs created in Güssing, with 50 new businesses attracted to the town; Burgenland has become Europe's first energy-independent region for electricity

Website:

www.guessing.co.at



In 1997, the Austrian state of Burgenland set itself the objective of **becoming energy-independent by 2050 by generating electricity from locally available renewable sources.**

Its aims in so doing were to boost local employment and stimulate economic development whilst reducing fossil energy dependency and cutting the region's energy expenditure. In 2013, Burgenland duly became the first region in Europe to

cover its electricity needs with renewable local energy sources, including wind, solar power and biomass. This strategy **created 5,560 new jobs in this state of 284,000 inhabitants** and raised its per capita GDP from 71% (1995) to 81% (2008) of the EU-15 average.

Among the 250 renewable projects initiated throughout Burgenland, the town of Güssing focused on biomass production, using local resources from forestry and »

agriculture and building a number of district heating plants as well as a biomass power plant. The implementation of these projects attracted biomass experts to Burgenland, prompting the establishment of the European Centre for Renewable Energy and a specialised bioenergy research centre called 'The Technikum'. This research pool allowed Güssing to develop all the existing technologies capable of converting biomass into energy.

As a result, **over 1,000 new jobs were created in Güssing**, which has a total population of 26,507, and over the last 20 years **more than 50 new businesses have either been set up there or relocated to the town**. This has made Güssing something of a model for other regions intent on taking active climate protection measures.

A great deal of time, effort and extensive resources have been spent on communication campaigns and public aware-

ness-raising designed to inform citizens how they can contribute to Burgenland's energy independence and how they benefit from Burgenland's sustainable eco-friendly approach.

Continued access to funding is crucial if Burgenland is to continue its green transition. **The Austrian Greens have actively lobbied for more resources and an even more efficient use of public investment**, to enable the region to continue pursuing its innovative, successful Green agenda.



photo: ©Andrey Popov

LE MANS AND THE PAYS DE LA LOIRE REGION, FRANCE: JOBS FOR WORKERS FROM DECLINING INDUSTRIES

ACTIVITIES:

Create new jobs for workers from declining industries and provide training

WHERE ARE JOBS BEING CREATED?

The wind energy and construction sectors, local firms, small and medium-sized enterprises

WHO?

The young and unemployed, workers employed in the automotive, aeronautical and electronics industries

SUCCESSES:

90% of trained workers found new jobs; 6,240 workers are now employed in the regional wind sector; mitigated impact of the recession

Website:

www.paysdelaloire.fr/no_cache/region-actu/actu-detaillee/n/un-guide-pour-se-former-aux-metiers-verts/



A training programme in Le Mans, a city in the Pays de la Loire region in north-western France, **helps unemployed youth and workers employed in declining industries, mainly the automotive industry and its supply chain, to transfer their skills to new jobs in the wind energy sector.** Indeed, an impressive 95% of car production and maintenance skills can be transferred to the wind sector, and no fewer than 90% of the 150 workers trained since 2009 have

found new jobs in the wind sector, whilst another 5% are continuing their training. Le Mans is the only place in France offering training for workers destined for the offshore wind industry.

The **training programme** is part of a broader regional strategy conducted by the Pays de la Loire Regional Council in a bid to develop a new locally based wind energy sector and thereby create jobs and »

business opportunities. Its goal in the on-shore sector is to increase wind energy's generating capacity from its present level of 480 to 1,750 megawatts by 2020. In parallel, great efforts are being made to develop an offshore wind energy sector by **stimulating expertise in engineering, research, training, the manufacture and assembly of wind turbine components, logistics, installation and maintenance.** The region is committed to making the best possible use of its pool of skilled workers and drawing on their extensive experience in the automotive, aeronautical and electronics industries as well as in the regional maritime sector.

As a result, the wind energy sector in the Pays de la Loire region now **employs 6,240 workers and comprises 170 local firms, including small and medium-sized enterprises,** e.g. in the construction sector. Furthermore, the region's wind energy capacity has increased by 166%

since 2009, and in 2013 the Pays de la Loire ranked sixth amongst French regions in terms of its installed wind capacity. This activity in the wind sector has also **mitigated the recession's economic impact on the region,** whose level of unemployment remains one of the lowest in France (9.1% in 2013).

The French Green party, Europe Ecology–The Greens (EELV), has been a driving force in the green transformation under way in the Pays de la Loire region. For instance, by chairing the Regional Council's Committee on Employment and Training it has ensured the development of relevant vocational training courses in green sectors.



THE REGION OF NAVARRA, SPAIN: CREATING JOBS AND A RESILIENT ECONOMY

ACTIVITIES:

Establish a regional renewable energy sector to lower dependence on expensive fossil fuel imports, build a resilient economy and create stable local jobs

WHERE ARE JOBS BEING CREATED?

In the renewable energy sector and associated small and medium-sized enterprises

WHO?

Trade unions, civil society, researchers, local authorities, local businesses, workers, the young and unemployed

SUCCESSES:

3,800 jobs created, 81% of electricity consumed now stems from renewable energies sources; the regional economy's resilience to the crisis exceeds the Spanish average

Website:

www.cenifer.com/



photo: ©inakiantonana

In the mid-1980s, 86% of energy in Navarra was not locally produced. But today a region that used to be highly dependent on imported fossil fuels with wildly fluctuating prices has instead become **a leader in the generation of renewable energies.**

In 1994, when the first Renewable Energy Plan was adopted, the region was characterised by high incomes and low unemployment. However, its economy was highly dependent on just a few industrial

sectors, especially the automotive industry, which at the time was threatening to move its production out of Spain.

Determined to become **less dependent on expensive fossil fuel imports, build a more diverse, resilient economy and create stable local jobs,** the regional government teamed up with the trade unions, civil society and local authorities and business associations to launch a strategy designed to shift the region's energy sources from fossil fuels to renewables. »

To **address the shortage of skilled workers**, a Renewable Energy Training Centre was set up for the young and unemployed as well as for workers employed in the new sector. At the same time, a national centre for **applied research on solar, wind and biomass energies** was established. Today, this facility is internationally recognised, has 200 researchers working there, implements projects on five continents and uses the very latest, cutting-edge technologies.

Even though a lot still needs to be done before the use of fossil fuels can be phased out altogether, impressive results have already been achieved:

For instance, the renewable energy sector in Navarra today comprises **more than 100 companies**, including factories manufacturing wind turbines and solar photovoltaic components, operators providing operational and maintenance services for

renewable energy systems, and research and development facilities. Between them, these companies generate annual revenue totalling €3.5 billion per year, directly **employ 3,800 people** (2.6 times the total in 2002) and account for 5% of the region's GDP (which is more than double the average rate of the sector throughout Spain, related to national GDP (2.4%)).

Navarra-based companies **manufacture 17% of all wind turbines sold worldwide**. In terms of renewable energy production, **81% of the electricity consumed in the region now stems from renewable sources** (compared to 42.4% for Spain as a whole and 20.6% for Europe according to 2011 figures). **The region has proven unusually resilient to the impact of the economic crisis**, and since 2008 Navarra's GDP has dropped by 5.1% less than national GDP over the same period.



Since 2009, Spain's central governments have drastically cut support programmes for renewable energies, and it is primarily these cuts which have resulted in the number of jobs in the sector nationwide having halved since then. For example, in July 2013 the government adopted an energy reform that champions fossil fuels and maintains the oligopolistic power of Spain's five major power companies. So far, Navarra's energy sector has managed to buck this trend.

LONDON, UNITED KINGDOM: LOCAL COMMUNITIES FOR GREEN SKILLS AND JOBS

ACTIVITIES:

Local communities are taking the initiative for greener and more inclusive neighbourhoods, training jobseekers in green skills and creating green jobs

WHERE ARE JOBS BEING CREATED?

Rainwater harvesting, insulating buildings, advising on access to grant support, installing photovoltaic solar systems, community gardening, hairdressing, recycling, waste management

WHO?

Local communities, employers, jobseekers, trade unions, education providers, local authorities

SUCCESSES:

More than 500 training opportunities created, a 100 unemployed people trained and offered jobs, agreements reached with large employers on work placements and employment

Website:

www.unionlearn.org.uk/our-work-and-projects/skills-investment/skills-green-economy/green-skills-partnership



photo: @hmpandlove

The green sector in the UK is increasingly seen as an important source of growth for the country. In 2011/12, it directly employed nearly a million full-time staff. The sector is expected to create nearly half a million new jobs by 2020.

In 2011, employers, trade unions, education providers, local authorities and community representatives launched the London Green Skills Partnership to exploit the green job potential. **The Partnership is a bottom-up initiative** with three main objectives: to create local networks to work together; to provide training, skills and work experience for locals, including the unemployed; and to transform communities into greener, safer, cleaner and more inclusive places.

Jobseekers are trained in both basic and specific environmental skills needed to transform employment into green jobs in domains as diverse as retrofitting »

buildings, hairdressing and waste management. Trained individuals also act as 'green ambassadors' in their neighbourhoods and workplaces, sharing their green skills with colleagues and neighbours to foster additional change.

Green jobs are being created in rainwater harvesting, building insulation, giving advice on how to access grant support, installing photovoltaic solar systems, community gardening (grass-cutting, woodland management, composting), using eco-friendly products in hairdressing, recycling, waste management and offering advice on how to cut waste.

The Partnership has evolved since its initial phase in East and South London, spreading across the whole city and now also to other parts of the UK. **Its successes include:**

- The creation of more than 500 training opportunities through all initiatives
- The provision of training and offers of work experience in the horticulture, waste management and retrofit sectors for 100 unemployed people
- The establishment of a pioneering workers' cooperative, the Lewisham New Leaf Collective, to integrate renewable energy generation into the sustainable retrofitting of social housing
- The conclusion of agreements with some of the country's largest construction companies and service providers on work placements, guaranteed interviews, apprenticeships and employment opportunities for workers and unemployed people in South London in domains associated with energy savings and sustainability.



photo: ©Jani Bryson

THE CZECH REPUBLIC: NEW JOBS AND ENERGY SAVINGS

ACTIVITIES:

Creating stable local jobs and saving energy in homes

WHERE ARE JOBS BEING CREATED?

Small and medium-sized companies in the construction sector

WHO?

Individual households, which benefit from subsidies and energy savings

SUCCESSES:

Around 16,000 jobs created or maintained, plus the potential to create 70,000 long-term jobs by 2020; savings of up to €1.5 billion in energy costs per year for households; lower CO₂ emissions

Website:

www.zelenausporam.cz/sekce/582/about-the-green-savings-programme/



photo: © ETHEN Jones

In 2009, a **Green minister launched the national Green Savings programme (2009-2012) which promoted energy savings** in private homes by awarding participating households a direct subsidy as high as 30-75% of the costs incurred.

The programme supported improvements to insulation (e.g. by replacing old doors and windows), the replacement of environmentally unfriendly boilers, the purchase and installation of solar energy systems and the construction of new energy-efficient homes. The subsidies were financed by public revenue generated through the sale of CO₂ emission credits under the European Emissions Trading System (ETS), which implements the Kyoto Protocol in Europe. Accordingly, the programme »

did not additionally burden taxpayers or the public sector budget.

Between 2009 and 2012 **over 250,000 households throughout the Czech Republic benefited from the programme to the tune of €967 million. The estimated reduction in CO2 emissions through the programme** at the end of 2012 was 864,000 tonnes per year, which is equivalent to the total emissions of a Czech city of 69,000 inhabitants.

Around 16,000 jobs were created or maintained, mainly in small and medium-sized enterprises active in the construction sector. Overall, the government subsidies awarded under the programme will **save households up to €1.5 billion a year** in heating costs alone.

It is estimated that continuation of the programme (from 2013 to 2020) will create or conserve **no fewer than 70,000 jobs.**





photo: ©Heatherfaye

COLOPHON

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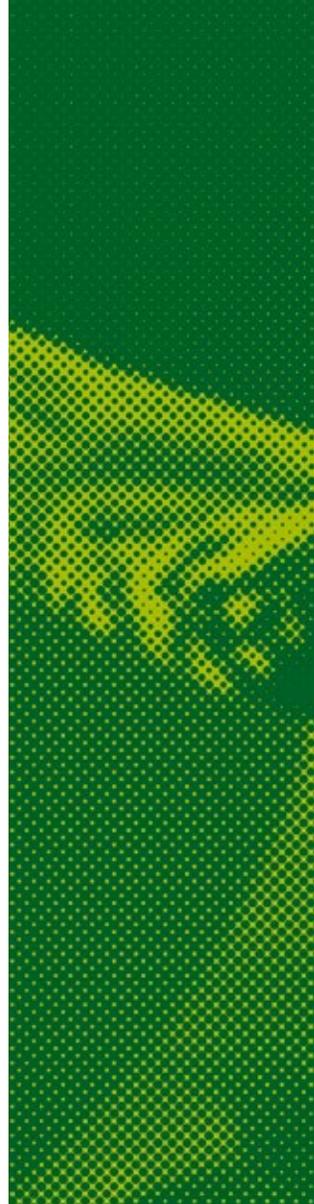




photo: ©Daisy-Daisy

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