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Guide for trade unions representatives for sustainable development











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Preface

This guide has been produced by Ecologia e Lavoro, a partner in the project led by CISL Toscana in Italy, along with trade unionists from Belgium, Bulgaria, France, Germany, Greece and the UK.

The guide aims to provide workers and union representatives across the EU with the tools to build union activism and action for a sustainable recovery.

The guide covers both the European energy and climate change policy framework and also provides many practical examples of trade union action which can be taken at a local level within the workplace.

It is not always easy to convince others that the answers to the economic, environmental and social crises are one and the same. These ideas are not always immediately accepted - we still need the commitment of workers, employers and governments. But we need to find new ways to tackle new challenges and this guide aims to provide these.

Special thanks are due the experts who have contributed to the work: Roberto Caracciolo, Director ISPRA (Institute for Environmental Research), Professor Marco Frey (Sant'Anna college of Pisa University) and Marco Gisotti (Green factor).

Special thanks go to Elizabeth Biliotti, Giuseppe D'Ercole and Gabriella Fenili who drafted the original report.

Sergio Sorani Ecologia e Lavoro

Unions are agents of social and environmental change: Let's act like it!

Europe is in crisis on many fronts and each one presents a fundamental challenge to trade unions and their members. 25 million people are out of work across the EU as workers are paying for the banking crisis with deep cuts to jobs, wages, and our public services. Half of the young people in countries like Spain and Greece are unemployed and economic insecurity is widening the gap between rich and poor, making for a more unequal, more divided Europe. In addition, economic uncertainties are playing their part in making people less concerned about the environment and climate change, at a time when we know we are pushing the planet to its limit in consuming energy and natural resources at a totally unsustainable rate. Yet within this critical challenge of climate change lies the real possibility for a sustainable economic recovery, leading to growth, investment and new jobs and skills. In all of this, trade unions have a key role to play, as they have demonstrated in democratic changes now evident in France, Greece, Germany and elsewhere.

There are alternatives to recession and austerity. This guide, developed in cooperation with trade unions in seven countries (led by CISL Toscana in Italy), aims to provide workers and union representatives with the tools to build union activism and action for a sustainable recovery.

As trade unionists we recognize that we have a duty to be part of the solution.

For the European Trade Union Confederation (ETUC), Europe today is faced with a three-fold crisis:

- Socially, Europe is reaching its highest ever rates of unemployment. Jobs, wages and working conditions are under threat. There has been a dramatic rise in insecure, precarious work in Europe, with youth unemployment wrecking the hopes of a generation. Yet for want of government leadership we have skills' gaps in key industries and professions. We need job creation strategies promoting the value and quality of work.
- · Environmentally, the extreme weather condi-

tions we have been experiencing recently are becoming far more widespread. In response, opinion polls show that the majority of the public in the European Union consider global warming to be one of the world's most serious problems, with all the implications for loss of biodiversity and extreme weather events. Climate change poses a threat to peace globally as resources and energy become more expensive and the subject of conflict.

• Our financial system is bust. Our failed banking system is not working for the real economy. It is incapable of delivering the scale of investment needed to tackle the longer-term challenges of climate change and resource depletion. The United Nations has estimated the cost of addressing these climate challenges as at least 2% of global GDP. While we are able to find financial resources easily for fossil fuel subsidies or military spending, we are struggling to find the money to invest in our communities and the planet's eco-systems on which we depend.

As trade unions we are committed to sustainable development. We pushed for workers' health and safety and environmental regulation in the past, and we must continue this legacy to defend our well-being in the future.

This means changing the way we produce and consume goods and services, to conserve resources, work smarter and avoid destroying vital eco-systems provided by our seas and forests. It means urgently finding alternatives to fossil fuels - oil, gas, coal. We need investment in the new technologies of the future and the jobs and skills that go with them - solar and wind power, electric vehicles and trains, capturing and storing carbon emissions, saving energy at home and at work. Energy and resource efficiency on the scale that climate change and 'planetary boundaries' demand will mean pushing for new models such as the 'circular economy'. This is based on designing products that can be broken down and reused at the end of their life. It means reduced consumption of materials and energy, recycling much more, and reusing waste as a raw material for new production.

For the ETUC, this means a fundamental and

necessary shift for our societies, where trade unions have a vital part to play. Our challenge is to make the most of the potential for job creation and social cohesion for workers and their families, but also to avoid negative consequences wherever they may arise. Therefore, we have consistently called for a 'just transition' to the energy and resource efficient model we need. There are five pillars to our 'just transition':

1. Participation and dialogue at all levels.

2. **Investment** in job creation and transformation, through low carbon industrial policies and infrastructure investment.

3. **Effective** and publicly-driven training and skills programmes, including an individual right to training for all workers regardless of contract.

4. **Respect** for trade union and human rights. No job can be a green job if it is not a decent job.

5. **Social protection** safety nets for workers negatively affected by the transition, with active labour market policies and well-financed social security systems. For the ETUC all workers regardless of sector, profession, gender or age, have a role to play in this transition and in ensuring the greening of their own workplaces. The ETUC is committed to an inclusive approach.

This *European guide for trade union environmental representatives* is intended to be used as a tool to help trade unionists at all levels better understand the importance of sustainable development – where finance works for the common good, where growth respects the environment, and how 'just transition' can be promoted as the way forward. The guide includes information on the tools already available, many examples of union good practice, the rights and policies we want to promote, and the goals we wish to achieve.

I hope the guide will prove useful for trade unionists to find ways of addressing sustainable development in their own industries, workplaces and unions, and demonstrate the value of working people's voices in this vital area. Whether through union-only initiatives or collective bargaining, I hope this guide will give inspiration to union representatives and provide a basis for unions to work together to promote solutions for people and the planet and not just for profit.

Good luck with your efforts to green your workplaces wherever they are.

Judith Kirton-Darling (ETUC)

'Greening' our mission

Work on this *European guide for trade union environmental representatives* was led by CISL Toscana (together with IAL Toscana and Ecologia e Lavoro) and supported by the ETUC and six trade unions partners:

- Arbeit und Leben DGB/VHS NW e.V Germany
- Confederation of Labour PODKREPA Bulgaria
- Confédération Démocratique du Travail France
- EKA Athens Labour Unions Organization Greece
- Fédération Générale du Travail de Belgique Belgium
- Trades Union Congress (TUC) UK.

The guide aims to provide workers and union representatives across the EU with the tools to build union activism and action for a sustainable recovery.

The guide draws on the experience of trade unionists who have been involved for several years in sustainable development, with the aim of raising the interest of all trade unionists to engage in the challenge of greening the economy. Sustainable economic growth is vital to safeguard our, and future generations', habitat on Earth with a more equitable and inclusive dimension.

To be effective and inclusive, participation in this great transformation has to begin at the workplace. This is the objective of this green guide: reaching out to all workplaces and employees.

The term 'green' as used throughout this guide means aspiring to a greener planet that ensures a safer and more secure world for all species that live in it.

I wish you a good time using the guide and every success in your work.

Special thanks to Gabriella Pusztai from IAL Toscana for her diligent work in coordinating the partners, and to National CISL Secretary which in the person of Fulvio Giacomassi has ensured and continues to ensure full support and confidence.

Renato Santini (CISL Toscana)

Introduction Greening the economy

"The economic and unemployment crises we are currently experiencing profoundly undermine our social structures. For the European Trade Union Confederation (ETUC) there is a clear and urgent alternative to austerity: a Sustainable New Deal for Europe, based on investment and sustainable governance for the long term. This is the future of work, transforming the economy not only in relation to climate or energy but discussing at the same time how we use resources. And we have a responsibility as trade unions to support and train our delegates so that they become confident in negotiating around green issues. Trade unions are important stakeholders and want to have their say about industry policy, climate change and the environment for the long term. The union movement and social dialogue are the first pillars of a just transition to a sustainable future." (1).

The need to seize the employment opportunities of greening the economy (2) is a key recommendation of the Employment Committee of the European Union (EU). Its report, Towards a greener labour market - the employment dimension of tackling environmental challenges (2010), emphasises the connections between climate change, environmental sustainability and the labour market. A narrow definition of the 'green economy' or 'green jobs' that limits it to new industries like renewables, fails to capture the full impact of the changes to the world of work that lie ahead. A 'just transition' will affect the whole world of work "in a similar way to the challenges of globalisation, technological change and ageing population" (Europe 2020's strategy).

So European and national trade unions need to focus on appropriate employment strategies that address the challenges of our changing climate. This means strengthening our capacity so that we can play an effective part in building a new economy that limits climate change and maximises new opportunities for working people.

Critical environmental issues

The environmental impacts of industrial development began in local areas with implications for human health - for example air pollution causing respiratory diseases - but have increasingly assumed a global dimension. The first global environmental phenomena were the so-called 'acid rains' caused by emissions of sulphur dioxide and nitrogen oxides from power stations, with harmful effects on soil, vegetation, water resources and ecosystems. In response, national governments and the EU introduced tough regulations to clean up emissions from power stations and other industries.

Over time the number of unwanted environmental pollutants has increased significantly. The following examples of critical issues are used by the European Environment Agency in preparing periodic reports on the state of the environment in Europe:

Environmental issues

- Greenhouse gases and climate change
- Ozone depletion
- Biodiversity
- Transboundary air pollution
- Hazardous substances
- Water stress
- Soil degradation
- Waste
- Natural and technological hazards
- · Genetically modified organisms
- Human health
- Urban areas
- Coastal and marine areas
- Rural areas
- Mountain areas

The first four have a global reach and require an agreement between all nations. This makes them more difficult to tackle effectively, as has been the experience under the UN Framework Convention on Climate Change.

Further difficulties in addressing these critical issues lie in their close interconnection. Climate change, for example, is the precursor of a significant number of environmental effects. In general climate change driven by greenhouse gas emissions is causing severe disruption to habitats through

¹⁾ Excerpts from Judith Kirton-Darling's speech, Florence, January 19, 2012

http://ec.europa.eu/social/main.jsp?langId=it&catId=89&newsId=97 0&furtherNews=ves

http://ec.europa.eu/social/BlobServlet?docId=6438&langId=en

extreme weather events, increased desertification, rising sea levels, and reduction of glaciers, with serious consequences for biodiversity.

Species may be lost, but also alien species appear in new territories - like the Asian tiger mosquito now spreading disease through Europe.

Breaking the chain

The solution lies in building a sustainable future and transforming the world of work. We have to be able to competently negotiate, adding the subject of combating climate change to our knowledge base. Negotiating for a low carbon society means renewing our union mission for a more just and more responsible society for present and future generations.

We are aware of the difficulty of producing a single EU guide which reflects the widely different trade union traditions across the EU, and the diverse economic and regulatory systems among Member States.

But we believe it is necessary to have a common knowledge base in order to give those who are approaching this urgent issue both the broader picture and the opportunities to take part in specific initiatives.

In the fight against climate change, the EU, its Member States and the ETUC are engaged in a number of key strategic initiatives, listed below. This list is not exhaustive – useful updates are available from the EU's Directorate General for Climate Action (3) and a free quarterly magazine *Environment for Europeans* (4)

European environmental initiatives

- 1. Starting from the UN Framework Convention on Climate Change (UNFCCC) signed at the Rio de Janeiro Conference in 1992, all countries of the world are engaged in the fight against climate change and global warming as consequences of greenhouse gas emissions. (5)
- 2. The UNFCCC convened its 17th annual Conference of the Parties in Durban (December 2011) where it confirmed the need to contain global warming to less than 2 degrees above pre-industrial levels, based on scientific evidence, in order to avoid irreversible changes to the climate and the extreme manifestations that would otherwise follow. (6) Reducing global warming means a

rapid shift of productive human activity towards a low carbon economy.

- 3. The EU has set binding targets on its Member States to cut greenhouse gas emissions across the EU by 20% by 2020 and prepared a first road map until 2050 for its low carbon economy.(7)
- 4. The EU's '20-20-20' targets are:
 - a reduction in EU greenhouse gas emissions of at least 20% below 1990 levels
 - 20% of EU energy consumption to come from renewable resources
 - 20% reduction in energy use compared with projected levels, to be achieved by improving energy efficiency.
- 5. *Europe 2020* is the EU's growth strategy for the coming decade. In a changing world, the EU aims to develop a "smart, sustainable and inclusive economy" (8) .The strategy will help Europe to overcome the crisis both domestically and internationally, promoting competitiveness, productivity, growth potential, social cohesion and economic convergence. It will introduce reforms in the medium / long term which will help growth and employment, and ensure the sustainability of public finances. All common policies, in particular the common agricultural and cohesion policy will align with the new strategy.
- 6. The ETUC has acknowledged the objectives of the European Strategy for 2020 and wants to participate in the strategy along with its affiliated trade unions on behalf of their 65 million members across the EU (9).
- 7. The ETUC and national unions have adopted the objectives of the low carbon economy ('20-20-20') as an opportunity for employment growth, innovation and a more equally distributed development across Europe (10).

This European guide for trade union environmental representatives aims to encourage the direct participation of trade unions and workers in these key strategic initiatives. The guide aims to promote understanding of environmental issues and interven-

9) http://www.etuc.org/r/6

³⁾ http://ec.europa.eu/environment

⁴⁾ http://ec.europa.eu/environment/news/efe/index.htm

⁵⁾ http://europa.eu/legislation_summaries/development/sectoral_development_policies/l28102_en.htm

⁶⁾ http://unfccc.int/meetings/durban_nov_2011/meeting/6245.php

⁷⁾ http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11

^{/272&}amp; format = HTML& aged = 0& language = EN& guiLanguage = en

⁸⁾ http://ec.europa.eu/europe2020/index_en.htm

¹⁰⁾ http://www.ituc-csi.org/IMG/pdf/2CO_10_Sustainable_development_and_Climate_Change_03-10-2.pdf; http://www.etuc.org/a/9159

tion techniques in order to help achieve the objectives set by the European Union.

Trade union environmental representatives

"The message we address to a union's environmental representative in the just transition scenario is that 'in your company (on your territory) it is you who can change things'. It means to broaden the horizon of trade unionists to themes that represent not only the necessity but also an opportunity for a more stable and competitive economy." (11)

Different traditions govern union activities across the EU, but they share the principles of autonomy, democracy and solidarity towards their own communities. For some unions the main focus is employment-related issues, while others prefer to work through local and national institutions.

This guide is intended to be a useful reference for all European trade unionists who feel the need to intervene or improve their action on environmental issues and, therefore, to increase their skills in this field. It reflects the richness of experiences which can become shared practices.

The guide does not replace the organisational choice of national unions who may have specialist green representatives, specifically trained on environmental issues, or who choose to promote a more general and widely spread environmental culture or orientation in terms of their capacity for action. Each union will define on the basis of its history, traditions, or even in terms of innovation and experimentation, the forms of organisation and the role they consider appropriate and necessary.

Nevertheless, union environmental representatives, however defined, can be the basis of a bottom-up approach to the environmental policies of the EU. They need to understand the impacts of measures for combating climate change on the economy, and they give meaning to the statement that workers can be key agents of this change.

¹¹⁾ Excerpts from Sébastien Storme's remarks, Florence, January 19, 2012.

Chapter 1. Sustainable development

What is sustainable development?

The classic definition of sustainable development is:

"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Brundtland commission, 1987

In 1983, the UN set up the World Commission on Environment and Development, chaired by Norwegian Prime Minister Gro Harlem Brundtland. In 1987, the Commission published the Brundtland Report, *Our Common Future*. Faced with widespread evidence of global pollution of the atmosphere and the environment, and of a planet living beyond its means, the report promoted for the first time the concept of sustainable development, or "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." Over time, sustainability means striking a balance in the relationship between people, resources and environment.

The Commission argued that widespread poverty is no longer inevitable: sustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfil their aspirations for a better life. A world in which poverty is endemic will always be prone to ecological and other catastrophes. Meeting essential needs requires not only a new era of economic growth for nations in which the majority are poor, but an assurance that those poor get their fair share of the resources required to sustain that growth. Such equity would be aided by political systems that secure effective citizen participation in decision making and by greater democracy in international decision making.

An early realisation of the maturing institutional and political response to the environmental crisis is the United States' National Environmental Policy Act 1969 (NEPA). The Act established a US national policy promoting the enhancement of the environment, the President's Council on Environmental Quality. After NEPA, other countries established specialised legislation and institutions for implementing environmental policies.

The United Nations Environment Programme (UNEP) was launched at the first *World Conference* on Environment in Stockholm (1972). UNEP over-

sees the UN's Environmental Programme which mostly promotes and encourages good environmental governance among governments and international agencies.

Yet in the end, sustainable development is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development and institutional change are consistent with sustaining future as well as present needs.

Rio Conference 1992 - principles and tools

A more structured way of defining sustainable development is contained in the action plan that emerged at the *World Conference on Environment and Development* in Rio de Janeiro in 1992 (the Earth Summit): *Agenda 21*, or the agenda of things that need to be done, globally, nationally and locally in the 21st century in order to achieve the objectives of sustainable development.

Agenda 21 identifies the social and economic dimension to environmental issues. For industriallyadvanced countries it proposed profound changes in prevailing ways of living and working. For developing countries it defined a programme of economic growth which is not environmentally destructive, is based on the fight against deep social inequalities, on birth control, and on the viability of large urban areas.

Part of Agenda 21 is the environmental programme for the conservation and management of resources for development. This covers issues such as protection of the atmosphere, integrated management of soil, the fight against deforestation, desertification and drought, sustainable agriculture, biodiversity, water protection, and ecologically optimal management of toxic substances and all types of waste.

For each issue, *Agenda 21* sets out objectives, the activities that countries must achieve, technical and financial means needed, and the legal and institutional tools that are necessary.

The specific roles of some social and economic groups where governments should strengthen cooperation for sustainable development are identified. These include women, children and young people, workers and trade unions, farmers, the world of scientific research and production activities. The need to encourage negotiation and the participation of various stakeholders in environmental policies is emphasised, in order to take the place of the command and control approach (12) that characterised them in the past.

Finally, there is detailed analysis of tools for implementing the programme. These range from financial instruments - such as aid to developing countries by developed countries with an increase in the share of GDP for this purpose - to scientific, technological and educational initiatives such as empowerment, training and information initiatives, and preparation and effective use of specific institutional and regulatory tools.

During the Rio conference two international conventions were launched, signed by most of the governments represented in Rio: *the United Nations Framework Convention on Climate Change and the United Nations Convention on Biological Diversity*. The first aims to stabilise the atmospheric concentration of greenhouse gases at a level that does not disrupt the global climate system. The second requires that all countries adopt strategies and tools to preserve the variety of living species, and ensure that the benefits resulting from biological diversity should be divided equally.

Even if the conference was limited on a politicaldiplomatic level, important contributions emerged - to defining problems, finding solutions, and identifying the main issues for a new environmental agenda.

In particular the definition of problems in an intergenerational time horizon has encouraged the so-called 'precautionary approach' that: "in the presence of threats of serious damage, scientific uncertainty should not serve to justify delays in the adoption of effective measures to prevent environmental degradation".

A close examination of the concept of sustainability from an ecological point of view has been conducted by the Wuppertal Institute (13) . Boxes 1 and 2 show, respectively, the criteria and the principles for sustainability that result from its work. In the Annexe (14), Easter Island is shown as a case of *unsustainable* development in support of these theories.

Box 1. Ecological criteria for environmental space use

a. The use of renewable resources can't be faster than their rhythm of renewal

b. The emission of materials can't be bigger than the absorption capacity of the environment

c. The use of non-renewable resources has to be reduced to a minimum level. They can be used only if a physical replacement with an equivalent functional level is created in the form of renewable resources

d. The length of human intervention must be linked to the natural length of a process, regarding both the waste decomposition process and the regeneration time of renewable resources or ecosystems.

Box 2. Principles for resource use

Regeneration principle:

A renewable resource can be used only insofar as it is regenerated;

it cannot release a larger quantity of substances than the environment may absorb.

Use principle:

The use of energy and materials must be reduced to a low-risk level.

Tools for implementing sustainable development in Europe

With the Treaty of the European Union an important step forward was taken in putting environment and sustainable development at the heart of the political process. Article 2 states that one of the basic objectives of the EU is to promote *"balanced"*

¹²⁾ The command and control approach is a form of management of environmental protection activities based on the imposition of given norms and commands and the following control of their implementation (control).

¹³⁾ The Wuppertal Institute carries out research projects at the request of private and public bodies.. It has economists, technologists, climatologists, chemists, physicists, biologists, sociologists and cultural historians as collaborators. It has five departments: climate policy, material flows and structural changes, energy, transportation, and new models of well-being. Prof. Dr. Uwe Schneidewind is President of the Wuppertal Institute which was founded in 1991 under the direction of Professor Ernst Ulrich von Weizsäcker. 14) See Annexe 1, Chapter 1

and sustainable development" while Article 174 says: "Community policy on the environment..... shall be based on the precautionary principle and on the principles that preventive action should be taken.... (15)

In line with these basic assumptions, principles of sustainable development and a programme for implementing policies are incorporated into the European Council resolution of 1 February 1993. This resolution adopts the Fifth Environmental Action Programme, already partly developed for the Rio conference and reflecting some of that conference's outcomes. The programme envisages protective action in all sectors of the economy, and advocates gradual shifting the style of environmental governance from 'command and control' to participatory and consensual forms. It also adopts as a tool for meeting these goals, a preventive integral approach, based on the precautionary principle and an analysis of the life cycle of products.

The Sixth Environmental Action Programme, launched in 2002 to run over a ten-year period, strengthens this approach. In particular it identifies priority areas (climate change, nature and biodiversity, environment, health and quality of life, natural resources and waste), establishes overall aims and principles (subsidiarity, polluter pays, etc.), and it promotes numerous initiatives in line with *Agenda 21* (e.g transfer of clean technologies to the candidate countries, collaboration and partnership with social partners, patterns of consumption and production etc.).

Unlike the UN (or other international bodies which generally do not have the necessary powers to ensure compliance and implementation of their resolutions), the EU is a real supranational body which has the tools to ensure member states implement its policies. In the environmental field, EU legislation has, over the years, assumed a very important, organic dimension. It is communicated mainly through the issuing of *directives*, which set objectives while giving autonomy to member states as to how to implement them.

Other forms of EU legislation are *decisions*, binding only on certain states, and *regulations* which apply to all member states. Currently, these deal with all the main environmental policy issues, such as pollution, waste management, soil, sea and coastline conservation, protection of flora and fauna, the urban environment, land management (through environmental impact assessments), prevention of industrial risks, and environmental quality of products (*ecolabel*) and production processes (*ecoaudit*). Regulatory measures such as EMAS and Ecolabel (see chapter 3) are voluntary while some, like the principle of "polluter pays" or the description of product characteristics required by the Registration, Evaluation, Authorisation & restriction of Chemicals (REACH) regulation, are mandatory. The REACH regulation of chemicals is an example of implementing fully the principle of producer responsibility. While previously states were responsible for the potentially harmful effects of chemicals released onto the market, under REACH producers must submit documentation about the risks associated with the substances they produce. This principle previously applied only to the pharmaceutical industry.

Another example is a recent directive on waste which outlines a wide application of the producer's "enlarged" responsibility. As a result, packaging manufacturers have to ensure that packaging waste is recovered and recycled, and producers of electrical and electronic equipment must recover the waste they produce.

One of the primary objectives of the legislation is to promote production and consumption with very low resource consumption. So we can see over time the shift from a *cradle to grave* concept (which is about controlling the environmental effects of products from production to when they stop being used), to the *cradle to cradle* concept (which encourages maximum recovery in production processes, through the circularity principle in the use of resources, copying the natural life cycle of fauna and flora).

A definition from the world of work

Various stakeholders in economic, social and cultural sectors across Europe have implemented numerous initiatives, projects and definitions of sustainable development on the basis of the EU's legislative principles. One such definition is provided by the national labour agreement of chemistry workers in Italy (May 2006):

"Sustainable development and environmental strategy: the Parts recognize that sustainable development - understood as a balanced and dynamic integration of the principles of economic growth, environmental protection and social equity - is the point of reference for the construction of a coherent environmental strategy".

¹⁵⁾http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/ce321 /ce32120061229en00010331.pdf

This definition of sustainable development based on the dynamic equilibrium of economic, social and environmental factors is compelling, as it gives all stakeholders – employers, unions and the wider environmental? movement - responsibility for promoting a balance between the three factors.

It also recognises that in some areas, notably in the rich western industrial world, there should be greater responsibility towards the environment, whereas in developing countries there will be more emphasis on social concerns such as poverty. However environmental protection should always be recognised, albeit with a different emphasis in richer and poorer countries. Achieving the right balance is the responsibility of every nation and local area and this will change over time.

Chapter 2. The European framework

EU 2020 - Europe's growth strategy

The European growth strategy for 2020 (1) has three objectives:

- 1. Smart and sustainable growth developing the knowledge-based economy and innovation
- 2. Sustainable growth building a more competitive low-carbon economy
- 3. Inclusive growth raising Europe's employment rate.

To measure progress in meeting these objectives, five headline targets have been agreed for the whole of the EU:

- 1. Employment 75% of 20-64 year-olds to be in employment
- 2. R&D /innovation 3% of the EU's GDP (public and private combined) to be invested in R&D/innovation
- 3. Climate change /energy achieving the "20/20/20" targets (see below)
- 4. Education reducing school drop-out rates to below 10%; at least 40% of 30-34–year-olds completing third level education
- 5. Poverty / social exclusion reducing the number of people at risk of poverty and social exclusion by at least 20 million

With respect to each of these headline targets unions are an important stakeholder, directly involved in the world of work and in action to improve the quality of life and the protection of groups at risk of poverty and marginalisation.

20-20-20 renewable energy directive

The *European Union Climate and Energy Package* (2) is a series of measures adopted by the European Parliament in December 2008 to address the problems of energy supply, climate change and sustainable industrial development.

The 2009/28 Directive on climate change and energy sets out EU targets, making a 20% reduction in greenhouse gas emissions and a 20% increase in energy from renewables compulsory, while encouraging a 20% increase in energy efficiency. The Directive also includes guidance on how to achieve energy efficiency and energy conservation by sector. (3).

The aim is to design a common European framework for the production of energy from renewables by setting binding national targets but varying from country to country, depending on different starting conditions and development opportunities. Regarding the transport sector, the only binding target is to achieve 10% of energy from biofuels by 2020.

Member States were required to adopt a national action plan (by 30 June 2010) in order to achieve the objectives, taking into account the effects of all other existing measures to promote energy efficiency in final energy consumption: the higher the reduction in total energy consumed less energy from renewables will be needed to achieve the target. National programmes should also look at reforming planning and price fixing, in favour of energy from renewables.

Member States may exchange quotas for renewable energy through "statistical transfers". They can work together on common projects and establish cooperation agreements with third countries for the production of sustainable energy if the electricity is produced in newly built plants, consumed in the EU, and has not received any other incentive.

From 31 December 2011, and every two years thereafter, Member States were required to submit a progress report. The European Commission will examine and monitor the programmes and submitted reports and, if appropriate, propose corrective measures. Member States have to ensure that information on measures to support energy efficiency and energy from renewables is made available to all stakeholders (consumers, builders, installers, architects and suppliers of energy systems) and they are required to establish information, awareness raising, guidance and training programmes for citizens on the benefits of the development and use of energy from renewables.

Roadmap

The European Commission's communication of 8

¹⁾ http://ec.europa.eu/europe2020/index_en.htm

²⁾ http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO /08/33&format=HTML&aged=1&language=EN&guiLanguage=fr 3)http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009 :140:0016:0062:en:PDF

Definitions (Art. 2 Directive 2009/28/CE)

"**Energy from renewable sources** means energy from renewable non-fossil sources, namely wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases."

(...)

"Gross final consumption of energy means the energy commodities delivered for energy purposes to industry, transport, households, services including public services, agriculture, forestry and fisheries (...)".

(...)

"Support scheme means any instrument, scheme or mechanism applied by a Member State or a group of Member States, that promotes the use of energy from renewable sources by reducing the cost of that energy, increasing the price at which it can be sold, or increasing, by means of a renewable energy obligation or otherwise, the volume of such energy purchased. This includes, but is not restricted to, investment aid, tax exemptions or reductions, tax refunds, renewable energy obligation support schemes including those using green certificates, and direct price support schemes including feed-in tariffs and premium payments."

March 2011 on 'the roadmap for a competitive low carbon economy in 2050' strengthens even further the EU strategy towards a low carbon economy (4)



In this communication the European Commission outlines the key steps aimed at reducing emissions of greenhouse gases in the EU by 80-95% by 2050 (compared to 1990 levels), through energy efficiency, innovation and increasing investment. The document indicates possible actions for key sectors, including:

- **Energy**: could become more diverse, without prejudicing competitiveness and security, and can almost totally eliminate CO2 emissions. This can be done by using existing technologies and by investing more, particularly in "intelligent networks" and photovoltaics.
- **Transport**: emissions from road, rail and inland waterways could be brought back to below 1990 levels by 2030 by the effective use of existing transport infrastructure, the development of hybrid engine technologies, more energy efficient vehicles, electrification and 2nd and 3rd generation biofuels.
- **Built environment**: better energy performance standards in the building sector in order to reduce emissions by around 90% by 2050. To achieve this, those built from 2021 onwards will have to be nearly zero-energy buildings and it will be necessary to invest in the refurbishment of the existing building stock.
- **Industrial sectors**, including energy intensive industries. GHG emissions in the industrial sector could be reduced by between 83-87% by 2050, by innovation in energy resource use, increased recycling and carbon capture and storage at large scale,
- Agriculture: sustainable land use and emissions reduction can be achieved by efficient land management and plant food management, efficient

fertilizer use, and by local diversification of production, optimising the benefits of extensive agriculture,

• **Investment**: investing in a lowcarbon future means significantly increasing public and private capital investment, an additional investment of around 270 billion euros in 40 years (1.5% of EU GDP per annum) on top of the overall current investment representing 19% of GDP. This, however, would

- reduce the energy bill and Europe's dependence on imported fossil fuels

create new jobs, and better

4) http://eur-lex.europa.eu/LexUriServ/LexUriServ. do?uri=CELE X:52011DC0112:EN:NOT



know how, over both short and long term, developing job creating sectors and providing training for workers, particularly in renewables, construction and new technology sectors

- improve air quality, monitoring and progressively reduce air pollutants, resulting in improved public health, reduction in mortality and health expenditure, and a reduction in damage to ecosystems.

In conclusion, the paper addresses the international dimension: scientific knowledge says that a cut of 50% in global greenhouse gas emissions by 2050 is necessary to avoid the increase of 2°C in temperature which would have irreversible climate change impacts.

The EU - whose emissions represent approximately 10% of global greenhouse gas emissions - is committed to enhancing its cooperation in the fight against climate change. Its actions should contribute to innovation, energy security and competitiveness in key sectors of growth and development.

The interconnection between the objectives of innovation, the 'climate - energy package', and growth and employment qualifications make European trade unions key players in the construction of a new Europe – more competitive economically, more sustainable and more equitable in growth.

Definition: Article 2, Proposal for a Directive on energy efficiency COM(2011) 370 final

"Energy audit means a systematic procedure to obtain adequate knowledge of the existing energy consumption profile of a building or group of buildings, an industrial or commercial operation or installation or a private or public service, identify and quantify cost-effective energy savings opportunities, and report the finding"

New Directive on energy efficiency

The proposal for a Directive on energy efficiency (5) (adopted by the European Parliament on 11 September 2012) was presented as part of the Europe 2020 strategy and aims to contribute directly to one of its priority objectives - 20% energy savings by 2020 - a goal which, because of the insufficient level of previous measures, is not yet on track.

⁵⁾ http://www.ipex.eu/IPEXL-WEB/dossier/document/COM20110 370FIN.do

The proposal contains arrangements for setting national targets for energy efficiency by 2020, and says the Commission must assess in 2014 whether the EU is able to achieve the target. If necessary a legislative proposal will be tabled, setting out objectives at national level.

The ETUC played a key role in ensuring that provisions on social dialogue and worker training are included in the text of the directive adopted in September by the EU institutions. The directive sets out the following elements:

- Energy end-users: the directive establishes a common framework of measures in order to define requirements for the public sector - both for the refurbishment of public buildings and for the application of energy efficiency standards in purchasing properties, products and services. Member States should establish mandatory national energy efficiency schemes, mandatory energy audits for large companies, and standard measuring and billing requirements for energy companies.
- Energy supply: Member States will be asked to adopt national plans for heating and cooling in order to take advantage of the potential of high efficiency power generation and district heating and cooling. Plants should be located close to demand for heat and all new power generation plants, as well as existing facilities, should be equipped with high efficiency cogeneration units, (except for specific cases that are exempt).

The proposed directive also requires member states to establish an inventory of energy efficiency data for fuel combustion, or oil and gas refining. It also sets out the requirements on priority / guaranteed access to the network, on the priority dispatching of electricity from high efficiency cogeneration, and on the connection of new industrial systems that produce waste heat from district heating or cooling.

Other measures: establish performance requirements for national regulatory authorities, information and training activities, requirements on the availability of certification schemes, promoting action for developing energy services, and a commitment of Member States in removing barriers to energy efficiency.

Choices on biodiversity

Directive 92/43/CEE on the conservation of natural habitats and of fauna and flora (*Habitats Directive*)

aims to maintain biodiversity through the conservation of natural habitats and of wild fauna and flora, which are part of Member States' heritage.

It relies on establishing by contract (mainly with farmers) a coherent network of protected ecological sites, the Natura 2000 network, the purpose of which is to promote the maintenance of biodiversity, taking account economic, social, cultural and regional conditions.

This network of protected areas was completed in 1992 with Directive 79-409 (EC) on the wild birds' distribution area (1979) located on EU territory. This Directive concerns:

- habitats of species in danger, vulnerable to specific changes in their habitats, or species considered rare because of their small populations or their restricted local distribution, and those that require special attention because of the specificity of their habitat,
- terrestrial or marine habitats used by migratory species not listed in Annex I (regularly occurring migratory birds); the same tool is applied to the protection of migratory species.

Special attention is paid to wetlands. The objectives are to protect habitats, assuring the survival and reproduction of rare or threatened wild birds and to protect the breeding, moulting, wintering sites and resting areas of all migratory species.

Each state designates protected areas for species of community interest, based on criteria established by the Directive.

Directive 2000/60/EC (23 October 2000), also called the Water Framework Directive (WFD) implements the framework for a common European policy on water and has the following objectives:

- have a good status of waters by 2015
- progressively reduce discharges, phase out emissions of priority substances
- abolition of discharges and dangerous priority substances by 2021.

The WFD for water management and water related activities (industrial discharges are only a part of it) drives the implementation of action plans through guidelines for creating good quality aquatic environments. National action plans have been developed to help apply the Directive.

Chapter 3. Green bargaining for a low carbon economy: a bottom-up approach

Areas for union action on the environment

Labour relations in Europe have a rich heritage which is part of the participatory and democratic social model known as the "European social model".

In the important challenge that Europe faces for leadership in the fight against climate change, labour relations - dialogue between trade unions and employers - and tripartite relations between political institutions, trade unions and employers – are key to success. These complex relationships are valuable not only for meeting the challenge of climate change but also for achieving the important objectives of the Europe 2020 Strategy through a "bottom-up" approach with the direct participation of workers in close dialogue with business and institutions (1).

Parallel with the 20-20-20 *Climate and Energy package* (see chapter 2), the EU envisages one million new jobs being created over the next decade in the renewable energy sector alone As noted by the International Labour Organisation (ILO), the movement towards a more sustainable economy will affect the labour market in at least three ways:

- new jobs will be created
- some jobs will disappear and will not be replaced
- some jobs will be replaced or transformed as methods of production, job profiles and required competencies adapt to market demand for green goods and services.

In order to measure the employment impact of the green economy the term 'green job' needs to be defined (see chapter 6). It is ambiguous, and can be used to show how jobs, know-how, and professions can contribute directly to the promotion and protection of the environment. However, the transition to a sustainable economy means all jobs will have to change in how they are carried out on a daily basis as well as production processes, use of materials, processing techniques and how work is organised.

So the implications of moving to a green economy are felt at the local level as businesses and workers respond to new regulatory frameworks and their constraints, starting with the specific implications for the local economy and negotiating their own version of the green economy relevant to the company and the area where it is based.

Social dialogue in the workplace and across different sectors

What are the connections between sustainable production processes, industrial relations and employment? One way of looking at this is to consider the relationship between competitiveness and sustainable production, using the concept of quality. Competitive pressures have led companies to address not merely the scale of production but also market and consumer demand. This is encapsulated in the concept of 'integral quality' which includes not only the quality of production and labour but also that of the internal and external environment in which the company operates.

Labour relations at the workplace are crucial for the improvement of dignity, for decent and safe jobs, and for well being. Alongside key directives on health and safety in the workplace, unions must support workers' right to work in full compliance with environmental laws as well as supporting employers' commitment to continuous environmental improvement.

European directives and regulations related to sustainable development provide tools and guidelines for business aimed at continuous environmental improvement - for example, the EMAS environmental certification and regulations on corporate social responsibility.

Among these legal regulations we look specifically at EMAS (2), Ecolabel (3), the CSR regulation, SA8000 (4), ISO (5), and the Emissions Trading Scheme directives (6)

EMAS III Regulation

EMAS certification (7) represents official recognition at European level that a given company has

¹⁾ http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:52 011DC0112:EN:NOT

²⁾ http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009: 342:0001:0045:EN:PDF

³⁾ http://www.ecolabel.it/, http://ec.europa.eu/environment/ecolabel/

⁴⁾ http://www.sa-intl.org/index.cfm?fuseaction=Page.viewPage&pageId=937&parentID=479&nodeID=1

⁵⁾ http://www.iso.org/iso/home.html

⁶⁾ ec.europa.eu/clima/policies/ets/index_en.htm

achieved excellence in environmental management and in its communication plans, both of which are implemented voluntarily.

It entails an open dialogue with stakeholders, communicating outside of the company independently validated environmental information. EMAS also enhances staff involvement, providing a greater guarantee of compliance with environmental legislation, and through continuous improvement of performance it minimizes the environmental impacts of activities of the company's activities.

Any company can ask for EMAS certification, manufacturing and services, across the private and public sectors. The active participation of workers is a prerequisite for obtaining EMAS certification and certification bodies should ensure the rule regarding workers' active participation is being applied.

The European community's label for ecological quality (Ecolabel)

The European Ecolabel (8) is a voluntary scheme, established in 1992 to encourage businesses to sell products and services that are kinder to the environment. Products and services awarded the Ecolabel carry the flower logo, allowing consumers including public and private purchasers - to identify them easily. Today the EU Ecolabel covers a wide range of products and services, with more being continuously added. Product groups include cleaning products, home appliances, paper, textiles, home and garden products, lubricants and services such as tourist accommodation.

The Ecolabel was extended recently to include tourist accommodation. A European Commission decision of 9 July 92009 set ecological criteria for the award of the Community Ecolabel for tourist accommodation services. These criteria set limits on the main environmental impacts from three aspects of providing tourist accommodation services - purchasing, provision of the service and waste. In Greece trade unions take part in the government's Organization for National Certification.

Corporate social responsibility (CSR)

Is about integrating ethics into the corporate strategic vision - a voluntary integration of social and environmental concerns into business operations and in the internal and external relationships of a company. CSR doesn't require formal employee involvement, but defines employees as privileged subjects of CSR programmes and activities. It is useful to introduce this right, at least as a right of proposal for workers. In Italy the collective labour agreement of the cement sector contains the right to information and consultation. (9)

SA8000 is a voluntary certification standard for companies that want to assure consumers (and also the wider public) that products are produced in accordance with workers' rights: ie no use of child or forced labour, maintenance of health and safety standards at work, freedom of association, no coercive or discriminatory practices, definition of fair working hours and pay. To get the certification, a company has to ensure that the chain of suppliers / subcontractors / sub-suppliers meets these social requirements. SA8000 was developed by Social Accountability International, a non profit organisation established in the USA in 1997 with the aim of developing standards of social responsibility.

ISO 14001 is a standard which establishes criteria for environmental management systems. It is a certifiable standard, which means that only a certification body - accredited to operate within certain rules - can release certificates showing conformity with the requirements. The certificate is not mandatory, but the voluntary choice of the company / organisation which wishes implement and improve its own environmental management system.

ISO 26000 helps organisations make a contribution to sustainable development by encouraging them to go beyond mere compliance with laws, to promote a common understanding in the field of social responsibility and integrate other tools and initiatives. It provides guidelines applicable to all organisations, to be achieved through a participatory approach.

Emissions trading scheme ETS

Emissions trading scheme (ETS): the second generation of the ETS Regulations establishes sector benchmarks and economic sanctions if a company fails to reach the sectoral benchmark. Employees of a company that is below the benchmark risk losing their job or lower pay because the company will need to spend money on purchasing emission rights.

The schemes referred to above – though they may not be compulsory – provide workers with oppor-

⁸⁾ See Annexe 1, Chapter 3

⁹⁾ See Annexe 2, Chapter 3

tunities to ask employers to make their jobs greener, and also for higher pay based on reduced costs due to more sustainable business activity.

+20% of energy efficiency is one of Europe 2020 goals. With the adoption of the European Energy Efficiency Directive, this objective has become binding meaning that every job should, directly or indirectly, pursue the goal of reducing energy consumption. The directive also includes provisions promoting social dialogue and worker training. Member states will determine how these provisions are enacted but trade unions should use them to the best effect possible.

Il dialogo sociale tripartito: strumenti ed esperienze

Agenda 21 (10) is an action programme (local, national, international) for sustainable development toward the 21st century, initiated by the UN Conference on Environment and Development in Rio de Janeiro in 1992.

Agenda 21 covers climate / environment and socio-economic emergencies and encourages participation of all stakeholders who work / live in a given area. The UN document recommends that each local authority start a dialogue with its resi-

Questi riferimenti, anche se non obbligatori, mettono i lavoratori nelle condizioni di poter chiedere ai propri datori di lavoro un posto di lavoro più verde e anche di avere un salario verde sulla base dei risultati che possono determinare per le imprese una riduzione dei costi per lo svolgimento delle loro attività.

dents, local associations and private enterprise, and adopt a 'Local Agenda 21'. Through consultation and consensus building, local authorities can learn from the local community and businesses, and can get information in order to formulate the best strategies. The consultation process can increase the public's environmental awareness. The programmes, policies and laws set by local government can be evaluated and modified according to new local plans adopted through the process. These strategies can also be used to support funding proposals at local, regional and international level.

Agenda 21 also aimed to strengthen the role of mayors and of workers and their unions (paragraph 29). It recognises that sustainable development will

mean major changes for workers and their unions who are key players in achieving sustainability in the context of a tripartite relationship (ie workers/unions, government, employers)

The Covenant of Mayors (11) was launched by the European Commission in 2008 to support local authorities in implementing sustainable energy policies. Local governments, in fact, play a decisive role, considering that 80% of energy consumption and CO2 emissions are associated with urban activities. It provides an opportunity for taking the actions of a public authority as a basis for tripartite action (political institutions, companies and trade unions) in order to achieve the binding goals of the 'Climate and Energy package 2020' within the local area.

Covenant signatories are committed to prepare an inventory of emissions and to submit, within one year, a plan for sustainable energy with the main actions they intend to carry out.

Good practice

ITALY

ICESPA initiative

As an example of tripartite dialogue experience, the CESPA initiative (Economic and Social Council for Environmental Policy), established in Italy in 2005 by the Ministry of Environment, involves the participation of every employers' organisation and of major national trade unions. CESPA has an advisory function on environmental legislation.

UK

Campaign for the green economy

The TUC is represented on the government's Green Economy Council (GEC), a tripartite body that includes business and government representatives. The government has described the council as "the leading engagement mechanism for development of new green growth policies." The non-government stakeholders have prioritised several key issues: government support for the UK's energy intensive industries like steel and ceramics facing high energy bills and needing to invest in new technologies; the need for investment in skills and training for an energy and resource efficient economy; and using public procurement to build UK supply chains

¹⁰⁾ http://www.eumayors.eu/index_en.html

¹¹⁾ http://www.eumayors.eu/index_en.html

in the new green economy – for example, renewables and electric vehicles. (12).

GREECE

Cooperation of 12 institutional bodies for the environment

This initiative is targeting a wide range of environmental issues in the city of Athens. Participants include trade unions such as the Greek General Confederation of Labour (GSEE), the regional labour organisations of Athens (EKA) and Piraeus (EKP). It started in 2009 and is based on a Memorandum of Understanding (MoU) signed by 12 social, political and scientific institutional bodies.

Having set a high priority on the promotion of greater Athens' green and free spaces, the MoUaimed to

- keepall open-free spaces
- protect and ensure free public access to beaches
- contribute to public awareness and mobilisation on the environment.

The participants in the initiative are: the Prefecture of Athens, the Greek General Confederation of Labour (GSEE), the Civil Servants Organisation (ADEDY), the Technical Chamber of Greece (TEE), the Local Union of Municipalities and Communities of Attica (TEDKNA), the Athens Bar Association (DSA), the Piraeus Bar Association (DSP.), the University of Athens (UoA), the National Technical University of Athens (NTUA), the Agricultural University of Athens (AUA), the Athens Labour Unions Organization (EKA) and the Piraeus Labour Unions Organisation (EKP).

¹¹⁾ http://www.tuc.org.uk/industrial/index.cfm?mins=433&minors=83&majorsubjectID=8

Chapter 4. **Union environmental representatives in the workplace**

Tools

There are a number of tools that union representatives can use to carry out an assessment of environmental issues in the workplace. These include an:

- Environmental audit. This aims to analyse the environmental effects generated by the activities of the company/organisation to ensure compliance with regulations and/or procedures provided by an environmental management system and to identify where there is room for improvement.
- **Energy audit**. This involves an analysis in order to understand how energy is used, and the causes of wasted energy. Energy usage is critically evaluated and compared with average consumption to identify how consumption can be reduced.
- Life-cycle assessment (LCA). This is a method of analysis which evaluates the interactions a product has with the environment throughout its life cycle. LCA is recognised internationally through International Organization for Standardization (ISO) standards. It takes an innovative approach, assessing all phases of a production process as interrelated.

However the most comprehensive tool - which also requires the active participation of workers - is the system of European environmental certification, the Eco-Management and Audit Scheme (EMAS). This is perhaps the most useful tool for trade union action as it can be introduced in any workplace. EMAS has the following phases:

- 1. **Initial environmental review**. This is a comprehensive preliminary examination of environmental issues, their impacts and the environmental performance related to activities at the workplace. It involves looking at the general characteristics of the site (e.g. administrative, urban planning, landscape, cultural, etc.) then a detailed analysis of activities is carried out to identify the environmental impact of the site. It involves using indicators to measure: the emissions of pollutants in water and the atmosphere, waste generation, the consumption of raw materials, energy, water, land and natural resources, the discharge of heat, noise, odours, dust, vibration, and visual impact.
- 2. **Identifying major environmental problems**. Once the environmental aspects related to the

activities have been identified, the most significant impacts need to be found on the basis of certain criteria - such as the number of instances, the quantity and quality of emitted pollutants, the time that an environmental component producing a given impact needs to restore optimum conditions, regulatory constraints, and the effects on the company's reputation.

- 3. Determining objectives. To determine specific green objectives for any workplace an environmental programme can be drawn up. The objectives selected should be based on the initial analysis of priorities, and take into account technological options as well as financial and operational constraints. They should also benefit from the input of all stakeholders, including employees. As far as possible, the objectives should be expressed quantitatively, using the kind of indicators set out in the table below. Where possible, the indicators should include deadlines and be regularly reviewed and updated.
- 4. Action planning. Once objectives have been established an action plan is prepared. Actions can be related to single processes, projects, products, services, or operations. Employees should be informed and involved in the implementation of the measures proposed.
- 5. Environmental management system. If a company's environmental programme is to be successful, it is essential that an environmental management system is introduced. This defines specific responsibilities, technical and managerial processes and the (human, technical, economic) resources that will be needed. It is not enough just to identify one responsible person for all environmental issues all the various functions of the company must be involved with the power and resources needed to meet their responsibilities.

Workplace enviror objectives and ind	nmental programme: icators
OBJECTIVES	INDICATORS
Waste reduction	 Generated waste per unit of end product per year % of recycled waste per year
Resource efficiency	• Quantity of raw material used, e.g. each quarter
Elimination or reduction of discharges of pollutants into the environment	 Quantity of greenhouse gas 2 emissions per year. Reduction of pollutant's, quantity - CFC, CO, SO2, hydrocarbon, lead
Re-designing products in order to minimise their environmental impact	 Quantity of raw material or energy used per unit of product per year % of recycled material in packaging per year
Improvement of safety practices and environmental management	No. environmental accidents per month. Investment in environmental protection
Promoting environmental awareness among employees	• Hours of environmental training for employees per month

Example:

Typical environmental responsibilities in an organisation

- Information about developments in environmental legislation
- Management of human, physical and financial resources
- Identification and management of environmental problems
- Establishment, maintenance and planning of control systems
- Definition of procedures in case of emergency
- Evaluation of costs and benefits of environmental management

- 6. Information and training. Training and information activities must be conducted in a planned, documented, systematic and continuous way. Internal communication is very important because of the need to communicate with employees and give them an opportunity to make suggestions. External communication should convey appropriate information to public authorities, the press, environmental groups (NGOs) and the local community. Training should be provided at all levels, from executive to clerical and operational staff. In particular, staff should be trained, at a minimum, on the importance of compliance with the environmental programme, on regulatory requirements, on processes and operating procedures, on the possible effects of various activities on the environment, and on correct behaviour in the event of an accident. Employee motivation for continuous environmental improvement can be encouraged by providing economic or other rewards to those who achieve the agreed goals.
- 7. **Mid-term and final evaluation**. An environmental impact assessment should be carried out regularly to measure changes and the achievement of objectives. In particular, data on pollutant emissions into the atmosphere, water, soil, waste production, energy, water and raw materials consumption etc. should be continuously monitored. This can be done by dividing production processes into phases, determining procedures for defining levels of acceptability and operating parameters, the provision and maintenance of suitable measuring equipment and the continual recording of data collected.

Nel procedimento possono essere inseriti programmi e obiettivi di miglioramento ambientale continuo riferiti alla catena /filiera dei fornitori e alle attività dirette e indirette dell'impresa.

Specific areas where union representatives can intervene

Continuous environmental improvement (CEI) Continuous environmental improvement (CEI) and / or reducing the environmental impacts of all economic activity should be the starting point for all environmental action plans. So what are the benefits for companies and workers?

Acknowledgement of the local and social context in which a business activity takes place can improve

a company's economic security. The greater the understanding of the impacts that an economic activity has on the site, the local area and on the whole country, the greater the prospects for the continuation and growth of that activity. Also, jobs in workplaces where there is a CEI programme are more likely to respect the context in which they operate and be more oriented towards the future.

Another economic benefit is linked to eco-efficiency advantages. In a globalised world where competition for natural resources is becoming increasingly fierce, having an eco-efficiency strategy means being less exposed to the changing prices of raw materials as well as bigger resource redistribution within the company and / or in the local economy.

An integrated approach: from design to product recovery

With regard to the principle of 'extended producer responsibility' of goods through their life cycle, especially in large companies, the union environmental representative should request information about how materials are recovered from the product conception and design phase to the end of its life-cycle when it becomes waste. Life-cycle assessment leads to industrial innovation ensuring the circularity of material use similar to the circular life cycle in the natural world. It also means recognising the 'cradle to cradle' concept (see chapter 1). In large companies asking for investment in the design of more sustainable products it can lead to not only environmental but also economic advantages.

Use of new materials which are easy to re-use

In companies where it is not possible to carry out research and development of new products or implement new organisational processes, union environmental representatives can ask that materials are used that are suitable for recovering and recycling.

Recognising the role of trade unions

- Recognition of the unions' role in environmental issues e.g. setting up a Joint Environment Committee
- Recognition of the unions' environmental representatives
- Training and information on environmental issues for both union reps and employees.
- Staff briefings on green issues.
- Environmental assessments
- Evaluation and reporting of environmental impacts.

Sustainable travel

Sustainable travel is often considered only in terms of the wider economy and society. Union environmental representatives should consider travel in relation to the workplace. This may include:

- The appointment of a travel manager
- Vouchers for public transport
- Changing rooms and repair services for cyclists
- Car pooling and car sharing
- Telecommuting.

Waste and eco-efficiency

The eco-efficiency of all resources used in the production cycle, and the use of materials better suited to recovery and reuse, is one of the most fascinating areas of innovation, not only from the perspective of new technologies, but also for new organisational approaches. These include:

- Waste reduction
- Separated waste collection tools and supports
- Reducing the consumption of materials
- Recovery of materials.

Improving environmental impacts

Continuous environmental improvement (CEI) is a procedure that can be used in both the internal and external life of a product, economic or service activity. It includes:

- The economics of proximity
- Green purchasing
- Emission reduction
- · Purification and recovery of water resources
- Reduction of land occupation / soil use
- Food systems and food waste recovery
- Water dispensers
- Protection of installations from hydro-geological risk and from extreme events related to climate change
- Control and communication with local stakeholders about the risks of relevant industrial accidents.

Energy

Energy is the biggest challenge for every workplace, because all use some form of energy. So good practice needs to be developed and consumption benchmarks set for different types of activity. These include:

- Energy savings and efficiency
- Participation in green investment such as in renewable technologies.

Pay

Gains from environmental efficiencies at work ("gainsharing") can also be translated into pay in various ways. Some business agreements state that pay is directly related to environmental outcomes (water, energy consumption, waste production etc.). In others a 'green' wage premium is linked to maintaining a company's environmental certification. Elsewhere, in Belgium, the national Eco-Cheque (1) agreement between the social partners has two objectives: improving workers' purchasing power and encouraging the purchase of green products and services. The list of products and services is determined in consultation with social partners and reviewed annually. In Italy, Eco loans take the form of end-of-contract indemnities which small enterprises (below 50 workers) manage themselves.

Green skills & training

Developing the green strategy of any business activity requires the improvement of specific professional skills. The union environmental representative should consider the relevant skills that may be needed. This might include:

- · requesting vocational training for green skills
- requesting the employment of green professionals (e.g. energy manager, travel manager, waste manager, sustainability manager, etc.).

Good practice

ITALY

Common statement of CGIL, CISL, UIL and Confindustria . (2)

The common statement between the employers' organisation and the three most important trade unions in Italy (CGIL, CISL, UIL) is among the most significant experiences in industrial relations relating to environmental issues. With reference to the goal of +20% of energy efficiency in the EU, a joint action programme was agreed in this common statement in December 2011 to be implemented across all industrial enterprises.

Green salary agreement in Paper mills (Cartiere) in Lucca

In the largest paper mills in Lucca's industrial district several company agreements were signed which established an annual wage premium in addition to normal remuneration according to the national sectoral collective agreement. This component of salary can range from a minimum annual wage of 300 euros to a maximum of 900 euros, depending on water and energy savings in the production process.

In some cases the value of wage increases is directly proportional to the economic value of saving energy and water. In others, the wage premium is based on percentages of water and energy savings. The wage premium has increased workers' attention to energy and water management in production processes, and created greater collaboration between all departments and between different professional roles and levels within the factory.



Agreement Bulgartransgaz EAD

La compagnia bulgara Bulgartransgaz EAD ha firmato un accordo che punta alla riduzione significativa delle emissioni di gas serra mediante la modernizzazione delle sue turbine a gas. L'accordo è stato firmato nel 2011 e scadrà nel 2020.

La necessità di inserire tematiche ambientali nell'accordo è nata in seguito al recepimento della direttiva 2009/29/ e per fornire una strategia di sviluppo sostenibile. In conformità con i requisiti per la deroga dall'art. 10c di tale direttiva e con il Programma nazionale bulgaro degli investimenti - adottato per la compensazione della produzione di elettricità del Paese e in vista della realizzazione di progetti per diversificare la sicurezza delle forniture di gas -, Bulgartransgaz EAD sta lavorando ad un progetto per la modernizzazione delle turbine a gas: gli apparecchi avranno un'alta efficienza e consumeranno meno gas naturale. Questo comporterà una riduzione significativa delle emissioni di gas serra. I delegati di Podkrepa hanno discusso il progetto e lo sostengono pienamente.

GERMANY

Steelmaking agreement ArcelorMittal in Eisenhüttenstadt

ArcelorMittal is the world's largest steel company, founded 61 years ago. It employs 2,800 workers at a plant in Eisenhüttenstadt from an overall total of

¹⁾ See Annex 1, Chapter 44.

²⁾ http://www.confindustriafirenze.it/sites/www.confindustriafirenze.it/files/allegati/2012/02/03/avviso_comune_eff._energetica_c onf._cgil_cisl_uil_21.12.2011.pdf

8,000 in Germany. Both management and the works council follow objectives of internal innovation and modification projects.

The first project 'Together we are Strong' is a joint initiative in taking measures against right-wing violence in the company and the region and taking social responsibility for good working conditions. Key instruments are posters, information flyers and cultural festivals. This corporate anti-racism campaign is regarded as one of the models for further nationwide initiatives. One important feature is a four to six-week practical course which trainees have to complete during their education in a social organisation in the region. These practical courses contribute to the development and strengthening of tolerance and solidarity towards others.

The second project is called 'Top Gas Recovery', and focuses on environmental protection by investing in the reconstruction of blast furnaces with top gas recovery. This will drastically reduce energy consumption and CO_2 emissions from steelmaking. The furnace project will be initiated at the plant in Eisenhüttenstadt. ArcelorMittal has committed up to 90 million euros to the project. The German government and the federal state of Brandenburg have also agreed to invest up to 40 million euros. (3).

GREECE

National Agreement between GSEE (4), SEV (5)., GSEVEE (6). and ESEE (7).

This national agreement was in force between 1994 and 2009 signed by the General Confederation of Greek Workers (GSEE) and employers organisations SEV, GSEVEE and (ESEE). The agreement for all productive sectors and all private sectors was for one year initially and renewed every year. The main issue it covered was the environment.

Both the general concern of workers on environmental issues and trade unions' sensitivity to these concerns led to the inclusion of key environment criteria in the National General Collective Agreement of Labor (NGCAL). The agreement took into consideration the following sustainability issues: energy use, water use, raw material use, transports of goods, mobility, waste management, and emissions in the atmosphere.

The NGCAL was renewed every year after collective negotiations and signed by the social partners. In this way the provisions of the article concerning the environment was enshrined every year. In the first year (1994) a joint committee (workers and employers) was set up. The committee was tasked with looking at environmental issues in relation to the productive activities and the urban situation and to come up with proposals. In the following years the provisions relating to the environment became more specific. The range of issues is now very wide and includes all those of common interest.

UK

Unite reps at the Magor Brewery

The Magor Brewery, near Bridgend, south Wales, makes 8% of British beer, including Stella Artois, Becks and Boddingtons. The brewery employs 400 people on a 23 hectare (57 acre) site. Brewing involves the use of huge amounts of energy and water - 35,000 litres of water a day, 50 tonnes of CO_2 emissions a day. That has all changed with the help of the union, Unite, which has taken the lead in helping the company to reduce its carbon footprint and save costs.

Three years ago, the union set up Project JUPITER (Join US People in Tackling Energy Reduction).It included a team of 'energy guardians' representing all departments at Magor which reviewed the energy savings that could be made and how. It set goals and monitored improvements to production processes. It has resulted in an energy saving mindset amongst employees.

Since starting the project the company has seen water usage decrease by 46%, electricity usage by 49% and heating bills by 23%. The company has saved over $\pounds 2$ million annually in bills, all through a mix of quick wins and a rolling programme of installing energy efficient equipment. The union convenor also felt that having a supportive management was vital to the project's success. The management at Magor was involved from the beginning and continues to fully support it. However it is a Unite initiative and the union set up meetings and

³⁾For more information, seehttp://rubigm.ruhr-uni-bochum.de/ Veroeffentlichungen/dialog_no_8_2012.pdf

⁴⁾ General Confederation of Greek Workers

⁵⁾ Hellenic Federation of Enterprises.

⁶⁾ Institute of Small Enterprises

⁷⁾ Economic and Social Council of Greece

⁸⁾ The ending of the National General Collective Agreement of Labor, and against all International, European and National legislation, as it is provided in the program of adjustment signed between the Greek Government and the Troika (IMF, ECB and European Commission.), will seriously affect cooperation between the social partners and not only on environmental issues.

chaired them and invited management to take part. The project has now entered a new phase and is spreading the energy saving word beyond Magor into the local business community. A TUC green reps course, *Trade unions and the environment*, was organised on site. The brewery is now exploring solar PV and wind turbines to power the site.

PCS reps at HM Revenue & Customs Lillyhall

At HM Revenue & Customs Lillyhall an environmental sustainability plan has been agreed between senior management and the Public and Commercial Services Union (PCS) representatives in an attempt to meet the 'Greening Government Commitments' that the government has set for its own estate.

The joint management/union discussions set up targets to reduce greenhouse gas emissions by 25%, reduce the amount of waste generated by 25% and reduce water consumption all by reference to a 2009/2010 baseline. The Lillyhall plan for 2011/2012 focuses on each commitment in turn and sets out a series of objectives, actions, and targets aimed at achieving the reductions required. Progress on the plan is reviewed monthly at senior management meetings.

In an attempt to reduce the environmental impact of travelling to work the reps have been liaising with the car park committee to promote car-sharing and have negotiated a Cycle to Work scheme. In September 2011 all staff were invited to take part in World Car Free Day with those actively participating entered into a prize draw. Due to the enthusiasm of the reps and the support of management the day was a huge success with over 50

members of staff using a different mode of transport for the day. Management and reps agreed paper usage would be a good place to start reducing waste. Workers

be a good place to start reducing waste. Workers were encouraged to set printers to print double sided and scrap paper boxes are now in place next to each printer. This scrap paper is turned into note pads further reducing the amount of paper used on site. The scrap pads were launched through a notebook amnesty during Climate Week (a national initiative that takes place every year in March). The next big event is Green Office Week. As part of this the team at Lillyhall has invited the local water company, United Utilities, along to advise on how to reduce water consumption.

Community union reps at Tata Steel's 20" Pipe

Mill in Hartlepool

Community Union is the largest trade union within Tata Steel Europe (previously Corus) and aims to have environmental representatives in place at all of Tata UK's operations in order to work with the company to reduce its carbon footprint. This is already happening with clear results at the 20" Pipe Mill in Hartlepool. Union reps at the site are trained so that they can answer questions about environmental procedures from colleagues in the mill and they are also in a position to give the company's environmental team input as to how and why improvements can be made around the site.

The reps attend quarterly meetings with the company's environmental department where they are informed about anything discussed in the section managers' environmental committee meeting. Information on any changes, legal updates, breaches, can then be passed on to the rest of the workforce through the reps and it is also an opportunity for the employer to get opinions and ideas on any of the solutions they have proposed. One proposal put forward by a rep at a meeting has resulted in all the amenity blocks having a recycling area and a recycle centre on site for waste such as tins and plastic.

The reps have attended environmental awareness training organised by the employer to give them insight into environmental regulations and requirements which the 20" Pipe Mill must adhere to: the idea is that they can then share this knowledge with the rest of the workforce. Six of the reps went on to train to become environmental internal auditors which involved attending a three-day training course. The course has enabled all attendees to gain a recognised qualification as an internal auditor which means they are now able to complete competent environmental internal audits for the 20" Pipe Mill.

"As we progress in our role we would like to be able to complete more audits and be able to offer more support to the environmental department, like safety reps have progressed in their role," said one of the reps who is now a qualified environmental auditor. "I think the next big step would be further environmental training for all staff members on site. This would help our role to progress and for the workforce to have a better understanding of what our role is on site."

In turn the company's environmental department is now able to rely on the trained environment reps to complete a thorough, relevant audit schedule, which ensures that the site is constantly regulated, and areas of improvement identified. Ultimately this means the organisation is able to reach high standards in its ISO 14001 audits (certification for environmental standards) and ensures they are prepared for new and ever more stringent environmental legislation.

BELGIUM

SWIFT

An ambitious project to improve travel to work arrangements has been developed closely with union representatives as well as a project on biodiversity. It has various outcomes: strengthening of the link between the municipality, the company and employees, salary savings for employees, and savings for the company through reducing dependency on fossil fuels. In particular, the use of bicycles has been promoted through a system of leasing. Showers have been installed as well as covered parking for bicycles, cloakrooms, and increased financial investment by the employer.

Another project developed jointly with union representatives concerns biodiversity. A flowery meadow has been created which contributes to the quality of life at work, hives have been settled, and an inventory of fauna and the flora has been drawn up.

FRANCE

National Institute of Geographic and Forest Information (IGN)

IGN, a public body, produces and maintain geographical information. It employs 1700 workers across nine sites. In the 2006 business plan IGN included sustainability issues, producing a 'charter' of values' that integrates the concept of sustainability and social responsibility. One of the areas in which the effects of the project were tangible was that of building policy, with old buildings being destroyed and the construction of a new one with low energy consumption. As part of this reorganisation, the issue of parking was raised. Through working groups in which the trade union CFDT was involved, a sustainable travel project began and the need to introduce teleworking was considered. This led to an ad hoc regulation signed by two trade unions. Training activities on sustainable development were also carried out. These were much needed.

Solvay

Solvay is a chemical group which employs 20,000 workers across 50 countries, 4,000 of them in France, where the major national site in Tavaux (Jura) has 1,450 workers together with 100 others in related industries. The risks posed by the chemical activities at the plant come from the emission of gaseous chlorine, the danger of fire and explosion.

Given these risks to the environment, Solvay's sustainability strategy is integrated in the organisation of the Group and its businesses and processes. The union (CFDT) has entered into a process of sustainable production developed by the company, for example, all workers were involved in a 'staff awareness forum'.

The improvement of environmental risks has often resulted in negative effects on employment, but the union is coming from the angle of prevention and not being resigned to inevitable technological change, but anticipating changes through its involvement in negotiating amendments to working conditions in order to avoid redundancies.

Chapter 5.

The union's role in environmental issues in the community and society

Unions in the local community

What role can trade unions play locally, beyond the workplace, in environmental issues? There are two aspects here: the first is directly linked to trade union activity to protect workers and employment; the second is about picking up important information about environmental issues through their members.

For example, a union environmental representative may discover information about:

- opportunities to treat and restore contaminated land
- land use recovery of abandoned industrial sites
- critical issues related to production processes
- opportunities to introduce good environmental management tools in production processes (e.g. EMAS, ISO 14001, Ecolabel)
- the social acceptability of existing production activities or new proposals.

Trade unions can therefore be important partners for local environmental groups and institutions after all, unions represent the interests of workers who work and live in the area. Production activities and work are often seen as being in conflict with protecting the environment; but the protection of jobs and the coexistence of production and environmental protection are the union's objectives from the perspective of sustainable development.

The union's role in sustainable development is also evident in local conflicts over environmental issues (e.g. the 'Nimby' phenomenon – not in my back yard). There can be many reasons for such conflict, from worry about technological risks to concerns about the effects on health, landscape and the natural environment or the compounding of already existing risks.

Environmental conflicts are often triggered by plans for new production facilities or infrastructure such as a new road or rail network, or because of the proposed closure of plants or activities which had been in the area for a long time. An example of this is industrial settlements in mountain areas which were welcomed in the past because they offered employment and development in depressed areas, but are now viewed as detrimental in areas developed for tourism. Lack of information and of participation in decision making may also affect the social acceptability of public policy decisions. In these situations unions may be involved in discussions with employers' associations, authorities and local environmental organisations in an attempt to overcome opposition to the plans. Mutual trust has to be created between the company and organisation proposing the project and the local community so that local citizens are able to participate in decisions (1). Unions have the experience and expertise to encourage public authorities to manage the process in a way that is transparent and participatory (see the schedules below). The union representative can play an important role in encouraging comprehensive, timely, objective information on the issue.

EU Directive 2001/42/EC requires a mandatory strategic environmental assessment process (SEA) for programmes and plans which have a significant impact on the environment. In SEA the process of information / communication is essential and should involve continuous interaction with the local community. All stages, from initial analysis to implementation of the work, should be subject to consultation with the local community and the regulatory system (i.e. institutions involved in monitoring the project).

Schedule nº 1



However, the communication and participation processes often become one-way information from the project proposer to the local community. This can happen when there is:

¹⁾ www.nimbyforum.it

• insufficient or biased communications and evaluations

• a lack of three - coordinated but independent - operating groups (design, evaluation, communication)

inadequate allocation of resources

• conflict management based on propaganda and political interests instead of information and problem analysis.

As schedule no. 2 shows, communication is often seen as important only in the final phase of implementation. By then it may be too late to modify the project and conflict starts which may prevent the work from being completed.

This is what happened in the province of Lucca in Italy, where a company already established in the area proposed to set up a paper recycling facility. The conflict between residents associations, the company and local institutions did not provide an opportunity for a truly participatory process. The trade union tried to promote discussion by encouraging meetings to take place, and participating in them, and by supporting the decision-making process. But in the end the process took so long that the company moved the operation elsewhere which meant the local economy did not benefit from the investment.

Schedule nº 2



Specific issues on which unions can intervene

There are many environmental issues in the wider community and society, ranging from pollution and biodiversity to responsible consumption, on which unions may wish to intervene; some of these are suggested below. When identifying these areas, it is important to take into account the relevant legislation and regulatory frameworks available, at both national and European levels. Some of the most important transnational environmental frameworks include:

- The "Seveso" directive, which obliges Member States to ensure that operators have a policy to prevent major accidents. It now applies to around 10,000 industrial establishments where dangerous substances are used or stored in large quantities, mainly in the chemicals, petrochemicals, storage, and metal refining sectors.
- The Aarhus Convention (2) on access to information, public participation in decision-making and access to justice in environmental matters.
- The European Commission's biodiversity strategy to halt the loss of biodiversity and ecosystem services in the EU by 2020. There are six main targets, and 20 actions to help Europe reach its goal.
- The draft EU Soil Framework Directive, which aims to harmonise and raise the level of soil protection across the EU. The approach currently proposed would require Member States to: tackle soil erosion, loss of soil organic matter, salinisation, landslides, acidification and so on.

Risks

To promote the safety of both workers and citizens, areas at risk or subject to maintenance need to be mapped and the people involved need to be informed of the risks and what to do in the event of an emergency. This is also important for discussions around planning (roads or infrastructure), and for production and workers' activities. The following needs to be considered:

- hydro-geological risk (mapping of risk areas upstream maintenance of the territory) (3),
- risks of relevant technological / industrial accidents (Seveso II) (4),
- polluting industrial sites and activities that have a significant environmental impact.

Biodiversity

Among the challenges of sustainable development, conserving biodiversity is less well known and often overshadowed by the serious issue of climate change. Yet ecosystems play a vitally important

2) http://europa.eu/legislation_summaries/environment/general_provisions/l28056_en.htm

4) See Annex 5, Chapter 5

³⁾ See Annex 5, Chapter 5

role in the balance of nature and in the capacity for adaptation to climate change.

Biodiversity also plays an essential role for example in water and air purification and in food production (e.g. pollination). The gamble we are taking on biodiversity is strongly linked to socio-economic issues many of the services provided by nature are free today but tomorrow they may become very expensive.

There are many directives concerned with nature conservation and these are integrated in European and national projects in order to comply with the Nagoya Convention (2010). Trade unions cannot wait for health catastrophes caused by pollution, or for irreversible events to happen to consider population and workers' interests in this regard. And business interests go hand in hand with these (see Pavan Sukhdev's report on the Economics of Ecosystems (5)).

Unions should pay particular attention to the following issues:

- reforestation
- protected natural areas
- coastal protection.

Urban pollution

Urban planning includes protection of depleted resources (such as soil), but also issues related to citizens' and workers' quality of life, and to employment (such as public transport and waste management) (6). Unions may wish to intervene in the following:

- **Transport** (7). Transport related measures such as analysing traffic flows can have an impact on travel between home and work, determining its effectiveness and cost for workers.
- Waste management (8). EU Framework Directive 2008/98 (19 November 2008) reformulates the waste management hierarchy giving it a priority order with implications for differentiating, recycling, and reusing waste.
- Urban green spaces (9).

Noise, light and air quality control should also be considered by trade unions, in line with what they already do about health and safety issues in the workplace, by extending the protection from workers to citizens.

- Noise pollution (10)
- Light pollution (11)
- Air quality (12)

Responsible consumption

Trade union rights and protection continually cross over into our lives as citizens. An obvious example of this is our role as consumer. What we buy on a daily basis may be viewed as a private issue yet it has important social, political and environmental implications.

We may think that consumption ends with the act of buying something. But it is in fact a much longer process that begins with the decision to buy and continues with where we buy, the type of product, how we use it and what we do with it when we have finished with it. Depending on how we deal with each of these steps, our consumption can have differing environmental impacts - and social consequences. We need to consider the impacts on resources or energy, the social impacts linked to prices and working conditions, and the disposal of waste.

Trade unions have something to say on this issue, because they want to encourage their members to be responsible consumers, and in the longer term, they promote the idea of a society in which workers' and citizens' behaviour plays a decisive role in the choices available. More specifically, unions have an interest from three perspectives: economic, social, and environmental.

Economic

A short distribution chain (in Italy: filiera corta) represents an opportunity to enhance food production in the local area. It makes it possible for employment in the area to be increased or maintained and lowers transport costs. This approach cannot be left to the market: there needs to be a distribution of wealth and an exploitation of environmental resources which recognises the value of biodiversity.

Social

Every individual is a person who purchases goods and services. In societies we develop relationships that go beyond the point of purchase and create associations that guide the market through its choices. In turn this brings opportunities for par-

- 8) See Annex 8, Chapter 5
- 9) See Annex 9, Chapter 5
- 10) See Annex 10, Chapter 5 11) See Annex 11, Chapter 5

⁵⁾ http://ec.europa.eu/environment/nature/biodiversity/economics/

⁶⁾ See Annex 6, Chapter 5

⁷⁾ See Annex 7, Chapter 5

¹²⁾ See Annex 12, Chapter 5

ticipation and sharing which are not only instrumental to the supply of goods, but bring about changes in practices, behaviour and ideas. Trade unions need to be aware of these organisations in considering priorities for action.

Environmental

By reducing the need for transport, polluting emissions will decrease, organic farming can develop with an emphasis on local production and respecting biodiversity. This makes an important contribution to the environment's resilience. The protection of biodiversity and local production to which responsible purchasing contributes are both ways to pursue sustainability.

Good practice

ITALY

Memorandum of understanding between CGIL, CISL UIL and the Region of Tuscany (13)

The regional government of Tuscany and trade unions have signed a memorandum of understanding on an environmental action plan. The memorandum enshrines the involvement of regional trade unions CGIL, CISL and UIL in the implementation phase of the three-year plan which aims to introduce changes in production and consumption, in order to develop eco-efficiency within the Tuscan economy and society.

Two actions have been agreed:

- **the establishment** of a technical bilateral committee to manage the implementation of the regional environmental action plan, giving priority to the design of interventions in critical environmental areas
- **pilot training** projects in order to increase the environmental knowledge of local trade union officials, and especially of trade unionists from federations which are the most affected by environmental problems.

UK

Unions campaign for carbon capture

In the UK's industrial heartland, trade unions are campaigning for urgent investment in new carbon technology to capture CO_2 emissions from heavy industry and power stations. For example, in the Aire Valley industrial region, Yorkshire, a group of a dozen coal power stations, cement works, chemical plants and steelworks emit altogether about 60 million tonnes of CO_2 . Unions in these companies and industry groups are working together to persuade government of the economic and environmental case for shared investment in new technology to capture and store the CO_2 in the North Sea's depleted gas and oil fields.

Similar opportunities exist in other industrial regions like Teesside, the East Irish Sea and east coast of Scotland. The TUC has strongly supported the Government's plan to invest £1billion in a pilot project. In a new study, *A Roadmap for Clean Coal* (14),

¹³⁾ Vedi scheda 14, Capitolo 5.

the TUC's Clean Coal Task Group is urging the government to move more quickly and decisively to bring public and private investments and experts together to get the first project underway. The joint unions-industry body argues that not only can CO2 capture help us reach climate change targets, but can also create tens of thousands of new jobs and skills across industry and the power sectors.

Construction union UCATT supports a green approach to social housing

UCATT is supporting the building of an environmentally-friendly housing development not only because it is helping tackle climate change and fuel poverty but also because the workers involved in the Wakefield and District Housing (WDH) project are getting the opportunity to develop their green skills on cutting-edge green technologies.

The 91-home Park Dale project in Airedale, Yorkshire is the UK's largest zero carbon housing development. The homes cater for a range of ages and family sizes and were built for WDH by developers Bramalls to the highest sustainable housing standard using traditional construction methods. For example, each home is connected to a central biomass boiler that uses locally produced wood pellets to provide heating and hot water; every house has a south facing roof fitted with 35m2 of photovoltaic (PV) panels to turn energy from the sun into electricity; and the air temperature in each property is regulated by a mechanical ventilation heat recovery system.

According to the environmental manager, a union member, "Other local authorities and social housing providers can be doing exactly the same as us" said. "It just requires vision on the part of senior management and a commitment to work in partnership with the trade unions and other organisations."

The UCATT General Secretary argues that the project highlights a major transition occurring in the construction industry. "It demonstrates not only the massive change needed in the way people are employed in construction; but also the opportunities for retraining those with traditional skills."

Apprentices have had access to unique hands-on practical training in cutting-edge green technologies at Park Dale – skills they would never have acquired on a conventional building site. For example, he can now install and maintain the grey water system to flush the toilet. Apprentices are now helping to pass on their skills to WDH's adult workforce. The union commented: "The project is fantastic. It is good for the environment, good for the tenants, and good for construction workers – providing them with the opportunity to develop green skills for the future. We certainly hope to see more developments like this springing up around the country."

GERMANY

Working group on sustainable procurement of raw materials

A working group has been set up to identify the interests of employers, employees and environmental associations and, where possible, to develop joint strategies in the gravel and sand extraction, and stone and lime quarrying industries.

The working group is made up of representatives from IG BAU (Construction, Agriculture and Environment Union) IG Chemie (Chemical Workers' Union), DGB (German Federation of Trade Unions) regions Münster and Dortmund, Arbeitgeberverband VERO (construction and raw materials industries' Employers' Association), Managing Directors from different companies, BUND (Friends of the Earth Germany) and Nabu (German Nature and Biodiversity Conservation Union).

BELGIUM

"Semaine de la Mobilité" (travel week)

Since 2002, the two major trade unions in Wallonia FGTB and CSC have developed what is known as "Cellules syndicales de Mobilité" (trade unions' travel units). In practice, it is an initiative that aims to support travel projects in companies and develop union representatives' awareness as well as social dialogue and training.

This project is run with the financial support of the Walloon government. The general objective of the units is to improve the capacity of representatives to intervene on travel issues.

In addition to the work with the representatives the "Cellules syndicales de Mobilité" take part in developing the mobility plans in 'areas of economic activities' as well as in public initiatives such as the 'travel week' organised each year in September by the Walloon government though awareness actions in companies.

At the moment, the trade unions' travel units are also participating in a public project called 'Tous vélo actifs' that aims to promote the use of bicycles for travelling to work.

¹⁴⁾ http://www.tuc.org.uk/search/start.cfm

Chapter 6. Jobs and skills in a Just Transition

A Just Transition

The shift to a low carbon economy is not just necessary but increasingly inevitable. A TUC report, A Green and Fair Future (2009) (1) argues that. in the past, significant periods of economic restructuring have often happened in a chaotic fashion leaving ordinary workers, their families and communities to carry the cost of change. Indeed, individuals and communities in the UK are still paying the price for the rapid shift away from industrial production over the last 30 years.

Although much more needs to be done to reduce the significant risks from climate change this century, new environmental regulation and investment in green and decent jobs can begin to change the shape of the UK economy over the next decade. But the injustices of industrial change in the past must not become a feature of transition to a low carbon economy now and in the future. Not only would this be unacceptable to trade unions and be socially damaging but it would undermine the credibility of the transition itself and could slow or even halt this vital and urgent shift.

For this reason, among others, we need a 'just transition' to a sustainable economy. 'Just transition' recognises that support for environmental policies is conditional on a fair distribution of the costs and benefits across the economy. It means unions having a place at the table with government and employers, negotiating on the creation of jobs, skills and social protection for all those affected.

Consultation	Consultation between representatives from trade unions, business, government, regional bodies and voluntary organisations, on the shift to a green, low carbon economy, from the workplace to national government.
Green and decent jobs	Investing in the technologies and infrastructure to meet the sustainability challenges for a low carbon, resource - efficient future while creating quality jobs.
Green skills	Government-led investment in education/training and skills programmes, from the workplace to national level, to equip students and the workforce with the skills for a low carbon, resource-efficient economy.
	Promoting individual worker's rights to training to ensure access for all workers.
Respect for labour & human rights	Democratic decision-making and respect for human and labour rights are essential in order to ensure the fair representation of workers and communities.
	Strengthening worker information, consultation and participation rights to matters concerning sustainable development
Social protection	Strong and efficient social protection systems in the transition to a low carbon economy

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The ETUC is also calling on the EU to adopt a European 'just transition roadmap' that includes the promotion of social dialogue and workers' rights, EU targets on quality jobs and skills, and new initiatives on the anticipation of change, through investing in skills and training initiatives. The transition to a low carbon economy is also an opportunity

for employment growth with more skilled jobs, better distributed across the nation.

Production activities related to the oil and coal era meant strong technological development but with

¹⁾ http://www.tuc.org.uk/social/tuc-14922-f0.cfm

little attention given to environmental concerns. The new economy must place much more emphasis on the availability of local natural resources. The ability to plan, and for different sectors of the economy to work together in an integrated and reciprocal fashion, are important features.

The transition to a low carbon economy is taking place within a context of general economic crisis. Both manufacturing and service sectors need structural and technological reorganisation to enable them to build resilience to this crisis. According to the United Nations Environment Programme (UNEP) (2) companies will be better able to resist the economic crisis if they first address present and future risks from climate change, and if they harmonise their production models with local communities and the environment, so creating virtuous networks between citizens, governments and natural resources.

The European Commission (3) has suggested a green revolution as a way out of the crisis: "In conducting fiscal consolidation, Member States should give priority to sustainable growth-friendly expenditure in areas such as research and innovation, education and energy".

In general, manufacturing and service sectors are moving towards more efficient forms of organisation. In the case of new areas, like renewables, they need new skills. In the case of existing sectors, like car production, retraining is needed.

I "green jobs"

Definitions

The International Trade Union Confederation (ITUC) defines the green economy and green jobs as follows:

The green economy "is an economy where investment in sustainable production and in cleaner technologies is shaped by key principles of social justice, social protection, and decent work."

"A green job reduces the environmental impacts of enterprises and economic sectors to sustainable levels, while providing decent work and living conditions to all those involved in production, and ensures workers' rights are respected. Green jobs are not only those traditional jobs people think of as green – like making solar panels, manufacturing wind turbines, water conservation and sustainable forestry. They also include retrofitting related jobs in the construction and public transport sectors, and making energy efficiency improvements in manufacturing plants, along with services supporting all industries."

Source: ITUC report Growing green and decent jobs, Millennium Institute, March 2012 (4)

"The eco jobs have to be decent jobs which means adequately paid with safe working conditions, job security, reasonable career prospects and respect for labour rights." **UNEP background paper on green jobs**

According to the classification by the Centre of Excellence (5) in California, the areas traditionally meant by the green economy, where green jobs are developed, are: renewable energy (production and storage), equipment installation, sustainable building, energy efficiency, production and cultivation of biofuels, sustainable transport, water, waste management and waste water management, environmental protection and sustainable development in general. Each of these areas are closely interconnected. Consider energy efficiency, for example, which has implications for entire production chains from manufacturing to waste management. There

may be opportunities to use biomass (using wood to produce heat and hot water) or to move to more sustainable transport within a company, both of which have energy saving implications.

Business Europe believes that the distinction be-

²⁾ http://www.unglobalcompact.org/docs/issues_doc/Environment/climate/C4C_Report_Adapting_for_Green_Economy.pdf

³⁾ http://europa.eu/rapid/pressReleasesAction.do?reference=DOC/11/1&fo rmat=HTML&aged=0&language=ENguiLanguage=en

⁴⁾ http://www.ituc-csi.org/IMG/pdf/ituc_green_jobs_summary_en_final.pdf

⁵⁾ http://www.coeccc.net/Environmental_Scans/GreenEcon_Scan_ SW_09.pdf

tween so-called "green" and more conventional sectors is artificial (6). Instead, the focus should be on the wider process of greening all jobs. In this sense there is the potential to rejuvenate older professions - often linked to manufacturing or agriculture. Through being relocated within the green economy, they can have a new lease of life. There is a long list of such jobs including: livestock farmers, farm workers, leather workers, suitcase makers, handbag makers, carpenters, chair menders, masons, plumbers, panel beaters, car mechanics, welders, watch repairers, printers, bookbinders, electricians, electromechanical technicians, weavers, tailors, upholsterers, painters, plasterers, scaffolders, floor layers, drivers, messengers and even gas meter controllers (7). Many of these are jobs, for which there is a growing demand, can also be attractive to voung people.

If we are to seize the opportunities for growth in employment offered by the development of a sustainable economy, we need a workforce with the right skills. A recent European Centre for the Development of Vocational Training (CEDEFOP) report (8) says it is more important to top up worker's existing skills than to design new study or training curricula for the more specialised, newer skills sets. In fact many of the skills needed for sustainable jobs are already available in existing occupations. These generic skills refer both to skills required in almost any occupation (such as communication, team work etc.) and general green skills (such as reducing waste) that should apply to any occupation and are more important than specialised green skills. Case studies illustrate that if there is a solid basis of professional skills, with a commitment to update or train, a wide variety of tasks required by a new 'green' profession can be performed (9).

Key figures in this transformation are those who, even without highly specialised training, can guide organisations in a green direction, improving processes and efficiency, encouraging the acquisition of relevant skills among the workforce, and the training of existing or hiring of new staff. Technical staff are also very important, as they are able to play a direct role in redesigning processes, putting in place technological innovations or buying new products.

As the CEDEFOP report referred to above says, the EU suffers from systemic weaknesses in its skills base which limit its productivity and competitiveness in today's economy as well as reducing its capacity to exploit the opportunities offered by green growth. These deficits in management skills and technical job-specific skills, many of which are related to science, technology, engineering and mathematics (STEM), are a greater concern than shortages of new green skills. While, on the one hand, green skills will become important for almost every job, on the other hand the retraining needed for workers to move to an occupation in an entirely different green industry, may not be available.

Skills in traditional sectors are also needed in the sustainable economy, for example, workers with experience in shipbuilding and in the oil and gas sector are highly sought after in the wind-turbine industry because of their skills in welding, surface treatment and outfitting. There are some areas in which significant investment in skills will be needed, mainly because of the scale of action required. This is most notable in energy efficiency and the building of zero-carbon homes; even if the new practices are not particularly complex, a very significant number of workers will need to update their skills.

Generally speaking, "green workers" will have had appropriate training relevant to the sustainability requirements of the business where they work, or they will receive training on the job. In both cases the worker's value is increased by green competencies, not only in professional terms, but also as citizens more engaged in the sustainability of their communities.

Union environmental representatives have a key role to play in relation to both new and updated skills, promoting both on-going training and awareness raising on environmental issues. Providing workers with qualifications and/or re-qualification training for the new economy, means making them more employable and competitive in the labour market, especially with regard to the green conversion of manufacturing and services.

Trade unions at all levels (local, regional, national, European) must press for highly professional training programmes so that young people can get jobs in the green economy as well as workers currently

⁶⁾ http://www.nho.no/getfile.php/filer%20og%20vedlegg/BE%20posisjonsdokument%20om%20En%20mer%20milj%F8vennlig%20%F 8konomi%20-%20utfordringer%20for%20sysselsetting%20og% 20ferdigheter,%2014.06.2010.pdf

http://www.rischiocalcolato.it/2011/11/sos-lavoro-a-rischioestinzione-molti-mestieri-manuali-agricoli-ed-artigianali.html
 http://www.cedefop.europa.eu/EN/Files/3057_en.pdf
 See Annex 1, Chapter 6

employed in jobs that will decline and, in some cases, disappear altogether.

Good practice

ITALY

Campaign for vocational training on energy efficiency

Confindustria, the Italian Industrial Employers' Association and the trade unions organisations CGIL, CISL and UIL have established a joint training programme on energy efficiency in industrial companies across the country. The programme provides basic training (8 hours) for workers and specialised training (40 hours) for energy managers (technical executives with responsibility for energy management activities). The courses are expected to be attended by union officials from both companies and local organisations.

As part of the course the partners have included the importance of developing joint and shared actions on eco-efficiency and also encourage wage premiums for workers and savings for businesses.

UK

The New Green Team

A new initiative by the public services union, UNI-SON, supported by the TUC, shows how trade unions are campaigning for green & decent jobs at local level. The New Green Team (10). launched in January 2012, argues for a green skills' strategy to identify and address key skills needs.

The Greener Jobs Alliance

The Greener Jobs Alliance was set up by the Universities and Colleges Union (UCU) to campaign for a national skills strategy to deliver a low carbon economy. The union believes green investment could provide the boost the economy desperately needs.

The union joined forces with South Thames College, London, and local organisations to show how a further education college and a trade union can jointly promote the development of green jobs and skills by working with community organisations. The union hopes not only to influence national skills policy but also to develop demonstration projects in local areas that can inspire students to want to work in the energy saving sector and give them the opportunity to gain the skills needed for the low carbon economy.

As demand for low carbon training is not as strong as it should be to justify significant investment in curriculum development, the UCU South Thames College branch worked with the college and other local organisations to promote low carbon training to local employers to create more demand. It also created links with local community organisations working on sustainable development in the two London local authorities where South Thames College has a campus – Merton and Wandsworth.

The alliance also sought to initiate opportunities for the college students, such as those in the construction school, to experience work with local organisations that would be involved in delivering the *Green Deal* - a UK government initiative that aims to improve the energy efficiency of domestic and business properties. So far students in heating and ventilation and electrical installation have worked with local employers by joining them on a home energy visit and installing photovoltaic (PV) systems in private households.

As a result of the project, one tutor from the construction school at the college is attending a five day training course with Parity Projects, a local energy conservation consultancy, to learn how to deliver a short course on energy efficiency measures. The alliance also produced training materials, including a video to be used on a range of 'Education for Sustainable Development' courses and meetings.

Overall the project offered a practical demonstration of community trade unionism and illustrated how a UCU branch can link environmental action with the future job prospects of staff and students. (11)

GREECE

The Academy of Labour and the Institute of Labour

1.The Greek General Confederation of Labour (GSEE), recognising the need for education and training for trade union elected representatives, new union members, and young members, established the Academy of Labour. The Academy

¹⁰⁾http://www.tuc.org.uk/workplace/tuc-20478-f0.pdf

¹¹⁾The video can be seen at http://www.youtube.com/watch?v =VNRx6tNFG8U

runs courses in subjects related to trade union activity, including the environment. Those taking the courses, which last for one year, can become 'green delegates' either at company or at regional/local level.

2. The Institute of Labour, a trade union institute, carries out studies related to the environment and employment in Greece, on the socio-economic impact of climate change policies, and on the preconditions for sustainable development. It also offers training to workers, and those who are unemployed, on protection of the environment, renewable energy sources, training for energy inspectors etc. The Institute of Labour has also participated in European programmes for identifying environmental skills so they can be certified as professional skills. It has also produced numerous publications on environmental issues and sustainability in order to promote understanding and development of union initiatives in these areas.

GERMANY

Cooperation project on resource efficiency for works councillors and employees

The efficient use of materials and energy can save companies money, secure jobs and contribute to protecting the environment. A social partner initiative on resource efficiency, led by the German Federation of Trade Unions (DGB), worked in partnership with the DGB Bildungswerk (DGB's educational institution) and the Federal Ministry for the Environment, Nature Conservation and Nuclear Safety. The result was the cooperation project on resource efficiency for works councillors and employees (Kooperationsprojekt Ressourceneffizienz für Betriebsräte und Beschäftigte: KoReBB).

From 2008 to 2011, KoReBB set out to strengthen and promote sustainable energy and efficiency in the use of materials in companies in order to contribute to long-term site and employment protection. KoReBB offers qualifications and advanced training for employees and project activities in support of the works councils. The project gave companies an opportunity to identify ways of balancing economic interests with environmental issues and employee interests.

FRANCE

School Notre Dame d'Ussel

Notre Dame d'Ussel is a private school offering

places from kindergarten to high school. The school has 600 students, 35 teachers and 15 technical and administrative clerks. In 2005 the school introduced Agenda 21, an action plan designed to meet social and environmental objectives in line with the educational process. As part of the pedagogical observatory board the trade union FEP Limousin (CFDT) had a leading role in suggesting projects and raising awareness.

As a first step, the Agenda 21 Steering Committee decided to provide shared civic, legal and social education across high school classes. The committee also decided to carry out a number of projects, and organise an event at the end of the year in order to present the actions and invite partners (in particular the Permanent Initiative Centre for the Environment). The actions were about solidarity, funding the school year costs for students in Togo and investing in Catholic Aid's 'Fair boutique'.

Recently the 'energy section' of the school has built a wind turbine and plans to use solar panels, the 'plastic arts' section has used recycled materials, and an organic garden is also envisaged.

47th CFDT Congress: an 'Eco-Congress' (Tours, June 7-11, 2010))

In 2010 the trade union CFDT engaged in a process of eco-sustainability at its Congress, with two objectives: to encourage participants to take an attitude of eco-responsibility and to provide the tools and procedures to facilitate personal commitment around these issues.

On-line conference management was at the heart of the process (registration of participants, conference documents, amendments); the restaurant served local and organic products; there were incentives to use rail or car sharing for travel; only recycled paper was used and only a limited selection of documents were printed; eco-friendly stands with prizes for the best projects; a "sustainable development space" at CFDT's stand with general information on the union's best practices. The Congress also carried out an assessment of CO₂ consumption based on data collected on energy, water, paper consumption, the transportation of people and materials, volumes of waste etc. This assessment will provide a benchmark for possible improvements from one Congress to another.

Finally, at the conclusion of the process, the union compensated for greenhouse gas emissions which could not be avoided, by supporting local and international projects that seek to tackle environmental and social problems.

Chapter 7. Unions and international action

"Think globally, act locally" is one of the most well known slogans used by organisations that are fighting for environmental causes. The slogan recognises the global dimension of environmental issues. An obvious example is global warming due to greenhouse gas emissions across the planet, to which we can respond locally in our lives and at work.

Trade unions can not only adopt this slogan from the environmental movement but can also enhance it with their strong organisation at international level and their mission of solidarity among all workers: 'Think globally, act locally and globally'.

Trade unions activity around environmental issues, both within the ETUC and the wider international context, has been growing in recent years. At the UN Earth Summit in Rio de Janeiro in 1992 the trade union delegation was one of the smallest, yet by the time of the next Earth Summit in Johannesburg in 2002 they were the largest group.

ETUC Sustainable Development Working Group

The ETUC's Sustainable Development Working Group brings together trade union experts from across the EU to advise the ETUC on what climate change means for people at work and in their daily lives.

Over the past two years, the Working Group has provided expert advice on:

- The EU Roadmap 2050, which sets out the policies needed for the EU to reach its ambitious targets on climate change. The ETUC is calling for huge investment across the EU in green jobs and skills as a union-led response to austerity.
- Going green at work: how trade unions can make a difference in saving energy and resources at work, through joint projects with their members and employers.
- The UN's international negotiations for a new global climate change treaty: the ETUC is calling for a globally fair, legally binding and ambitious agreement to tackle climate change, in line with the scientific evidence. Green jobs, decent work and worker involvement are among the ETUC's key demands.

Workers & climate change: the ITUC

Tackling climate change is a top strategic priority for the International Trade Union Confederation (ITUC). Every year, the ITUC sends a strong delegation to the UN's annual negotiations for a new global climate change agreement. The UN Framework Convention on Climate Change (UNFCCC) is where the talks take place, and where nations must agree a new treaty to take over from the Kyoto Protocol (KP). The KP is the first global climate change agreement, but it applies to only 27 countries and expires in December 2012.

At the UN conferences, the decision makers are the world's 182 nations. The ITUC, with over 165 million members globally, is recognised as an Observer Group to the UN. The ITUC's working group on climate change, where European trade unions play a key role, aims to influence governments and the UN to agree to a treaty that will stop climate catastrophe.

The ITUC works to ensure that developed nations take urgent actions to cut their carbon emissions through new technologies and investments. It also wants developing nations, especially the poorest, to receive major new financial support to adapt to the changes ahead, and build greener economies as they develop.

ITUC demands

The ITUC published a report, *Workers and climate change*, ahead of the last UN conference in Durban in December 2012. The report puts forward the following demands:

- 1. **Cutting emissions**: developed countries must commit to an emissions reduction target of at least 25% to 40% by 2020, in line with the UN's scientific evidence. The major developing countries and emerging countries (such as China and India) should take actions to ensure their economic development follows a below business-as-usual trajectory – through investing in renewable energy, efficient technologies and public transport.
- 2. **Signing** a new and ambitious Kyoto Protocol: to avoid a gap in emissions reduction commitments when the Kyoto Protocol runs out in December 2012, the legally-binding Kyoto Protocol (KP) should be renewed from December 2012 (as KP2), with the highest emission targets already 'pledged' by participants, or more.

- 3. **Climate finance**: the UN must set up a major new fund building up to \$100 billion a year by 2020 to help developing countries deal with climate change.
- 4. **Just transition**: the UN must include the principles of 'just transition' and decent work in the new treaty, to give workers a voice in the future. It must also mandate the International Labour Organisation (ILO) to monitor progress and set standards on green jobs, green skills and national dialogue between unions, government, business and communities in every country. (1).

European Works Councils and Global Unions

Multinational companies seem to be the real protagonists of globalisation. By having a sole decision-making centre they are the only organisations able to define strategies of a global nature that 'fly over' national contexts and governments. While there is not a 'world government', there is transnational governance of a company. This gives these companies' decision makers an extraordinary power to determine not only their economic impacts but also those of a social and environmental nature. So we can look at multinational companies as entities that can help influence the development model of the planet.

This is why it is vitally important to find ways of entering into dialogue with the key decision- makers in multinational companies, to try to intervene on directions and choices that draw on strategies for global development. The European dimension offers more opportunities than other international contexts, with a robust regulatory framework based on the acquis communautaire and on the European social model.

European Works Councils (EWC) should be considered in this context, as the only form of labour representation at a transnational level able to interact with the decision makers of the leading globalised companies.

EWCs began in Europe under the European social dialogue with the aim of extending the experience and practice of social dialogue from a 'macro' institutional / inter-professional / sectoral level to the 'micro' level of a single company. Apart from a series of pilot experiments, the official birth of the EWC came with a 1994 European Directive, recently revised, which defined the characteristics and rules of this new instance of European social dialogue and which lead to the creation of nearly

900 European Works Councils.

The role of the EWC is to facilitate information and consultation between employers and workers, but in many cases this has extended to drawing up framework agreements. A recurring theme of these agreements and, more generally, of the interaction between the EWC and transnational companies is corporate social responsibility (CSR) and sustainable development.

Even if the European dimension offers such opportunities we must not overlook the fact that transnational corporations often operate beyond the European context, at a global level. This is also the level at which Global Unions operate.

An interesting example is the international framework agreement (IFA) signed by multinationals' head offices and the Global Unions often in collaboration with the European trade union federations and the EWC. Around 200 IFAs have been signed, and the issues of CSR and sustainable development are the most frequently cited in these agreements because they are in line with the overall business strategy of these companies.

Global Compact

The UN Global Compact is a strategic policy initiative that brings together businesses, international agencies (2), workers and civil society associations. It is based on 10 principles covering human rights, labour, the environment and anti-corruption and aims to promote an alliance between businesses and public authorities and joint responsibility towards society and development.

The idea was proposed by former UN secretarygeneral Kofi Annan in his address to the World Economic Forum in Davos, Switzerland in 1999 when he spoke of a "Global Compact on shared principles" in order to give a human face to global markets. This was a particularly significant opening towards the world of business, and broke with UN

¹⁾ http://www.ituc-csi.org/IMG/pdf/ituc_contribution.pdf

²⁾ The Global Compact Office is supported by six UN agencies: the United Nations High Commissioner for Human Rights (OHCHR); the United Nations Environment Programme (UNEP); the International Labour Organisation (ILO); the United Nations Development Programme (UNDP); the United Nations Industrial Development Organization (UNIDO); the United Nations Office on Drugs and Crime (UNODC), the United Nations Industrial Development Organization (UNIDO). The first five organizations deal with the Global Compact's ten principles, while UNIDO give support to SMEs. For more information see http://www.unglobalcompact.org/

tradition which had previously not been very open to such forms of dialogue.

Since then, the Global Compact has developed rapidly at global level and is now a growing network based on the processes of 'learning, 'dialogue" and 'partnership projects'. A growing number of companies and organisations from all over the world are participating in the Global Compact. They decide voluntarily to achieve a "more inclusive and sustainable global economy" through sharing, supporting and implementing the 10 principles promoted by the initiative.

By 2011 there were over 8,000 stakeholders participating in the Global Compact including over 6,000 companies across 135 countries. European countries were the first to participate in the Global Compact (France and Spain) followed by Latin America (Argentina, Mexico and Brazil). Inside the Global Compact, national networks operate proactively.

Towards a Just Transition A Just Transition: rights for environmental representatives

The shift to a low carbon economy is not just necessary but increasingly inevitable. Although much more needs to be done to reduce the significant risks from climate change this century, new environmental regulations and investment in green and decent jobs can begin to change the shape of the European economy over the next decade.

But the injustices of industrial change in the past must not become a feature of transition to a low carbon economy now and in the future. Not only would this be unacceptable to trade unions and be socially damaging but it would undermine the credibility of the transition itself and could slow or even halt this vital and urgent shift.

For this reason, among others, we need a 'just transition' to a sustainable economy. 'Just transition' recognises that support for environmental policies is conditional on a fair distribution of the costs and benefits across the economy. It means unions having a place at the table with government and employers, negotiating on the creation of jobs, skills and social protection for all those affected.

Consultation between social partners, or "stakeholders", is fundamental to a Just Transition, involving representatives from trade unions, business, government, regional bodies and voluntary organisations, on the shift to a green, low carbon economy. Consultation is essential at all relevant levels, from the workplace to national government.

The partners involved in preparing this *Guide for trade unions representatives for sustainable development* believe that a level playing field of rights at work is essential for environmental representatives across the EU. A set of positive rights should be opened for discussion with the social partners in support of continuous environmental improvement in work organisation and industrial processes. It should include the right of workers to information, training and trade union action on these issues.

Just as for the health and safety issues at work, where workers' representatives and employers enjoy a range of rights and duties to ensure safe and healthy working conditions, so a similar framework needs to be developed to ensure continuous environmental improvement - both as regards their own organisations but also in upstream and downstream activities. This is the meaning of the national contract of chemistry workers in Italy (2006) which established for all chemical companies operating in Italy the principle of continuous environmental improvement with the definition of employers' obligations and workers' rights. The contract of workers in the cement sector in 2010 also established the right of workers to be active participants in the process of Corporate Social Responsibility within the sector.

European training programmes on sustainable development

Skills for low carbon, resource efficient economy are a second fundamental principle of a Just Transition. This involves Government-led investment in education/training and skills programmes, from the workplace to national level, to equip students and the workforce with the skills for a low carbon, resource-efficient economy. Training programmes for new professional skills should include the new principles and cultural values of sustainable development.

There is no doubt that with the forthcoming low carbon economy new professions and skills appear on the labor market, and in a wider aspect all activities shall have a green change, because only in this way we can have a general change in the production, consumption modes, and in organizing the social and civil life of citizens of the 3d millennium.

As we said in the Guide, we have to pursue and build together a different kind of development based on the principles of sustainability to safeguard the planet and the richness and variety of it life it supports, and to distribute the benefits of economic growth in an equitable manner. One of the major resources of welfare is labor, and labor in the new society has to grow in quantity and quality.

Rediscovering the role of "worker-citizensconsumers"

Trade unions involved in this project also believe that trade union organizations should consider developing a range of activities to develop their members' consciousness of their role as consumers. The purchases of goods and services that respect social and environmental considerations, including local purchasing, can be an effective action for a sustainable economy.

Supporting the Tobin tax

In drafting this Guide, the project partners have considered a variety of ways to tackle underdevelopment and reduce carbon emissions.

The ETUC supports the Tobin tax on international financial transactions to help reduce speculative financial initiatives and contribute vital funds to the challenge of underdevelopment and global poverty alleviation. We welcome the EU's support for this initiative.

Taxing carbon emissions

Carbon taxes are one of a number of ways in which regulations are being deployed to combat climate change. We do not think that taxing carbon emissions is a cure for all problems involved in the international "governance" of the fight against climate change. But pricing carbon emissions, through the European Emissions Trading Scheme, for example, can help to introduce a deterrent to practices damaging the planet.

Carbon taxes can help to spread the development of products and services with lower CO_2 content, both in continental markets and international trade. It would certainly be useful to help citizens understand the issue of climate change and the need to guide production, consumption and lifestyles towards a low carbon economy. In this way resources can be used to promote policies for employment and environmental protection all around the world.

Building alliances

Trade unions at national and international level have developed a wide range of joint initiatives with environmental organisations, employers and governments in the field of environmental protection and the fight against poverty and inequality. This includes the Spring Alliance, a broad-based movement pushing for an EU that places people and planet at the centre of policymaking. It was established by four leading civil society organisations – the European Environmental Bureau (EEB), the European Trade Union Confederation (ETUC), Social Platform and Concord – and is composed of groups and individuals from civil society and beyond. We trust that this Guide will help build and strengthen alliances such as this, between all those concerned to ensure a truly sustainable, fairer and more equitable European and global society

ANNEX 1

Easter Island - a case of unsustainable development

Easter Island which is only 120 square kilometres (km), is located in the Pacific Ocean 3,700 km from the west coast of South America and 2,315 km from the nearest habitation, Pitcairn island. For this reason, from an environmental point of view it can be considered an isolated system (ie a system which can't interact and change resources with neighbour systems). This makes it a particularly interesting example, because it is possible to evaluate with high reliability the consequences of any action which changes the environmental balance.

The Dutch Admiral Roggeveen was the first European to visit the island on Easter Sunday 1722. He found a society in a primitive state with about 3,000 people living in squalid reed huts or caves engaged in almost perpetual warfare and resorting to cannibalism in a desperate attempt to supplement the meagre food supplies available on the island.

What amazed and intrigued the first European visitors was the evidence, amongst all the squalor and barbarism, of a once flourishing and advanced society. Scattered across the island were over 600 massive stone statues, on average over twenty feet high. When anthropologists began to consider the history and culture of Easter Island early in the twentieth century they agreed on one thing: the primitive people living in such poverty-stricken and backward conditions when the Europeans first visited the island could not have been responsible for such a socially advanced and technologically complex task as carving, transporting and erecting the statues.

Easter Island therefore became a mystery and a wide variety of theories were advanced to explain its history. Today the mystery is solved: the island is a striking example of the dependence of human societies on their environment and of the consequences of irreversibly damaging that environment.

The history of Easter Island is believed to have begun in the fifth century (CE) when Polynesians colonised it. They discovered a world with few resources: the island was volcanic in origin, both temperatures and humidity were high, drainage was very bad and there were no permanent streams on the island. Because of its remoteness the island had only a few species of plants and animals and the waters around the island contained very few fish.

The settlers were restricted to breeding chicken and growing sweet potatoes, but these activities were not very demanding and left plenty of time for other activities. As the population slowly increased the forms of social organisation familiar in the rest of Polynesia were adopted. The basic social unit was the extended family, which jointly owned and cultivated the land. Closely related households formed lineages and clans, each of which had its own centre for religious and ceremonial activity.

The chief monuments were large stone platforms, similar to those found in other parts of Polynesia, which were used for burials, ancestor worship and to commemorate past clan chiefs. These platforms indicate the intellectual level of the population because some of them have sophisticated astronomical alignments, usually towards one of the solstices or the equinox. At each site they erected between one and 15 huge stone statues that survive today as a unique memorial to the vanished society.

Crop production took very little effort and so there was plenty of free time which the clan chiefs were able to use for constructing the statues. They took up immense amounts of peasant labour and were fashioned to represent in a highly stylised form a male head and torso, carved using only obsidian stone tools, weighing about ten tons and measuring approximately 6 meters. The statues were dragged across the island using tree trunks as rollers (there were no animals that could be used) and then erected on the platforms.

The population of the island grew steadily from the original small group in the fifth century to about 7,000 at its peak in 1550. Over time the number of clan groups would have increased and also the competition between them in statue construction in order to have a good social position and prestige. As the population slowly increased, trees would have been cut down to provide clearing for agriculture, fuel for heating and cooking, construction material for household goods, pole and thatch houses and canoes for fishing. The most demanding requirement of all was the need to move the large number of enormously heavy statues to ceremonial sites around the island. As a result by 1600 the island was almost completely deforested (the initial settlement on

Easter Island had a dense vegetation cover including extensive woods) and massive environmental degradation caused the collapse of the society.

The deforestation of the island had drastic effects on everyday life for the population. The shortage of trees forced many people to abandon building houses from timber and live in caves or sheds of stone, canoes could no longer be built and only reed boats incapable of long voyages could be made. Fishing was also more difficult because nets had previously been made from the paper mulberry tree (which could also be made into cloth) and that was no longer available. Removal of the tree cover also badly affected the soil of the island, which would have already suffered from a lack of suitable animal manure to replace nutrients taken up by the crops. Increased exposure caused soil erosion and the leaching of essential nutrients. As a result crop vields declined. In addition they were almost completely isolated from the rest of the world, so they couldn't import resources to restore its environmental heritage.

It became impossible to support 7,000 people with diminishing resources and numbers fell rapidly. Without canoes, the islanders were trapped in their remote home, unable to escape the consequences of their self-inflicted, environmental collapse.

The social and cultural impact of deforestation was equally important. The inability to erect any more statues must have had a devastating effect on the belief systems and social organisation and called into question the foundations on which this complex society had been built. There were increasing conflicts over diminishing resources resulting in a state of almost permanent warfare. Slavery became common and as the amount of protein available fell the population turned to cannibalism.

The fate of Easter Island has wider implications. Just like Easter Island the earth has only limited resources to support human society and all its demands. Like the islanders, the human population on this earth has no practical means of escape. For the last two million years humans have succeeded in obtaining more food and extracting more resources on which to sustain increasing numbers of people and increasingly complex and technologically advanced societies. But have they been any more successful than the islanders in finding a way of life that does not fatally deplete the resources available and irreversibly damage their life support system?

ANNEX 2

The development of environmental legislation in Italy

The development of environmental legislation in Italy

Specific environmental policy has a very recent history in Italy, although some important measures date back to the second half of the 1960s. The history of Italian legislation on environmental issues has three phases:

- **1**. An embryonic phase between 1966 and 1977. This is characterized by a first response to environmental problems with clear visibility, such as the 'anti-smog' law in 1966, followed in 1970-71 by regulations and by the establishment of a 'Committee on ecological issues' in the Senate (1971).
- 2. The second phase over the next decade, was characterised by increasing legislation, largely prompted by EU environmental directives. Some examples are the 'Merli law' in 1976 on tackling water pollution, followed by the decree of the president of the Republic in 1982 on solid waste, the 'Galasso law' in 1985 on landscape protection and so on. (Note that this phase coincides precisely with the period between the Seveso accident and Chernobyl).
- **3**. The third phase began with the creation of the Ministry of the Environment (law no. 349 in 1986). Extensive law-making characterized this phase, from the regulation of industrial and urban waste treatment to the creation of national parks, industrial sites at risk from noise restriction, hazardous substances and assessing the environmental compatibility of some types of projects.

Recently sustainable development principles and the importance of environmental issues were the subject of national legislation. Two examples are: the institutional innovation [law n. 61 in 1994 – creation of the National Environmental Protection Agency (ANPA) and regional Agencies], and the enactment by the Government of some important planning documents in order to use part of national income for environmental preservation (the national plan for sustainable development implementing Agenda 21, and two following intervention plans, triennial programmes for environmental protection 1989-91 and 1994-96).

Law 61/94 reorganised environmental issues at both administrative and technical-scientific levels,

and together with creating the Ministry of Environment represents the most important formal steps towards environmental governance in Italy. Specifically, with the implementation of "expert structures", the separation of institutional and environmental aspects of health issues has taken place, bridging the gap between Italy and other Western countries. This is an important step, especially because of critical observations made about Italy's environmental policies, not so much the legislation, but its implementation.

At the legislative level we can see a rapid evolution of the legal framework following EU action. Rules of environmental impact assessment and EMAS and Ecolabel regulations have been implemented. Later, procedures which extended integrated environmental assessment from single projects (environmental impact assessment or EIA) to plans and programmes (strategic environmental assessment or SEA), were introduced alongside integrated environmental authorisation (IEA).

The fast growing body of environmental legislation led to problems of coherence between different laws. It was therefore necessary to revise the legal area often defined as "regulatory pollution", with consequences for public and private companies. In 2006 the first step took place with the legislative decree 152/2006, also known as "unified acts" (testo unico) or "environmental code" (with later with further revisions).

ANNEXES CHAPTER 3

ANNEX 1

1. The European Ecolabel

European Ecolabel is a voluntary scheme, established in 1992, to encourage businesses to sell more ecological products and services.

The criteria are agreed at European level, following wide consultation, and the label itself is only awarded after verification that the product meets high environmental and performance standards. The voluntary nature of the scheme means that it does not create barriers to trade. On the contrary many producers find that it gives them a competitive advantage.

The EU Ecolabel is part of a broader action plan on Sustainable Consumption and Production and Sustainable Industrial Policy adopted by the European Commission on 16 July 2008.

2. Trade union environmental representatives and the Ecolabel competent body

Article 4 of Regulation (EC) No 66/2010 of the European Parliament and of the Council of 25 November 2009 on the EU Ecolabel, says that each Member State should designate a body or bodies, within government ministries or outside, responsible for carrying out the tasks provided for in the Regulation and ensuring they are implemented. The composition of the competent bodies should be such as to guarantee their independence and their rules of procedure should ensure transparency in the conduct of their activities as well as the involvement of all interested parties.

Trade unions should be represented within the competent body for the Ecolabel and union environmental representatives have an important role to play in representing unions on the competent body. They can also play a wider role, especially in relation to the working environment and training for employees on the implementation of the Ecolabel.

Competent bodies may require supporting documentation and may carry out independent monitoring. This provision is important because it gives union environmental representatives on the competent body the opportunity to check important issues related to the involvement of employees in the implementation of Ecolabel criteria including relevant training.

3. The Ecolabel for tourist accommodation services

A European Commission Decision of 9 July 9 2009 established ecological criteria for the award of the Community Ecolabel for tourist accommodation services (notified under document number C(2009) 5619). These criteria aim to limit the main environmental impacts from the three phases of providing tourist accommodation services (purchasing, provision of the service and waste). In particular they aim to limit energy and water consumption, waste production, to promote the use of renewable resources and of substances which are less hazardous to the environment, and to promote environmental communication and education.

4. Greek trade unions' role in the Ecolabel for tourist services

Since the competent body for the Ecolabel in Greece was established in 1992 (ASAOS), trade unions have been represented through the Greek General Confederation of Labour (GSEE). This participation gives enables unions to have a voice on the wider implementation of Ecolabel criteria, and to strengthen the role of employees in tourist accommodation services.

ANNEXES CHAPTER 4

ANNEX 1

Climate change and the environment: Belgian social dialogue - *eco-cheques*

In the Belgian social dialogue the climate change issues (adaptation and mitigation) have emerged over the past ten years. These issues are addressed within the Central Economic Council (CCE) (1) and the National Labour Council (CNT) (2) which are two instances of formal bilateral discussion at federal level. Their primary mission is to provide advice on economic and social issues.

These two bodies work closely together on environmental issues, they have created a Joint Subcommittee on "Green Jobs" in order to facilitate the drafting of opinions on these issues. This subcommittee has produced two reports on green jobs (Avis concernant la thématique des emplois verts, 2009 et Réussir la transition vers une économie à basse émission – Second avis concernant la thématique des emplois verts, 2010).

Since 1968, the National Labour Council has been also mandated to conclude collective labor agreements at interprofessional level.

In July 2009 CNT's social partners have introduced the eco-chèques (also called green cheques). This is an application of the agreement of December 22, 2008 covering the period of 2009-2010. It was detailed in the Collective Labour Agreement No. 98 of February 20, 2009, adopted by the National Labour Council.

This initiative has two objectives:

- Increase employees' purchasing power,
- Encourage the purchase of green products and services. The list of these products and services is defined in consultation with social partners and reviewed annually.

This initiative was designed and implemented in a context of economic crisis in order to improve the purchasing power of employees, without affecting the wage norm. Every two years an evaluation of

¹⁾ Established by the Law of September 20, 1948, the CCE has the objective of addressing issues of the Belgian national economy. It is composed - in a joint way - by approx. 50 members and other 50 supply members.

²⁾ Established by the Law of May 29, 1952, the CNT has the objective of addressing social problems in Belgium. It is composed - in a joint way – by 26 members maximum (13 management representatives and 13 union representatives).

the *eco-chèque* system by social partners is foreseen. The last evaluation has established a monitoring of the compliance with the ecological criteria of these products and services.

Its implementation is done within companies and remains subject to sectoral collective agreements negotiated in joint committees and joint sub-committees.

Belgian trade unions have supported this initiative, because it encourages environmentally friendly products, but they remain cautious about the risk of replacing a gross wage increase by this kind of initiative.

ANNEX 2

Go Green at work: TUC check-list of trade union green rights at work

In order to check the application of green rights at the workplace, the TUC's handbook for green union reps, Go Green at work, suggests key ways to assess the roles, responsibilities and resources involved in greening the workplace:

- **Roles** and responsibilities of trade union delegates on environmental issues, and how trade unions intend to nominate them.
- **Training** advice and support needed to assist them in their role.
- **Issues** of agreeing with management the time away from main duties required to make sure they can perform their duties, and take advantage of relevant training opportunities.
- **Opportunities** to carry out surveys and inspections on consumption / savings in energy and environmental resources, in consultation with management.
- **Ensuring** effective links to health and safety risk assessments and other policies.
- **Setting** up a Joint Committee composed of trade unions' and employers' representatives, and agreeing clear objectives and monitoring policies.
- Agreeing promotional activities to encourage employees and union members to engage in environmental issues.
- The right to information on energy and environmental issues.
- **Consider** ways to share the benefits to achieving the objectives.
- **Consider** wider benefits for consumers and the community e.g. sustainable transport, local products for canteens in enterprises and schools.

ANNEX 3

Greeing the workplace - check-list for unions

Quick Walkround Checklist

Energy

- 1. Does heating or cooling keep workers comfortable without wasting energy?
- 2. Is the workplace properly insulated and draughtproofed? Are outside doors frequently left open, creating draughts? Are there any areas where comfort is poor?
- 3. Are the thermostats in the right places, set to the right temperature? (19°C for heating, 24°C for cooling), and fitted with timers? Are the times right?
- 4. Are heating or ventilation sources blocked by furniture or equipment, or poorly located in relation to the workplace design?
- 5. Are there automatic power reducing features, e.g. motion sensor lights, timers, power downs? Are they enabled and do staff know how to use them?
- 6. Are controls and switches clearly labelled and accessible, including when they should/can be turned off?
- 7. Are all bulbs low energy?
- 8. Are all computer monitors flat-screen?
- 9. Is all equipment turned off fully when not in use? If not, why?

Resources, waste and biodiversity

- 1. Is everything recycled that can be, and is everything bought recycled where possible?
- 2. Are water saving measures in place, such as rainwater harvesting, low flush toilets, water saving taps, and audits of industrial water use?
- 3. Are the catering arrangements satisfactory or is food over-processed or packaged?
- 4. Are there attempts to protect biodiversity or establish wildlife habitats and natural garden areas at or around the workplace? Are these areas that workers and clients can access and enjoy?

Travel to work

- 1. Have you completed a travel to work survey?
- 2. Has a travel to work plan been negotiated with

the employer?

Good questions to ask workers include:

- How do you travel to work?
- Has this changed over time?
- Would you like to change it if other options were available?
- What problems does your current mode of travel cause (eg congestion, delays, long waits)?
- What stops you changing to public transport/bicycle/walking if you don't use these options already? (cost/lack of availability/family commitments/other)
- What would you like your employer to do?

ANNEXES CHAPTER 5

ANNEX 1

Causal relationships

In order to better perceive and plan the interventions of environmental protection, the analysts had given tools that help to optimise the programming.

An analysis tool of the OECD, further developed by the European Environment Agency is the DPSIR model (Determinants - Pressure – State – Impacts - Responses). It is based on a system for analysing the causal relationships between human activities and environment.

The determinants (D) representing human activities (transport, energy, etc.) are the root causes (Driving Forces) of the pressures (P) on the environment. But at the same time human activities drive development and economic growth. The pressures (emissions, waste, etc.) alter the state (S) of environmental quality, producing impacts (I) of various nature (health, ecological, economic, etc.) and so they call for responding initiatives (R) from the part of the community.

The correlation between pressures on the environment (P) and the causes or determinants from human activity (D) have great relevance for sustainability policies, or how much pressure is produced by a specific environmental factors. Not all pressure levels are compatible at local level. Action has to be taken.



Decoupling pressures on the environment

Decoupling environmental pressures from economic growth by adopting policies that balance economic development with good environmental management is one of the main objectives of the OECD strategy for the first decade of the twentyfirst century.

The decoupling strategy means a specific effort by the governments of member countries to direct the manner of consumption and production to forms that allow a more efficient use of resources and waste minimization. For the best achievement of the decoupling objectives the strategy states that these efforts are directed equally to **producers and consumers**







ANNEX 3

The ecological footprint

The ecological footprint is a measure of human demand on the Earth's ecosystems. In 2000, Italy's *ecological footprint* was estimated to be equal to 4.5 hectares per citizen, according to the World Wildlife Fund (WWF) study. WWF calculated how much energy and natural resources Italians used per person. It exceeded the available national territory of 3.1 hectares per citizen.

Measuring the ecological footprint of a society or organisation is another approach to achieve the objectives of sustainability. It was developed by Wackernagel and Ress in 1996. This approach estimates the surface are of productive ecological systems needed to assure the life of a community in a sustainable manner with the current technology and with the sustainable organization of the community.

The surface area is calculated by complex methods and is equal to the surface needed for all the natural resources required for the goods and services produced and also for absorb all the waste and pollutants.

For 2007, humanity's total ecological footprint was estimated at 1.5 planet Earths; that is, humanity uses ecological services 1.5 times as quickly as Earth can renew them. The globally accumulated ecological deficit is paid with non-renewable resources, particularly fossil resources and the poisoning of air, water and soil.

ANNEX 4

Water risks

Hydrogeology is the discipline that studies underground and surface waters. The terms hydrogeological upheaval and hydrogeological risk in the common sense of the word are used to identify the phenomena and the effective or potential damage caused by waters in general, be they surface, in liquid or solid form, or underground. The most typical examples of hydrogeological phenomena comprise landslides, floods, coastal erosion, subsidence and avalanches.

Hydrogeologycal risk can be expressed by a formula that links hazard, vulnerability and exposure of people and things:

• **hazard** expresses the probability that a harmful event of a determined intensity will occur in a zone within a determined period of time.

• vulnerability indicates how much an "environmental component", such as population density, buildings, services, infrastructures etc., can sustain the effects of the intensity of a given event.

• value at risk or exposure indicates the element to be sustained in a certain event and can be expressed either by the number of human presences or by the value of natural and economical resources on the territory at risk

http://www.protezionecivile.gov.it/jcms/en/home page.wp

ANNEX 5

Major accidents involving dangerous substances – Seveso Directive

Seveso accident

In July 10, 1976 the chemical reactor of ICMESA (an industrial site) exploded near the Italian town Seveso. After the incident the EU began to discuss a directive in order to have environmental security and protection rules in high-risk industrial sites.

Seveso Directive

An accident is relevant if there is an emission, fire, or explosion, resulting from uncontrolled developments in the course of the operation of any establishment.

Industrial activities which foresee the presence and / or use of dangerous substances are subject to Council Directive 82/501/EEC on the major-accident hazards of certain industrial activities (**Seveso**

I). Chemicals are classified according to their physico-chemical, toxicological and eco-toxicological properties: they can be very toxic, toxic, oxidizing, explosive, flammable, highly flammable, dangerous for the aquatic environment. The Directive was updated through years. **The Seveso II Directive** (96/82/EC) shifts the emphasis to the control of the safety and security management: education and training of personnel, operational control, equipment design, modifications and maintenance.

In 2003, **the Seveso III Directive** (2003/105/EC) brings further changes and additions.

The activities at risk are identified taking into account the dangerous nature of substances and products, used, handled or stored at a given site. It is mandatory to submit the documentation on the risk evaluation to the competent authority.

http://europa.eu/legislation_summaries/environment/civil_protection/l21215_en.htm

ANNEX 6

Urban planning

The strategy adopted by the European Community for the land protection in September 2006 indicates the main threats to our territories.

http://www.europarl.europa.eu/sides/getDoc.do?pu b R e f = - / / E P / / T E X T + T A + P 6 - T A - 2 0 0 6 - 0367+0+DOC+XML+V0//EN

When planning new buildings, the land is generally considered as a "physical" support, but the land is a depleted and non-renewable resource, a common primarily limited good. Therefore for the environmental sustainability of an effective development it is necessary that all level public authorities in planning and decision making pursue the following measures:

- reduction of soil consumption, limiting waterproofing;
- safeguard soils with high production and protective capacity or high natural or historical value;
- rationalization of productive activities: in case of abandoned buildings or sites we have to opt for reconstruction, and only in delimited areas. Indirectly this restricts also the need to expand the infrastructure network.

Municipalities are encouraged to facilitate the soil consumption and subsequent waterproofing of

their areas because they can use up to 50% of infrastructure costs for current expenses.

Examples of municipalities with zero expansion (Osnago, Solza, Pregnana Milanese, Ozzero, Ronco Briantino, Cassinetta) confirm that it is possible, also economically speaking, to make the shift from a culture of expansion to a culture of restoring. This wouldn't mean to stop building sector, but to give priority to restoring and maintaining of already existing buildings and to demolish-rebuild operations.

http://europa.eu/legislation_summaries/environment/soil_protection/index_en.htm

ANNEX 7

Urban mobility plans

Urban systems' sustainability can be assessed by traffic. The complex problem of making sustainable urban mobility requires a strong commitment in terms of innovation: from urban policies, methods and contents, to the planning tool called Urban Plan for Sustainable Mobility. This Urban Plan is a set of actions aiming the economic, social and environmental sustainability which are three aspects of the same problem.

The plan has three organizational levels, the strategic lines, the actions and the operative measures:

- strategic lines: evaluating economic, social and environmental impacts, so all aspects on which depend a mobility plan's or system's sustainability;
- actions, objectives: evaluating the plan's results, so the direct effects that the plan has on the mobility system, modifying it in terms of sustainability;
- operative measures, tools: evaluating plan's outputs, thus the implemented products.

Indicators of impacts, results, and outputs are associated respectively to the three hierarchical levels of strategic lines, actions and operative measures. http://www.eea.europa.eu/publications/eea_report_2008_1

http://ec.europa.eu/environment/urban/pdf/tran sport/2007_sutp_prepdoc.pdf http://www.euromobility.org/

The **area mobility manager** is reporting to all referents of sustainable mobility on the area, and is nominated by the territorial organization (municipality, province, region) which is the more active in coordinating and promoting mobility management. The company mobility manager is working in local authorities and in companies with more than 300 employees.

The company mobility manager is individuated in one division of the company (human resources, logistics, fleet management), draw up the Home-Work Travel Plan (HWTP), an analysis document of the company's mobility which contains recommendations for initiatives to disincentivate the use of private vehicles for the daily travels. The HWTP offers to the employees a minor travel cost, shorter travel time, accident risk diminution, minor psycho-physical stress due to traffic, increasing facilities and services for those who are already using alternative travel modes and new ways to socialize with colleagues.

The advantages for the company consist in the opportunity to create socialization occasions for employees, to offer a useful service to them, but also in parking space reduction, and better company image.

The mobility manager proposes new mobility services for the travel between home and work in synergy with the local public transport (car sharing, car pooling, bike sharing, collective taxi, company shuttles), he/she proposes the use of new technologies for reducing travel occasions (teleworking, internet), manage at best the existing company infrastructures (parking areas, access to the company).

http://www.euromobility.org/

ANNEX 8

Waste management

The framework directive 2008/98 of November 19, 2008, of the European Parliament reformulates the hierarchy in waste management, and applies the following steps, in order of priority:

- prevention,
- preparing for re-use;
- recycling;
- other recovery (e.g. energy recovery);
- disposal.

Waste management plans include the analysis and evaluation of the current situation in a given geographical area, the measures to adopt to improve environmentally correct reusing, recycling, recovery and disposal, the evaluation of how plans will contribute to the implementation of directive's objectives and disposals. The waste management plans contribute to achieving the goal of reducing the volume of biodegradable waste going to landfill sites.

When applying the waste hierarchy, member states must take into account the general principles concerning the environment protection, prevention and sustainability, technical feasibility and economic viability, resources protection, and the overall social, economic, health and environmental impacts. Prevention programs must have the objective of dissociate economic growth from waste's environmental impact, with indicators for monitoring both the quantity and the quality of measures which may affect the waste production, planning, production, consumption / use phases.

In the waste production phase we may introduce planning measures or economic tools for the efficient resources use, for the promotion of research and development of cleaner products and technologies, for the development of indicators on waste production.

After this, attention should be paid to the promotion of eco-design (life cycle), to information on prevention techniques, to training / information measures for competent authorities, companies and the public.

At the consumption and utilization phase we can incentivise the purchase of less polluting goods, promote awareness and information of the public, promote eco-labels. We can develop agreements with businesses or retailers to ensure the availability of information on the prevention of waste and on products with lower environmental impact. We can integrate environmental criteria in calls for tenders and contracts, promote reuse and / or repair of products or components creating accredited centers and networks to repair / reuse.

The extended producer responsibility (art. 8) is highlighted, as member states may take measures to implement the responsibility of those who design, produce, transform, handle, sell or import products. The measures may include the obligation to take back returned products and their waste, the product management at the end of their life-cycle and consequent financial responsibility, the public information on the reusability and recyclability of products. http://europa.eu/legislation_summaries/environment/waste_management/index_en.htm http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:312:0003:01:en:HTML EN

ANNEX 9

Urban green spaces

The quality of public spaces in the city affects the quality of life of its citizens. Public spaces should be designed in function of the inhabitants, but often prevail the activity and mobility requirements. Therefore it would be desirable that the biggest possible number of municipalities develop the Urban Green Plan together with the City Urban Planning.

Green areas have a bioclimatic role, because the sum of evaporation and transpiration from plants can contribute to a substantial mitigation of the summer temperature in urban areas. Furthermore, with reference to the cultural sustainability of urban areas and to the role of green areas inside the city, we should re-introduce the practice of urban gardens, in line with the objectives of Agenda 21.

ANNEX 10

Noise pollution

In every industrialized countries the noise of the living environment has become one of the main factors of environmental degradation and decreasing quality of life. The main causes are the diffusion of individual and collective means of transport, the lack of coordination in the development of the territory where industrial sites, residential areas and roadways are often mixed.

European Directive no 2002/49/EC highlights the urgent need to quantify the size of the population exposed to noise, its severity and the correlation between the physical phenomenon and the impact of disturbance or degradation of the quality of life of populations. The main objective of a policy controlling noise in its various aspects is to keep exposure to noise as low as possible, through the development of criteria for protection from exposure and the noise assessment as part of the protection process of citizens health. The general principles on which this assertion is based are found in Agenda 21:

• precautionary principles: in every cases noise has to be reduced to the lowest level possible in that

given situation;

- polluters pay principle: the full cost associated with noise pollution (including monitoring, control, mitigation) has to be paid by those who are responsible for noise emitting;
- prevention principles: actions must be taken, when possible, acting on the noise source. The planning must be integrated with environmental

impact assessment considering the noise as a polluting component.

We can apply to the issue of noise pollution the DPSIR scheme already described in Annexe no 1 of Chapter 5, as stated in fig.1.2 below, taken from Review of indices and indicators for the noise of APAT.



 $http://europa.eu/legislation_summaries/environment/noise_pollution/index_it.htm$

ANNEX 11

Light pollution

Any form of artificial light irradiation being dispersed outside the areas to which it is functionally dedicated and being oriented above the horizon line, is in fact classified as light pollution. The main causes of light pollution result from excessive use of lighting and poorly functional installations. http://www.savethenight.eu/Light%20Pollution%20in%20Europe.html

ANNEX 12

Air quality

Air pollution is an alteration of the natural composition of air due to chemical, physical and biological pollutants. These pollutants can be classified as **macro-pollutants** when concentrations in the atmosphere are measured in mg/m3 (milligrams per cubic meter) and **micro-pollutants**: substances whose concentrations in the atmosphere are measured in ng/m3 (nanogrammes by cubic meter). With reference to their source, pollutants can be classified as **primary** if they are toxic in the form in which they are released into the atmosphere, and **secondary** if they result from primary under the influence of physical or chemical catalysts. They can be found among the constituents of photochemical smog (e.g. ozone O_3).

http://europa.eu/legislation_summaries/environment/air_pollution/index_en.htm

http://europa.eu/rapid/pressReleasesAction.do?r eference=IP/08/570&format=HTML&aged=0&la nguage=IT&guiLanguage=en

ANNEX 13

IEA (Integrated Environmental Assessment) e SEA (Strategic Environmental Assessment)

The IEA procedure, as by EC directives no. 85/337 and no. 97/11, is applied to construction works or of other installations or schemes on the territory, and has the following objectives:

- Protect human health,
- Improve the quality of life through better environmental conditions,
- Preserve biodiversity,
- Preserve the reproductive capacity of ecosystems,
- Protect the environment.

The IEA is carried out through an administrative procedure which assesses the environmental compatibility of a planned project on the basis of an analysis of all effects that the project itself will have on the environment, and on socio-economic components involved in various phases of its implementation: from design through building to demolition. This project approach has limitations because it intervenes only when decisions potentially harmful to the environment are likely to be already undertaken at the strategic, planning or programme level. The SEA is an evolution of the IEA.

The Strategic Environmental Assessment (SEA) aims to assess the environmental effects of plans or programs, prior to their approval (ex ante), during and after their period of validity, introducing the consideration of environmental aspects already in the strategy building phase.

SEA's other objectives are to improve information to the public and to promote public participation

in planning / programming.

The European Directive on SEA (2001/42/EC) is directly connected to the EIA and Habitats Directives, as well as to several other directives which contain requirements for the establishment and assessment of plans / programs.

Generally the SEA process comes before an IEA procedure. The two types of assessment work in two different phases, with complementary goals. The SEA is a procedure to evaluate the environmental consequences of plans or programmes (determinants, environmental pressures and responses), while IEA is a procedure to assess environmental impacts (changes of the environmental components) resulting from projects or works. From a legal point of view, the SEA's guiding principles are precautionary, as they consist in integrating environmental interests into other interests (typically socio-economic) that determine plans and policies. The IEA's guiding principle - more immediately functional - is the prevention of environmental damage.

http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31997L0011:EN:NOT http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32001L0042:EN:HTML

ANNEX 14

Regional CGIL, CISL UIL, Council resolution No. 237 March 15, 2004

This protocol aims to strengthen the relationship between industrial development, territory and environment for quality jobs, health and environment protection in Tuscany, as the implementation of the Regional Environmental Action Plan (PRAA) 2004-2006. The following two actions are outlined:

1) The establishment of a bilateral technical committee aiming a dynamic management of the Regional Environmental Action Plan

• analyzing critical environmental situations related to production processes, and sites to be recovered, in order to identify – possibly together with economic and institutional stakeholders - actions and projects necessary to consolidate and develop the productive apparatus;

• identifying opportunities in terms of demand for products and services related to environment improvement, proposing also projects and actions to promote development and quality jobs. 2) In order to increase skills and connections in a perspective of environmental governance and education for stakeholders who deal with environmental issues, the parts agree on the usefulness of a pilot training action. The training is designated to:

trade unions officers dealing with environmental issues, especially trade unionist from federations which are the most affected by the environmental problems;
trade unions', companies' and union representative bodies' officers.

ANNEXES CHAPTER 6

ANNEX 1

Table 1. Examples of upskilling to new occupationsnegli Stati membri

	Occupation(s)	Core training	Upskilling	New occupation
ž	Industry electrician/energy technologist	VET qualifications/tertiary engineering qualifications	Knowledge of energy sources, ability to integrate energy systems, project management	Manager in renewable energy
Ś	Industrial operator/ industry electrician	VET qualifications/upper secondary qualifications	Assembly, installation of parts, use of tools	Wind-turbine operator
Ш	Construction worker	No professional standard	Knowledge of energy systems, data analysis, project management	Energy auditor
	Recycling sector worker	General cerificate of vocational qualification (CQP)	Sorting and reception techniques, knowledge of conditioning and storage	Waste-recycling operator
щ	Product design and services	22 initial training courses with varying specialisation	Integrating environmental criteria in design process, integrated assessment and life cycle analysis	Ecodesigner
	Electronic/mechatronic technician	Initial vocational training	Electronics and hydraulic systems, safety procedures, operation and services	Wind power service technician
ä	Plumber/electric and heating installer	Initial vocational training	Technical training, knowledge of administrative procedures, entrepreneurial skills	Solar-energy entrepreneur/ installations project designer
	Engineer in energy sector	Tertiary engineering qualifications	Installation and maintenance of low-carbon technologies, customer service skills	Smart-energy expert/smart- energy manager
ž	Commodity trader/broker	Tertiary qualification	Practical skills on functionning of carbon market, understanding of tradind tools	Carbon trader/broker

Fonte: Cedefop: Skills for green jobs: European synthesis report http://www.cedefop.europa.eu/EN/Files/3057_en.pdf, p. 10

Green jobs in Italy

An estimate made in Italy (1) by the Union of Trade Chambers foresees that 22% of professional figures needed by the sectors in question have to specialize their competences for the specific sector where they will operate. 49% need to learn more remaining at the same time sufficiently cross-sectoral, and 30% will simply be "sensitised" to the sustainability issue. The same study states that the current transformation will be as big and deep that a total of 39,5% of all professions will be in some way concerned.

A transition which is already happening from the bottom, from small (10-49 employees) and micro (1-9 employees) companies, at least in Italy.

Today the main demand for workers with "green" competencies is from these small and micro enterprises. The big enterprises has a smaller demand for professions potentially dedicated to sustainability and, furthermore, in relative decline in recent years, while the demand expressed by micro and small enterprises continues to grow (2). This particular and every time more evident tendency is due to a necessity of transversal competencies regarding environment: but it is also due to the development of niche markets for green products, a need expressed by manufacturing and building industries, businesses which has a growing demand for more specialized figures in environmental issues.

The survey which highlights the expansion of new green professionals in the Italian small- and medium-sized enterprises is very interesting as they represent over 90% of the national industrial sector. It will be useful to assist and reinforce this labour market tendency with important territorial initiatives and with the consolidation of these new skills.

ANNEXES CHAPTER 7

ANNEX 1

The Global Compact

The *Global Compact Network Italy*, in line with the directives of the Global Compact Office in New York, acts as a national platform for the implementation of Pact promotion and distribution on the Italian territory and carries out both the "terminal" and "sensor" role. Its mission is to make sure that the Global Compact will not only become better known and receive more adhesions, but it will be taken more seriously as a valid tool for the reform of way of being of their enterprises and stakeholders members.

The Italian network has organized many initiatives, including a preparatory meeting for the Rio Conference at the Foreign Ministry which was attended by all the European networks of the Global Compact. During the conference on public-private partnership, a significant number of best practices was presented, and later summarized in a document for the UN's Rio +20 Conference (June 2012).

A few days before the UN Conference, in fact, The Global Compact Corporate Sustainability Forum had been organized. More than 2,000 delegates have worked together to provide an effective contribution to the work of the Rio Conference.

¹⁾ http://www.unioncamere.gov.it/download/1257.html and http://www.symbola.net/assets/files/Ricerca%20GreenEconomy%20completa_1279545697.pdf

²⁾ http://www.unioncamere.gov.it/download/1257.html

Project partners' presentation



is the regional organization of the Italian national trade union CISL. The Italian CISL is the Confederation of Trade Unions in Italy organized in 20 major national branch (sector) Federations and 20 regional sections, with more than 4.5 million of affiliated workers and pensioners. The CISL Toscana has about 240,000 members, and is also organized in a territorial way, with 10 provincial sections: Firenze, Prato, Pistoia, Pisa, Livorno, Massa Carrara, Siena, Grosseto, Arezzo and Lucca. In 2005, CISL Toscana established the environmental NGO, *Ecologia e lavoro*. http://www.cisltoscana.it/

ECOLOGIA E LAVORO



Ecologia e Lavoro has the mission to:

train the CISL trade union's representatives on environmental and sustainable development issues;
promote studies and research on environmental issues and put together the issues of environment, economy and work;

• developing initiatives and campaigns on issues and objectives of sustainable development.

http://www.cisltoscana.it/ecologia-&lavoro/ecologia-&-lavoro

CES/ETUC European Trade Union Confederation (ETUC)

The ETUC exists to speak with a single voice, on behalf of the common interests of workers, at European level. Founded in 1973, it now represents 85 trade union organisations in 36 European countries, plus 10 industry-based federations.

The ETUC's prime objective is to promote the European Social Model and to work for the development of a united Europe of peace and stability where working people and their families can enjoy full human and civil rights and high living standards.

The ETUC believes that workers' consultation, collective bargaining, social dialogue and good working conditions are key to promoting innovation, productivity, competitiveness and growth in Europe

IAL TOSCANA



IAL Toscana Innovazione Apprendimento Lavoro srl Impresa Sociale is the regional training agency of the CISL Toscana. IAL Toscana operates in the entire educational system with a perspective of lifelong learning: from guidance / orientation to training for young people looking for a job, from continuous training for workers to the advisory plans for companies, and participating to local development plans aimed at increasing the competitiveness and employment.

www.ialtoscana.it





The TUC was represented on the project by representatives from the Public & Commercial Services Union (PCS) and the TUC itself.

The TUC is the voice of Britain at work. It represents 54 affiliated unions and brings Britain's unions together to draw up common policies for the world of work. Climate change is a strategic priority for the TUC, and its climate change and energy policy framework is determined by the TUC's annual Congress. In consultation with its affiliated unions, the TUC coordinates its work on energy, climate change and industrial policy through an expert advisory body, the Trade Union Sustainable development Advisory Committee (TUSDAC). Over the last decade, the TUC has engaged with the challenge of climate change and energy policy through the notion of a Just Transition to a low carbon future. "Just Transition" is about recognizing and planning fairly and sustainably for the huge changes that climate change policies will have for our whole economy. The TUC's recent "green" achievements include:

 establishing a national network of green workplace projects supported by a Green Newsletter and website: http://www.tuc.org.uk/greenworkplacesnetwork/Green_Workplaces_News.cfm?th eme=greenworkplacesnetwork

- setting up trade union environmental education and green skills programmes; and
- working with industry, trade union and government stakeholders to develop a range of specific and practical policies linking industrial policy and climate change objectives.

The TUC takes forward its international commitments to tackling climate change through its representation on international bodies: the ETUC, the International Labour Organization and the International Trade Union Confederation: www.tuc.org.uk

GERMANY

The German team included experts from the German Trade Union Confederation (*DGB*), the trade union *IG BAU* and the educational institution *Arbeit und Leben*, all from the region of Northrhine-Westfalia. As the trade union umbrella organisation, the DGB represents the German trade union move-





ment in dealing with government at federal, state and national level, the political parties, the employers' organizations and other groups within society. The partner in this project was the DGB executive board of the federal state Northrhine-Westfalia, representing 1.5 million members. The IG BAU (Industriegewerkschaft Bauen Agrar - Umwelt) Westphalia represents 40.000 employees of the building industry, building materials industry, gardening and landscaping, agriculture and forestry and the janitors working in industrial facilities and buildings. Arbeit und Leben NW (North-Rhine-Westphalia) is an institution for further adult education supported by DGB and the German Association of Adult Education (Volkshochschule VHS). Arbeit und Leben has built a far reaching network and arranges seminar programmes and projects with approximately 25.000 participants and 1000 tutors each year

www.dgb.de,

http://www.aulnrw.de, http://www.igbau.de/



The CFDT (Confédération Francaise Démocratique du Travail) is one of the major trade unions in France. Organized into 18 major national Sector Federations and 22 Regional sections, CFDT was created in 1964 and has around 800,000 affiliated workers and pensioners. CFDT attended the Rio Summit in 1992, and it was one of the key players in negotiating the "Grenelle de l'environnement" (2007) in France. It also took part in the discussion on the French National Strategy for Biodiversity in 2011 and has participated actively at the RIO+20 summit. The 47th confederal congress in 2010 was an eco-designed congress. CFDT promotes studies and research on sustainable development issues and is currently developing a range of initiatives and campaign, including corporate social responsibility and decent work: www.cfdt.fr

EKA



EKA (ErgaroŸpalliliko kentro Athinas: Athens Labor Unions Organization) was established in 1910 and is active in the greater Athens area, with about 450.000 members. Its mission is to support its members towards the improvement of working and living conditions and promoting initiatives of just transition in areas of production changing due to environmental requirements:

http://www.eka.org.gr/



The FGTB (La Fédération Générale des Travailleurs de Belgique) is the General Federation of Workers in Belgium. It was born after the second world war (1945) on the basis of the former Confederation Generale du Travail de Belgique (CGTB). The FGTB and the CSC (Confederation of Christian Trade Unions) are the two major trade unions in Belgium. The FGTB has now 1.503.000 members. The FGTB is organized in seven sectoral centers, in three interregional (Wallonia, Flanders and Brussels) and 17 regional centers - according to the federal structure of the Belgian state.

One of the priorities of FGTB is sustainable development and environment, both in its claims and in the social dialogue, and also in of delegates' and workers' training: http://www.fgtb.be

PODKREPA



The Confederation of Labour PODKREPA (Support) is a national representative body for trade unions in Bulgaria. Created on 8th February 1989 by a group of dissidents as an underground alternative trade union under the former totalitarian regime, PODKREPA is the second independent union body set up in Eastern Europe following the model of the Polish Solidarnosc. PODKREPA has some 153 000 members, 23 branch Unions and 36 regional structures all over the country. It affiliated to the ITUC in 1991 and the ETUC in 1995Its President Dr. Trenchev is actually Vice-president of the ETUC. Its last Congress was in February 2011, electing President, Vice-president and 7 Confederal Secretaries for a mandate of four years:

http://dostoentrud.podkrepa.org/portal/page/ho me.faces