



Foresight of New and Emerging Risks to Occupational Safety and Health Associated with New Technologies in Green Jobs by 2020

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Welcome and Introduction

Emmanuelle Brun

Project Manager, Prevention and Research Unit



Safety and health at work is everyone's concern. It's good for you. It's good for business.

Why green jobs?



- **OSH Community Strategy 2007-2012:**
EU-OSHA to anticipate **risks associated with new technologies**
 - **Green jobs: strong emphasis on innovation**
 - **A growing sector: over 1million new jobs in the EU by 2020 (FR: 600,000)**
 - EU2020: 20% decrease in CO2 emissions, 20% increase in renewable energy, 20% increase in energy efficiency
 - Solar, wind and biomass energy: the most rapid employment growth
 - EU Wind energy: +30% jobs between 2007-10; +50% between 2010-20
 - EU: 300,000 jobs linked to biomass fuel production by 2020
- ⇒ **Potential to affect many workers if green jobs are not safe**
- ⇒ **Green jobs will be sustainable only if safe, healthy and decent**
- ⇒ **Opportunity to anticipate new risks before they appear**

A 10-year horizon foresight



SAMI Consulting

technopolis_[group]

- **Policies often driven by an “official” view of the future**
- **Scenario-building foresight: a tool for strategic futures thinking**
 - Doesn't assume the future is pre-determined
 - To provide insight and stimulate debate into ways to shape the future
 - Takes account of demographic, societal and economic context
 - **Multidisciplinary** → new risks are more likely to be identified
 - **Participatory** approach → outputs are useful for stakeholders
- **Outcome: Scenarios of plausible, possible futures to help**
 - gaining **insights into new and emerging risks**
 - understanding better **what decisions** could help **shape a safer future**

Outputs

■ Publications:

- April 2013:
 - Foresight report + PPT cartoons
 - Summary report (in DE, EN, ES, FR, IT, PL)
- EU green week (3-7/06): E-facts
 - Green construction
 - Small-scale solar energy
- End 2013: Report Wind energy
- Q1 2014: E-fact Wind energy

■ Foresight workshops:

- With Focal Points
- 2014: With EU sectoral social dialogue committees

Navigation
About Us
Practical Solutions
European Risk Observatory
Topics
Accident Prevention
Business aspects of OSH
Changing World of Work
Cleaning workers
Dangerous Substances
Economic Incentives
Green jobs
Mainstreaming OSH into Education
Maintenance
Management Leadership
Musculoskeletal Disorders
Noise at work
Risk assessment
Stress
Worker Participation
Workplace Health Promotion
Priority Groups
Sectors
Campaigns
Competitions
Press and Multimedia
Publications
Organisations and strategies
National Focal Points
Legislation
OSH in figures
Our Events
European Presidency



as good for the environment.

Workers' safety and health in green jobs

The EU is working hard to balance economic growth with the need to protect the environment, and has set itself challenging targets for reducing greenhouse gas emissions, increasing energy efficiency and promoting renewable energy, and reducing waste. This has given rise to a wide range of green jobs – jobs which contribute to preserving the environment, or restoring it to what it was. If they are to be truly sustainable, though, we need to make sure that these jobs provide safe, healthy and decent working conditions. Green jobs need to be good for workers, as well

What are green jobs?

Green jobs covers a wide range of different jobs in different sectors, and involves a diverse workforce. There are many different definitions of the term, such as the ones by the [United Nations Environment Programme](#), the [European Commission](#) or [Eurostat](#). But green jobs can be understood as contributing, in some way, to the preservation or restoration of the environment. They can include jobs that help to protect ecosystems and biodiversity, or reduce consumption of energy and raw materials, or reduce waste and pollution. Our purpose at EU-OSHA is to raise awareness of the need for good occupational safety and health (OSH) in these jobs. Green jobs need to provide safe, healthy and decent working conditions in order to contribute to a truly smart, sustainable and inclusive growth and meet the objectives of the [European Commission's Europe 2020 Strategy](#).

How is the 'green economy' growing?

The Europe 2020 Strategy stresses the need for growth to be sustainable, building a low-carbon, resource-efficient economy. To help make this happen, the EU has set itself targets for reducing greenhouse gas emissions, increasing the share of renewable sources in meeting Europe's energy needs, and increasing energy efficiency. Meeting these objectives will result in rapid growth in the 'green economy' – for example, the targets to increase renewable energy and energy efficiency by 20%, compared to 1990 levels, is expected to lead to over 1 million new jobs in the EU. Solar power, wind energy, biomass technology and waste recycling are the areas of the green economy that are experiencing the most rapid growth.

Why is it important to consider OSH in green jobs?

We tend to associate the word 'green' with safety – but what is good for the environment is not necessarily good for the health and safety of workers who are employed in green jobs. In some cases already, we have seen new legislation and technologies, designed to protect the environment, resulting in workers being put at greater risk. Reducing the amount of waste being sent to landfill, for example, has resulted in higher rates of accidents and illnesses among workers whose job it is to process it.

The new technologies or working processes associated with green jobs can lead to new hazards, which call for new combinations of skills to deal with them: the 'old' OSH knowledge cannot simply be transferred to them. Installing a solar water heater, for example, involves combining the skills of a roofer, a plumber and an electrician.

The speed at which the green economy is expected to expand could lead to skills gaps, with inexperienced workers involved in processes that they have not been trained for, and who therefore put their safety and health at risk. There may also be a stronger polarisation of the workforce towards skills, with low skilled workers pushed to accept poorer working conditions. Last but not least, economic and political pressure could lead to OSH concerns being overlooked.

If green jobs are to be truly sustainable we need to make sure that they are to the benefit of workers' safety and health, as well as of the environment. In the green economy, as elsewhere, good OSH plays a vital role in increasing competitiveness and productivity. In this fast-developing area, we need to ensure that what is good for the environment is good for workers too.

What is EU-OSHA doing to prevent new and emerging OSH risks in green jobs?

Given how quickly the green economy is expected to grow, it is important that we anticipate any new or emerging OSH risks in relation to green jobs before they appear. That is why EU-OSHA has carried out a detailed foresight study, looking at how work in green jobs is likely to develop by 2020, and what future OSH challenges this may bring. The study has identified a number of possible future scenarios, given developments in green technologies, under different economic and social conditions. The aim is to draw attention to potential OSH risks in this area, and to provide EU policymakers, in particular, with tools to help them shape the workplaces of tomorrow, and keep Europe's workers safe and healthy.

Know more on:

[The foresight report on OSH in green jobs](#)

[The summary of the report and the scenarios](#)

[The cartoons featuring the new and emerging OSH risks in the scenarios](#)

Feedback from participants in the foresight project

- **Over 170 participants: interviews, e-surveys and 8 workshops**

- **Scenarios are a useful tool to:**
 - To anticipate possible new and emerging risks
 - To mainstream OSH into other disciplines
 - To encourage people to think outside their “usual box” in a neutral context (the future) removed from the constraints of the present in order to generate new insights
 - And to test policies against different assumptions to develop future-proofed, surprise-resistant policies



**Thank you for your interest and
enjoy the workshop!**

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