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## **Sustainable Development as a Key to Peace: the Role of Europe as a Global Actor**

by *Vittorio Prodi, MEP*

Global warming and today economic crisis call for urgent action. We can't go on behaving as usual, following the usual recipes: what is needed is a deep change, in economy and society.

A global coordinated action is extremely urgent to face and contrast climate change, and we can do it fighting at the same time economic crisis, if we have the courage to invest in innovation.

Acting in the field of energy can be a sort of metaphor of the action we will need to undertake in other fields, such as natural, always scarcer resources.

First of all we must reduce our CO<sub>2</sub> emissions:

- energy saving
- energy efficiency
- energy diversification

### **Energy saving and energy efficiency**

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**Energy saving and efficiency measures** are commonly known and expanding at a rapid rate.

Progress has been made in the use of new materials in the building sector: allowing, for instance, better insulation of houses and public buildings, leading to reduced heat loss.

Meanwhile, new superconductors herald new horizons in the development of more efficient electric grids and appliances, as well as nanotechnology in fuel cells and photovoltaic plants, all aimed at reducing the consumption of precious raw materials.

### **Renewable energy sources**

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The greatest challenge comes anyhow from the need to diversify our energy supply. Given the material scarcity of fossil fuels, Europe needs to find alternatives which do not alter the balance of the earth: namely, **renewable energy sources**.

A recent report of the European Climate Foundation (ECF) shows that a low-carbon economy in Europe is not only possible, but also convenient. The report has been developed by a consortium of experts funded with the title **Roadmap 2050**<sup>1</sup>. It provides a practical, independent and objective analysis of pathways to achieve a low-carbon economy in Europe, in line with the energy security, environmental and economic goals of the European Union.

Renewables are more flexible and their application can be organized in a decentralized system, by involving and empowering people who should be enabled to contribute the self-generated power to local grids. This technology allows communities to produce part or all of their own electricity and decrease the vulnerability of traditional large power plants to blackouts (making them more flexible) and terrorist attacks. Additional advantages of this approach include improved hydraulic, geological and fire safety, in addition to reducing the threats associated with the recurrence of extreme meteorological events such as heavy rains, droughts, and fires, all of which are set to increase in light of global warming. Of course this implies a grid able to work in both directions: of distribution to consumers and collection from distributed producers.

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<sup>1</sup> [www.roadmap2050.eu](http://www.roadmap2050.eu) e [www.europeanclimate.org](http://www.europeanclimate.org).

We must adopt a systemic approach that combines energy applications (including the aspects of energy saving and energy efficiency) with territorial care. The energy potential embedded in solar, photovoltaic, thermal, geothermal, thermodynamic, wind, wave, hydraulic, and biomass sources is enormous: we “only” have to learn how to harness them, and this will require a strong effort in research and investments.

## **Europe and climate change**

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The EU is trying to adopt several measures to keep up with this turning point.

**Europe 2020**<sup>2</sup>, the European Union agenda for the coming decade approved last year, is centred on the key concepts of sustainability and inclusion.

In a changing world, we want the EU to become a smart, sustainable and inclusive economy. These three mutually reinforcing priorities should help the EU and the Member States deliver high levels of employment, productivity and social cohesion.

Concretely, the Union has set five ambitious objectives - on employment, innovation, education, social inclusion and climate/energy - to be reached by 2020. Each Member State has adopted its own national targets in each of these areas. Concrete actions at EU and national levels underpin the strategy.

**Sustainable growth** means:

- building a **more competitive low-carbon economy** that makes efficient, sustainable use of resources
- **protecting the environment**, reducing emissions and preventing biodiversity loss
- capitalising on Europe's leadership in developing **new green technologies** and production methods
- introducing **efficient smart electricity grids**
- **harnessing EU-scale networks** to give our businesses (especially small manufacturing firms) an additional competitive advantage
- **improving the business environment**, in particular for SMEs
- **helping consumers** make well-informed choices.

Europe 2020 has included the objectives fixed in the package on energy, launched by the Commission on 23rd January 2008. The measures described in the package will dramatically increase the use of renewable energy in each country and set legally enforceable targets for governments to achieve them. All major CO<sub>2</sub> emitters will be given an incentive to develop clean production technologies through a thorough reform of the Emissions Trading System (ETS) that will impose an EU-wide cap on emissions. The package seeks to deliver the European Union to reduce greenhouse gases by at least 20% and increases to 20% the share of renewable energies in the energy consumption by 2020, including a 10% biofuels target.

To achieve the 20% target, the EU will need to install every year the equivalent of the capacity of renewable energy developed over the last 10 years and this, for the next 12 years. This is indeed ambitious, but the EU needs to improve its productivity and competitiveness.

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<sup>2</sup> [http://ec.europa.eu/europe2020/index\\_en.htm](http://ec.europa.eu/europe2020/index_en.htm)

Meeting our energy goals could save €60 billion on Europe's bill for oil and gas imports by 2020 – essential for both energy security and economic reasons.

Further integration of the European energy market can boost GDP by 0,6% to 0,8%.

Meeting 20% of Europe's energy needs from renewable sources could create over 600 000 jobs in the EU – and an additional 400 000 if we meet the 20% energy-efficiency target.

Our emission-reduction commitments should be met in a way that maximises benefits and minimises costs – including through the spread of innovative technological solutions.

### **Smart grids, super grids**

Europe is moving towards a system in which consumers are progressively becoming producers, where decentralised energy production sits side by side with large scale production, and where energy moves freely allowing a rational use of all resources, from the offshore wind sites in the North Sea to the sunny climes of the Mediterranean.

Large projects such as **Desertec** in the Mediterranean are being developed in this new and larger perspective. Desertec aims at supplying Continental Europe with electricity from clean solar and wind energy sources in North Africa and the Middle East. In addition to supplying a large share of the local markets, it targets to supply some 15% of Continental Europe's annual electricity demand by 2050.

Technology development is fundamental to our energy security but also to our competitiveness: we have no choice but to use energy more efficiently, put renewables in the forefront and invest in smart products. But we cannot rely only on scientific circles and just wait until technologies make their way from laboratories to the market. We must be at the forefront of making low-carbon technologies affordable and competitive – a market choice.

**Huge investments** are needed to reinforce the market of renewables, and also a specific programme: resources could come both from EFSF (European Financial Stability Facility), and from EIB (European Investment Bank)

We are also discussing of conceiving Eurobonds to finance specific projects on renewables

It is worth noting that buying fossil fuels would cost more (also because it is quite probable that decreasing availability will stimulate an increase in fuels prices)

### **Climate justice: One person one emission allowance**

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I firmly believe more democratic elements should be introduced in our system, to work out shared solutions and equitably distribute costs and benefits of the action. I think a new principle should be introduced in the new Kyoto Protocol, to be discussed in Durban this year.

By 2050 we have to reduce per capita emissions from the actual 7 ton per person per year to less than 1 ton per person per year. If this is a sustainable level, every person should be given access free of charge in a system when any other emission should be assigned by paid auction.

The principle is that of “**one person-one emission allowance**”, in order to state equal right for every human being to the access and use of natural resources. Other allowances could be issued on the basis of auctions. By selling the emission rights they don't use, poor countries could have access

to resources for mitigation and adaptation. These new resources could be allotted not through charity but through equity and justice (the right to have access to natural resources for present and future generations).

Applying the principle “one person one emission right”, developing countries **could systematically receive billion euros per year** to be used in sustainable projects for food and energy production, estimated in roughly the same amount of money promised by international cooperation programs and these resources could be channelled and controlled in a very efficient way.

Of course this is a complex proposal that would require an effective endorsement of the **United Nations** capacity and authority as international organisation in dealing with these issues, together with other international organisations such as International Labour Organization (ILO), World Health Organization (WHO), United Nations Development Programme (UNDP), United Nations Environment Programme (UNEP) and naturally UN Framework Conference on Climate Change. We would then begin to adopt what I have been preaching, as a scientist, all along, in my role as member of the European Parliament: a systemic approach, crucial to face the complexity of our world.

Of course I realise that this is possible only within a global agreement, but we have to consider that we are interdependent and we have to find a shared solution to manage this interdependence.

### **A stronger European Union**

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To reach such challenging objectives, I firmly believe a stronger European Union is needed. **A crucial point is certainly that of the reinforcement and democratisation of European Institutions.**

The Lisbon Treaty has introduced important changes, but still, in this particular moment, single states' interests seem to prevail over the European perspective. The actual Commission can't certainly be defined as a strong one and in Europe what is lacking is a convinced engagement in the European project, in the **building of a European Union conceived as a political entity** and not only as a functioning market. A new impulse is absolutely necessary: today economic crisis, today global warming can't be faced by single member states: a strong Europe is more and more important.

### **A shift to a knowledge-based society**

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**In parallel to the political action we can't avoid a change in lifestyles and a shift to a knowledge-based society**

What is really needed today is a momentous change, involving the cultural dimension. It is necessary to shift from a consumption society to a fair and **knowledge-based society**.

We must push for making immaterial assets desirable and for shifting from consumption of material goods to consumption of immaterial ones, in this way decreasing the pressure on the expenditure of natural resources. The international initiatives “Beyond GDP”<sup>3</sup> are about developing indicators that are as clear and appealing as GDP, but more inclusive of environmental and social aspects of progress, to measure true wealth and well-being of nations, in order to promote innovative and comprehensive politics.

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<sup>3</sup> See for example: <http://www.beyond-gdp.eu/>; <http://hdr.undp.org/en/statistics/>; <http://www.stiglitz-sen-fitoussi.fr/en/index.htm/>; <http://www.grossnationalhappiness.com/>;

Global warming is just the outrider for further planetary challenges to come: think about food, water or technological materials.

This is an age of change: we are suspended between peace and war. We have to learn how to manage scarce resources and preserve the rights of every human being to a decent future. If we do not succeed by those peaceful means, wars will decide on the allocation of vital resources.