

### What EU Leaders can do for Energy Security

European Heads of State, meeting in Lahti, Finland on October 20, will discuss the future of Europe's energy supply under the title of 'External Energy Relations'. This attempt to secure fuel imports from countries outside the European Union is, however, unlikely to solve the profound problems facing Europe's energy system. If fossil fuel consumption grows as predicted by the European Commission's latest review, the EU will not come close to meeting its long-term climate target.<sup>1</sup> To guarantee energy security and meet the challenges of climate change, renewable energy and energy efficiency cannot be marginalised in the EU's energy debate; these issues must be brought to the very core of the discussions.

The Summit is taking place at a decisive time for energy policy in the European Union; in January 2007, the European Commission will launch its Strategic Energy Review, proposing a package of measures on European energy policy. In the ongoing debate on the future energy supply, European leaders must look beyond securing energy imports that continue our addiction to burning fossil fuels.

#### Once bitten twice shy

Climate change, caused largely by our use and abuse of fossil fuels, is an accepted reality. The debate must now centre on solutions for a sustainable and secure energy future for Europe. Indeed, action taken in the next ten years will determine our future. Decisions for binding targets on emissions reductions, renewable energy and energy efficiency for 2020 must be set now.

Most Governments, businesses and industries, however, refuse to acknowledge the urgency of solving this problem by continuing to invest in fossil fuel and nuclear projects; keeping us tied to old methods of energy production and to agreements that will keep us dependent energy imports. If we do not alter current trends, the EU's dependency on foreign energy supplies will only worsen.

It's time to start changing those trends in order to create true energy security.

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<sup>1</sup> According to a Commission report "European energy and transport: Trends to 2030 – Update 2005", the EU would, with current energy trends, result in 4 % emission increases by 2020, compared to the 1990 levels. This conflicts seriously with EU's climate target of keeping the global temperature rise below 2 degrees, which requires EU to reduce its emissions by 30 % below 1990 levels by 2020.

### Renewables and Efficiency: The only energy security

#### The Energy Revolution

The European Commission stated in its *Green Paper on A European Strategy for Sustainable, Competitive and Secure Energy* from March 2005: "Action on renewables and energy efficiency, besides tackling climate change, will contribute to security of energy supply and help limit the EU's growing dependence on imported energy. It could also create many high-quality jobs in Europe and maintain Europe's technological leadership in a rapidly growing global sector."

A blueprint developed by Greenpeace and the German Aerospace Centre (DLR) describes a revolution for energy safety, innovation and long-term security<sup>2</sup>. It details the potential of a sustainable EU energy system, and demonstrates that it is possible to reduce carbon dioxide emissions from the energy sector by more than 70% by 2050, compared to 1990 levels, and phase out nuclear power entirely.

A combination of renewable energy technologies and energy efficiency offers Europe independence from global market fluctuations in fossil and nuclear fuels; has almost no impact on our climate system; and provides future generations with secure access to energy.

#### Efficiency: Win-Win Solution To Save Money And Energy

In a business-as-usual scenario, the EU's energy demand is expected to rise by more than 40% by 2050. By contrast, with a dedicated energy efficiency strategy, it can fall to 65% of what we consume today.

#### Heat Supply: Magic Combination

In a market where the demand for heat would be reduced by 50% due to efficiency measures, an increasing contribution of decentralised combined heat and power production will cover nearly a third of the remaining heat demand in 2050. The contribution of renewable energy sources in the heat supply sector could grow to more than 50% in 2050. In particular, this applies to biomass, solar collectors and geothermal energy as substitutes for conventional systems for direct heating and cooling.

#### Electricity: Empowering Renewable Diversity

More than half of the operating power plants in the EU are over 20 years old. Within the next 10 years, major investment decisions have to be taken. By

<sup>2</sup> A summary of the report's main findings and recommendations is presented above. The full report, Energy Revolution: a sustainable pathway to a clean energy future for Europe is online at <http://www.greenpeace.eu/downloads/energy/EU25scenario2050.pdf>

2050, 70% of the electricity consumed in the EU-25 Member States could come from renewable energy sources, namely on-shore and offshore wind, solar, bio-energy, hydropower and geothermal.

### **Greenpeace Demands to EU leaders**

Greenpeace calls on European Governments, the European Commission and the European Parliament - in the process of the Strategic Energy Review – to commit to the following:

#### **1. SET RENEWABLE ENERGY TARGETS:**

Ambitious and legally binding targets for the share of renewable energy would demonstrate the EU's long-term commitment to renewable energy and enhance investor confidence.

Greenpeace is calling for sector-specific targets through:

- A review of the existing Renewable Electricity Directive to include mandatory national targets for renewable energy in the power sector that add up to a 35% share for the EU in 2020.
- The development of a Directive on Renewable Energy in the Heating and Cooling Sector, including mandatory national targets that lead to at least 25% by 2020.

#### **2. SET ENERGY EFFICIENCY TARGETS:**

The reduction of primary energy demand is a crucial prerequisite for achieving a significant share of renewable energy sources and a sustainable energy supply system. Greenpeace is calling for the EU to set a target to reduce consumption in 2020 by at least 20%.

#### **3. PHASE OUT SUBSIDIES FOR FOSSIL ENERGY AND NUCLEAR POWER:**

Subsidies to fossil fuel and nuclear power sources have propped up these technologies for decades, keeping renewable energy out of the marketplace. Greenpeace urges national Governments and the EU to phase out direct and indirect subsidies to these polluting and dangerous technologies.

### **Don't Be Seduced by False Solutions**

Today's most polluting industries are trying to prolong the lifetime of outdated technologies by dressing them up in new, climate-friendly packaging.

The nuclear industry is promoting atomic power as the solution to our future energy needs and to climate change. But it has not been able to change the facts: every stage of the nuclear cycle remains beset by hazards and risks.

The threat of major accident has not gone away, and there is still no disposal solution for the highly radioactive waste by-products. In addition, nuclear power is one of the most expensive energy sources and dependent on state support, before, during and after a reactor's working life. It is the opposite of a sustainable, competitive and secure energy source; and it is unnecessary in the 21<sup>st</sup> century.

Similarly, carbon capture and storage is presented as the panacea for the global warming impact of fossil fuel technologies, yet this ignores the questions surrounding the risks of burying carbon dioxide beneath land or sea. The technology is unproven, expensive and perpetuates our reliance on fossil fuels.

Instead of wasting time and money trying to clean up or make-over polluting and hazardous energy sources that prolong our dependence on fossil and nuclear fuel imports, the European Union should move towards a truly sustainable energy system. This is entirely possible. Renewable energy technologies and energy efficiency offer a clean, cost-effective and secure solution.

In the recent years Finland has been singled out as the country that has managed to make nuclear economically attractive, win the public's support and even find a solution for the nuclear waste. These claims are all based on a long list of false facts. To find out what is happening in Olkiluoto, Finland, see [www.greenpeace.fi/nuclear/](http://www.greenpeace.fi/nuclear/).