



WWF-Canada Energy Efficiency Backgrounder Europe Continues to Improve Energy Efficiency

European politicians, business and citizens agree that increasing Europe's energy efficiency and reducing reliance on imported energy is necessary and a winning strategy.

The newly-approved *2006 Action Plan on Energy Efficiency* requires member states to implement efficiency measures and will reduce energy demand from products, buildings, and industrial plants. The target is to reduce energy consumption 20 per cent by 2020.

Energy efficiency was a major focus for the European Commission in 2005 when it;

- Circulated the Green Paper on Energy Efficiencyⁱ.
- Approved a directive on End-Use Energy Efficiency and Energy Servicesⁱⁱ, guiding member states to put in place policies to reduce demand in the heating, transport and electricity sectors nine per cent by 2017. (The public sector, whose procurement of goods represents around 16 per cent of the GDP, has a higher target).
- Issued a framework directive (called Eco-Design of Energy Using Productsⁱⁱⁱ) which aimed to set minimum efficiency standards for a large variety of products. Following a wide public consultation, the Commission issued an Action Plan on Energy Efficiency^{iv} in 2006.

The European Action Plan on Energy Efficiency: Key elements

Europe can cost-effectively reduce energy consumption 20 per cent by 2020, saving EURO 100 billion dollars a year and creating as many as one million new jobs, with the technical potential being much higher. Other assessments placed the cost-effective potential even higher at 30 per cent.^v

The Plan contains more than 70 initiatives under six headings: better performance standards for products, buildings and energy services; improved energy transformation; more efficient transport; financing and economic incentives; behavioural changes; and international partnerships. These include:

- Rapidly implementing the Eco-Design directive and by 2008, setting minimum energy efficiency standards for 14 priority product groups including motors, computers, street and office lighting, televisions, air conditioning and refrigeration. At the same time, upgrading the existing appliance energy labelling method.
- Substantial expansion of the 2002 building energy performance directive by 2009^{vi} including the first EU-level minimum energy requirements for new and renovated buildings. This will be extended to include smaller buildings and set measures to ensure that by 2015, energy-neutral "passive" houses (which consume less than 10 per cent of the average house^{vii}) become "not the exception but the norm."
- Develop minimum binding efficiency requirements for new electricity, heating and cooling installations lower than 20 megawatts, and consider similar requirements for larger installations by 2008.
- "If necessary," by 2007 propose legislation to ensure the EU meets its target level for average new vehicle emissions of 120 grams per kilometre by 2012.
- "Facilitate a more targeted and coherent use of energy taxation" by 2008.
- Develop efficiency education programs for energy managers in industry and utilities to help spread best practice by convening a "covenant of mayors" of the EU's "largest and most

pioneering cities.”

- Seek framework agreements with its major trading partners to improve energy efficiency worldwide.
- Encourage the banking sector to offer finance packages aimed at small and medium sized enterprises and energy services firms to adopt energy savings identified in energy audits.

Super-efficiency coming of age in already-efficient Europe

Energy efficiency policy in the European Union has traditionally focused on setting minimum energy efficiency standards and labelling for a limited number of products sold in the EU. Recently, policy makers have become far more ambitious in accelerating the pace and the scope of energy efficiency legislation in the EU under increased pressure to reduce Europe’s dependency on foreign supplies of energy, to meet Kyoto targets and longer term climate policy aims. These include:

- Entry of 10 new countries into the EU, many of which are from the former Communist bloc with old buildings and industrial infrastructure and much higher energy consumption per unit of GDP than western Europe. These countries are also dependent on energy supplies from outside the EU which made the situation even more urgent.^{viii}
- The Building Energy Performance directive (2002), which member states are now in the process of implementing domestically and even improving upon, will also be strengthened and extended in 2009. Similarly, approval of a directive to advance cogeneration, (an efficient technology to produce both heat and electricity and to reduce waste of heat in power stations), is being implemented across Europe with several member states putting in place even more ambitious policies.
- EU energy efficiency policy received strong support from business groups including EuroCopper (representing the copper industry)^{ix}, EuroACE (representing the insulation industry), CECED (white good manufacturers), ELCFED (the lighting industry), COGEN Europe (representing the cogeneration industry) and others. Philips Lighting said that the EU could phase out incandescent light bulbs within 10 years^x.
- The EU energy efficiency policy has also been strongly supported from all sides of the political spectrum, especially in the EU Parliament.

European energy efficiency outlook

In Europe, 2007 promises to be a busy year for energy efficiency improvements:

- The German government, which holds the Presidency of the European Union until June, has indicated initiatives to achieve higher energy and resource efficiency and growth/jobs is a priority. Complex negotiations will be underway to achieve agreements between 27 countries, including two new countries joining the EU in 2007 (Bulgaria and Romania).
- Member States must present their national energy efficiency plans to the European Commission by June.
- New minimum energy performance standards for a wide range of products should be in place by 2008; the UK government announced that it will be pushing for tough standards.

Overall, the EU appears firm in its intention to rapidly introduce policies to reduce energy demand 20 per cent by 2020 in order to achieve its climate targets and reduce dependency on imported fossil fuels.

i “Doing More With Less: Green Paper on Energy Efficiency,” EC, 2005. Available here:
http://ec.europa.eu/energy/demand/policy/doc/2005_06_green_paper_book_en.pdf

ii More information, and the text of the Directive here: http://ec.europa.eu/energy/demand/legislation/end_use_en.htm

iii The Directive is available here: http://ec.europa.eu/energy/demand/legislation/eco_design_en.htm

iv Link to the plan: http://ec.europa.eu/energy/action_plan_energy_efficiency/doc/com_2006_0545_en.pdf

v Evidence for this potential was presented in a statement by Stephan Thomas of Germany’s Wuppertal Institute – at a public hearing in the European Parliament in 2004.

vi The full text of the Directive is available here:
<http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32002L0091:EN:HTML> The directive aims to start exploiting the large potential the buildings sector offers for achieving Kyoto targets. The EU Commission website states that it accounts for 40% of the EU’s energy requirements and the largest single potential for energy efficiency. Research shows that more than one-fifth of the present energy consumption could be saved by 2010 by applying more ambitious standards to new buildings and those that are being refurbished.

vii more information on passive houses can be found here: <http://www.leonardo-energy.org/drupal/files/LowEHouse.pdf?download>

viii A. Froggatt, G. Canzi, “Ending Wasteful Energy Use in Central and Eastern Europe: An Essential Step for Climate Policy in a Competitive EU-25”, 2004. Available here:
<http://assets.panda.org/downloads/endingwastefulenergyincentraleasterneurope.pdf>

ix A report by EuroCopper for the EU Commission illustrating the huge potential to save energy in the industrial sector through the use of more efficient motors is here:
<http://www.eurocopper.org/doc/uploaded/File/Moteurs%20Press%20Kit%20April%202004%20EN%20finale1.pdf>

x quoted in ENDS Europe DAILY 2222, 08/12/06. More on what companies like Philips are saying can be found here:
http://www.foe.co.uk/campaigns/climate/case_studies/energy_efficient_lighting.html