

Europe could save 20% of its energy by 2020

The Commission today adopted a Green Paper on energy efficiency, outlining an ambitious programme with the objective of harnessing cost-effective energy savings for Europe equivalent to 20% of the EU's current energy use. This means reducing the amount we spend on energy, mainly imported hydrocarbons, by € 60 billion per annum or the present combined energy consumption of Germany and Finland. Instead, this money would be invested in energy efficient equipment and services, in which Europe is a world leader. In other words, instead of spending money importing hydrocarbons we create jobs in Europe. According to available studies, if we could harness these benefits, it means as much as a million new high quality jobs in Europe.

Even without high and volatile oil prices, which have led to a downgrading of the prospects of economic growth in Europe, there would be very good reasons for the European Union to make a strong push towards a re-invigorated programme promoting energy efficiency at all levels of European society:

Competitiveness and the Lisbon agenda

Although considerable investment is needed to harness the potential savings mentioned above, in terms of new energy efficient equipment and energy services, Europe is a world-leader in this area and energy services are largely local in character. As mentioned above, this means the creation of many new high-quality jobs in Europe. Furthermore, as the measures targeted in this initiative are only cost-effective energy efficiency measures – ones that result in a net saving even once the necessary investment is taken into account – a successful energy efficiency scheme means that some of the €60 billion not spent on energy translates as a net saving, resulting in increased competitiveness and better living conditions for EU citizens. The same studies mentioned above conclude that an average EU household could save between €200 and €1,000 per year in a cost-effective manner, depending on its energy consumption.

An effective energy efficiency policy could therefore make a major contribution to EU competitiveness and employment, which are central objectives of the Lisbon agenda.

Environmental protection and the EU's Kyoto obligations.

Energy saving is without doubt the quickest, most effective and most cost-effective manner for reducing greenhouse gas emissions, as well as improving air quality, in particular in densely populated areas. It will therefore help Member States in meeting their Kyoto commitments.

Security of supply.

By 2030, on the basis of present trends, the EU will be 90% dependent on imports for its requirements of oil and 80% dependent regarding gas. It is impossible to predict the price of oil and gas in 2020, particularly if demand from the developing world continues to increase as rapidly as today. Making a real effort to at first cap EU energy demand at present levels and subsequently reduce it, would represent an important contribution in developing a coherent and balanced policy to promote the security of energy supplies for the European Union.

This Green Paper therefore seeks to identify the bottlenecks presently preventing these cost-effective efficiencies from being captured – lack of appropriate incentives, lack of information, lack of available financing mechanisms for example. It then seeks to identify options how these bottlenecks can be overcome, suggesting a number of key actions that might be taken. Examples include:

- Establishing Annual Energy Efficiency Action Plans at national level. Such plans might identify measures to be taken at national, regional and local level and subsequently monitor their success both in terms of improving energy efficiency and their cost-effectiveness. The plans could be complemented by a “benchmarking” and “peer review” process at European level, so that Member States can easily learn from the successes and mistakes of others and to ensure the rapid spread of best practice throughout the EU;
- Giving citizens better information, for example through better targeted publicity campaigns and improved product labelling;
- Improving taxation, to ensure that the polluter really pays, without however increasing overall tax levels;
- Better targeting state aid where public support is justified, proportionate and necessary to provide an incentive to the efficient use of energy;
- Using public procurement to “kick-start” new energy efficient technologies, such as more energy efficient cars and IT equipment;
- Using new or improved financing instruments, both at Community and national level, to give incentives, but not aid, to both companies and householders to introduce cost-effective improvements;
- Going further regarding buildings, where an existing Community Directive applies, and possibly extending it to smaller premises in a manner that ensures cost-effectiveness and minimum additional bureaucracy;
- Using the CARS 21 Commission initiative to catalyse a new generation of more fuel-efficient vehicles.

This Green Paper seeks to act as a catalyst, leading to a renewed energy efficiency initiative at all levels of European society – EU, National, regional and local. In addition, it seeks to make a significant contribution, by way of example and leadership, to kick-start an international effort to contribute to addressing climate change through energy efficiency. With exploding energy demand in particular in China and India, energy efficiency must be one of the key policies to try to reconcile on the one hand the increased energy needs of the developing world to power growth and improve living conditions for their citizens and, on the other hand, combat global warming. This Green Paper, and the momentum created in following it up, should put the EU at the forefront of efforts to make energy efficiency a global priority.

Finally, high oil prices hit the poorest the hardest, particularly in developing countries. Attention should be given during the follow-up to the Green Paper as to how technology which is developed in Europe can be used or adapted to meet the needs of these countries and how best it can be deployed.

The concrete examples cited above to meet this challenge, which are examined in more detail below, are not proposals; they are ideas for discussion. Nor are they exhaustive. Following the publication of the Green Paper, the Commission shall, until the end of this year, undertake an intensive public consultation. To stimulate debate and effective input, the Commission puts forward 25 non-exhaustive questions.

The Commission has decided to set up the "European Sustainable Energy Forum". This Forum, based on the models of the "Florence" and "Madrid" Forums, which were used very successfully to develop consensus on how to proceed with energy market liberalisation, will bring together the Commission, Member States, the European Parliament, national energy Regulators and representatives of European industry and NGO's. It will meet twice a year. The first meeting, scheduled for October, will discuss in depth this Green Paper.

However, in addition to consulting the Council, the European Parliament and industry and NGO's on the document, the Commission considers it vital to have a wide-ranging public consultation and will carry out a series of open meetings throughout the EU in addition to a web-based exercise

It is important that this Green Paper rapidly leads to concrete action. Thus, following the consultation process the Commission believes that a concrete Action Plan should be drawn up in 2006, outlining the specific action to be taken at EU and national level, accompanied by necessary cost-benefit analyses.

This Green Paper is an important document, not only because of its potential economic importance, but also because it marks the beginning of this new Commission's attempt to renew Europe's energy policy, centring its different elements on the need to really develop competitiveness, sustainable development and security of supply.

This is the first in a series of consultative or preparatory documents that will be adopted by the Commission in 2005 and early 2006. Commissioner Piebalgs intends to table:

- a Communication on Renewable Support Schemes,
- an Action Plan on Biomass,
- a Communication on the transparency and functioning of hydrocarbons markets,
- a Green Paper on Security of Supply,
- a Report on the functioning of the liberalised gas and electricity markets, and
- a Communication on the new approach to Nuclear Safeguards.

This will give the Commission a full picture of how to approach the development a real coherent and integrated energy policy for Europe. Concrete proposals are expected to follow in 2006.

Questions for debate

The Green Paper puts forward 25 questions for debate;

1. How could the Community and the Commission in particular, better stimulate European investment in energy efficiency technologies? How could funds spent supporting research in this area be better targeted?
2. The emission trading mechanism is a key tool in developing a market-based response to meeting the goals of Kyoto and climate change. Could this policy be better harnessed to promote energy efficiency? If so, how?
3. In the context of the Lisbon strategy aiming to revitalise the European economy, what link should be made between economic competitiveness and a greater emphasis on energy efficiency? In this context, would it be useful to require each Member State to set annual energy efficiency plans, and subsequently to benchmark the plans at community level to ensure a continued spread of best practice? Could such an approach be used internationally? If so, how?
4. Fiscal policy is an important way to encourage changes in behaviour and the use of new products that use less energy. Should such measures play a greater role in European energy efficiency policy? If so, which sort of measures would be best suited to achieve this goal? How could they be implemented in a manner that does not result in an overall increase in the tax burden? How to really make the polluter pay?
5. Would it be possible to develop state aid rules that are more favourable to the environment, in particular by encouraging eco-innovation and productivity improvements? What form could these rules take?
6. Public authorities are often looked to for an example. Should legislation place specific obligations on public authorities, for example to apply in public buildings the measures that have been recommended at Community or national level? Could or should public authorities take account of energy efficiency in public procurement? Would this help build viable markets for certain products and new technologies? How could this be implemented in practice in a way that would promote the development of new technologies and provide incentives to industry to research new energy efficient products and processes? How could this be done in a manner that would save money for Public authorities? As regards vehicles, please see question 20. (Section 1.1.6)
7. Energy efficiency funds have in the past been used effectively. How can the experience be repeated and improved? Which measures can be adopted usefully at:
 - a. International level
 - b. EU level
 - c. National level
 - d. Regional and local level?

8. Energy efficiency in buildings is an area where important savings can be made. Which practical measures could be taken at EU, national, regional or local level to ensure that the existing Community Buildings Directive is a success in practice? Should the Community go further than the existing Directive, for example extending it to smaller premises? If so, how could the appropriate balance be achieved between the need to generate energy efficiency gains and the objective of limiting new administrative burdens to the minimum possible? (Section 1.2.1)
9. Giving incentives to improve the energy efficiency of rented accommodation is a difficult task because the owner of the building does not normally pay the energy bill and thus has no economic interest in investing in energy efficiency improvements such as insulation or double glazing. How could this challenge be best addressed?
10. How can the impact of legislation on the performance of energy-consuming products for household use be reinforced? What are the best ways to encourage the production and consumption of these products? Could, for instance, present rules on labelling be improved? How could the EU kick-start research into and the subsequent production of the next generation of energy efficient products? What other measures could be taken at
 - e. International level
 - f. EU level
 - g. National level
 - h. Regional and local level?
11. A major challenge is to ensure that the vehicle industry produces ever more energy efficient vehicles. How can this best be done? What measures should be taken to continue to improve energy efficiency in vehicles and at which level? To what extent should such measures be voluntary in nature and to what extent mandatory?
12. Public information campaigns on energy efficiency have shown success in certain Member States What more could and should be done in this area at:
 - a. International level,
 - b. EU level,
 - c. National level, or
 - d. Regional and local level?
13. What can be done to improve the efficiency of electricity transmission and distribution? How to implement such initiatives in practice? What can be done to improve the efficiency of fuel use in electricity production? How to further promote distributed generation and co-generation?
14. Encouraging electricity and gas providers to offer an energy service (i.e. agreeing to heat a house to an agreed temperature and to provide lighting services) rather than simply providing energy is a good way to promote energy efficiency. Under such arrangements the energy provider has an economic interest that the property is energy efficient and that necessary investments are made. Otherwise, electricity and gas companies have an economic interest that such investments are not made, because they sell more energy. How could such practices be promoted? Is a voluntary code or agreement necessary or adequate?

15. In a number of Member States, white (energy efficiency) certificates have been or are being introduced. Should these be introduced at Community level? Is this necessary given the carbon trading mechanism? If they should be introduced, how could this be done with the least possible bureaucracy? How could they be linked with carbon trading mechanism?
16. Encouraging industry to take advantage of new technologies and equipment that generate cost-effective energy efficiencies represents one of the major challenges in this area. In addition to the carbon trading mechanism, what more could and should be done? How effective have been the steps taken so far through voluntary commitments, non-binding measures adopted by industry, or information campaigns?
17. A new balance between modes of transport – a major theme of the strategy set out in the White Paper that the Commission adopted in 2001 on a European transport policy for 2010 – is still a top priority. What more could be done to increase the market share of rail, maritime and inland waterway transport?
18. In order to improve energy efficiency it is necessary to complete certain infrastructure projects from the trans-European transport network. How should the investments needed for infrastructure projects be developed, using what sources of financing?
19. Among the measures that could be adopted in the transport sector, which have the greatest potential? Should priority be given to technological innovations (tyres, engines...), particularly through standards defined jointly with the industry, or to regulatory measures such as a limit on fuel consumption of cars?
20. Should public authorities (state, administrations, regional and local authorities) be obliged in their public procurement to buy a percentage of energy efficient vehicles for their fleets? If so, how could this be organised in a manner that is technology neutral (i.e. it does not result in distorting the market towards one particular technology).
21. Infrastructure charging, notably paying to use roads, has started to be introduced in Europe. A first proposal was made in 2003 to strengthen the charging of professional road transport. Local congestion charges have now been introduced in some cities. What should be the next steps in infrastructure charging? How far should “external costs” such as pollution, congestion and accidents be directly charged to those causing them in this manner?
22. In certain Member States, local or regional energy efficiency project financing schemes, managed by energy efficiency companies, have proven very successful. Should this be extended? If so, how?
23. Should energy efficiency issues be more integrated in the Union’s relationships with third countries, especially its neighbours? If so, how? How can energy efficiency become a key part of the integration of regional markets? Is it necessary to encourage the international financial institutions to pay more attention to demand management issues in their technical and financial assistance to third countries? If so, what could be the most effective mechanisms or investments?
24. How could advances in energy efficiency technology and processes in Europe be put to effective use in developing countries?
25. Should the Union negotiate tariff or non tariff advantages within the WTO for energy efficient products and encourage other members of WTO to do the same?