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## COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 29.5.2006 SEC(2006) 693

### COMMISSION STAFF WORKING DOCUMENT

Report on the Analysis of the Debate of the Green Paper on Energy Efficiency

{COM(2005) 265 final}

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The "Green Paper on Energy Efficiency, *Doing More with Less*" published on 22<sup>nd</sup> June 2005, opened a public consultation posing 25 questions to all interested parties in order to facilitate the evaluation of their opinions regarding energy efficiency and to give guidance for the outline of the Action Plan on Energy Efficiency. The period for replying to the public consultation ended on 31<sup>st</sup> March 2006.

#### THE DEBATE

The debate on the Green Paper was complemented by a series of events in order to promote a better understanding of the initiative and better prepare the future Action Plan on Energy Efficiency. Commissioner Piebalgs and Commission services participated in a number of events in several Member States and received delegations from several sectors and Member States at the premises of the Commission.

#### **CONTRIBUTIONS**

Aware of the importance of this issue, interested parties submitted a large number of contributions with concrete proposals and observations. The Commission services received a total of 241 contributions to the debate. (31 from NGOs, 66 from Member States and public Bodies, 106 from industry and private sector and 38 from private citizens). A list of the contributors is presented in Annex I. Annex III includes charts depicting the sectors and countries represented in the contributions.

The analysis also includes the recommendations made in the report<sup>1</sup> of the European Parliament as well as the results of public events in which Commission services participated.

#### THE ANALYSIS

An exhaustive analysis of the results has been carried out following a methodology that provided a precise quantitative and qualitative evaluation of the opinions of the stakeholders, taking into consideration their significance. To simplify the analysis of the outcomes (approximately 5000 answers), sets of keywords have been built reflecting the different opinions, suggestions and criticism from the participants to the debate. These keywords were the object of a statistical assessment and are presented in parallel with the most practical, original and innovative ideas. The sets of keywords were built for each question and the results provide the number of stakeholders from the different groups (NGOs, Member States and public bodies, industry and the private sector and private citizens) that support each opinion. A comprehensive list of the keywords and samples of results for each question have been enclosed in Annex II.

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Adoption of Vidal Quadras Report on EE Green Paper is forseen on 31 May 2006.

The analysis of the debate was made question by question and the main conclusions are expressed in the following paragraphs.

This document is an objective analysis which reflects only the opinions of the contributors to the debate, and not necessarily the opinion of the Commission Services.

• Question 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?

The answers delivered a clear message that there is a need for **sensitisation and information**. Citizens, local authorities and industry are often not aware of the possibilities they have to improve energy efficiency, neither of the implementation of technology nor of the funding possibilities to develop it.

Contributors claimed that funds would be better spent on demonstrating and validating the potential of current technology, avoiding the situation in which good solutions stay in closed boxes without delivering results. Stakeholders need to know that technology exists, is effective and works.

Specific research is also supported, meaning that research should be driven by specific needs – creating a solution to solve a particular problem, providing more flexibility and being more effective. Audits should be carried out to assess where to act.

The use of passive options in the housing sector (like natural ventilation and solar shading), is regarded as having a great potential for reducing energy consumption and these should have further support.

The use of tax incentives and other schemes should be used to promote market transformation, making energy-efficient solutions available on a commercial scale.

Further development of active measures like Clean Coal Generation Technology, Combined Heat and Power, electric/hydrogen vehicles, thermal insulation programmes and others should be supported as they represent a great potential for improved energy efficiency.

Financial support could also, according to the contributors, be targeted to promote simulation models that could easily say how effective equipment is, what the real cost of implementing would be, what the benefit would be and how long it would take to pay back the investment.

• Question 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?

There is general agreement by the participants to the debate that the Emission Trading Scheme (ETS) is a key tool to meet Kyoto objectives and improve energy efficiency.

To make it more effective, some participants in the debate (mainly from the industry sector) state that its scope should be expanded by including additional sectors like transport, aviation and buildings, as well as other greenhouse gases. NGOs stress that benchmarking practices across Europe could also be a way to improve its effectiveness without creating market distortions, and the setting up of ambitious but real targets would boost action.

Certificates and allowances should be awarded based on energy efficiency practices/achievements and not only on the history of emissions. Reducing the number of allowances and auctioning them would be beneficial because it would encourage energy efficiency and would make investments take place where they would be cheaper (improving cost effectiveness).

The ETS should be integrated with other policies like the Combined Heat and Power, Large Combustion Plant and the IPPC Directives, boosting energy efficiency but always aiming at reducing bureaucracy and making the system more transparent, practical and appealing.

• Question 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 States 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?

There is general agreement among contributors that energy efficiency plans would be beneficial in promoting sustainable development and boosting EU economy. Member States should follow EU guidelines putting forward Action Plans to improve energy efficiency and disseminate best practices. However, it is suggested not to have annual reports but rather with a periodicity of 3 to 5 years<sup>2</sup>.

These action plans should have clear targets per sector. They should also have a strong emphasis on SMEs where creativity is more common and accepted.

In order to reduce bureaucracy (burden of several existing parallel policies) the reporting, evaluation, comparison and benchmarking would be more efficient if prescribed by an EU template, easy to use and analyse.

An integrated approach, meaning one clear plan for all energy policies (environment, transport, economic, housing, etc.) would be most effective as it would multiply the information and reduce bureaucracy.

A cost-benefit analysis (assessing the most promising policies/measures), together with the setting of international standards would be very useful to create effective harmonized action across Europe.

Setting indicators to measure the Action Plans` performance and making reports public would make Member States more responsible and action more effective.

On the other hand, there are remarks from the contributors that some regions/Member States already have energy efficiency plans, and that they just need to be stimulated and effectively implemented, not overburdened by more policies.

• Question 4 – Fiscal policy is an important way to encourage changes in behaviour and the use of new products that use less energy. Should such use play a greater role in

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Action plans are now required every 3 years by the new Directive on Energy end-use efficiency and energy services.

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?

The contributions to the debate show a very clear support for fiscal policy and the improvement of the current fiscal practices.

Fiscal policy could be improved by lowering VAT or giving other tax incentives for investments in clean technologies/energies (insulation, renewable energies, solar shading, heat pumps, Combined Heat and Power and others) in industry and households.

A higher focus should be given to the transport sector by raising taxes for less efficient models based on energy consumption or CO<sub>2</sub> and particulate matter emissions.

An EU-wide fiscal policy would be very much welcome in order to avoid incoherence and put industry or citizens at a competitive disadvantage. This policy must include a neutral net result, meaning that the tax increase on non-energy-efficient services must be compensated by reductions on labour or certain energy-efficient activities. It should also oblige Member States to use the revenues of such policies on energy efficiency measures instead of earmarking them for other initiatives and thereby unbalancing the aim of the fiscal measure.

Targeted low interest loans for renewal or implementation of energy efficiency appliances are also proposed, as well as higher taxes for low performance buildings in all sectors (households, industry, public buildings and others) and for energy-efficient technologies with high benefits that are not reinvested in research for energy efficiency.

There is also a call for "cost-reflective pricing", showing the consumer (in a very clear system similar to labelling) how much they are paying for or saving with improved energy efficiency.

• Question 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?

State aid in favour of energy efficiency is supported and welcomed by participants in the debate. State aid rules should be simple, practical and transparent, removing barriers for the effective implementation of energy efficiency measures.

Projects should be submitted to an accurate evaluation and those with energy efficiency issues should be prioritised.

The revision of the EU Guidelines on State Aid should include energy efficiency related investments, but maximizing the potential of existing measures/rules is essential.

The market often gives the right incentives and signals, so state aid taking the form of tax exemptions should take place in limited periods just to stimulate market opening and they should be applied carefully in order to avoid market distortions.

State aid should also prioritise education, transforming people in ways that make things work. State aid should also only be used as a start-up incentive or seed capital and for a short period.

• Question 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 efficient products and processes? How could this be done in a manner that would save money for public authorities?

A large number of contributions from NGOs, private citizens and the private sector state that public authorities should definitely play an exemplary role by investing in energy efficiency, renewable energy sources (RES) and driving market demand and professional capacity (design and application of technology).

The implementation of clean technologies in public buildings should be mandatory and should be promoted/shown to the public – setting the example and showing citizens that their public authority succeeded and they can do the same. Building and public lighting infrastructure management should also be given more attention.

With the exception of public authorities, participants in the debate believe that energy efficiency should also be mandatory as a requirement in public tenders and procurement; however, there is an urgent need for information and training of the staff involved so that the requirement becomes a reality.

Concerning procurement, a clear and easy EU regulatory framework for public procurement is needed, together with guidance and promotion of best practices and also the possibility of joint procurement between public authorities (reaching better deals with volume purchases).

NGOs proposed that the European Commission should build a "road map" detailing opportunities, costs and benefits of efficiency improvements, identifying the biggest potentials.

• Question 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: international, EU, national, regional and local levels?

It is generally admitted by participants in the debate that current initiatives still have a big potential to develop. Action should be directed towards the synchronization, assessment and re-prioritisation of existing policies in order to take full advantage of them.

"Green" ethics and behaviour should be encouraged and embedded in peoples` minds because the steering engine for action is society. Local and regional energy agencies have a major responsibility in this area, so they should be further promoted and be prepared to manage local projects, deliver advice and expertise based on local conditions, seek local opportunities for energy efficiency and manage knowledge transfer programs. For this purpose, structural and cohesion funds should be used to finance capacity building and promote energy efficiency.

Energy efficiency funds should be developed taking into account local conditions and funds should be targeted to where the potential is bigger. Even though there is strong support for the

creation of these funds, no mention is made regarding who is going to pay for them. A transparent and detailed analysis should be carried out to benchmark projects and business cases leading to bigger profits and robust decisions.

According to contributors, energy efficiency funds should also be developed through Public-private partnerships as they become more robust and effective.

• Question 8 – Energy efficiency in buildings is an area where important savings can be made. Which practical measures could be taken at EU, national, regional and 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?

A large number of contributions (mainly from industry/private sector) states that the focus should be on implementing the current Energy Performance in Buildings Directive and to assess the cost-effectiveness of the measures undertaken. Only then should the review be carried out.

On the other hand, there is also a large number of contributions (mainly from NGOs) stating that the revision of the directive should be carried out as soon as possible, including buildings with less then  $1000~\text{m}^2$ , as well as mandatory efficiency measures like Combined Heat and Power, renewable energy sources, integrated heating networks, heat pumps and other measures.

The revision of the directive should also include specific regulations for insulation, solar shading, blinds and windows as well as stricter obligations for the refurbishment of old buildings.

The system of certificates for buildings (something similar to labels) should be further promoted by energy agencies and shown to the public in order to raise awareness. This system should also come together with funds for performance diagnosis (audits) and inspection of buildings.

The difficult implementation of the directive was due to the lack of expertise for designing, building and implementing energy-efficient structures and equipment. It is urgent that the Commission supports and monitors the development of this expertise.

Buildings management, through Energy Services Performance Contracting (ESPC) or without, should be further encouraged as it represents a big savings potential and it could easily be implemented (especially if the company is paid based on the energy reductions it achieves).

• Question 9 – Giving incentives to improve the energy efficiency of rented accommodations 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?

To start with, most contributors state that a proper implementation of the Buildings Directive is needed.

A system of certificates (ABC rating) should be mandatory for every building and should be reflected with every transfer of property influencing the price. In this way, owners would have an interest in having efficient buildings as they would have an added value and the buildings would be easily rented<sup>3</sup>.

To make such a system work, information campaigns on the meaning of the certificates and on the available energy-efficient technology are fundamental.

According to many contributors, tax incentives could also be used as a tool to encourage energy efficiency investments from owners. ESCOs could also be encouraged as a specialised company would have the responsibility of guaranteeing energy saving measures.

To mediate the "conflict" between the owner and the tenant, an authority should be created in order to find and propose solutions where both the tenant and the owner could benefit.

The improvement of standards necessary to rent a house should also be carried out, together with energy audits for buildings, making sure that Member States comply with the standards.

• Question 10 – How can the impact of legislation on the performance of energy consuming products for household 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: international, EU, national, regional and local levels?

The current labelling system is widely recognised as a success story, but it should be applied to a larger range of products, and include more information about costs and savings. This information must be kept simple and easy to read. The life time cost of managing a product should also be assessed and displayed on the label.

The contributors consider that standards for labelling should be revised every 3 to 5 years in order to keep the labelling system for appliances dynamic. A better labelling system should also be implemented for vehicles, as they represent a significant share of energy consumption and source of inefficiency. Clear and simple labels could lead the way in the market shifting to efficient vehicles.

Most important, to make the whole system work, information campaigns are necessary to stimulate "labelling awareness" and to encourage the option for new, more efficient technology. The campaigns should not be conventional due to the risk that nobody pays attention. Think outside the box and create innovative ways of approaching the public, to provide food for thought but in a way that people really think about it, have been mentioned by several contributors.

The obligation for such a system exists already in Directive 2002/91/EC.

More research should be conducted in order to increase product efficiency and most important, reduce standby consumption, which is significant (5 to 10% of total consumption).

It is widely admitted by contributors that VAT reductions should also be allowed for efficient appliances and VAT increases for inefficient ones.

Mandatory minimum standards for energy efficiency in products should also be implemented on a large scale as well as benchmarking.

• Question 11 – A major challenge is to ensure that the vehicle industry produces ever more energy efficient vehicles. How can this 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?

The encouragement of efficient vehicles should be carried out using incentives to develop a market for hybrids, fuel cells, stop and start, and to discourage sports cars, all-terrain or prestige pollutant vehicles. This could also be accomplished by implementing mandatory requirements for car manufacturers regarding efficiency, labelling and power.

Citizens and industry/private sector mention in their contributions that the taxation of vehicles should also be better fitted and more ecologically fair, meaning that the tax should be calculated taking into account the consumption of the car as well as CO<sub>2</sub> and particulate matter emissions. Other fiscal measures could be implemented to discourage car usage and encourage clean vehicles and fuels.

Some contributions (especially from NGOs) state that voluntary agreements from manufactures are generally ineffective and policies do not work if they are not mandatory and touch the "pocket" of producers and consumers, while others favour the current voluntary alternative.

An EU-wide system of labelling could be further developed for cars, giving consumers an easier way to realise what kind of car they are buying and the benefits they would have from that, allowing a better choice. This labelling system should be accompanied with information campaigns to make the labels more "visible" and effective.

Eco-responsibility should be stimulated more among consumers, either with the acquisition of vehicles or during their use.

• Question 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: international, EU, national, regional and local levels?

There is a very widespread agreement that public awareness campaigns are essential to make any policy work, however they need to be more visible in the media, factual and appealing/innovative. There is a need for a change in people's behaviour in order to make policy work.

If well managed, these campaigns could be self supported by sponsorships, so they could be simply contracted by objectives with publicity agencies.

However, the debate has shown that campaigns must be simple, clear and deliver information concerning costs and savings, and also linking energy efficiency and health to have a real impact.

An integrated approach is also needed - coordinating information campaigns, legislative, regulatory or policy measures and bringing together public administration, media and industry in order to better fit the approach and collect bigger profits.

A clear focus should be given to schools and universities where minds are more open and represent a major power-influencing segment of society.

Benchmarking best practices across the EU or making EU-wide information campaigns is beneficial; local and regional energy agencies could play a major role at their local levels as they know the specific conditions and how to better act and achieve results, so they should be given more significance and encouragement. They could act in capacity-building, training trainers to deliver appropriate messages in an effective way. It is widely recommended not to carry out this campaign from "Brussels", but to promote it using structures that are closer to the public and stakeholders.

• Question 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 cogeneration?

The answers deliver a clear statement supporting the decentralization of energy generation and the further use of Combined Heat and Power, renewable energy sources and Clean Coal Generation Technology, as they represent a considerable added value for security of supply and less dependence on external suppliers. However, no clear strategy or proposal on how to change the situation is presented.

There is a considerable support by participants in the debate for more research on reducing grid losses, either by reinventing the materials used or by using software/devices to control grid peak demand or evaluate patterns of consumption, leading to better grid management. For this purpose, mandatory minimum standards for grid losses would be welcome, as well as more funds to support research and the renewal of old grids that are still operating.

Action towards the harmonization of rules across the EU would be welcome as it would facilitate grid connections and trans-national distribution.

• Question 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 the 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?

There is strong support among contributors for the promotion and creation of Energy Service Companies (ESCOs). ESCOs could have a major impact on reducing energy consumption in households, office buildings and even industry, especially SMEs. However, these companies

will only work effectively if the consumers are aware of the possibilities they are offered so strong information campaigns are needed to show consumers the benefits they would have from contracting energy services. For this purpose, an entity like an "energy advisor" should be created in local authorities or in local and regional energy agencies in order to provide advice to consumers on the strategy to follow in each case.

Voluntary agreements for large companies to become more efficient are supported; however there are also a number of statements (mainly from NGOs) against voluntary agreements, stating that they will never work because the goal of companies is to sell as much energy as possible.

Market-based mechanisms would be more effective than regulations as they would stimulate competition and they would lead companies to make improvements and offer a better service (more efficient) for a lower price. However, no further innovative ideas are proposed.

Partnerships between energy suppliers and ESCOs could be a good solution and should be implemented in pilot areas, be monitored and evaluated to assess their real potential and effectiveness.

• Question 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 mechanisms?

NGOs state that white certificates are a good scheme and should be supported and further implemented at EU level. However, a real and coherent analysis of the current experiences should be carried out, comparing them at EU level and assessing how to go forward. The implementation or extension of white certificates schemes should be done carefully and consistently with existing measures, bringing added value and not duplicating.

The white certificates scheme could be linked to the carbon trading mechanism through a transparent and EU-coherent measurement scheme that would control the attribution of certificates according to the savings. These initiatives could start on a pilot scale and then be disseminated if they were effective.

On the other hand, a number of contributions (mainly from industry/private sector) state that the attribution of white certificates is too complex and would represent a burden. This situation is even more aggravated by the fact that the certificates are not applicable to citizens that represent a substantial share of energy consumption and the potential for energy savings. They could be effective if designed as a market mechanism and linked to mandatory targets and product standards.

• Question 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?

In order to further promote efficiency in industry, some contributions claim that further financial assistance should be given to the acquisition and implementation of new efficient technologies but this procedure should be controlled for compliance by public authorities. However, no proposals are made concerning who should pay for that financial assistance.

The establishment of voluntary agreements with industry should be given preference over regulation, but NGOs state that mandatory targets would also be welcome in specific sectors.

Information should be given both to users/consumers and to industry, giving them an overview of the technologies available to achieve energy efficiency and to better design voluntary agreements.

Long (i.e. longer than 1, 2 or 3 years depending on the sector) pay back periods are also mentioned, especially by big industrial players, as impediments. When made aware, small and medium-sized enterprises seem to take a longer term approach.

Tax benefits should be given as an incentive to invest in energy-efficient equipment and for the replacement of old equipment, taking into account the costs of replacing (production and disposal) that equipment. The equipment should also be subject to a labelling system regarding energy consumption and efficiency, making the decision from consumers easier. The introduction of minimum performance standards to place a product on the market should be carried out, specifically to avoid unfair competition from cheap imports, going along with the effective implementation of existing rules.

• Question 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?

In order to increase the market share of these transport modes, it is believed by participants in the debate that EU-basis integration is needed. A good articulation is fundamental for an effective transportation of goods all over Europe.

Pricing infrastructures like highways according to the efficiency (not only fuel but also transport efficiency) of the vehicles is also a strategy that contributors indicate to stimulate a shift to rail or waterway transport.

Offering better services regarding flexibility, regularity and punctuality would very much increase the use of rail transport, for example.

In cities, the pricing of infrastructures integrated with more attractive packages for public transport would encourage a modal shift and increase mobility in cities along with reducing pollution.

Better land use planning would favour efficient transport modes, together with more investment in intelligent transport and transport management systems.

That the White Paper on Transport Policy is difficult in its implementation is clear from the debate. The shift toward clean transport modes is taking place very slowly.

• Question 18 – In order to improve energy efficiency, it is necessary to complete certain infrastructure projects from the trans-European transport network. How should the investment needed for infrastructure projects be developed, using what sources of financing?

At a first stage, a transparent impact assessment of the projects should be made and those with bigger revenues/benefits in a shorter period in a cost-effective way should be prioritised.

The Polluter Pays Principle is largely supported by the contributors. Revenues from road pricing, congestion charges, and fuel taxes should be used in increasing the energy efficiency of infrastructures and building new efficient ones.

The Public-private Partnerships could also be an effective instrument as they would be a means of increasing investments, creating more jobs and have a catalyst effect on Community support.

An integrated financing scheme involving several simultaneous funds (public, EU, EIB, EBRD, extra-budgetary funds and auto financing in highways) could also be a solution to develop, probably with good revenues.

Contributors state that these funds should be managed by the governments; however, once again, the contributions deliver no proposal regarding who should pay for these funds, who should bear the burden.

• Question 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?

There is a strong message supporting the implementation of clear and binding fuel efficiency standards as well as characteristics of tyres, air conditioners and other equipment that has a major influence on vehicle fuel consumption.

It is believed that more incentives should be given for a shift from combustion engines to energy-efficient or non-motorized vehicles. These incentives could go from tax incentives (for efficient vehicles) or penalties (for less efficient vehicles) to reductions in infrastructure charging.

There is also a suggestion from stakeholders for a more holistic approach. Not focusing on individual innovations but to create a balance between different policies, mandatory and voluntary.

A very important factor pointed out by stakeholders to make transport policies work is information and awareness. Citizens should know what they can and should do and what their responsibility is. The introduction of eco – driving would be a major achievement, but drivers need to realise that they, themselves, would profit from less aggressive driving. This issue should be tackled in strong, effective information campaigns.

Contributors welcome also more research, particularly in fields such as traffic management, as its inefficiency represents sometimes a major barrier to the implementation of new policies.

It is believed that the taxation of high consumption company cars could also be further pursued in order to discourage their use. Some NGOs and citizens stated that these vehicles represent a considerable share of inefficient vehicles that is too often disregarded.

• Question 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. does not result in distorting the market towards one particular technology)?

A considerable number of contributions (mainly from NGOs and industry/private sector) state that public authorities should take the leadership, giving credibility to efficient technologies and policies and creating a market for efficient products and equipment and they should be obliged to acquire a percentage of fuel-efficient vehicles. On the other hand, some contributions (mainly from Member States/Public Institutions) state that the lack of expertise and budgetary constraints make this task not welcome.

A strategy to implement this could consist of establishing consumption limits for each vehicle and performance targets for the whole fleet. This would also mean that the scope would be enlarged and energy efficiency criteria would not only be applied to heavy duty vehicles.

Some contributors say that financial support for the acquisition of efficient vehicles would be necessary, as well as guidelines to implement the efficiency criteria in procurement and the definition of all the recognised technologies at international level in order to avoid market distortions. However, once more there are no proposals regarding where to get such financial support from.

• Question 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?

There is a strong statement supporting the Polluter Pays Principle – those who use roads, cause accidents or contribute to congestion should be penalized for that.

NGOs claim that inefficient vehicles should be taxed more than efficient ones in order to internalise external costs and that the revenues from these schemes should be used to promote and improve green fleets for public transport and public authorities.

It is stated by NGOs that local congestion charges should be expanded and implemented in more cities. An EU framework would be useful to provide the necessary conditions and guidance for implementing infrastructure and congestion charges. In these terms, a clear and transparent method to calculate the cost of the charges should be implemented.

The revision of the "Eurovignette" Directive in due time is also mentioned by participants in the debate in order to avoid market distortions and avoid that all the costs are paid by society. However, no proposals are made regarding the issues to revise or the timeframe.

There is also a considerable number of opinions that do not support congestion charges, as they would bring increases in product prices and would generate social discrimination.

• Question 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?

There is a common agreement among the contributors that these schemes should be supported and enlarged. The EU should further encourage the use of structural or regional development funds in energy efficiency projects by local, regional and national powers. This would promote efficient alternatives and avoid inefficient ones.

Contributors believe that the development of these schemes would be more effective if done through Energy Services Companies (ESCOs) using performance commitments, long duration services and other similar solutions.

The dissemination of these practices and projects would be most useful and it would have a multiplying effect. It would also be useful for stakeholders to be aware of the possibilities they have and their benefits.

Partnerships between local companies and local authorities would be very useful as they would grant more funds and would lead to more coherence in projects.

• Question 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 mechanism or investments?

It is widely requested that the European Union should improve its efforts in persuading third countries to adopt energy efficiency. This could be done firstly through the dissemination of best practices that are currently implemented in the EU.

Providing sustainable aid would also be very useful, meaning that the EU should allocate aid to sustainable projects that promote energy efficiency and renewable energy sources in third countries.

The creation of international energy standards would also be a very useful instrument to facilitate business relations and promote energy efficiency.

Regarding the promotion of European energy-efficient technologies and companies, the EU should take the leadership in energy efficiency and also support the engagement of the International Energy Agency.

Partnerships between SMEs could be useful as they would have the possibility to explore new markets and represent a good way to provide important expertise in third countries.

Contributors state that the EU should put pressure to make sure that energy efficiency projects are given top priority by International Financial Institutions, giving the example of the

European Bank for Reconstruction and Development (EBRD) that provides free energy audits before any lending.

• Question 24 – How could advances in energy-efficiency technology and processes in Europe be put to effective use in developing countries?

According to participants in the debate the simple provision of know-how to developing countries would open a market for European energy efficiency products and technologies. Knowledge transfers would be very useful, but always taking adaptation into consideration due to different cultural and socio-economic factors.

Participants suggest that the EU could stimulate cooperation programs between organizations, centres, associations and companies from third countries and EU countries. Clean Development Mechanism (CDM) projects would be a good solution for this and a good vehicle for dissemination of good technology. This would also create a market for exporting energy efficiency goods and technologies.

Most important is to give support for capacity building, helping third countries in creating their own structures to develop and implement technologies and policies.

• Question 25 – Should the Union negotiate tariff or non-tariff advantages within the World Trade Organisation (WTO) for the energy-efficient products and encourage other members of WTO to do the same?

According to a number of participants in the debate this kind of measure should be pursued in order to develop a market for energy-efficient products accessible to a broader range of countries, but in reality it is not the same in every country, so the negotiations should take this into account, avoiding market distortions.

Contributors suggest that the focus should be put on EU products with the best energy efficiency potential and take advantage of that within the negotiations – the best available technology should be available without barriers (e.g. high costs of implementation and the need for a large number of licences to import and export new energy-efficient equipment).

Disregarding the significance of tariffs or non-tariffs, according to contributors, setting minimum energy efficiency standards to place products in the market would also be beneficial as it would reduce unfair competition from other markets.

#### CONCLUSION

There is strong support for energy efficiency, demonstrating the win-win potential of a determined and resolute strategy for this initiative.

Ironically, considering the very strong interest and regardless of the contributor's specific sector, the analysis of the public consultation delivered a clear message that there is a lack of information. Citizens, industry and stakeholders in general are often not familiar with the instruments (technology and other policies) they can use to improve energy efficiency. This fact is also clearly identified in the recent Eurobarometer 64.2 (Attitudes towards Energy, January 2006), showing that the main instrument that European citizens miss is information. In synthesis, nearly all the contributors call on the Commission Services to address energy

efficiency through information, particularly using innovative approaches. Contributors request a bigger focus

on education in schools and universities. Their argument is that this would provide much needed expertise on energy efficiency issues, and also provide a "multiplier" for actions.

The importance of legislative and normative instruments is recognised by the contributors to the debate, however there is a strong call for less policy and more action, meaning that current legislation is not implemented effectively in all Member States yet and is not delivering its full potential. A very large number of contributors believe that local and regional energy agencies should be further promoted as they have a big potential to improve this situation. Furthermore, they argue that these Agencies are more aware of local conditions, meaning they could easily and effectively implement energy efficiency measures, including providing information. For the participants in the debate, the creation of "energy advisors" in local and regional energy agencies or public authorities would also be beneficial as a simple but effective vehicle for information to citizens/stakeholders. Finally, better use of public and EU financing such as structural funds or through International Financial Institutions is also mentioned as a means to better implementation.

The validation and dissemination of best practices is also strongly advocated by stakeholders as having a big potential. Projects and measures that were successful in a certain area should be widely disseminated and supported in areas with similar characteristics. They believe that this could be better done at EU level using adequate benchmarks. There is also support to further analyse the costs and benefits of the white certificates schemes at EU level.

The debate shows that Public Authorities have a major role to play on this issue, as they could act as a role model for improving energy efficiency while further developing the market for energy-efficient products and services. This could be strengthened by the introduction of energy efficiency in procurement guidelines at EU level. To make this work, Energy Services Companies (ESCOs) should be further encouraged. By their nature, Energy Services Companies could improve dramatically energy efficiency in public buildings, office buildings and particularly SMEs, that often have no staff allocated to energy issues and where energy efficiency is often disregarded. A stronger emphasis should be given to SMEs as they often have more flexibility and creativity to develop or implement new ideas, in particular due to the very high potential of job creation in the energy efficiency sector.

The current labelling system is considered very effective and there is a strong call to have it implemented on a broader range of products, including industrial equipment, vehicles and housing in a very clear and "user-friendly" manner. The system should also be updated regularly.

Regarding energy efficiency in buildings, many contributions support that the Energy Performance of Buildings Directive should be reviewed in order to have it applied to buildings smaller than 1000 m<sup>2</sup> and promote the use of energy-efficient solutions. But most indicate that this should be done in due course, giving the possibility first to fully implement the current directive and assess the impact of its measures.

The transport sector is also singled out by contributors as having a big potential and need for energy efficiency improvements. The participants in the debate recognise the need to significantly improve vehicle efficiency particularly through effective minimum efficiency

standards. The taxation of vehicles according to their efficiency is mentioned by NGOs as an instrument to promote a shift to more efficient vehicles, together with better land use planning, infrastructure pricing and intelligent traffic management systems.

The energy production sector has a huge potential for energy efficiency improvements mainly through the introduction of more efficient power plants (refurbishing or replacing old ones). Combined Heat and Power is widely supported by NGOs but also by industry as representing a huge potential if effectively connected to district heating grids by recovering heat in power generation and reducing energy consumption for heating in households.

Combined Heat and Power is also mentioned regarding decentralised energy production as it is very flexible and would give a strong contribution to reducing losses in energy distribution grids, together with more research on alternatives to new grids and the renewal of old infrastructures.

Concerning the market opening to efficient products and technologies, there is a clear support from debaters for the use of fiscal policies. Reducing VAT for energy-efficient products, using tax incentives for energy efficiency investments and other fiscal instruments would be widely welcomed as it could represent a major advantage on improving the overall energy efficiency and boosting economic competitiveness.

Finally, it is widely recognised by the participants to this wide debate that the EU could and should do more to spread better energy efficiency practices globally, both as regards emerging economies and developing countries, as well as in multilateral agreements and organisations such as G8 and in the International Energy Agency.

#### A FURTHER STEP

This analysis of the Green Paper on the energy efficiency debate represents the views of thousands of people that have debated for months on the need and the way forward to implement energy efficiency. Clearly, there are broad ideas that receive either strong consensus or even unanimous support, while other ideas are more divisive. This is the reason why the present document is one of the elements that will be used by the Commission to prepare its energy efficiency action plan. The other element will be an Impact Assessment currently underway. As requested by the Conclusions of the European Council on March 24, 2006, the Commission will carefully analyse these documents and in line with what was announced in the Energy Efficiency Green Paper it will submit later this year to the Council and to the European Parliament an Action Plan on Energy Efficiency.

ANNEX I – List of contributors to the debate on the Green Paper on energy efficiency

	Description						
NGOs	Friends of Earth Italy						
	European Mine, Chemical and Energy Worker Federation						
	The Danish Ecological Council						
	Friends of Earth Slovakia						
	Council of European Municipalities and Regions						
	Climate Action Network Europe						
	The Network of Major European Cities						
	World Wildlife Fund for Nature						
	Institution of Electrical Engineers						
	Sauvons le Climat						
	Friends of Earth Spain						
	Friends of Earth Latvia						
	Assemblée Permanente des Chambres de Métiers						
	Fondazione per L'Ambiente "T.Fenoglio"						
	Friends of Earth Ireland						
	The Swedish NGO Secretariat on Acid Rain						
	European Council for an Energy Efficient Economy						
	Forum of European National Highway Research Laboratories						
	Bond Beter Leefmilieu						
	Friends of Earth Czech Republic						
	4x4 info.be						
	Friends of Earth Finland						
	Friends of Earth Europe						
	European Union Cyclist Group						
	European Forum for Renewable Energy Sources						
	Cities and Regions Networking for Innovative Transport Solutions						
	Federation of German Consumer Organizations						
	The European Consumers Organization (BEUC/ANEC)						
	Greenpeace						
	Climate Alliance						
	EnergieCités						
Institutions/Member	Association of London Government						
States	Belgium						
	Carlow Kilkenny Energy Agency - IR						

Compagnia Trasporti Pubblici spa - IT
Economic Development & Transport - Committee of the National Assembly for Wales
Bundes-Arbeitsgemeinschaft Energie der Grunen
UK - National Grid
Confédération Européenne des Distributeurs d'Energie Publics Communaux
Trading Standards South East UK
Kent County Council - UK
EUROCHAMBRES
Communauté Urbaine de Dunkerke
Energitjenesten - DK
Association Municipal Energy Agency - BG
Energy Efficiency Agency - BG
Regione Veneto, Unitá Complessa Energia - IT
Max Planck Institute for Meteorology
Agency of Brasov for the Management of Energy and Environment
National Energy and Environment Agency - IT
Energy and Environmental Agency - Province Perugia
Green Group in the Scottish Parliament
Ministry of Economy of Slovak Republik
Union Internationale des Transports Publics
Alliance 90/The Greens Parliamentary Group
Federal Association of German Housing and Real Estate
Vestjylands Energi - og Miljoforening
European Commission
Sammenslutningen af Danske elforbrugere
Energy Agency Meath County Council
Vereinte Dienstleistungsgewerkschaft ver.di (Trade Union)
Association of Irish Energy Agencies
Danish Energy Authority
North Rhine Westphalia
Energy Agency Freiburg
Energy Agency Hannover
EP - Greens/EFA group
Estonia
Energy Agency Allgaeu
 EU Mayors (Eurocities, EnergieCités, CEMR, Climate Alliance)

	Local Agenda 21 - Italy							
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	London European Office  The National Health Service - London							
	Provinzia de Milano							
	European Federation of Regional Energy and Environment Agencies							
	Regione Piemonte							
	Slovak Republik							
	Energy Agency Tipperary							
	Trading Standards Institute - UK							
	The National Energy Foundation (NEF – UK)							
	Association of UK Energy Agencies (AUKEA)							
	Milton Keynes Energy Agency (MKEA)							
	EU Affairs Committee of the Riigikogu							
	World Sustainable Energy Days							
	ManagEnergy Reflection Group							
	Committee of the Regions - Bernd Vogerle							
	Bremer Energy-Konsens							
	The Netherlands							
	Sustainable Energy Europe							
	Luxembourg - Ministère de l'Economie et du Commerce extérieur							
	Intelligent Energy Executive Agency							
	Hungary Energy Association							
	Groupement des Autorités Responsables de Transport							
	Government of Navarra							
	Conference of Pheripheral Maritime Regions of Europe							
	Energy North East - UK							
	République Française - Assemblée Nationale							
Industry/	French Association of Private Enterprises							
Private Sector	Bellona Foundation							
	Federation of European Rigid Poliurethane Foam Associations							
	Union of the Electricity Industry							
	Hunter Douglas Lda							
	Solar Systems co Ltd							
	European Extruded Insulation Board Association							
	Eurogas							
	E.ON AG							
	Bundesverband der deutschen Gas - und Wasserwirtschaft							
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European Manufacturers of Expanded Polystyrene

Union Française de l'Electricité

American Electronics Association - Europe

International Federation of Industrial Energy Consumers

**ETP Consulting Ltd** 

American Chamber of Commerce to the EU

**European Solar Shading Organization** 

Electricité de France

European Committee of Domestic Equipment Manufacturers

**SUEZ** 

National Heat Pump Association Austria

Fiwihex - energy saving products

German Electricity Association

Fédération Française des Entreprises Gestionnaires de Services

**European Car Manufacturing Association** 

**MICHELIN** 

Renewable Energy and Water

European Insulation Manufacturers Association

European Heat Pump Association

Comite européen des équipements techniques du bâtiment

**European Trade Union Confederation** 

Bundesindustrieverband Deutschland Haus, Energie und Unwelttechnik e V

**NCIE** 

L'Union professionnelle des industries privées du gaz

**Dutch Chemical Industry Association** 

TemoDeck International

Federation of National Associations for Manufacturers of Luminaires and Electrotechnical Components for Luminaire in the European Union

The European association for the promotion of Cogeneration

Asociación Española de Empresas y Asociaciones de Empresas Mantenedoras de Extintores e Instaladoras y Mantenedoras de Equipos y Sistemas de Protección Contra Incendios

Iberdrola

Technical Association of European Natural Gas Industry

Confartigianato Imprese

Verband der chemischen industrie

European Hydrogen Association

	European Autoclaved Aerated Concrete Association								
	Associacion de Empresas con Grande Consumo de Energia								
	Euroheat & Power								
	ALTRAN consulting								
	European Construction Industry Federation								
	European Energy Network								
	Association of Austrian Electricity Companies								
	VKR Holding								
	Federation Internationale de L'Automobile								
	Somfy GmgH								
	Community of European Railway and Infrastructure Companies								
	Taakgroep Isolatie ANRE								
	The European LPG Association								
	Representative of the National Associations of European Transformer Manufacturers								
	Federation of Danish Energy Industries								
	Building Materials Industry/Confederation of Danish Industries								
	Union des Industries de la Communauté européenne								
	European Association of craft, small and medium enterprises								
	German Electrical and Electronic Manufactures association								
	European Federation for Intelligent Energy Efficient Services								
	Danfoss - Heating Division								
	European Copper Institute								
	Association of the European Heating Industry								
	EMERSON Process Management								
	European Photovoltaic Technology Platform								
	The European Cement Association								
	Ceramie Unie								
	European Association of Gypsum Industries								
	Klub Strazov								
	International Ltd - UK								
	European Association of Rubber Industry								
	British Retail Consortium								
	Council of European Energy Regulators								
	Centrica PLC								
	Antwoorden CIR vzw - Isolatie Raad								
	Confederazione Nazionale d'Artigianato								
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	Confagricoltura
	Confcommercio
	Confapi
	Confederazione Italiana Esercenti Commercio, Turismo e Servizi
	Danish Transports and Logistics Association
	European Builders Confederation
	European Information & Communications Technology Industry Association
	European Rail Infrastructure Managers
	European Power Plant Suppliers Association
	Eurocommerce
	The European Heating Oil Association (Eurofuel)
	European Association for the Consumption-based Billing of Energy Costs
	Hydro Building Systems
	International Network for Sustainable Energy - Europe
	Orgalime - European Engineering Association
	Plastics Europe
	Gaz de France
	RICS – Royal Institution of Chartered Surveyors
	Royal Society for the encouragement of Arts, Manufactures & Commerce
	Scottish and Southern Energy
	European Federation for Transport and Environment
	Union européenne des promoteurs-constructeurs
	Vattenfall
	European Centre of Enterprises with public Participation and of Enterprises of General Economic Interest
	Association of German Chambers of Industry and Commerce
	Weber Shandwick
Private Citizens	Ing. Buro Michel - DE
	No name 1 (Italy)
	No name 2 (Italy)
	No name 3 (Italy)
	No name 4 (Italy)
	No name 5 (France)
	Do Jane - NL
	Dhanjisha Variava - UK

Bellisario Numa - FR					
Zbornik Peter - CZ					
Filipe Nelson - PT					
Phuoc Tram - BE					
Ledoux Laurence - FR					
Delearde - FR					
Daniel Shimdt - FR					
Raymond Bonello - MT					
Vitorge Pierre - FR					
Anthony Zammit - MT					
Greig Philip - UK					
Pierre Cornil - BE					
Pori Ossi - FI					
Charles Yousif + Robert Farrugia - MT					
Reinhard Boehnke - DE					
No name 6 (Germany)					
Gregoire van Havre - BE					
Ricci Arturo - IT					
No name 7 (Lituania)					
No name 8 (Portugal)					
No name 9 (United Kingdom)					
Marcos Pratas - PT					
Ekaterina Tsvetkova					
(Other)					
Roland Rotsaert - BE					
Glyni - UK					
Aris Tekelenburg - BE					
Gordon Adam - UK					
Rómulo Alba - Colombia					
Valentino Romeri - IT					

# <u>Annex II – List of keywords and their significance per question</u>

QUESTION 1			Counti	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
coordination	2	1	6	0	9	need of coordination to avoid double work and unnecessary measures
demonstration/validation	3	2	12	1	18	funding for EU wide demonstration program to validate technology in real operational conditions. Promote transition from research to market products.
flexible provisions	1	2	3	0	6	create more flexible instruments to provide state aid to emerging countries
market transformation	4	1	11	1	17	funding to make solutions available at commercial scale
CO <sub>2</sub> storage/capture	0	0	2	0	2	
bureaucracy	2	3	6	0	11	need to streamline access to EU funds and reduce bureaucracy
distinction on research	0	0	2	0	2	distinguish commercial market-driven and fundamental research
energy caps	0	0	1	0	1	energy caps on new buildings to stimulate investment on clean tech
passive options	2	0	5	0	7	support options with low energy use: natural ventilation, solar shading
prioritise larger savings	7	1	8	1	17	give priority and support areas that can deliver larger energy savings
no nuclear	8	1	0	0	9	nuclear energy absorbs too much money leaving RES with few
sensitisation/information	3	1	15	6	25	sensitisation of the "big" public is indispensable
buildings management	1	0	7	0	8	office building management leads to considerable energy savings
overall research	3	0	2	1	6	research on the overall target ( savings in a certain area) rather than on a particular technology
cost/economic benefit	0	0	3	0	3	information on costs and economic benefits of energy savings
low interest loans	0	0	1	1	2	Low-interest loans or subsidies to support investments and renovations
energy standards	4	0	6	0	10	setting ambitious minimum energy standards to stimulate an active demand for energy-efficient products

decentralised production	3	0	0	0	3	decentralise energy production to reduce transmission losses on transportation
active options	1	1	5	0	7	improve efficiency of generators, insulation, CHP, electric/hydrogen transport, auditing and diagnose mechanisms to assess where to act
lack of proper legislation	0	0	5	0	5	lack of regulatory framework to provide incentives and attractive financing mechanisms is an obstacle to achieve energy savings
cost of investment	1	1	5	0	7	technology exists but is too expensive. No further research is needed.
more funds	3	4	8	0	15	more funds to support development and implementation of technology and products in a cost-effective way
market liberalisation	0	0	1	0	1	market liberalisation is needed to improve competition and efficiency in the sector of energy production
technology assessment	0	0	8	0	8	assess existing and theoretical technologies and realise their potential in the EU. The AP should build on this.
focus on RES	5	2	3	0	10	RES have local applications and increase the security of supply and stability in Europe
make consumer pay	1	0	1	1	3	if the consumer has to pay for inefficiency, there will be a demand for efficiency technology creating a sustainable market
modal shift	3	1	0	0	4	to improve connections between different means of transport is energy efficient
energy services	0	0	5	0	5	short term contracts for energy supply increase efficiency from the supplier
tax incentives	2	0	5	2	9	tax exemptions stimulate investment in energy efficiency equipment
research vs implementation	4	0	5	1	10	research should lead to effective systems that produce long-term profits research outcomes should not stay in closed boxes
specific research	3	2	7	0	12	applied research on energy efficiency technology and not only on efficient energy production. Topics decided also by research institutes and not only by central power
implement legislation	1	0	3	0	4	better implementation of existing legislation would lead to energy savings
simulation models	0	1	0	0	1	develop simulation models to easily assess the costs/impacts of a measure/technology

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QUESTION 2	ON 2 Counting					
Keywords	NGOs	MS	Industry	Citizens	Total	long version
ETS + other policies	0	1	2	0	3	ETS together with other policies like CHP, Large Combustion Plant and IPPC Directives will boost energy efficiency in power plants
Cost internalization	0	0	5	0	5	price signal, internalizing costs, will incentivise more efficient and economic use of energy
tax emission rights	0	0	0	1	1	taxes on emission rights to increase public funds to invest in energy efficiency
too complex to monitor	0	0	4	0	4	ETS is too complicated to monitor. CO <sub>2</sub> reduction targets would be more effective
ambitious real targets	11	1	2	0	14	Need to avoid that things remain on paper. Need to have short/mid-term targets to boost action
more incentives	2	0	2	0	4	more incentives to make industry improve energy efficiency
clear doubts	0	0	8	2	10	stakeholders have clear doubts that ETS is the solution
Key tool	3	1	7	1	12	agreement that ETS is a key tool to meet Kyoto objectives and improve energy efficiency
reduce bureaucracy	0	1	2	2	5	need to reduce bureaucracy, making the system more transparent, practical and appealing
benchmark	6	1	2	0	9	create benchmarks on basis of best available technology in order to avoid market distortions
expand scope	2	2	14	0	18	expand scopes by including additional sectors (transport, aviation, buildings,) and gases
not good for housing	0	0	1	0	1	the ETS is not adequate for the housing sector
reduce allowances	2	1	3	0	6	reduce allowances to promote energy efficiency and reduce emissions
auction allowances	6	0	1	0	7	like this, reductions would be made where they would be cheaper

reduce costs	0	0	3	1	4	reduce the costs of management of the system
effective action needed	0	1	1	1	3	MS need to effectively implement EU policies and make them work
NAPs consistency	2	0	3	0	5	consistency between National Action Plans and market-based mechanisms is the key
market based mechanisms	1	0	3	0	4	emphasis on market-based mechanisms is the key
assessment	0	1	2	1	4	need to assess whether ETS is an administrative burden or has environmental benefits and what are they
EU allowances	0	0	1	0	1	create a system of EU wide allowances exchange
award En Efficiency	0	2	4	0	6	with certificates and allowances and based on energy efficiency improvements and not only on the historic of emissions
additional plan	1	0	2	0	3	CO <sub>2</sub> emissions are allocated an equivalent in euros to create a fund for clean energy projects

QUESTION 3			Countin	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
EE essential	9	4	12	3	28	sustainable development and revitalisation of EU economy must take energy efficiency on board
EE Plans essential	6	5	18	1	30	MS should produce specific action plans to improve energy efficiency and disseminate best practices following guidelines from EU policy
modelled reports	3	2	4	1	10	create a model for reporting, making the evaluation, comparison and benchmarking more efficient
sanctions	1	0	0	0	1	sanction MS that adopted/proposed measures and did not implement them
bureaucracy	0	2	9	0	11	Action Plans are useful, but benchmarking, the peer review process and the role of the Sustainable Energy Forum all together will increase bureaucracy
flexibility	0	0	4	1	5	need to adapt measures to different realities in different MS

integrated approach	1	2	6	0	9	one clear plan/report for all energy efficiency policies (environment, transport, economical, housing,)
Cost-benefit analysis	1	3	8	1	13	Cost-benefit analysis by the Commission before proposing is a pre-requisite
benchmarks	9	6	18	1	34	benchmark per sector will induce efficiency gains at lower cost then national level targets and plans
domination	1	0	0	0	1	old fashioned companies are sometimes dominating opinions and not moving to energy efficiency
Government leadership	0	1	0	1	2	public transport/power stations should set an example and be a mirror of efficiency that the public would follow
harmonization	1	0	6	1	8	product/solutions development is sometimes useless because it is disparate in different MS
international standards	3	1	6	0	10	international cooperation must be secured not to compromise efficiency, market growth and global standards
reports made public	6	1	1	0	8	citizens should know what the country is doing to improve energy efficiency
balance	0	2	5	0	7	balance between mandatory and voluntary measures
pressure	1	0	3	0	4	must be put under pressure, otherwise nothing will happen
clear targets per sector	5	2	6	1	14	clear targets per sector will boost actions
umbrella organizations	0	0	2	0	2	could be used as a platform to spread best practices and promote action, especially in SMEs
indicators	0	4	0	1	5	to measure the improvements in energy efficiency
no more policy	1	1	4	0	6	need to stimulate the creativity of citizens/stakeholders launching orders for innovative tangible products/solutions for specific situations
Directive adoption	0	0	2	0	2	annual energy efficiency plans must depend on the provisions (guidelines) of the Directive on energy end use efficiency and energy services after its implementation
existing plans	2	0	3	0	5	many MS/regions already have strategic plans. Need to implement them correctly and support/disseminate the most effective ones.

market competition	0	3	3	0	6	energy efficiency is stimulated by market competition. Political intervention will lead to market distortion.
Short-term measures	1	0	0	0	1	with objectives, resources and monitoring; but also long-term view of the future energy efficiency policy
regional/local levels	2	1	1	1	5	should get more involvement
public procurement	0	1	0	0	1	
specialised funding	0	1	0	0	1	
BP database	4	0	7	1	12	best practice database per area/region with contacts of people/organization

QUESTION 4			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
support	15	4	27	6	52	fiscal policy plays an important role that could be improved
against	0	2	7	0	9	taxes are not the best policy to follow
invest revenues	0	4	6	1	11	revenues from fiscal policy should be reinvested in energy efficiency funds, renewable energy sources or R&D
market based	0	3	9	1	13	market based mechanisms should be supported in order to avoid market distortions that sometimes benefit conventional (less clean) energies
low VAT	6	3	16	2	27	for all energy efficiency investments or clean energies (insulation, , renewable energies, solar shading, CHP, Heat pumps, CHP,)
high taxes	7	2	6	1	16	for pollutant technologies/activities and for high benefits from conventional energies (oil, coal,) that are not reinvested in research of energy efficiency
high VAT products	1	1	2	0	4	polluter pays high VAT for inefficient products or energy used above a capped level
Government example	0	0	2	0	2	government properties/equipments should set the example for efficiency
fiscal harmonization	2	1	7	0	10	EU-Wide coherent fiscal measures

neutral net result	9	1	8	1	19	increase tax on polluting services but decrease it on labor or certain environmentally friendly behaviour
focus on transport	13	3	7	2	25	higher taxes for less efficient models based on annual CO <sub>2</sub> or PM emissions, but not removing registry taxes
avoid disadvantages	2	1	12	0	15	policies should avoid putting EU industry at competitive disadvantage
tax incentives	7	5	22	3	37	specific tax reductions for acquisition or application of the energy efficiency technology in households or companies
targeted low-interest loans	1	1	5	0	7	for renewal or implementation of energy efficiency appliances
tax bad properties	3	0	4	0	7	properties that do not meet energy efficiency standards should be penalised
tax car companies	2	0	0	0	2	tax company cars at the same level as individual cars
guidance	0	0	1	0	1	guide to purchase energy efficiency products
increase use	2	0	0	0	2	increase the use of current instruments is the right approach
positive fiscality	0	0	2	1	3	economic instruments as alternatives to taxes for companies and negative fiscality for citizens(tax exemptions)
long-term policy	0	0	1	1	2	Long-term fiscal policy provides stability to markets making industry more confident regarding investment
define polluter	0	0	1	0	1	before we think about polluter pays, we should assess who is the polluter: the consumer or the producer
heat supply networks	0	0	1	0	1	VAT reductions to reduce i market distortion
Cost-reflective pricing	1	1	0	1	3	show the consumer how much they are paying or saving for energy efficiency
benchmarking	0	0	1	1	2	benchmark policy instruments and fiscal incentives and disseminate the most effective ones
other awards	0	1	1	0	2	award companies that meet all regulations and use BAT with other kind of incentives

QUESTION 5			Countir	ıg		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
support	7	2	12	1	22	
against	0	0	2	0	2	
remove barriers	4	2	5	0	11	remove barriers to effective implementation of energy efficiency measures so that they can be cost effective
ensure transition	0	1	4	1	6	make sure that projects supported can be marketable and self sufficient
simple	2	4	11	0	17	rules need to be simple/transparent and practical
subsidies	0	1	4	1	6	Subsidies for renewables (wind, wave, solar energies,)
based on energy use	1	0	1	0	2	grants/rebates should be calculated based on energy use and coupled with energy efficiency products
prioritise	2	1	0	0	3	state aids prioritisation based on accurate energy efficiency projects analysis
avoid market distortion	0	1	5	0	6	need to assess whether aids will distort the market and avoid that situation
coordination	0	1	2	0	3	coordinate state aid with ETS and other measures and policies (green certificates trade)
maximize existing measures	3	1	8	0	12	maximizing the potential of existing measures/rules is essential
redefine	5	0	2	0	7	redefine structural/regional/cohesion funds policies so that projects are in fact sustainable and energy efficient
equitable distribution	0	2	5	1	8	aids should be equally distributed to avoid market and concurrence distortion
revision	3	2	7	0	12	energy efficiency related investments should be included and promoted in the revision of the EU Guidelines on State Aids
primary market	3	2	4	0	9	the market should give the right signals and incentives. State aids taking the form of tax exemptions should take place in limited periods just to stimulate the market opening

public tenders	9	0	1	0	10	energy efficiency should be a criteria and should be used to promote the use of public services (transport,)
technology neutral factors	0	1	2	0	3	state aid rules must be based on technology neutral performance factors
Start-up initiative	0	0	2	0	2	state aid should only be used on start-up initiatives and for a short period of time
prioritise education	1	0	1	0	2	people who know what they can do and its costs and benefits are a levy to make things work
massive investment	0	1	0	0	1	support massive localized investments to avoid environmental impact and increase performance

QUESTION 6			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
support	12	10	39	8	69	
against	0	0	1	0	1	
driving demand	13	4	23	1	41	Public Authorities should play an exemplary role by investing in RES and driving demand on market and professional capacity (design and application)
info/training	0	1	10	0	11	staff needs to be trained so that green procurement and green public budget become realities
cost is an obstacle	0	1	2	1	4	high cost of equipment/solutions is an obstacle. Tax exemptions could be a solution to reduce the burden
mandatory	5	4	10	2	21	public authorities should be obliged to implement clean technologies in buildings and promote/show them to the public
standards	1	2	5	0	8	standards for energy saving models should be set for buildings with legislation (public buildings performance should be 25% higher that in private buildings)
benchmark	0	2	4	0	6	evaluate and disseminate performance level of public administrations (name and shame)

clarify consumers	2	1	3	0	6	European list of technological solutions, prices and performances. At the present, the field is a jungle
tender requirement	5	3	8	1	17	in new buildings or equipment acquisition, energy efficiency should be a requirement for tenders and procurement
energy services	3	1	7	1	12	contracting lighting, heating, cooling or public building management
EU wide	0	2	0	0	2	National choices should build on EU minimal requirements (to be set)
Public sector targets	1	1	7	0	9	mandatory targets for energy efficiency should be created specifically for public sector
motivate consumers	3	2	13	1	19	show private consumers that their Public Authority succeeded and they can do the same in a cost effective way (life cycle costs)
regulations for procurement	7	6	19	1	33	clear and easy EU regulatory framework for public procurement is needed
guidance	2	3	3	0	8	guidance and promotion of best practices among local/regional authorities
joint procurement	1	0	0	0	1	joint public procurement between several small local authorities to get rebates and new products/services secured by big authorities
no more regulation	0	1	0	0	1	no need for more regulation that has different interpretations in different MS and is very complicated
energy performance certificates	0	2	0	0	2	should be displayed visibly so that public can take note of them
road map	1	0	0	0	1	each MS should detail opportunities, costs and benefits of efficiency improvements, identifying the biggest potentials

QUESTION 7			Countin	ıg		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
improve existing initiatives	8	4	7	2	21	inform, synchronize and implement (assess, re-prioritise) existing policies

criteria	0	0	4	1	5	criteria for production, utilisation, elimination and creation of eco-products
control	0	1	1	1	3	reinforce environmental control at commercial and industrial levels EU-wide, putting pressure without imposing methods
cooperation	0	1	2	1	4	industrial, economic and academic centres across Europe to cooperate and create a market for energy efficiency and eco-products
environmental ethic	1	1	6	1	9	deliver/promote moral duties of society. It is not individual responsibility, it is for society as a whole.
commitments	1	1	3	0	5	EU agreed targets and commitments to promote/backup national programs
energy agencies	11	2	1	0	14	establish them to provide advice, local expertise, seek for local opportunities for energy efficiency and manage knowledge transfer programs using Regional Policy Funds
harmonization	0	1	7	1	9	financing systems to energy efficiency programs through public budgets should be harmonized at EU level
local conditions	6	3	10	0	19	energy efficiency funds should take into account local conditions (climate/resources/energy)
priority	3	1	4	0	8	energy efficiency should be a priority at all levels in all projects
targeting	2	0	8	1	11	target funds to where the potential is bigger
Publicprivate partnership	0	0	4	0	4	makes programs/investments more robust
benchmarking	0	1	6	1	8	benchmark projects, business cases in a detailed, transparent way to robust decisions
reintroduce funding schemes	2	1	2	0	5	successful subsidy schemes should be reintroduced and/or improved
general funding framework	0	0	4	0	4	general funding Framework, but no harmonization given the wide variations between MS (demographic, primary fuel sources, climatic,)
co-financing	2	3	5	0	10	National and EU financing
Third-party financing	0	0	1	0	1	at national, regional and local levels could also provide solutions and reduce interest rates for energy efficiency investments

integration	0	0	3	0	3	with other instruments like CO <sub>2</sub> quotas or/and energy certificates
cohesion/structural funds	5	0	12	0	17	allow them to support energy efficiency
not necessary	0	1	0	0	1	energy efficiency funds are not needed. They would only increase the burden on energy prices

QUESTION 8			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
hard look	2	2	4	0	8	CEC should have a hard look on actions at national level and implementation of EU policies. Not to be soft on infringements.
building management	1	0	2	2	5	Economic lamps, movement detectors for lamps. In construction: increase natural lighting
assure energy efficiency	6	4	15	1	26	check implementation and continuation of use of energy efficient technologies in buildings
benchmark	1	0	2	0	3	only between countries with similar climates
flexibility	1	1	4	0	6	building regulation cannot be EU-wide, seen the differences between MS
Directive review	11	3	19	0	33	Review of the Energy Performance of Buildings Directive should include buildings of less then 1000 m2. should also include mandatory CHP, RES, integrated heating networks, heat pumps
retrofitting	7	1	5	0	13	80% of the buildings we will have in 2020 are already built. We need to renovate and retrofit.
right instrument	2	0	6	0	8	Energy performance in Buildings Directive is the right instrument if well implemented
specific regulations	3	0	6	1	10	specific directives for insulation/solar shading/blinds/windows for refurbishment of old buildings
difficult implementation	3	2	5	0	10	Difficult implementation of the building directive because of lack of expertise for designing and building. Urgent that CEC supports and monitors the development of this expertise

European Standards	1	1	7	0	9	European minimum energy performance requirements according to BAT to assess the implementation of the Directive
focus on implementation	5	7	19	0	31	Primary focus should be on implementing the current Directive and assess cost effectiveness of measures undertaken.
energy certificates for buildings	1	2	9	0	12	Successful mechanism promoted by Energy Agencies. Should be shown to citizens promoting energy efficiency.
stricter obligations	1	1	7	0	9	compulsory targets for replacement and renovation of equipment/buildings
ESPC	1	1	3	0	5	Energy performance contracting. ESCOs are key to big savings in almost all sectors
aids for diagnosis	1	2	7	0	10	aids to MS to control the energy performance diagnosis/inspections in buildings
create a market	0	1	1	1	3	need to create a market for energy efficiency services. Already being done by the directive on energy services
social benefits	3	0	0	0	3	deliver social benefits to those who implement the Directive

QUESTION 9			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
middleman	0	0	2	0	2	create an authority to "mediate" and propose solutions where both owner and tenant benefit
reflect certificates	5	3	16	3	27	energy performance certificates should be reflected and mandatory in every property transfer
proper implementation	4	0	8	1	13	proper implementation of the Buildings Directive is fundamental
increase value	0	3	11	2	16	owners investment on energy efficiency increases the value of the property but also the rent (gradually). It is easier to rent if you provide energy efficient buildings
taxes	3	0	2	1	6	owners that do not renovate should pay extra taxes that should be deducted to the user of the building (that pays higher bills of energy)
Low-interest loans	2	0	5	1	8	to help owners make necessary energy efficient improvements

tax incentives	5	4	16	4	29	for energy efficiency improvement works
ABC rating	3	1	4	1	9	for buildings, as it was very effective on domestic appliances, including gross rent and energy efficiency price/cost
range of measures	0	1	2	0	3	not isolated measures, but a range of them: market forces, regulation, incentives and information
information	3	2	5	1	11	awareness on certificates and benefits of energy efficiency technology is fundamental to make them work
minimum energy requirements	1	1	5	1	8	EPBD should encourage MS to set minimum requirements for use of energy in buildings
ESPC	0	0	8	0	8	ESCOs are responsible for maintaining and guaranteeing energy saving measures. They are only paid if benefits are achieved
improve standards	2	1	0	2	5	improve existing building codes and make sure that MS comply
energy audits	3	1	3	2	9	define cost-effectiveness and link inspections to building taxation, making it more expensive if buildings are not performant
no legal incentive	0	1	1	0	2	at the moment there is no legal incentive that takes landlords to improve energy efficiency in buildings
producers responsibility?	0	0	1	0	1	the using of buildings is reflected in a fee that is converted to improve energy efficiency in buildings
dual approach	0	1	0	0	1	give incentives to owners and encourage tenants to demand more efficiency

QUESTION 10			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
mandatory	8	3	1	0	12	legislation should be mandatory, stronger and effectively implemented
enlarged labelling	12	7	20	6	45	apply labelling to a larger range of products and include more information about costs and savings
life time	5	1	3	1	10	information on the costs of managing a product over its life time should be provided in the labels

harmonise test methods	3	0	3	0	6	EU-wide harmonization of test methods is absolutely necessary to avoid unfair market
information	8	7	18	3	36	information campaigns to stimulate labelling "looking" and the option for new technology (more efficient)
efficiency alternatives	1	0	3	0	4	cogeneration, micro generation, heat pumps, all RES
standby	4	3	3	2	12	invest on reducing its significance (5%-10%) at EU level on all products
market surveillance	2	1	3	0	6	check labelling and technical certifications of products to avoid unfair competition
funding programs	0	1	2	0	3	for the design of energy efficient products
VAT reductions	2	1	4	2	9	for energy efficient appliances and increases for non efficient
certificates for buildings	0	0	2	0	2	certificates for energy performance of buildings
revision	7	1	3	0	11	standards for labelling should be revised every 3 to 5 years to keep out the whorst appliances
take-back system	0	0	3	0	3	to facilitate the substitution of appliances, a recovery system (of the old product) should be facilitated by companies
benchmark	3	1	3	0	7	benchmarking products at international level boosts competition and energy efficiency
one standard	1	0	0	1	2	one EU-wide standard is needed. We have too many standards
Directive revision	1	0	1	0	2	revision of the labelling Directive (wider range of products, minimum energy efficiency requirements, changes in tax system, incentives to take up most efficient products)
minimum standards	6	2	3	0	11	mandatory minimum standards for energy efficiency in products

QUESTION 11			Countin	ıg		
Keywords	NGOs	MS	Industry	Citizens	Total	long version

taxes	3	3	6	6	18	car taxes should take into account the consumption of the car as well as ${\rm CO_2}$ or PM emissions
eco-responsibility	3	2	2	6	13	promote an eco-conscience and stimulate eco-behaviour from consumers/producers
labelling for cars	2	1	2	3	8	easy way to let consumers know what they are buying and inducing a better choice
voluntary ineffective	10	1	2	3	16	voluntary agreements are generally ineffective
encourage efficient vehicles	3	3	8	7	21	encourage hybrids, fuel cells, stop and start, etc, and discourage sportive, SUV or prestige pollutant cars
fiscal measures	2	0	5	4	11	fiscal measures to discourage car usage and encourage use of clean fuels are the solution. Without them, nothing works
very low efficiency	3	1	1	0	5	combustion engines have very low efficiency. Need to invest on research to improve it
mandatory requirements	8	2	4	3	17	to car manufacturers regarding efficiency, labelling and power
land planning	2	0	3	2	7	land and town planning should be reshaped to make individual transport less important
information	3	3	5	0	11	would help consumers including energy efficiency in their decisions
balance	4	1	2	0	7	between mandatory and voluntary measures (eg multi partite agreements)
limit cars speed	0	0	0	1	1	that would lower the consumption and improve traffic conditions reducing jams

QUESTION 12			Countin	ıg		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
essential	7	3	18	1	29	public awareness is essential to make any policy successful
benchmark	1	3	8	1	13	benchmark the best actions undertaken in Europe and disseminate them
focus on schools/universities	5	3	7	1	16	clear and not discriminatory campaigns are essential and should focus mainly on schools and universities

cooperation	6	1	9	1	17	between public administration, media and industry could bring good profits
invoices	0	0	4	0	4	energy companies could use their invoices to deliver advice to the consumer
energy agencies	4	5	6	0	15	EU-wide campaigns are important, but local Energy Agencies are closer to consumer (local reality) and are able to deliver a lot more results
capacity building	2	7	9	2	20	training of trainers is essential to deliver the right message in an effective way
product testing	0	0	1	0	1	product testing should be shown through the media - factual information has more impact
Public-private partnership	0	0	2	0	2	joint forces of institutions/industry/public authorities with the common objective of improving energy efficiency deliver a lot better results
more visibility	5	6	18	2	31	campaigns should be more visible in the media. If well managed, they could be self supported (sponsorship)
clear	5	1	10	3	19	campaigns must be simple, clear and deliver information concerning costs and savings, making the link between energy efficiency practices and health
integrated approach	5	4	8	1	18	awareness should be accompanied by legislative, regulatory or policy measures
support to agencies	3	2	2	0	7	support agencies that are responsible for delivering awareness
database	5	2	2	0	9	create a reliable user-friendly public database
financing	4	0	0	0	4	campaigns should be financed by local, regional actors through energy efficiency funds
focus on SMEs	1	0	0	0	1	focus on SMEs and private households gives a lot more turn back
Long-term campaigns	2	1	0	0	3	have a stronger effect if they are well planned
guidelines	0	0	1	0	1	the commission should provide guidelines for campaigning but national campaigns have a lot more impact then European ones

QUESTION 13			Countin	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version

no price increase	0	1	2	0	3	measures should not lead to higher electricity prices
decentralized	13	8	12	1	34	decentralized energy generation system provides more security on supply
more CHP/RES	9	7	19	4	39	more CHP, gas, CCGT and renewable to feed into the grid
SMEs partnership	0	0	1	0	1	research in cooperation with SMEs (creativity)
role definition	0	0	1	1	2	clear definition of the role of private or public bodies who work in the field
harmonization	3	1	4	0	8	rules should be the same across EU in order to facilitate the connection to the grid and trans-national distribution
household microgeneration	0	0	2	1	3	very efficient and could easily diminish grid overload
more research	5	1	8	1	15	research on software/devices to control grid peak demand and evaluate patterns of consumption reducing grid losses
energy storage	0	0	2	1	3	energy storage in small communities should be studied using hydrogen in conjunction with RES. This could be used in households and transport
day/night tariffs	0	0	4	0	4	EU-wide harmonization of day and night time tariffs
avoid monopolies	0	1	2	2	5	encourage SMEs and not big energy lobbying companies that block the market
more funds	3	1	5	1	10	to renew the grid of supply reducing energy losses
mandatory standards	6	0	10	0	16	mandatory minimum standards for grids
benchmark	1	0	1	0	2	EU-wide benchmark identifying best practices
economic incentives	0	2	2	1	5	differentiated taxes to incentivate shift to CHP and increase efficiency in transmissions
clear/ambitious	2	1	1	0	4	EU should adopt a clear, credible and ambitious policy for the period after 2012
market liberalization	0	2	4	0	6	to boost competition and increase efficiency
retain profit	0	0	1	0	1	producers should retain profits from energy efficiency gains to reinvest
maintenance	0	1	0	1	2	maintenance of grids is essential. old cables lead to lower transmission efficiency. Risk of accidents and power loss is reduced.

QUESTION 14			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
strict legislation	1	3	4	0	8	is the only way to improve energy efficiency
energy performance standards	0	0	3	0	3	for equipment and buildings
incentive to suppliers	3	1	12	0	16	linked to the savings of the consumers
mandatory	2	2	7	0	11	energy services scheme should be mandatory as it has a big savings potential
ESCOs	10	3	13	0	26	should be promoted and supported to increase efficiency in households, industry and production
liberalization	1	0	2	0	3	market liberalization would stimulate competition and efficiency
simple	1	2	4	0	7	simple administrative regulations are more efficient
market based	5	2	12	0	19	market based mechanisms are more effective then regulations
partnership with ESCOs	0	1	2	0	3	energy efficiency is an opportunity so, joint ventures between suppliers and ESCO are good solutions
voluntary agreements	1	2	5	1	9	for large companies to become more efficient
different tariffs	0	1	1	1	3	for private consumers, industry, commerce, for different periods,
no voluntary	7	0	1	1	9	does not work. The objective of energy suppliers is to sell as much as possible
real benefit	1	1	6	0	8	for the consumer and for the supplier
pilot areas	2	0	1	2	5	to try the concept and see if it works
training	4	0	3	1	8	for the utility and energy companies staff
white certificates	0	0	5	0	5	promote them at EU-wide scale
information	3	1	12	0	16	all segments of clients have to be informed of the opportunities they are offered

awards	1	0	0	0	1	for communities that achieve certain targets of efficiency
energy advisor	0	1	2	0		each municipality should have one energy advisor to manage energy contracts and give independent advice to consumers

QUESTION 15			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
analyse	6	2	15	1	24	Analyse current experiences and compare them at EU level. Certificates should be consistent with existing measures, bring added value and not duplicate
very complex	5	1	8	1	15	complexity of the rules makes the system inefficient. Too much bureaucracy
not effective	0	0	1	0	1	white certificates have not demonstrated to be effective
not the solution	1	1	13	1	16	substantial part of the consumption is made by citizens, not companies. Companies have few interest on white certificates
encourage and increase	1	4	5	1	11	white certificates are a good instrument and they should be introduced at EU level
local initiative	2	0	3	0	5	local (national) white certificates and then pass to a harmonized EU market
coherence	1	0	3	1	5	the market has to develop in order to well integrate white certificates
define trading	0	0	3	0	3	need to define if the certificates should be just issued or traded at EU level
good regulation	4	0	2	0	6	white certificates will only work if accompanied by good regulations and ambitious targets
Kyoto connection	1	0	2	1	4	create a certificates system based on carbon to link it to Kyoto commitments
transparent	2	0	7	0	9	transparent and EU-coherent measurement scheme should be used linking to carbon savings
standards	2	0	2	0	4	targets and certificates are useless without product standards as they are needed to calculate the outcome
mandatory targets	0	1	1	0	2	more countries would consider adopting white certificates

merger	0	0	1	1	2	merge both schemes, ETS and white certificates
not linked	5	0	2	0	7	ETS must not be linked to other EU certificates system
information to the public	0	0	1	0	1	general public (that makes things work) should be better informed of these schemes
step by step	1	0	1	0	2	the approach must not be on one step not to avoid a large burden and putting actions at risk
distribution, not generation	0	0	1	0	1	white certificates should involve all types of energy companies but not generation
market mechanism	0	0	4	0	4	white certificates should be designed as a market mechanism
involve all actors	0	0	1	0	1	from producers to consumers
definitions	0	0	1	0	1	CEC should give more concrete definitions of Energy Efficiency Service and Energy Performance Contract
ESCOs	0	0	1	0	1	independent ESCOs to sell/issue energy certificates accordingly

QUESTION 16			Countin	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
benchmark	0	0	8	0	8	to set achievable goals in energy efficiency using cost effective technologies
Low-interest loans	0	0	1	0	1	to help industry on their investments
rewards/fines	1	2	2	1	6	benchmark setting with rewards for good performances and fines for bad ones.  E.g.: giving more or less allowances
tax benefits	8	1	2	0	11	to support and incentivate energy efficient investments and replacement of inefficient equipment
labelling	6	0	4	0	10	labelling system for industrial equipment
performance standards	8	0	2	0	10	mandatory minimum energy efficiency performance standards to avoid easy competition (from China)

existing rules	4	3	6	1	14	systematic application and use of existing technology and rules
mandatory targets	2	2	5	1	10	for public and private parties
ISO/EMAS certification	1	0	2	0	3	with effective verification, promoting the involvement of all company staff
information	2	3	7	0	12	effective information to the consumers regarding engines/equipments performance and energy performant industries in order to generate a market demand
financial assistance	1	2	11	1	15	for industry to promote energy efficiency
voluntary agreements	2	4	14	0	20	should be given preference over regulation
more R&D	1	0	2	0	3	more research to better fit technology to specific problems
energy audits	0	1	4	2	7	implement mandatory energy audits to help companies developing a "energy culture" and identifying opportunities
info to business	1	4	10	0	15	giving industry information on costs of energy and opportunities to decrease it improving energy efficiency
Public-private partnerships	1	0	1	0	2	
market balance	2	0	4	0	6	market should not be destabilized leading to unfair competition (free-riders)
more stringent	7	0	1	0	8	EU, National authorities should be more hard on controlling implementation and compliance
no additional regulation	0	0	1	0	1	not to increase the burden
national level	0	0	1	0	1	the best for addressing energy efficiency measures
performance certificates	1	0	0	0	1	would lead to a bigger concern and influence behaviour in a good way

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QUESTION 17	Counting	
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Keywords	NGOs	MS	Industry	Citizens	Total	long version
better service	1	3	5	3	12	improve quality of the service offered (punctuality, flexibility,)
new pricing	0	2	1	4	7	encouraging public transport and discouraging private
policy/pricing the infrastructure	5	2	1	0	8	setup pricing mechanisms and policies to manage infrastructures (differentiate efficient vehicles,)
information	1	1	4	2	8	more information and awareness campaigns. need constant effort of improvement
EU-basis intermodality	3	3	8	1	15	to facilitate international travelling and transport
good integration	3	1	7	3	14	of different transport modes
park & ride	1	0	1	0	2	must be extended and improved to become more attractive
land-use planning	1	1	2	1	5	to increase use of public transport and discourage use of private vehicles in cities
pricing framework	7	1	1	2	11	needs to be completed ASAP
rail policies	2	0	5	1	8	need to be pursued vigorously
too expensive	0	1	0	1	2	infrastructure investment is too expensive
tax aviation	11	0	3	1	15	new for of taxation/emissions trading for aviation/navigation needs to be examined
reduce parking	1	0	0	0	1	in cities, in order to decrease the number of vehicles going inside
modal shift	7	1	4	0	12	improve and increase modal shifts in cities
avoid bureaucracy	0	0	4	0	4	overregulation and increase of time and cost intensive bureaucracy must be avoided
define products to carry	0	1	0	0	1	definition of sets of products that cannot be transported on road
traffic limitations	5	2	0	0	7	inside cities to encourage and develop public transport (congestion charges, roads closed to traffic, one way streets,)

research projects	0	0	1	0	1	should be analysed further. E.g Wuppertal Institute on traffic management systems
cost-benefit analysis	0	0	1	1	2	preliminary, reliable cost-benefit analysis is essential
market share	0	0	2	0	2	for clean vehicles
competition	0	3	0	0	3	reduces price and increases quality of service
more investment	2	2	1	1	6	in rail, intelligent transport, inland water transport,

QUESTION 18			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
support railways	7	0	0	1	8	more resources directed to railways
impact assessment	7	0	3	1	11	transparent cost-benefit analysis on investments are needed to assess which have a bigger impact and energy efficiency, so they can be better supported
integrated	2	3	2	0	7	funding from several simultaneous funds (public, EU, EIB, EBRD, extra-budgetary funds, auto financing in highways)
Polluter Pays Principle	8	1	1	3	13	revenues from road pricing, congestion charges and fuel taxes should be used to improve energy efficiency in infrastructures
prioritise	11	2	1	2	16	give priority to sustainable projects with bigger revenues in shorter periods of time
invest in current infrastructures	3	0	0	1	4	invest in energy efficiency measures in current infrastructures rather then investing in new ones
low speed	4	0	0	1	5	invest in low speed infrastructures
control capacity	1	0	3	1	5	invest in dynamic capacity of management systems for infrastructures
Public-private Partnerships	0	2	5	0	7	are a mean to increase investments, also meaning more jobs and catalyst effect of Community support
companies` taxes	1	0	0	1	2	energy companies (and others) have major benefits from investments in infrastructure that uses electricity so they should also support its implementation

administrative problems	0	0	1	0	1	the problem is not financing but bureaucracy and slow license management
no tax increase for citizens	0	2	0	0	2	
government	0	0	1	0	1	government should be responsible for financing infrastructures together with banks
labelled investments	1	0	0	0	1	label infrastructure projects relating to energy efficiency and give more or less support based on that

QUESTION 19			Countin	ıg		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
integrated approach	4	2	9	3	18	do not focus on individual innovations but take a more integrated approach (mandatory/voluntary measures balanced)
traffic management	2	2	2	1	7	in order to reduce jams and waiting periods in cities, increasing energy efficiency
fuel efficiency standards	14	3	12	9	38	clear, binding and transparent targets for fuel efficient including characteristics of tyres/air conditioners
incentives	6	6	8	1	21	for shifting from current combustion engines to energy efficient or non motorized vehicles
eco driving	4	2	7	2	15	teach drivers on eco driving styles reducing energy efficient
regulatory measures	4	3	3	0	10	clear measures, for example: limit the fuel consultation on cars
ACEA agreement binding	5	0	0	0	5	ACEA agreement should be made binding, as car manufacturers are not making enough efforts
car labelling	4	0	0	0	4	clear message with info about energy performance of vehicles
priority to freight transport	1	0	0	0	1	priority to freight vehicles and trucks regarding innovation is vital to sustainable economic development in regions
cost-effective	0	0	1	2	3	cost effective measures should be more supported and demonstrated in order to increase their acceptance and penetration

encourage energy- efficient vehicles	4	1	4	0	9	modal shift to energy efficient transport is vital
London model	1	0	0	0	1	London and Stockholm initiatives on traffic limitations should be encouraged in other cities
procurement	1	0	0	0	1	energy efficiency should be a criteria in procurement for cars
infrastructure design	0	0	2	0	2	roads and motorways correct design and improvement could have a major benefit in reducing energy consumption
more R&D	2	0	3	1	6	research and development should be encouraged for continuous improvement
voluntary agreements	0	0	1	0	1	to be further developed focusing on public fleets
partnerships	0	0	1	0	1	facilitate partnerships between local authorities and local operators to improve urban areas efficiency
taxes	5	3	0	2	10	different taxes according to different energy consumptions for cars and other equipment
information	0	0	1	0	1	
energy audits	0	1	0	0	1	mandatory energy audits to transport energy companies

QUESTION 20			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
Public authorities to lead	12	6	14	3	35	Public authorities are taken as an example and they should be obliged to acquire a percentage of fuel efficient vehicles
guidelines	1	2	0	1	4	to public authorities to stimulate requirements on energy efficiency and environmental criteria in procurement
shift of market	2	0	1	0	3	is needed and public authorities have the power to do it without the risk of market distortions
consumption limits	4	1	2	1	8	for each vehicle and performance targets for the whole fleet

financial support	1	2	1	2	6	high costs of some efficient vehicles diminish the demand - need for supports
dialogue with manufacturers	1	0	0	0	1	in order to identify the most efficient solutions
private companies	1	0	0	0	1	impose obligations also to private companies
freedom	0	2	1	1	4	public authorities should be free to choose how to improve and obtain a clean fleet
expand scope	6	0	0	0	6	procurement not only for heavy duty vehicles
balanced	2	3	4	1	10	member states and public authorities should ensure a balanced and focused approach to avoid market distortions
leasing	0	0	0	1	1	procurement can be replaced in part by leasing as owners (leasing company) will keep the vehicles in good conditions (efficient)
speed limits	1	0	0	0	1	procurement not only with energy efficiency requirements but also with speed limited vehicles
definition	1	1	3	0	5	definition of all the recognised technologies at international level in order to avoid market distortions. The competition will then lead the market
not many offers	0	1	0	0	1	the market does not have many offers in terms of efficient vehicles
common procurement	1	0	1	0	2	public authorities should be encourage to pull forces and buying together, resulting in cost savings
totally	0	0	0	4	4	public authorities should renovate all the fleet with efficient vehicles
buildings	1	0	0	0	1	public authorities should include energy efficiency criteria in procurement for buildings/services also
information	0	1	1	0	2	recent EU legislation on procurement needs to be encouraged and explained at local level

QUESTION 21			Countin	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version

expand congestion charges	8	2	5	2	17	congestion charges are good and should be implemented in more cities
taxes	5	2	5	1	13	taxes over fuels and inefficient vehicles and compulsory insurance schemes to externalize costs
polluter pays	10	3	3	4	20	those who cause the problems should pay for them
green fleets	10	3	8	1	22	for urban public transport, supported by the revenues from the congestion charges
EU framework	5	0	2	2	9	providing necessary conditions and guidance for implementing infrastructure and local congestion charges
demonstration projects	1	1	1	0	3	to show the potentialities of this kind of measures
calculate costs	3	0	2	2	7	transparent method to calculate costs should be implemented
holistic approach	0	0	1	0	1	social, economic, environmental dimensions should be integrated in policy making/actions
revise "Eurovignette"	4	0	2	1	7	revision of the "Eurovignette" Directive is necessary in order to avoid market distortions and avoid that all the costs are being paid by society
different forms	0	0	1	0	1	to tighten-up measures in different areas with different problems
services congestion charges	0	1	0	1	2	external costs are sometimes caused by road closure, road works, traffic lights. Entities should also pay for that.
intelligent charging	0	0	2	1	3	flexible charging, changing with the different periods of the day and in different areas. Avoid peages and use electronic payment.
not good idea	0	3	2	1	6	will bring increases on products price and social discrimination
stimulate clean vehicles	0	0	1	0	1	no congestion charges for clean vehicles

QUESTION 22			Countin	ıg		
Keywords	NGOs	MS	Industry	Citizens	Total	long version

support	8	3	7	1	19	
EPSC	8	1	7	0	16	these schemes should be better developed within EPSC (performance commitments, long duration services,)
funds	13	2	12	1	28	EU should give support through structural and regional funds
working group	1	1	0	1	3	commission should create a working group with stakeholders, financing institutions and Member States to identify the best mechanisms and opportunities
dissemination	10	1	9	4	24	support for dissemination of best practices is needed
information	4	1	7	2	14	stakeholders, institutions should be informed of the possibilities and their benefits
performance rewards	0	3	0	1	4	give rewards to companies who invest and succeed in energy efficiency
benchmark	0	0	2	0	2	benchmarking in order to identify the guidelines to follow in the future
partnerships	1	2	5	1	9	could be developed between companies and local authorities to give access to more funds and assure competition
criteria	0	0	3	2	5	for granting funds and implementing projects
energy agencies management	0	2	1	0	3	energy agencies, as neutral structures, should manage the projects

QUESTION 23			Countin	ıg		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
persuasion	2	2	5	1	10	EU should try to persuade third countries to adopt energy efficiency
international energy standards	1	1	6	1	9	to facilitate business relations and promote energy efficiency
revise neighbourhood policy	2	0	0	0	2	to strengthen energy efficiency issues
EBRD as example	6	0	0	0	6	the EBRD provides free energy audits before any lending. This should be implemented in other branches of the world bank

International Energy Agency	4	0	1	0	5	EU should support the growing engagement of the International Energy Agency
leadership	3	0	3	1	7	EU should take the leadership in energy efficiency in order to promote European technologies and companies
facilitate	2	0	2	0	4	cooperation with third countries on electricity distribution to increase security of supply
win-win solutions	2	0	1	0	3	EU to cooperate with third countries in order to develop win-win solutions
partnerships	3	0	10	0	13	stimulate partnerships mainly between SMEs, focusing on research and business
sustainable aid	5	3	10	2	20	preferential aid should be allocated to sustainable projects promoting energy efficiency and renewables
provide expertise	2	0	0	0	2	EU should be able to support foreign countries providing necessary expertise and technical collaboration, namely through the Intelligent Energy Executive Agency
institutional barriers	0	0	2	0	2	EU should address them in order to promote investment in energy efficiency at international level
dissemination	5	0	12	2	19	dissemination of best practices to third countries
IFIs to priority	4	1	0	0	5	energy efficiency projects should be given top priority by International Financial Institutions (IFIs)

QUESTION 24			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
know how	7	3	7	1	18	free of charge provision of know-how to developing countries
transfers	8	2	10	2	22	of knowledge and technology but having in regards adaptation due to different cultures, socio-economic situation
Local authorities partnerships	1	0	0	0	1	to promote exchanges between local authorities of developed and developing countries

export	1	0	3	1	5	EU should engage promotion of exports of energy efficiency goods and technologies
pluri-annual programs	0	0	1	0	1	which should be periodically verified for "performance" by the EU
WTO negotiations	0	1	1	0	2	need to ensure that services in energy efficiency remain in the field of the negotiations of the WTO so they can profit from non-discrimination and market opening
build capacity	1	0	5	2	8	building capacity, support and develop energy efficiency technology in third countries instead of recycling old technology
expertise	2	0	2	0	4	Intelligent Energy Executive Agency should provide necessary expertise and support technical collaboration
international treaty	1	0	1	0	2	developing countries could keep funding if they achieve their targets
collaboration	2	2	6	2	12	with organizations, centres, associations and companies in developing countries
benchmark	0	0	1	0	1	
CDM projects	5	1	5	0	11	good vehicles for dissemination of good technology

QUESTION 25			Countir	ng		
Keywords	NGOs	MS	Industry	Citizens	Total	long version
create market	2	1	2	0	5	measures should be supported to develop a market for energy efficiency products accessible to a broader range of countries
avoid market distortion	6	1	5	0	12	reality is not the same in every country. Negotiations should take that into account in order to avoid market distortions
focus on EU	3	0	3	0	6	focus on EU products with best energy efficiency potential and take advantage of that within the negotiations
ban low efficiency	0	0	3	1	4	low efficiency products production should be banned
without barriers	6	0	0	0	6	best available technology on energy efficiency should be available without barriers
targets	0	0	2	0	2	set targets for long term benefits

standards	1	0	5	1	7	instead of tariffs, legislate minimum energy efficiency levels to place products on the market
environmental goods	1	0	1	0	2	increase the WTO list of environmental goods (CHP for example)
balance support programs	0	0	0	1	1	support programs to energy efficiency should be more balanced and international financing institutions should be more encouraged to get involved
funds	1	0	0	1	2	funds for long/medium term projects on energy efficiency in countries that accept negotiations
against	0	1	1	0	2	against movement for free trade for products and the categorization into energy efficient and non energy efficient products

## ANNEX III - General statistics regarding the contributions on the Internet Platform





