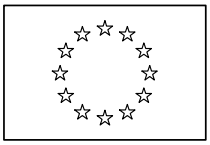

COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 8.3.2011
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COMMISSION STAFF WORKING DOCUMENT

IMPACT ASSESSMENT

ANNEX I

Accompanying document to the

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS
COMMISSION STAFF WORKING DOCUMENT

Energy Efficiency Plan 2011

COM(2011) 109 final
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ANNEX I

REPORT ON THE PUBLIC CONSULTATION

ON

EVALUATION AND REVISION OF THE ACTION PLAN FOR ENERGY EFFICIENCY

In line with the Commission's commitment to transparent and interactive policy-making, this documents aims at providing an overview and general impression of the feedback provided to the Commission in the context of a public consultation. The statements and opinions expressed in the document do therefore in no way necessarily reflect those of the Commission or the Commission services.

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Executive Summary

At the Spring Council 2007, the EU Heads of States and Governments stressed the need to increase energy efficiency in the EU so as to achieve the objective of saving 20 % of the EU's energy consumption compared to projections for 2020[1]. However, evaluations suggest that the energy saving potential is not being realised fast enough and the measures adopted so far can only achieve energy savings of about 11% by 2020, if properly implemented by Member States.

On 19 October 2006, the Commission adopted the Action Plan for Energy Efficiency: Realising the Potential (EEAP)[2]. As announced in the Plan, the Commission is to prepare in 2009 a revised Action Plan, as requested by the European Council. In this regard a Public Consultation on the Evaluation and Revision of the Energy Efficiency Action Plan was launched on 8 June 2009 with a deadline on 3 August 2009.

This report presents the results of the public consultation on the Evaluation and Revision of the Energy Efficiency Action Plan. This public consultation was also held in order to receive input for the New Energy Efficiency Action Plan planned to be adopted by the end of this year.

There were 203 submissions to the on-line public consultation, 173 organisations and 30 individuals. In addition, 6 submissions via email were sent to the Commission by organisations which did not make use of the web-based interface to reply to the questionnaire.

Overall, 173 organisations, the 30 individuals and the additional submissions have generally acknowledged that the measures in the current Energy Efficiency Action Plan should continue to be implemented. However, the majority of the stakeholders argued that the time had come for a more focused and targeted approach in order to promote energy efficiency further.

The topics highlighted to be targeted were energy efficiency of buildings, access to financing, energy efficiency both on the supply and demand side for SMEs and a better use of the Structural and Cohesion funds with regard to energy efficiency projects.

It was also pointed out that the new Energy Efficiency Action Plan should recognise the role of the local politicians in the delivery of energy efficiency in Europe. The Covenant of Mayors was mentioned to be a successful policy instrument to bring energy efficiency policy to local level. Several stakeholders were also of the opinion that cogeneration and district heating planning had to be further promoted since the existing legislation had not given the correct incentives to develop these policy areas satisfactorily. White certificates were mentioned as an instrument that could give the correct incentives in this regard. However, there seemed to be a general reluctance for a unified EU wide Certification Scheme to be introduced.

The majority of stakeholders welcomed binding targets on energy efficiency, however, there were some divergent views on which parameters to use as a base for the methodology and verification for measuring energy efficiency.

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[1] 7224/1/07 REV 1.

[2] COM(2006) 545.

Energy efficiency was also argued to be a global issue and not only a policy for Europe. A reference was made to that several countries like United States and Japan had already launched efficiency programmes. Several stakeholders pointed out that it was therefore crucial that Europe from a competitiveness aspect did not miss opportunities in the timing of developing an energy efficient economy.

Finally, it was also emphasised by numerous stakeholders that the different legal instruments should not overlap or be conflicting. The Commission should endeavour to synchronise the different frameworks on energy efficiency for optimal effect on the market with due regard to avoiding any distortion of the internal market.

A broad range of ideas for possible actions were put forward by respondents. This report explores the feedback in more details. The policy conclusions drawn by the Commission will be set out in an official communication and not addressed in the present report.

1. CONTEXT AND PROCESS

1.1. Context and purpose

At the Spring Council 2007, the EU Heads of States and Governments stressed the need to increase energy efficiency in the EU so as to achieve the objective of saving 20 % of the EU's energy consumption compared to projections for 2020[3]. However, evaluations suggest that the energy saving potential is not being realised fast enough and the measures adopted can only achieve energy savings of about 11% by 2020[4], if properly implemented by Member States[5]. This progress is very unsatisfactory and more actions need to be taken in order to address the remaining challenges and reap the potential savings.

On 19 October 2006, the Commission adopted the Action Plan for Energy Efficiency: Realising the Potential (EEAP)[6]. It gave an outline for a coherent framework of legislation, policies and measures with a view to save a substantial part of the 20% of EU annual primary energy consumption by 2020. It proposed a selection of cost-effective energy efficiency improvement initiatives to be put in place and implemented until 2012. As announced in the Plan, the Commission is to prepare in 2009 a revised Action Plan, as requested by the European Council.

To explore possible policy options, several meetings were held with stakeholders. However in order to obtain an even wider input for the New Energy Efficiency Action Plan, a public consultation on the current Action Plan was launched on 8 June 2009 with a deadline on 3 August 2009. Public authorities, businesses, non-governmental organisations, citizens and other interested parties were asked several questions with regard to the current Energy Efficiency Action Plan and whether there were to be suggested additional measures at EU level in order to further promote energy efficiency. A list of all contributions is to be found in Annex I to this report.

1.2. Process and timing

The consultation consisted of a questionnaire in English with structured questions, supplemented by open "free text" questions where participants could provide feedback not captured in the structured part. The on-line questionnaire and the background document can be found in Annex II and III to this report. Moreover, the Commission will publish the submissions that answered affirmatively to be published on-line.

The public consultation complied with the Commission's minimum consultation standards, including the 8 week minimum duration. The standard Commission internet tool for Interactive Policy Making[7] was used. As participation was voluntary and based on self-selection, the views expressed by respondents are not necessarily representative of the views held by all stakeholders or citizens.

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3 7224/1/07 REV 1.
4 The latest estimates, forthcoming Impact Assessment Report on the new Energy Efficiency Action Plan.
5 COM(2008) 772.
6 COM(2006) 545.
7 http://ec.europa.eu/yourvoice/ipm/index_en.htm

2. BACKGROUND INFORMATION ABOUT THE RESPONDENTS

In all, 203 responses from individuals and organisational participants were received through the IPM tool (the on-line questionnaire).

	Number of requested records	Requested records (203)
Representative of an organisation	**173**	**85.2%**
Individual citizen	**30**	**14.8%**
Total number	**203**	**100%**

Tab. 1 Total number of respondents

A few other responses, 6 submissions, were submitted by organisations which did not make use of the web-based interface to reply to the questionnaire. The statistical data in this report refer only to responses made by the 203 responses submitted through the IPM tool. However, the views in all the submitted responses, including those submitted without using the IPM tool, have been considered by the Commission services.

2.1 Organisations responding

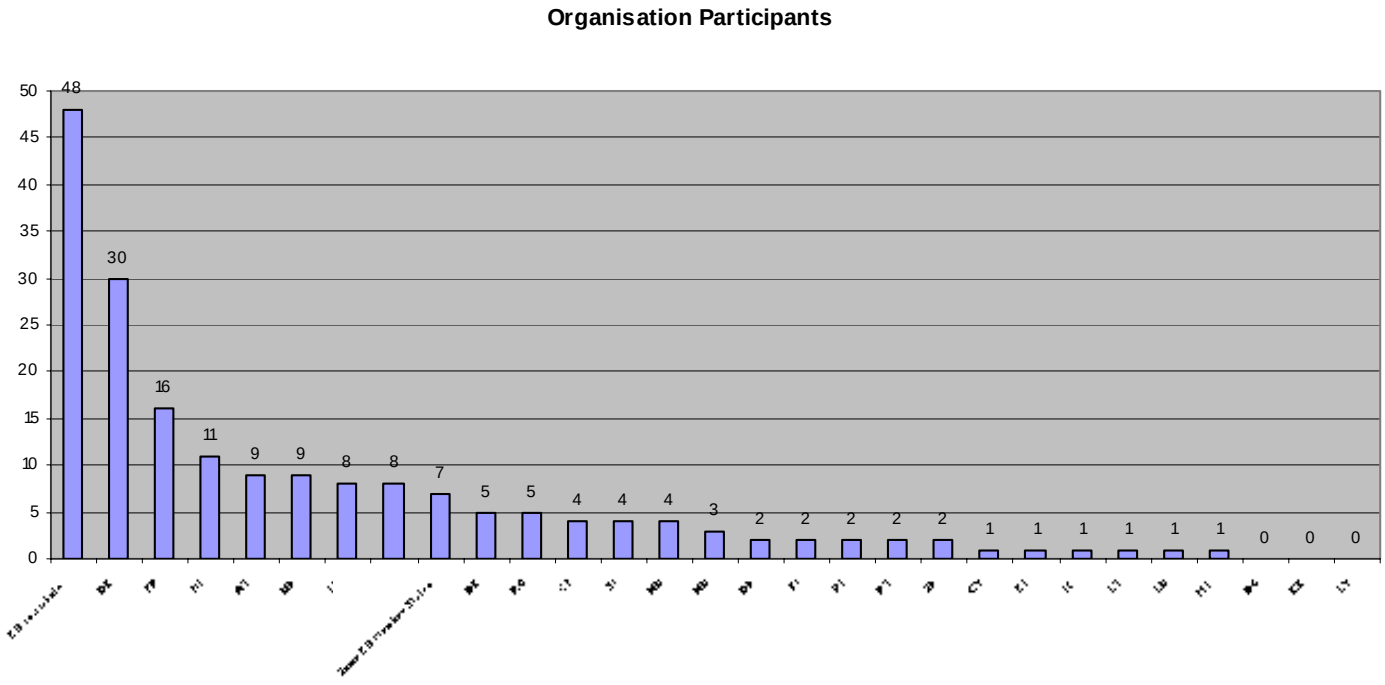


Fig. 1: Number of organisations responding per country of residence

Most responses were received from organisation representing EU as a whole, followed by Germany, France, Netherlands and Austria. Moreover, there were two contributions from Switzerland.

2.1. Individual respondents

In all, 30 responses from individuals were received. The replies came from citizens from Austria, Belgium, Czech Republic, Denmark, France, Germany, Ireland, Italy, Lithuania, Malta, Netherlands, Romania, Slovakia, Spain, Sweden and UK (in alphabetical order). The number cannot be seen as representative for the citizens of EU, but the Commission services welcome these submissions since energy efficiency is a policy highly concerned with the citizens of the EU.

2.2. Number of participants for each type of organisation responding

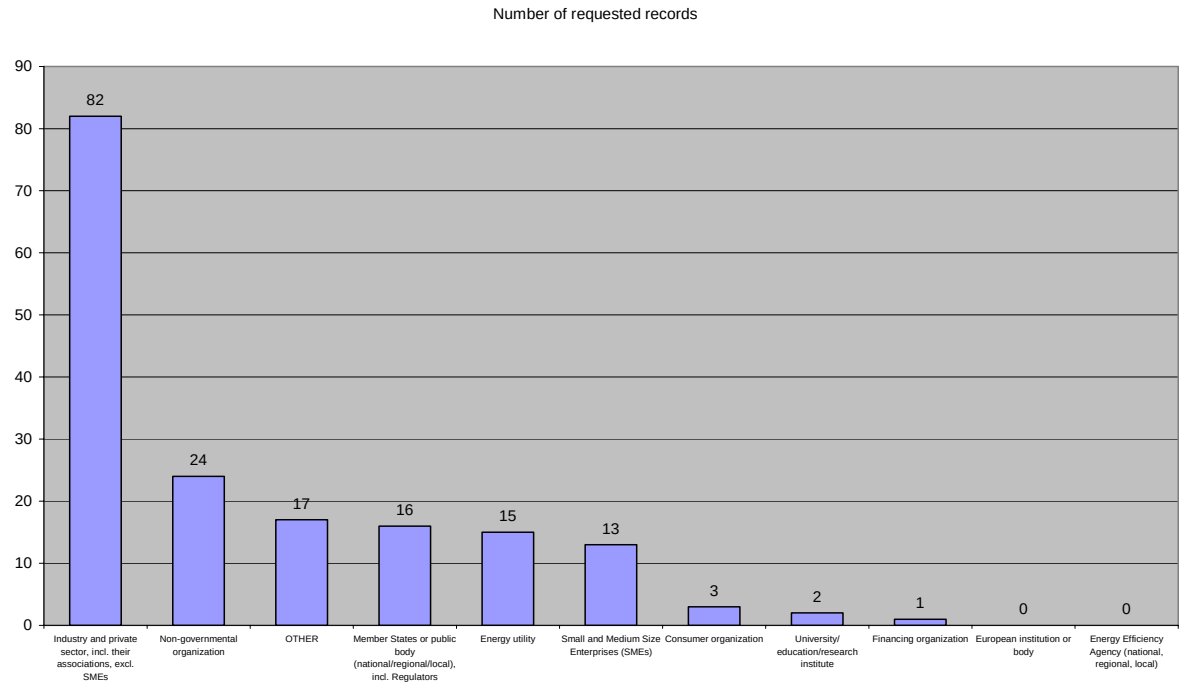


Fig. 2: Number of participants for each category of organisations

The largest single fraction of responses was from private sector companies or industry associations. The second largest fraction of the submissions was from non-governmental organizations.

2.3. Type of private sector/association responding

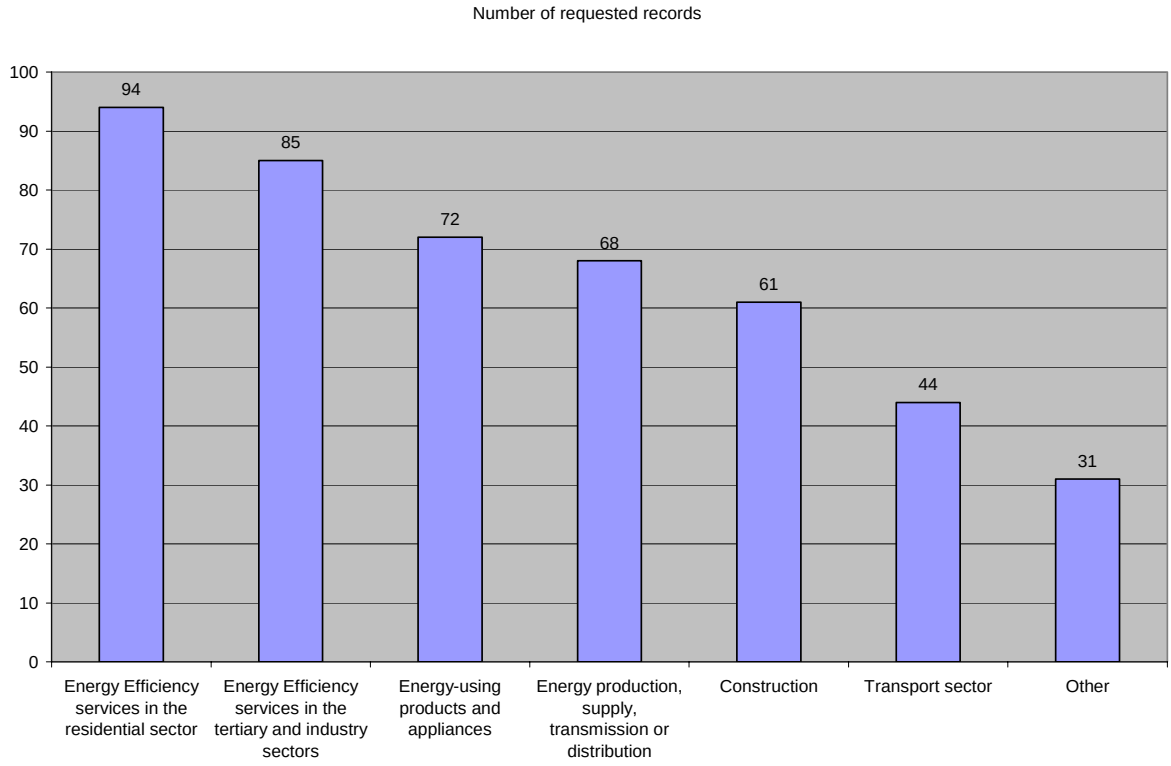


Fig. 3: Type of private sector companies or industry associations that responded

Within the fraction of private sector companies or industry associations, the largest single group was from companies/organisations dealing with energy efficiency services in the residential sector, in the tertiary and industry sector. However, also industry related to energy-using products, energy utilities and construction were highly represented in the received submissions.

3. GENERAL OPINION ABOUT THE CURRENT ENERGY EFFICIENCY ACTION PLAN AND ITS REVISION

As a first and general question the public consultation asked whether the 6 key areas and 85 actions in the current Energy Efficiency Action Plan should be continued, redefined, discontinued and if so the public consultation enquired for the underlying reasons for the suggested modifications.

Several stakeholders made reference to the global economical crisis. Moreover, numerous stakeholders were concerned because of the climate change. Concern was also raised of the increasing import dependence of Europe and in this regard the security of supply of energy. Energy Efficiency was therefore concluded to be a good political response to the economical crises by creating job opportunities. Energy Efficiency could also mitigate climate change and

security of supply by using the energy in Europe smarter and more efficiently. On the aspect of mitigating climate change and also security of supply, it was emphasised by several stakeholders that it was of importance to find the optimal balance between energy efficiency and renewable energy policies.

On how to best promote energy efficiency, the overall majority stated that the measures in the current Energy Efficiency Action Plan should continue to be implemented. However, several stakeholders argued that the time had come for a more focused and targeted approach in order to promote energy efficiency further. Some of the topics that were highlighted in this regard were the energy efficiency of buildings and particularly energy efficiency of the existing building stocks. Another topic often referred to as significant was financing but also to create the awareness of the existing opportunities of access to finance for energy efficiency projects. Several stakeholders pointed to the fact that the Structural and Cohesion funds should be further used to promote energy efficiency in the different Member States. In this regard it was suggested that the new Energy Efficiency Action Plan should recognise the role of the local politicians in the delivery of energy efficiency in Europe. The Covenant of Mayors was mentioned to be a successful policy instrument to bring energy efficiency policy to local level and to "think globally but act locally".

A lot of the stakeholders were of the opinion that cogeneration and district heating planning had to be further promoted. The existing legislation had not given the correct incentives to develop these policy areas satisfactorily.

Energy efficiency was also argued to be a global issue and not only a policy for Europe. Several countries like United States and Japan had already launched several efficiency programmes. It is therefore crucial that Europe from a competitiveness aspect does not miss opportunities in the timing of developing an energy efficient economy.

It was also emphasised among several stakeholders that the different legal instruments should not overlap or be conflicting. The Commission should endeavour to synchronise the different frameworks on energy efficiency for optimal effect on the market with due regard to avoiding any distortion of the internal market.

4. SPECIFIC QUESTIONS

4.1. Introduction

Following the general question, the public consultation also put forward several specific questions. The specific questions consisted of a questionnaire in English with structured questions, supplemented by open "free text" questions where participants could provide feedback not captured in the structured part. This report will provide the statistical data regarding the structured questions. For the open "free text" questions the submissions will be generally described with certain direct references to some of the suggestions in the submissions.

4.2. The promotion of energy efficient buildings

The questionnaire contained a question regarding whether more could be done on buildings besides the existing Energy Performance of Buildings Directive (2002/91/EC). Out of the 203 contributions, 154 (75.9 %) submissions were of the opinion that more could be done in order to further promote energy efficiency in buildings. 24 (11.8 %) of the submissions stated that they were not in favour of additional measures and 25 (12.3 %) of the contributions did not have any opinion in this regard. Concerning energy efficiency in buildings there were 3 open "free text" questions. The first question was how to assess the need to move towards a requirement that all new buildings have low or zero energy consumption and carbon emissions after a certain date. The second question was addressing the need for introducing at EU level measures concerning training of architects, builders and installers. The third question related to which other measures at EU level need to be undertaken.

Concerning the first question there was a majority in favour of developing buildings of low or zero energy consumption and carbon emissions after a certain date. Furthermore, the majority were of the opinion that the main challenge was to promote energy efficiency in existing buildings. A holistic approach was argued to be the best way to proceed with due regard to district heating and renewable energy. There were also different views on how to define low or zero energy consumption and carbon emissions buildings. Some stakeholders argued that the CO2 aspect was the key issue, while others were proponents of only relating the definitions to primary energy consumption. Some stakeholders also referred to the different climate between the Northern and Southern part of Europe which should also be accounted for when deciding on the development of buildings of low or zero energy consumption and carbon emissions. Furthermore, there were divergent statements regarding setting the date for implementation of such a policy. There were also voices for taking due regard to and preserve the cultural heritage contained in some of the existing buildings of Europe.

Examples of stakeholder feedback on that all new buildings will have low or zero energy consumption and carbon emissions after a certain date:

- "The setting of such requirement is important for the launch of construction and reconstruction of buildings in the best available standards in the short and medium term. Facing the need to tackle the climate change and the rising energy prices, the savings potential in buildings ought to be exploited". (A Ministry of Environment in one of the Member State of EU)
- "In steps of about three years the standard should be developed: for example in Germany: EnEV 2009, EnEV 2012, EnEV 2015 (passive house standard), EnEV 2018 zero emission standard". (Organisation for architects)
- "Each year, new buildings represent about 1% of the buildings stock. This very small percentage should feature the latest technologies in terms of energy efficiency and renewable energies to ensure that new buildings make the EU less dependent on imported, expensive and scarce energy. Indeed, Plus-Energy Buildings and Net Zero Energy buildings are crucial for security of supply reasons. Decisions taken now will have a crucial impact on the future landscape of the European building stock…. Existing buildings should not fall out of the scope of the EU scrutiny: the refurbishment rate of existing buildings is very low in the European Union and furthermore, Europe has a large stock of historic buildings which are far away from being energy efficient. If the European Union takes the threat of climate change seriously, it needs to address existing buildings. The recast of the Energy Performance of Buildings' Directive should provide

the first opportunity to set targets for existing buildings to become net zero energy buildings by 2018". (Organisation for promoting renewable energy)

Concerning the second question, the majority welcomed the idea of introducing measures concerning training of architects, builders and installers. However, several stakeholders were of the opinion that this was best pursued by the Member States due to the different structures of the sector across EU, and the range of institutions, professional bodies and educational bodies involved in the training in the different Member States. Nevertheless, the stakeholders expressed that EU had a role to play for facilitating action on training through for instance EU programmes such as the Intelligent Energy Europe. The EU could also assist concerning the exchange of best practises, but also facilitate for the mutual recognition of qualifications between Member States. Some stakeholders made reference to Annex IV of the Directive 2009/28/EC on the promotion of the use of energy from renewable sources and that a similar annex could be adopted for the Energy Performance Directive on Buildings (2002/91/EC). Reference was also made to the American system where architects must maintain their certification by earning a number of credit points from mandatory courses. Such courses can be arranged by the government, institutional and private actors under the approval of an authority.

Examples of stakeholder responses on introducing at EU level measures concerning training of architects, builders and installers:

- "While training activities are a largely national competence, the Commission does have a leadership role to play in spreading best practice and providing finance to stimulate such activities. The EU should ensure mutual recognition of training programmes across Europe as well as harmonised accreditation of inspectors and assessors. European funds could also be used to finance training activities at national level". (Industry organisation for energy efficiency services)
- "The operatives on construction sites who actually install energy efficiency materials, products and components must be fully aware of the need for those items to be installed to a high level of workmanship and with a high level of care. Bringing assistance to relevant institutions and associations that can quickly fill the training and education gaps is one tool that could significantly assist in improving the energy efficiency of buildings in the medium term". (Organisation for architects)
- "Optimal outcomes in the built environment will only be possible if builders, installation companies and architects are provided with all the relevant training and information they need to make an optimal decision about which solution is most suitable for the building in question. Unless training is addressed and offered in a timely fashion, it is widely feared that it will be a key barrier". (Association for micro-generation)

On the third "free text" question on what other measures at EU level should be adopted for the promotion on energy efficiency in buildings, several ideas for further measures were suggested. One suggestion that several stakeholders referred to was the need for further promotion of cogeneration, district heating and cooling. It was stated that the existing legal instruments did not give the necessary incentives for these technologies to achieve their potential. Furthermore, smart metering should be rolled out in different Member States in order to help consumers to save energy. ICT was also argued by several stakeholders to be an important instrument for the promotion of energy efficiency. It was also argued that buildings

when sold should have to reach a certain standard of energy efficiency. A Smart City Campaign for Buildings was also envisaged to be launched by the EU.

Examples of stakeholder responses on introducing further measures at EU level:

- "Possible measures could introduce an obligation to upgrade the energy performance of a building whenever it is sold or rented up to a certain standard (for example obligation to reach a higher energy class of the energy performance certificate or to renovate according to very low energy standards), and an obligation on countries to at least double their renovation rates of existing buildings. To make this approach more flexible, it could be possible to set different targets for different type of buildings (public buildings, commercial buildings, and residential buildings) or for buildings of different ages, for example by initially focusing only on buildings built after 1945. Adequate financing is crucial to ensure the success of any policy intending to improve the energy performance of existing buildings. Financing should not only come from national sources through fiscal and/or financial incentives but the use of available funds from other sources should be optimized (EU structural and cohesion funds, use of auctioning revenues under the EU ETS). In addition, an energy performance contracting model needs to be promoted in order to increase refurbishment rates in existing buildings". (NGO)
- "The requirement that all new buildings and major renovations be equipped with intelligent metering systems is rational and necessary. This, however, must be reconciled with the smart metering requirements in the 3rd Energy Package". (Industry)
- "ICT can play an important role in making buildings more energy efficient, and its role should be recognised as such. Public procurement (for public buildings) is a tool that may be used for encouraging innovative ICT solutions to reduce energy consumption of building". (Industry)
- "The European Commission could launch an “Energy Smart Building” Campaign. This campaign would aim at stimulating the market for energy efficiency and renewable energies in buildings and would be implemented via national campaigns, for instance by national energy agencies and/or ministries, in strong connection with cities. …… It is estimated that at least 150 000 jobs will be newly created in the Energy Smart Buildings sector in the coming years, which will become one of Europe’s job-motors. The proposed stimulus would largely benefit SMEs involved in the energy efficiency and renewable energy sectors". (European Renewable Energy Industry Association)

4.3. Transport

The public consultation addressed also energy efficiency in transport. 93 (45.8%) of the submissions were in favour of additional measures on energy efficiency at the EU level in the transport sector, while 22 (10.8%) were opposed to further measures. 88 (43.3%) submissions did not have any opinion in this regard.

Most of the stakeholders in favour of additional measures on energy efficiency in the transport sector welcomed the electrification of the transport sector for cars, buses, rail, motor cycles, scooters and mopeds. It was argued that the current Emission Trading Scheme is penalising the rail sector. Even though the aviation will be included, stakeholders argued that

only 15% of the allowances in this regard will be auctioned and the rest will be transferred to the aviation sector free of charge. As railways are affected by ETS, the other modes of transport that have higher emissions were argued to receive a competitive benefit. Another concern raised in the public consultation regarding transport was a request for a more robust regulation on CO2 emission for vans. There were also proponents who argued that legislation should not only be concerned with the concrete CO2 emissions, but also the efficiency of the car as such. A reference of importance in this regard was the weight of vehicles. Eco-driving was another measure suggested to be launched at the EU level. The use of a bicycle, but also the city planning of facilitating increased number of cyclists, was also stated to be an efficient measure to reduce significantly CO2 emissions.

Examples of stakeholder responses relating to transport:

- "The current technology-based approach to reduce CO2 emissions from cars needs to be supplemented with infrastructure and driver behaviour related measures, as is the case in other sectors. In this respect, eco-driving is a no-regret measure that can be implemented rather easily, leads to solid results rather quickly and can contribute to fighting climate change". (NGO)
- "The transportation sector plays a central role in the European economy and accounts for almost 20% of the total European consumption of primary energy. 98% of the energy that is used in this sector is fossil fuel. It is therefore important that the energy consumption in the transportation sector is made efficient and that new fuel sources are developed for this sector. The Electrification of the transportation sector, including promotion of electric cars, is an important element with regards to making the energy consumption in the transportation sector more efficient". (Energy utility)
- "The EU should provide different options to encourage technical development of hybrid and electrical cars, e.g. funding research and demonstration projects, contributing fiscal measures such as tax incentives, heightening of public awareness to environmental issues. Other measures would include mandatory targets, removal of administrative and planning barriers and sharing best practices on the promotion of clean vehicles and intermodal shifts. Local authorities should be fully involved and engaged in making it attractive to utilize an electric car, free of charge batteries stands, less taxes, free parking spaces in the cities, etc. The EU should consider whether transport and the efficiency hereof should be regulated on equal terms as any other energy consumption and become part of the Directive for Energy end-use Efficiency and Energy Services". (Association of electricity industry in Europe)

4.4. Product policy

Stakeholders were also asked whether they were in favour of further measures in order to increase the impact of the Eco-design Directive (2005/32/EC) and Energy Labelling Directive (92/75/EEC). 110 (54.2%) of the submissions were in favour of further measures, 45 (22.2%) of the contributions were against additional measures, while 48 (23.6%) had no opinion in this regard.

The majority of the stakeholders expressed satisfaction with both the Eco-design Directive (2005/32/EC) and Energy Labelling Directive (92/75/EEC). However, there was some concern raised regarding these two Directives. Several stakeholders argued that it was of significant importance that the labels for consumers were clear and not confusing. There had

been to many labels and marks discussed in recent times. Moreover, there were some resistance for including further product groups in the near future because of the argument that there is still a lack of experience of the adopted implementing measures of the Eco-design Directive (2005/32/EC). However, others were of the opinion that the Eco-design Directive (2005/32/EC) should set stricter requirements and a faster implementation. It was also necessary to enhance the market surveillance in this regard since it was argued that this function was not adequately performed by some Member States. Moreover, there were divergent views on voluntary agreements. Some submissions stated they were in favour while others argued that voluntary agreements were inefficient.

It was also argued that the extended scope of the Eco-design Directive (2005/32/EC) and Energy Labelling Directive (92/75/EEC) should not cover certain construction products. This should rather be included in the Energy Performance of Buildings Directive (2002/91/EC). The reason for this was stated to be that the performance of construction products can only be assessed at the level of the functional unit, which is the building. Neither of the two directives provides a methodology as to how this could be achieved. The absence of such a methodology may distort competition, confuse markets and have a negative effect on market transparency. Even worse, the indicators would not provide a methodology to identify the most sustainable solution for a building over its whole life cycle.

Several stakeholders expressed that it was of importance that the different legal instruments in place should not overlap or be conflicting but taken due account to when deciding on which legal instrument would be the most adequate to promote the energy efficiency aim in question.

Examples of stakeholder responses relating Eco-design Directive (2005/32/EC) and Energy Labelling Directive (92/75/EEC):

- "The energy and environmental performance of construction products can only be assessed at the level of the functional unit, which is the building. Neither of the two directives provides a methodology as to how this could be achieved. The absence of such a methodology may distort competition, confuse markets and have a negative effect on market transparency. Even worse, the indicators would not provide a methodology to identify the most sustainable solution for a building over its whole life cycle. All requirements regarding buildings and building components should be addressed in the EPBD". (Association for insulation in buildings and renewable energy)
- "The impact of Eco-design directive could certainly be increased by setting stricter requirements and a faster implementation. In addition, two crucial elements should also be reinforced: market surveillance and a better coordination with existing legislation covering the same products (i.e. RoHS, WEEE and EPBD). In order to safeguard competitiveness among manufacturers and ensure European consumers' rights, it is imperative that products subject to Eco-design requirements are properly verified before entering the EU market. At present, market surveillance, organised at Member State level, is not performing this function adequately; therefore, a more coordinated approach across Europe is necessary. Ensuring a better integration of existing EU product-related regulation is another essential issue when developing eco-design requirements. Although avoiding duplications is important, making sure that no gaps or grey areas are overlooked is even more critical. For this reason where technically possible Eco-design measures for specific products should set more ambitious requirements than allowed under another regulation (i.e. lower mercury

levels than those allowed under RoHS could be applied for domestic lighting). When facing overlaps with existing legislation, implementing measures should be thoroughly designed to avoid gaps and ensure that the combined potential of the relevant regulations is fully exploited. For example Eco-design measures on heating and cooling equipment should be fully coordinated and integrated with the respective provisions in the Energy Performance of Buildings Directive, in particular those dealing with building components and systems. A bold approach on heating equipment could help save more than 200 million tons of CO2 in the EU-27 by 2020, one of the largest savings achievable". (NGO)

4.5. Financing

The public consultation also addressed the lack of access to appropriate financing which is an important bottleneck for further promoting energy efficiency. Various financing instruments are at present time being developed by different institutions such as the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), national promotional banks and private banks in particular in association with the Covenant of Mayors. Demonstration projects of the application of energy efficient technologies in a competitive manner, for example "smart cities" could also be considered. The question was therefore raised in the public consultation whether stakeholders thought that other financing measures at EU level are needed.

135 (66.5%) of the stakeholders answered confirmatively, 18 (8.9%) responded negatively and 18 (24.6%) stakeholders had not any opinion in this regard. Several stakeholders expressed that Structural Funds should be reformed with a strong focus on energy efficiency projects. At the same time it was argued that the EU should facilitate that the current funding opportunities under the Structural and Cohesion Funds were properly spent by encouraging Managing authorities to develop and promote energy efficiency projects in their regions.

It was also stated by several stakeholders that there were numerous funding opportunities in place, but that these funding possibilities seemed confusing and difficult to access which discouraged participation. The Commission was therefore encouraged to facilitate a one-stop-shop procedure to remove these barriers to funding. It was also suggested that many small scale investments should be linked together and thereby apply for financing. Consequently, there would not only be access to finance for the large energy efficiency projects but also for smaller energy efficiency schemes.

Up-front financing was also highlighted to be of significant importance by several stakeholders. It was suggested that the EIB should lend money to specialised national energy efficiency funds which would provide up-front financing solutions to ESCOs and in particular SMEs. Alternatively, these funds could provide loan guarantees to facilitate lending from private banks.

Several stakeholders also made reference to the importance of using energy performance contracts (EPCs). The experience of KfW in financing EPC was referred to as a successful funding mechanism in this regard. However, apart from raising the awareness in the public and private sector of EPC it was also pointed to the need of addressing accounting and budgeting rules. Accounting and budgeting rules in several Member States were stated to prevent or discourage EPCs.

Some stakeholders also stated that there was a particularly need for enhanced investments in CHP and district heating. Furthermore, investment in smart grids and smart metering were also emphasised.

There were also statements suggesting that the Member States should be strongly encouraged to use the auctioning revenues from ETS for energy efficiency projects.

It was also emphasised that due regard should be taken to fuel poverty. Finance for energy savings should not place a burden on consumers who already are facing the highest level of billing to their homes.

It was further suggested that not only "smart cities" projects should be launched but also "smart industries" should be developed. There is increasing interest in the potential of having industries, including power stations, working in co-ordination to provide connected heat loads and use high efficiency cogeneration. Smart industry zones could be created encouraging the linking of industries together and maximizing the efficiency of electricity and heat delivery to the group, combined with distribution of heat to the local community and the commercial or agricultural zones.

Examples of stakeholder responses relating to financing:

- "The continued reinforcement of the use of the European Cohesion policy as a key tool in the leverage and promotion of investment aimed at reducing the environmental impact of the residential sector….. The revenues of the EU Emissions Trading Scheme should be used to promote energy efficiency and renewable energy in existing housing stock". (Organisation for social housing)
- "Tackling head-on the cost barriers which inhibit energy efficiency actions will bring about dramatic progress. Lower interest loans, with long pay back periods, and “pay as you save” schemes from the EIB in conjunction with national banks will help incentivise business and consumers to install energy efficiency measures. This model is being trialled on public buildings through the C40 large cities climate leadership group (with a major project being undertaken in London). Measures to guarantee energy savings as a basis for loan pay back helps tackle the barriers of upfront costs. SMEs in particular should be targeted with low interest loans as they often require extra support in the short term to overcome difficulties in accessing credit". (Industry organisation).
- "One of the main barriers is the current frame of mind of average investors in building energy efficiency measures. Indeed, large institutional investors are very much focused on large projects for which the associated risks over the lifetime of the project are easily identified/quantified. However, the energy revolution that is needed involves a plethora of small/medium projects to be promoted by a large number of actors or their agents (e.g. energy services companies). Thus large budgets (that can be equivalent to that of a single large project) need to be committed towards a pool of smaller projects so that it can finance smaller operation efficiently. Experience shows that investors are currently shying away from it. A limited number of financial products, including from the EIB, are targeting this kind of operations but do not seem to be known enough by the market. The EU can play a role to promote and encourage the use of such financing products adapted to small projects". (Industrial organisation for energy services in the residential sector)
- "The financing measure at EU level is correct and appropriate. The problem is the access to these financing instruments at country level. For small enterprises it is not easy knowing

the rules of access and it is not always clear who to contact". (ESCO operating in the lightning sector)

- "Apart from raising the awareness in the public and private sector of energy performance contracting (EPC), is to address accounting and budgeting rules that can prevent or discourage EPCs. Ideally, an ESCO contract should be over multiple years (e.g. 10 years or more) with no upfront investment costs and aimed at the existing building stock where the biggest energy saving potentials are located. Operators in public sector (ministries, hospitals, schools, universities etc) need to receive assurances that they will retain the financial benefits of reduced energy costs and not just see their efforts translated into budget reductions; they also need to be able to engage in long-term contracts. Both these critical factors are often impossible to realise due to budgetary and accounting rules; and Member States need to remove such administrative barriers so there is a real incentive for public sector operators to engage in long-term partnerships with ESCOs". (Chamber of Commerce)

4.6. Fiscal incentives

The stakeholders were also asked whether they were in favour of additional measures at the EU level for fiscal incentives. 147 (72.4%) of the stakeholders responded confirmatively, 16 (7.9%) of the submission answered negatively, while 40 (19.7%) had no opinion in this regard.

The majority welcomed fiscal incentives for the promotion of energy efficiency. Several stakeholders from the industry expressed that the main problem of developing and promoting energy efficiency services was not the supply of energy services but the lack of demand. In their view fiscal incentives could help to create further demand of energy efficient products and energy efficiency services. One example mentioned in this regard was to examine income tax rebates for energy-saving measures for consumers which have been employed in the United States with some success.

Regarding VAT, some stakeholders expressed that VAT reductions should not be applied to all products and services. It was pointed out that reduced VAT rates should not to be permitted for certain energy construction saving products, such as insulation. The effectiveness of energy efficiency measures was stated not to be the sum of the products used, but how they were incorporated. Otherwise, it would encourage undeclared labour and increases the risk of bad workmanship which would be counter-productive to the goal of increased energy efficiency.

Some stakeholders regretted the recent withdrawal of the Commission's legislative plans on reduced rates of VAT for energy and environmental policy purposes. Preferential rates on materials which enable savings on energy demand in buildings would have contributed to lowering the prices of low energy buildings and making them more attractive. Even though some of the stakeholders stated that they understood that the issue of reduced VAT rates could be politically difficult at this point in time, they invited the Commission to encourage Member States to make use of other fiscal tools such as progressive property tax in relation with a building’s energy certificate. Differentiated tax levels would be instrumental in inciting future owners to opt for the most energy efficient buildings. Another suggestion instead of re-proposing VAT reductions at EU level, was the proposal that the EU should provide a framework of available options that could be compatible with state aid rules as well as sharing of best practise between Member States.

Several stakeholders were also of the opinion that an efficient and timely roll out of smart grid and smart metering required fiscal incentives to be adequately and timely developed.

A reference was also made to the landlord/tenant dilemma regarding investment in buildings. A tenant is not interested to invest in energy efficiency in a building that is not owned by the tenant. Furthermore, a landlord has not so much interest to invest in energy efficiency since the landlord is usually not paying the bill of the energy consumption. Financial incentives could trigger landlords to make investments in energy efficiency. Such measures could include tax-breaks on the refurbishment of houses or revolving funds for the same purpose.

Examples of stakeholder responses relating to fiscal incentives:

- "Landlord/tenant dilemma: in several EU countries over 50% of buildings are rented, and neither the tenants (as they do not own the houses) nor the landlords (as they do not pay the energy bills) have incentives to invest in such measures as insulation. Financial incentives should oblige landlords to make the right investments. Such measures could include tax-breaks on the refurbishment of houses or revolving funds for the same purpose. The European Economic Recovery plan suggests urgent tax measures to improve the energy efficiency of the housing stock and public buildings. Taxation ought to be one of the instruments that governments should apply to promote energy efficiency investments". (Industry association for energy efficiency services)
- "VAT reductions for energy-efficient products are not recommended. They bear the risk of high free-rider effects. Targeted financial incentives for the purchase of such products are better in this respect, since they are not given automatically and more easily adapted to the required level. On the other hand, targeted incentives for investments in energy efficiency in buildings or production facilities can be given through fiscal incentives. A number of Member States have made good experiences with enhanced capital allowances or with rebates on energy taxes (often coupled to voluntary agreements with industry). A Concerted Action is advisable to exchange experiences and to develop common conclusions. Following this, an EU Directive could require Member States to provide a certain level of funding through such fiscal incentives, leaving them freedom on the concrete way how to do it". (University, institute)
- "High up-front costs are often a psychological obstacle. Fiscal policies should therefore continue to be developed and coordinated at the EU level. Such policies could take the form of ecological tax reform, such as tax differentiation (e.g. reduced VAT for the most energy efficient products and services), enhanced use of fiscal incentives (e.g. tax rebates for consumers buying products labelled as the most energy efficient goods or if consumers insulate their homes) or more easily accessible financing schemes and subsidies for energy efficiency investments of private households. This will make consumer uptake of such products increase and ensure a level playing field in Europe. In this context, we particularly call on the Commission to consider re-introducing the plan for an EU proposal to reduce minimum VAT rates for green products and services, which was recently dropped due to the current financial crisis". (Consumer organisation)

4.7. Education and Training

The public consultation also addressed the vital need for further education and training in energy efficiency. The stakeholders were therefore asked whether they wanted EU level actions to catalyse training at schools and universities.

145 (71.4%) of the stakeholders answered confirmatively, 11 (5.4%) responded negatively and 47 (23.2%) stakeholders had not any opinion in this regard.

It was stated by the majority in favour of additional measures that it was essential that energy efficiency becomes part of education and training. It was further emphasised that the best long-term results are achieved when education starts early. In higher education the classes were suggested to become more practical.

Examples of stakeholder responses relating to education and training:

- "Schools and universities are places where people are educated on a variety of topics that will benefit them for the remainder of there live. As such schools and universities are an excellent place for education and training on energy efficiency. It is especially important that the training will be continued during several years of the education so it can be ensured that energy efficient behaviour gets locked into people's normal behaviour. To systematically include the topic of energy efficiency in education will surely help to meet the European Union's long-term challenge of arriving at a energy-efficient and low-carbon economy". (ICT company)
- "An EU wide spread of best practice examples and case-studies to be used in further education courses and as part of the university courses. The business sector should be actively integrated in the development of such training elements. This could be done for example by introducing regular visits of energy advisors to schools". (Chamber of Commerce)
- "There should also be opportunities not only for students but professionals". (Industrial organisation for energy efficiency services in the tertiary and industry sectors)

4.8. Awareness of consumers and SMEs

The stakeholders were also asked whether they were in favour of additional measures at the EU level for raising awareness on energy saving opportunities, particularly for consumers and SMEs. 141 (69.5%) of the stakeholders responded confirmatively, 24 (11.8%) of the submission answered negatively, while 38 (18.7%) had no opinion in this regard.

The majority of stakeholders in favour of additional measures for awareness raising on how to save energy, welcomed information campaigns but not at EU level. Communication was argued to be needed given at local level and close to the citizens. There were several practical examples suggested such as the organisation of information days in cities and regions. It was also suggested that local Energy Agencies or Chambers of Commerce could play a key role on awareness raising as they are close to consumers and SMEs. The Covenant of Mayors was also mentioned to be a good structure to be used for information campaigns.

Concerning consumers and SMEs and their energy bills, ICT solutions were suggested to be efficient. The consumers should be able to access a website or digital indicator to be aware at any time of their energy consumption allowing them to take conscious decisions on energy saving. It was also suggested in this regard that the mere information was not sufficient for

significant energy saving, the information needed to be accompanied by advice how to save energy.

Examples of stakeholder responses relating to awareness of energy saving for consumers and SMEs:

- "Our answer is actually a no for EU-level Campaigns: Communication needs to be closer to the citizens. Therefore, any EU legislation and regulation should include requirements to the Member States to ensure communication (including at lower government levels) that makes citizens and market actors aware of the benefits of the legislation and regulation and how to apply it. The contents of that decentralised communication could and should be co-ordinated at EU level. This could be a new task for the EACI". (University, Institute)
- "Communication campaigns on energy efficiency and sustainable development are very important but are not sufficient. It asks a strong involvement from inhabitants to look for information and have the “good energy behaviour”. All the European citizens don’t have the capacity and time to be well informed. European Union has to develop a new communication strategy based on local level, with a direct dialogue with inhabitants. In France, to inform people on wastes management, there is “wastes management ambassadors” in each neighbourhood, who are intermediaries beside inhabitants. European Union could promote Energy ambassadors in each member’s states, it means local actors who could inform, train and answer question, directly to citizen on energy saving. Covenant of Mayors could be a good way to implement it at the first step". (Association for social housing)
- "When it comes to requirements of information about energy efficiency via the energy supply companies or the transmission or distribution operators it is important, that information are given in a cost and climate protecting way (e.g. via internet if possible, just one time by the supplier and not additionally by the grid operator and the meter operator)". (Energy utility)
- "The easy access to consumption patterns, through a website or a digital indicator in a central location, allows consumers and SMEs to keep a constant eye on their consumption, allowing them to make conscious decisions. The indication should be kept in close relation to the cost savings made by energy users, as the price of energy has a large impact consumers and on a business’s bottom line profits". (Producer of energy using products)

4.9. SMEs

The public consultation also addressed the significant need for further promoting energy efficiency for SMEs. The stakeholders were asked whether they thought that specific measures targeted to SMEs are necessary. 121 (59.6%) of the stakeholders answered confirmatively, 20 (9.9%) responded negatively and 62 (30.5%) stakeholders had not any opinion in this regard.

Looking at the demand side on energy savings for SMEs, the majority of the stakeholders in favour of further measures for promoting energy efficiency welcomed awareness raising rather than new incentives. Moreover, several stakeholders expressed that subsidised or free energy audits would be an efficient tool to facilitate real energy savings for SMEs.

Concerning the supply side, micro-credits for SMEs were stated to be of significant importance in order to help ESCOs to be created.

On the decision- making process, some stakeholders raised the concern that SMEs were not adequately involved, particularly with the proceedings regarding the Eco-design Directive (2005/32/EC) since the cost of sending representatives were too high. An on-line system aimed at collecting industry data allowing SMEs to take part in the process was suggested to facilitate further participation by SMEs in this regard.

Examples of stakeholder responses relating to SMEs:

- "Most traditional banks still see no return in loans financing energy efficient improvements in SMEs and/or they are still not prepared for this. We are talking about micro credits of around 20.000 to 30.000 Euros required by SMEs directly or through ESCOs. This hampers improvement in energy efficiency in many SMEs due to their often precarious financial situation. The EU and its Member States could set up specific measures to change this attitude, for instance through awareness campaigns addressed to the banks. At the same time the EU could explore new, alternative financing ways to ensure the conditions are laid for these micro credits to be provided (for instance through venture capital, etc.)." (Industry organisation)
- "SMEs will enter the energy efficiency market so long as that market provides clear and profitable commercial opportunities. This would be achieved if all the existing policies, legislation and financial instruments in place at EU (and Member State) level operated fully and effectively. No particular new incentives for SMEs are needed; rather the emphasis should be placed on making all existing (and proposed) instruments work fully and effectively. This should be underpinned by adopting binding targets for energy efficiency, which would send a clear signal to SMEs that energy efficiency is a market area worth investing in. For example, Energy Performance Contracting (EPC) generates jobs by employing local labour and local contracting companies which tend to be SMEs. If EPC is supported, this will automatically provide for SME growth". (Construction Association)
- "The current eco-design standard setting procedure suffers from a lack of SME participation in the process. Even though SMEs are generally considered the source of innovation in the engineering sector, their high performing products are not considered in the process, as their participation in the process is not ensured. The cost for an SME to send a representative to Ecodesign Consultation Forums is too high, resulting in standard setting meetings being dominated by multinational corporations and broad associations. As associations can only participate based on the lowest common denominator, their impact is limited. This results in a watering down of requirements. An online system aimed at collecting industry data would allow SMEs to take part in the process at a fraction of the cost, allowing the EU to develop meaningful legislation". (Producer of energy using products)

4.10. Public sector

The public sector should lead by providing the best example on the promotion of energy efficiency. The stakeholders were therefore asked whether actions at EU level should be adopted in order to further make the public sector to promote energy efficiency. 137 (67.5%) of the stakeholders responded confirmatively, 31 (15.3%) of the submission answered negatively, while 31 (15.3%) had no opinion in this regard.

The majority of stakeholders wanting additional measures for the public sector stated that public buildings should be setting a leading example and should be the first buildings to be zero net buildings. Moreover, green public procurement was stated nearly by all stakeholders to be of significant importance. Some of the stakeholders wanted to make green public procurement mandatory. Some concern was raised that green public procurement applied by the governments seems to favour larger companies and not SMEs.

Examples of stakeholder responses relating to public sector:

- "The public sector can help raise awareness of the benefits of energy efficiency for business and consumers. For example Energy Performance Certificates (EPCs) and Display Energy certificates (DECs) provide details on the energy performance of buildings. The A-G rating of EPCs provides important information highlighting improvements that can be made to the fabric of the building to make it more efficient. By showing how efficiently energy is used in a building the DEC rating encourages investment in energy efficient equipment and promotes behavioural change. A further role out of DECs from public buildings to all non–domestic buildings could be a powerful tool in motivating businesses to monitor and manage their energy consumption. The role of green public procurement is also highly significant in the switch to energy efficiency". (Industry organisation)
- "The leading role of the authorities cannot be underestimated. Public procurement offers a route to increased efficiency of products. Public authorities should also change their ways of working as far as possible towards a low-carbon one, fully utilizing the possibilities that ICT and broadband communications (mobile and fixed) can bring". (Company in the ICT sector)
- "The public sector should lead by example and improve the energy efficiency of their buildings in the short term, through binding implementation dates. The public sector should also be mandated to implement all recommendations indicated in the energy performance certificate during the lifetime of that certificate. The public sector in each Member State needs to make an overall and systematic plan to renovate the public sector building stock. If resources are pooled to renovate multiple buildings at the same time, a higher cost-savings can be achieved. Scaling up in this way will not only bring the best economies of scale, but also of knowledge and best practice. The National Energy Efficiency Action Plans could be used as the tool to outline these plans. A change in attitude is needed regarding public procurement practices for energy efficiency. It is about buying energy saving, not products or services. Public authorities need help in changing mindsets to this way of thinking. The green public procurement policy advocated by the EC can help Europe to move towards a more sustainable building stock. The EC needs to make sure that this policy is based on objective, scientific and well accepted criteria. Financing should also be available to the Public sector to allow implementation of these ambitious plans". (Industry association in energy efficiency services)

4.11. Energy utilities

The stakeholders were also asked whether they thought that specific measures targeted to energy utilities were required. 111 (54.7%) of the stakeholders answered confirmatively, 34 (16.7%) responded negatively and 58 (28.6%) stakeholders had not any opinion in this regard.

The majority of the stakeholders in favour of further measures for the energy utilities wanted stricter requirement on energy utilities to invest and provide energy efficiency services. However, there were some stakeholders who favoured that the requirements should be of voluntary character, while others were of the opinion that the further obligations should be legally binding. On which segment the requirements should be set, some of the stakeholders expressed the distribution companies were the best segment since they are closest to the consumers.

There were also arguments that when energy utilities were investing in energy services they should be able to pass the cost on to the end-consumers. This could also be done in coordination with the national regulatory authorities by passing-through costs in the network rates or supply prices.

Energy utilities were also encouraged by certain stakeholders to invest in Best Available Technique (BAT) in their own installations. Moreover, it was suggested that in the licence process for new plants, energy utilities should demonstrate to the national regulatory authorities that their plants are of the most cost-effective option.

Some of the stakeholders made reference to the new codes to be developed by the Third Liberalisation Package. It was proposed in this regard that the code on energy efficiency should be ambitiously set for concrete energy savings.

Examples of stakeholder responses relating to energy utilities:

- "There is a burning need to change the regulatory framework in order for the energy utilities to play a much bigger role in the energy efficiency and to offer energy performance contracting. It is necessary to provide the energy utilities with an incentive to invest in energy efficiency – for example a possibility to make profit through energy savings. Moreover, it is necessary to further promote a fair and open market with energy". (Ministry of environment in one of the Member States of the EU)
- "In particular Article 6 of the Energy End-use and Energy Services Directive needs to be fully enforced, and then strengthened. Also it should be made a requirement for all energy companies, before any new generation plant is built, to demonstrate publicly to the regulator (or government) that a new plant would be a more cost-effective option than helping consumers to save energy. This is standard practice already in many US States". (Industry association in energy efficiency services)
- "The incentives for energy companies to pursue end-use energy efficiency depend on the framework conditions. Articles 6 (2) and 10 of the EU Directive on energy end-use efficiency and energy services (ESDir) enable Member States to create such a framework. However, they are not yet specific and concrete enough. Three components need to be regulated to remove disincentives and create positive incentives for energy companies to pursue end-use energy efficiency, under the condition that the cost-effectiveness of the programmes for participating energy consumers and society can be made plausible: (1) There must be the possibility to recover programme costs. If network operators or energy suppliers with regulated supply prices (as, e.g., still in France) implement the programmes, the regulators must explicitly allow pass-through of programme costs in the network rates or supply prices. Article 10 of the ESDir should be recast in order to require national regulators to allow this. If unregulated suppliers are to implement programmes, giving all comparable suppliers the same level of obligations to save energy will also enable them to pass on the

costs in their supply prices. (2) In the energy network business, regulators must take care that the level of net profits of the network company is not compromised if they or anybody else save energy at the final energy consumers connected to the network. Article 10 of the ESDir should be recast in order to require national regulators to allow this". (University, Institute)

- "New market models in liberalized markets, combined with unbundling measures, can lead to confusion on roles and responsibilities of the different market players : DSO – which is the only player with a neutral and long term relationship with the energy consumer - should (continue to) play a central role in energy saving actions and contribute to the (further) development of energy services. - consider the specific requirements (high-level bureaucratic und regulatory complexity) to local energy companies in the EU member states. To integrate suppliers successfully in energy efficiency programs, specific and new incentives will have to be developed. A central role for the DSO - with his neutral and long term relationship with the energy consumer – is most logic in the field of energy efficiency. The possible conflict between the regulator that strives for maximum cost cutting, and the DSO that is ambitiously stimulating energy efficiency actions must be avoided and should explicitly be addressed. EU-level measures should be restricted to a general framework, leaving the practical elaboration to the Member States. In general it should be avoided that existing successful measures (possibly in conflict with a new EU-level general framework) are being stopped". (Energy utility organisation)
- "The role of energy utilities has been fundamental until now to develop energy efficiency services in some countries; probably their role might evolve towards a cooperation with Regulators to promote structural investments in energy efficiency. Energy utilities could contribute not as “obliged subject” but as “intermediate” between the State and the obliged subject. In this scheme energy utilities might commit themselves on the results with the possibility to share benefits of energy savings and therefore maybe ready to share or support costs when the client cannot afford or does not want to divert investments from its core business. This would have the effect to produce results for the State in terms of energy savings and CO2 reductions, and would at the meantime launch projects resulting in a stimulus for the competitiveness of the industrial system." (Energy utility)

4.12. Incentives for SMEs to enter the energy efficiency market

Energy efficiency offers significant market opportunities. The stakeholders were therefore asked whether actions at EU level should be adopted in order to further provide incentives for companies to enter these markets and particularly SMEs. 86 (42.4%) of the stakeholders responded confirmatively, 56 (27.6%) of the submission answered negatively, while 61 (30%) had no opinion in this regard.

The stakeholders responding confirmatively to this question stated in general that the creation of ESCOs was important in this regard. It was also mentioned that United States and Japan had already launched several efficiency programmes. It was therefore argued that it is crucial that Europe from a competitiveness aspect does not miss opportunities in the timing of developing an energy efficient economy.

4.13. White certification scheme

The public consultation also addressed the question whether an EU wide White Certification scheme should be introduced. 60 (29.6%) of the stakeholders answered confirmatively, 65 (32%) responded negatively and 78 (38.4%) stakeholders had not any opinion in this regard.

On this issue there was rather diverging opinions. Furthermore, there were several stakeholders who had answered yes to the question, but qualified the answer by stating that they would only welcome white certificate schemes to be introduced at the national level. The majority of stakeholders were not in favour of the introduction of a unified EU wide White Certificate Market. The reasons given were amongst others that it could distort the already existing schemes introduced in some of the Member States, and it could overlap with other instruments such as ETS and green certificates. However, there were several proponents for national white certificate schemes to be introduced under the condition that these schemes should be market driven and carefully designed in order not to overlap with other schemes and create further administrative burden for the Member States. Some stakeholders suggested that white certificates should be targeted towards energy utilities in order to encourage energy efficiency services to be provided.

Examples of stakeholder responses regarding White Certification Scheme:

- "We have some reservations about the introduction of an EU wide white certificate scheme. Whilst the CERT in the UK, and previously the EEC, is helping to improve energy efficiency (and can help drive energy efficiency skills at a local level) an EU wide scheme could be cumbersome, unwieldy, overlap with other schemes (national and European) and not be appropriate to the needs of individual member states. If such a scheme was set up at EU level, given the differences in market liberalisation in the member states, a white certificate could enhance the market position of incumbents and hinder access for SMEs". (Chamber of Commerce)
- "Article 6 of the ESD already requires Member States to place obligations on their utilities, including the possibility of White Certification schemes. It should be possible to facilitate even further at EU level the continued use of such White Certification schemes where utilities are involved, by the use of and, if necessary, the strengthening, of Article 6(2) in the ESD, placing additional obligations on utilities. Creating an EU-wide or regional trading system may, however, prove difficult at this stage where different national schemes already exist, and where an EU –wide might generate too much administrative burden and render the national systems less effective". (Industry organisation)
- "White certificate schemes can be, and are already, an effective policy measure for promoting implementation of energy efficiency improvement measures. This is reflected in the fact that a number of countries have already adopted such schemes or similar supplier obligations and more are actively doing so in the context of implementation of the Energy Services Directive. We believe therefore that a proposal for an EU-wide scheme is neither necessary or timely as it has the potential to both cast uncertainty over, compromise, or actively conflict with the operation of existing successful national schemes. The current Energy Services Directive Concerted Action provides an opportunity for Member States to learn form each other's national schemes". (Ministry of a Member State)

- "In general terms we support measures that give appropriate and cost-reflective price signals that improve energy efficiency and we often believe that market based mechanisms constitute the most economical approach compatible with a liberalised

market. However, this implies a liquid, well designed, transparent and harmonised market, particularly concerning the methodology for calculation, reporting and verification. In addition, a homogeneous product to be traded. This is not the case for energy efficiency. On the question of a European white certificate scheme, we believe that existing national experiences should be analyzed and compared before any extension. The same applies for the impacts of white certificate schemes to common European energy markets, energy end prices and the EU emissions trading scheme. Today, few Member States have opted for a white certificate scheme and their schemes are not compatible (i.e. white certificates are not tradable across their borders). Moreover, such schemes have yet failed to demonstrate their effectiveness (both in terms of additionality and of real reductions in energy consumption) and their driver in investments with medium-to-long term payback time. We would also like to stress that implications of interactions between different trading schemes (ETS, Green Certificates, White Certificates) should be carefully assessed. In this respect, we believe the conclusions of the 2005 NERA report "Interactions of the EU ETS with Green and White Certificate Schemes" are still valid and should be taken in serious considerations. Furthermore, the introduction of certificates should be consistent with existing measures, bring an added value, and be cost effective – i.e. the least bureaucratic possible. Multiple overlapping steering mechanisms should generally be avoided and EU-wide regulation should be as limited as possible. Any discussion on white certificates shall not neglect that calculations of savings shall include the whole energy chain from production to end-point use in order to make sure no point of the energy process is neglected. In addition, it should specifically address issues like the risk of free riders and increased cost, and the effectiveness in driving investments in the industrial sector, where the highest potentials at the lowest cost can be found". (Association of electricity industry in Europe)

4.14. Binding targets

The Directive on energy en-use efficiency and energy services (2006/32/EC) set indicative targets for energy savings. Since energy efficiency is becoming increasingly important both as regards security of supply and climate mitigation, the public consultation raised the question of the need for binding targets. 108 (53.2%) of the stakeholders responded confirmatively, 50 (24.6%) of the submission answered negatively, while 45 (22.2%) had no opinion.

The majority that answered confirmatively, favoured a binding overall target but supported by secondary level targets, amongst others for CHP. However, the condition for adopting binding targets was to find a common measurement and verification method.

Examples of stakeholder responses relating to binding targets:

- "There is a need for an overall target for energy efficiency to be made mandatory, such as the 20% by 2020 compared to 1990. This should be underpinned by an understood and clear definition of "energy efficiency" and the development of an objective method for measuring and quantifying energy efficiency. 2. The binding overall target needs to be supplemented by secondary level targets in specific sectors. 3. An overall mandatory target for 2050 should also be set for the buildings sector. There are legitimate concerns regarding the reliability of existing data in all member states for establishing baselines to measure precise energy intensity. Therefore, there is a need for more practical sector specific targets to be

set. For buildings, for example, a target could be set that would see x% of existing buildings renovated to a high standard in each Member State every year until 2020/2030/2050". (Industry association in energy efficiency services)

- "There is a need for an overall binding target for energy efficiency. The level of ambition should be set at least the 20% savings target already espoused by the Heads of State and government for 2020. There is additionally a need to define clearly what the baseline for the calculation at Member State and EU level will be. The binding overall target needs to be supplemented by secondary level targets in specific sectors, including a target for the penetration of cogeneration in the electricity provision of a member state". (Association of cogeneration)

4.15. Measurement and verification

Measurement and verification of energy savings is an essential aspect for monitoring the results of any measure introduced at national and EU level. The public consultation raised therefore the questions whether it was necessary that a systematic and harmonised approach at EU level should be adopted. 143 (70.4%) of the stakeholders responded confirmatively, 22 (10.8%) of the submission answered negatively, while 38 (18.7%) had no opinion in this regard.

The majority opting for a systematic and harmonised approach at EU level to be adopted stated that measurement and verification methods are a prerequisite for binding targets. The stakeholders had however some divergent views on which parameters to base such a methodology for measuring energy efficiency.

Examples of stakeholder responses relating to measurement and verification:

- "Systematic and precise measurement of Primary Energy used should be emphasised in any overall energy use management/monitoring at EU level. This is the most effective parameter and ensures parity between all energy sources". (NGO)
- "The indicative ESD savings target of 9% by 2016 and the 20% 2020 savings goals are not directly comparable since the ESD is an end-use (final energy) target and the 2020 target relates to primary energy use. However, the MS should be required to put their national ESD target into the context of the 2020 target to identify the gap. It should also be requested from the MS to indicate how they consider dealing with the identified gap. To improve methodology and comparability of energy savings between Member States, EU wide and mandatory templates should be proposed for the next round of National Energy Efficiency Action plans. The templates should be sector specific and highlight how the obligation to the Public sector should be implemented. A template should also be used to request the MS to clearly state which measures are new and which ones already exist, as well as how they plan to validate the impact of the measures to be implemented. Several sector templates were developed for the first NEEAPs, which is a good starting point for developing mandatory EU templates covering all end-use sectors. The results of the in-depth analysis of the NEEAPs currently undertaken by JRC, as well as the analysis done by Wuppertal and Ecofys as part of the EEW project, should also be taken into account when developing templates. To provide consistency in approach and confidence for organisations implementing energy saving measures, a standard protocol should be supported and implemented for the measurement and verification of energy savings from Energy Performance Contracting such as IPMVP which is used in North America and is being used

by all the major ESCOs in Europe". (Industry association in energy efficiency services)

- "Energy efficiency is the largest, quickest, and most cost-effective resource to improve security of supply and mitigate climate change. Binding targets as for renewable energies or greenhouse gas emissions should therefore also be set in the energy efficiency area. However, energy savings can always only be measured against what would have been the energy consumption in the absence of energy efficiency measures (a counterfactual). Given the measurement problems associated with the definition of this counterfactual, it may be better to set binding requirements for the absolute energy consumption in a Member States than for energy savings from energy efficiency. These requirements for the absolute energy consumption can easily be measured and are thus able to prove their fulfilment with the precision required. However, they should still be accompanied by indicative targets for energy savings against baseline projections. The level of energy savings achieved through policy and energy services should also be calculated in order to measure the Member States' effort". (University, Institute)
- "This is a difficult question as savings of energy is not the same thing as energy efficiency, it seems attractive to work with energy units saved, but to monitor this is difficult. Our own work within this field is based on additionality on the sales of electricity, and then this funds energy efficiency activities. We argue that there are important gains also in those projects that are not necessarily resulting in the largest net gain per invested euro as activities can boost and support indirect effects". (NGO)

4.16. International cooperation

The public consultation asked the stakeholders whether they agreed to that energy efficiency should become a vector of international cooperation and a subject of international financing programmes, in particularly regarding EU neighbouring countries. 142 (70%) of the stakeholders responded confirmatively, 5 (2.5%) of the submission answered negatively, while 56 (27.6%) had no opinion in this regard.

The stakeholders expressed that energy efficiency is a global issue as the climate change is an issue that concerns the planet. Moreover, energy efficiency gives several market opportunities. As several countries like United States and Japan have already launched several energy efficiency programmes which will create new products and energy services, energy efficiency is also linked to the competitiveness of Europe.

Several stakeholders also expressed that they want Europe to be a leader in energy efficiency policy and that ambitious EU level decision should be brought to the negotiation table in Copenhagen by the end of this year.

5. FINAL REMARKS

As a last open free question, the public consultation invited the stakeholders to give their final comments on energy efficiency. Some stakeholders expressed that the on-line consultation should have had an open-free text also related to the No options for the different questions. The Commission takes due notice of these remarks and will endeavour to take this into consideration for future on-line questionnaires. Nevertheless, section 5 asked for additional comments and was intended for statements that would not directly fit in under the specific questions. Several stakeholders used this option to elaborate their negative replies for the

specific questions and these comments have been included in this report on the public consultation on the Evaluation and Revision of the Energy Efficiency Action Plan.

Annex 1: List of organisations submitting responses

Country	Organisation	Website
Austria	Organisation	Alpsolar Klimadesign
Austria	Organisation	Association of Austrian Electricity Companies
Austria	Organisation	Enamo GmbH
Austria	Organisation	Energie AG Oberösterreich
Austria	Organisation	EVN Aktiengesellschaft
Austria	Organisation	IG Passivhaus Österreich
Austria	Organisation	Österreichische Elektrizitätswirtschafts-AG
Austria	Organisation	Sonnenplatz Großschoenau GmbH
Austria	Citizen	
Belgium	Organisation	Cefic - European chemical Industry Association
Belgium	Organisation	DIGITALEUROPE
Belgium	Citizen	
Belgium	Citizen	
Belgium	Citizen	
Cyprus	Organisation	
Czech Republic	Organisation	CEZ Group
Czech Republic	Organisation	Ministry of the environment
Czech Republic	Organisation	Saint-Gobain Orsil
Czech Republic	Citizen	
Denmark	Organisation	Danish Energy Association
Denmark	Citizen	

EU as a whole (for organisations only)	Organisation	A.I.S.E. (detergents industry association)
EU as a whole (for organisations only)	Organisation	AEGPL - European LPG Association
EU as a whole (for organisations only)	Organisation	American Chamber of Commerce to the European Union
EU as a whole (for organisations only)	Organisation	ANEC
EU as a whole (for organisations only)	Organisation	Architects' Council of Europe (ACE)
EU as a whole (for organisations only)	Organisation	BEUC - the European Consumers' Organisation
EU as a whole (for organisations only)	Organisation	BING European polyurethane insulation association
EU as a whole (for organisations only)	Organisation	Bosch Thermotechnik GmbH
EU as a whole (for organisations only)	Organisation	CECED - Household Appliance Industry Association
EU as a whole (for organisations only)	Organisation	CECODHAS - European Social Housing Network
EU as a whole (for organisations only)	Organisation	COGEN Europe
EU as a whole (for organisations only)	Organisation	Danfoss A/S
EU as a whole (for organisations only)	Organisation	EFIEES – Europ. Feder. Energy Efficiency Services
EU as a whole (for organisations only)	Organisation	Emerson Electric
EU as a whole (for organisations only)	Organisation	EON AG
EU as a whole (for organisations only)	Organisation	EPIA, European Photovoltaic Industry Association
EU as a whole (for organisations only)	Organisation	ETRMA- European Tyre & Rubber Manufacturers' Ass
EU as a whole (for organisations only)	Organisation	eu.bac - european building automation & controls
EU as a whole (for organisations only)	Organisation	EURELECTRIC
EU as a whole (for organisations only)	Organisation	EURIMA, European Insulation Manufacturers Assoc
EU as a whole (for organisations only)	Organisation	EuroACE
EU as a whole (for organisations only)	Organisation	EUROCHAMBRES
EU as a whole (for organisations only)	Organisation	EuroCommerce

EU as a whole (for organisations only)	Organisation	EUROGYPSUM
EU as a whole (for organisations only)	Organisation	Euroheat & Power
EU as a whole (for organisations only)	Organisation	European Aluminium Association
EU as a whole (for organisations only)	Organisation	European Autoclaved Aerated Concrete Association
EU as a whole (for organisations only)	Organisation	European Calcium Silicate Producers Association
EU as a whole (for organisations only)	Organisation	European Construction Industry Federation (FIEC)
EU as a whole (for organisations only)	Organisation	European Copper Institute
EU as a whole (for organisations only)	Organisation	European Cyclists' Federation (ECF)
EU as a whole (for organisations only)	Organisation	European Environemental Bureau (EEB)
EU as a whole (for organisations only)	Organisation	European Federation for Construction Chemicals
EU as a whole (for organisations only)	Organisation	European Lamp Companies Federation
EU as a whole (for organisations only)	Organisation	European Petroleum Industry Association, EUROPIA
EU as a whole (for organisations only)	Organisation	European Renewable Energy Council
EU as a whole (for organisations only)	Organisation	FIA European Bureau
EU as a whole (for organisations only)	Organisation	GEODE
EU as a whole (for organisations only)	Organisation	Glass for Europe
EU as a whole (for organisations only)	Organisation	International Network for Sust. Energy - Europe
EU as a whole (for organisations only)	Organisation	Kingspan Group - mark.harris@kingspanpanels.com
EU as a whole (for organisations only)	Organisation	Micropower Europe
EU as a whole (for organisations only)	Organisation	NGVA Europe
EU as a whole (for organisations only)	Organisation	Surfrider Foundation Europe
EU as a whole (for organisations only)	Organisation	Surfrider Foundation Europe
EU as a whole (for organisations only)	Organisation	UEAPME

EU as a whole (for organisations only)	Organisation	WWF European Policy Office
EU as a whole (for organisations only)	Citizen	
Finland	Organisation	Finnish Energy Industries
Finland	Organisation	National Board of Antiquities
France	Organisation	ACFCI - French Chambers of Commerce and Industry
France	Organisation	Assemblée permanente des chambres de métiers (APCM
France	Organisation	Banque Populaire
France	Organisation	Bosch Thermotechnology
France	Organisation	ELM Leblanc (groupe BOSCH)
France	Organisation	ERDF - Electricité Réseau Distribution France
France	Organisation	Fédération Française du Bâtiment
France	Organisation	Fédération Nationale des Travaux Publics (FNTP)
France	Organisation	GIMELEC
France	Organisation	L'Union sociale pour l'Habitat
France	Organisation	MEDEF
France	Organisation	Ministère en charge du développement durable
France	Organisation	Regional Chamber of Commerce and Industry Lorraine
France	Organisation	EDF
France	Organisation	
France	Organisation	
France	Citizen	
Germany	Organisation	B.A.U.M. e.V.
Germany	Organisation	Bayerisches Staatsministerium für Umwelt

Germany	Organisation	BDEW German Association of Energy and Water Indust
Germany	Organisation	Bundesarchitektenkammer
Germany	Organisation	Bundesverband Großhandel, Außenhandel, Dienstleist
Germany	Organisation	Deutscher Industrie- und Handelskammertag DIHK e.V
Germany	Organisation	DGUF - Reg.-Nr. 82277911427-06
Germany	Organisation	erdgas mobil GmbH
Germany	Organisation	Federation of German Industries (BDI)
Germany	Organisation	FMI Fachverband Mineralwoleindustrie e.V.
Germany	Organisation	German Association of the Automotive Industry
Germany	Organisation	German Engineering Federation (VDMA)
Germany	Organisation	IHK Halle-Dessau
Germany	Organisation	Landis+Gyr Ag
Germany	Organisation	Industrieverband Polyurethan-Hartschaum e. V:
Germany	Organisation	Max Weishaupt GmbH, D-88475 Schwendi
Germany	Organisation	RWE AG
Germany	Organisation	Schulze Darup & Partner architects
Germany	Organisation	Stadtwerke München GmbH
Germany	Organisation	Verbraucherzentrale Bundesverband
Germany	Organisation	Wienerberger AG
Germany	Organisation	Vereinigung der Landesdenkmalpfleger in Deutschlan
Germany	Organisation	Viessmann Werke GmbG & Co. KG
Germany	Organisation	Viessmann Werke GmbH & Co. KG
Germany	Organisation	VKU e.V. und ASEW GbR

Germany	Organisation	Wuppertal Institute
Germany	Organisation	Zentralverband des Deutschen Handwerks
Germany	Citizen	
Germany	Organisation	
Germany	Organisation	
Germany	Citizen	
Germany	Citizen	
Greece	Organisation	test
Hungary	Organisation	Hungarian Real Estate Association Management HAREM
Hungary	Organisation	National Office of Cultural Heritage
Hungary	Organisation	
Ireland	Citizen	
Italy	Organisation	3Effegi S.r.l.
Italy	Organisation	Centro Studi Galileo
Italy	Organisation	Confcommercio - Imprese per l'Italia
Italy	Organisation	Edison spa
Italy	Organisation	ENI SpA
Italy	Organisation	Municipality of Bologna
Italy	Organisation	PIRELLI REAL ESTATE
Italy	Citizen	
Italy	Organisation	
Lithuania	Citizen	
Luxembourg	Organisation	

Malta	Citizen	
Netherlands	Organisation	Bouwend Nederland
Netherlands	Organisation	
Netherlands	Organisation	
Netherlands	Organisation	
Netherlands	Citizen	
Netherlands	Organisation	
Netherlands	Organisation	
Netherlands	Organisation	
Netherlands	Organisation	
Netherlands	Organisation	
Netherlands	Organisation	
Netherlands	Citizen	
Poland	Organisation	Verband für Wärmelieferung e.V.
Poland	Organisation	
Portugal	Organisation	EFRIARC - Assoc.Port.Eng.Frio Ind. Ar Condicionado
Portugal	Organisation	Portuguese Natural Gas Vehicle Association
Romania	Citizen	
Romania	Citizen	
Romania	Citizen	
Romania	Citizen	
Romania	Citizen	
Slovakia	Organisation	Association of Service Users
Slovakia	Citizen	

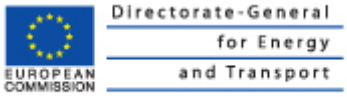
Slovenia	Organisation	Elektro Ljubljana d.d.
Slovenia	Organisation	Focus Association for Sustainable Development
Slovenia	Organisation	Lokalni pospeševalni center Pivka
Slovenia	Organisation	ZOJA
Some EU Member States (for organisations only)	Organisation	CEDEC
Some EU Member States (for organisations only)	Organisation	CELMA
Some EU Member States (for organisations only)	Organisation	EnBW Energie Baden-Württemberg AG
Some EU Member States (for organisations only)	Organisation	Eurofuel (The European Heating Oil Association)
Some EU Member States (for organisations only)	Organisation	EUROGAS
Some EU Member States (for organisations only)	Organisation	Lubrizol
Some EU Member States (for organisations only)	Organisation	UPEI (Union of European Petroleum Independents)
Spain	Organisation	Cantabria Trade Federation
Spain	Organisation	FENIE
Spain	Organisation	IBERDROLA
Spain	Organisation	Minsiterio de Industria, Turismo y Comercio
Spain	Organisation	Saint-Gobain Cristalería S.A.
Spain	Organisation	UNION FENOSA comercial
Spain	Organisation	
Spain	Citizen	
Spain	Citizen	
Sweden	Organisation	Telefonaktiebolaget LM Ericsson
Sweden	Organisation	5665831886-97 (Svensk Energi, Swedenergy AB)

Sweden	Organisation	Stadskansliet, City Hall
Sweden	Organisation	Swedish Society for Nature Conservation
Sweden	Citizen	
United Kingdom	Organisation	Confederation of British Industry (CBI)
United Kingdom	Organisation	Department of Energy and Climate Change (UK)
United Kingdom	Organisation	Energy Action Scotland (EAS)
United Kingdom	Organisation	Kingspan Insulation Limited
United Kingdom	Organisation	Local Govt Assn (for England and Wales)
United Kingdom	Citizen	
United Kingdom	Citizen	
United Kingdom	Citizen	
United Kingdom	Citizen	
	Organisation	ACEA
	Organisation	AGFW e.V.
	Organisation	Alstom Power
	Organisation	Greenpeace
	Organisation	HELIO International
	Organisation	International Union of Tenants (IUT) www.iut.nu
	Organisation	Royal Institution of Chartered Surveyors (RICS)
	Organisation	shecco
	Organisation	SHV GAS
	Organisation	AREA
	Organisation	Applied Materials

	Organisation	Better Place
	Organisation	Energy Efficiency Industrial Forum
	Organisation	Eurocities
	Organisation	
	Organisation	

Annex 2: On-line public consultation

Public Consultation on the Evaluation and Revision of the Action Plan for Energy Efficiency [COM(2006) 545]



Useful links - Background documents

The Heads of States and Governments have endorsed an ambitious European Energy policy which seeks to enable the European Union to reduce greenhouse gases by at least 20 %, to reduce energy consumption by 20 % and increase to 20 % the share of renewable energies in energy consumption by 2020.

The Action Plan for Energy Efficiency (EEAP) of 2006 was prepared and adopted with a view to intensify the process of realising the substantial cost-effective energy savings potential and the above-mentioned target on energy consumption reduction. The Plan's running time is until 2012. A major mid-term review to evaluate its effectiveness and results was scheduled to take place in 2009.

This internet consultation will support this evaluation and revision. It aims to collect views from interested parties on the effectiveness and results of the Action Plan so far, and on how best the EU may identify and initiate improved policy actions and measures which contribute to a maximum extent to the EU's energy saving targets.

The Commission will publish the results, which may also contain some of the individual replies (if no specific request for confidentiality is made) at
http://ec.europa.eu/energy/efficiency/consultations/2009_08_03_eeap_en.htm

The public consultation will last 8 weeks. The closing date is 3 August 2009.

Please note that:

• Replies in free text questions are limited, in most cases, to maximum 4000 characters (spaces included).
• The session time is limited to 1 hour 30 min, which means that you should submit your reply within this allotted time. If you exceed this timeframe, your replies will be lost.
• If your replies need to be co-ordinated internally, we suggest that you print the blank questionnaire and draft your reply off-line (e.g. in a word processor of your choice) and then enter the answers online (you can of course simply "copy/paste" text already prepared).
• After you have clicked on "submit", you should see a confirmation page stating that your reply has been recorded. If this is not the case, and if the survey page is re-loaded instead, please check that you have filled in all compulsory questions correctly and you have not exceeded the maximum number of characters for free text questions. In this case, an error message appears next to the question for which something is wrong or missing.
• The answers to the questions can be provided in any of the official languages of the European Union; where possible, answers in a commonly known language are encouraged in order to simplify the processing of replies, if possible in the Commission working languages (i. e. English, French or German).
• The respondents are strongly encouraged, if possible, to support their answers with quantitative and qualitative arguments and reference to other information sources.

Profile of the respondent

Your profile (compulsory)

- ☐ Citizen
- ◉ Organisation

Region (compulsory)

- ☐ European Union
- ☐ Europe outside European Union
- ☐ International
- ☐ Other

- ☐ Austria
- ☐ Belgium
- ☐ Bulgaria
- ☐ Cyprus
- ☐ Czech Republic
- ☐ Denmark
- ☐ Estonia
- ☐ Finland
- ☐ France
- ☐ Germany
- ☐ Greece
- ☐ Hungary
- ☐ Ireland
- ☐ Italy
- ☐ Latvia
- ☐ Lithuania
- ☐ Luxembourg
- ☐ Malta
- ☐ Netherlands
- ☐ Poland
- ☐ Portugal
- ☐ Romania
- ☐ Slovakia
- ☐ Slovenia
- ☐ Spain
- ☐ Sweden
- ☐ United Kingdom
- ☐ EU as a whole (for organisations only)
- ☐ Some EU Member States (for organisations only)

- ☐ Albania
- ☐ Andorra
- ☐ Armenia
- ☐ Azerbaijan
- ☐ Belarus
- ☐ Bosnia and Herzegovina
- ☐ Croatia
- ☐ Former Yugoslav Republic of Macedonia
- ☐ Georgia
- ☐ Iceland
- ☐ Liechtenstein
- ☐ Moldova
- ☐ Monaco
- ☐ Montenegro
- ☐ Norway
- ☐ Russia
- ☐ San Marino
- ☐ Serbia
- ☐ Switzerland
- ☐ Turkey
- ☐ Ukraine
- ☐ Vatican City State

Would you like your reply to be published online? (compulsory)

- [ ] Yes
- [ ] No

Organisation name (optional)

Organization type (compulsory)

- [ ] Member States or public body (national/regional/local), incl. Regulators
- [ ] European institution or body
- [ ] Industry and private sector, incl. their associations, excl. SMEs
- [ ] Small and Medium Size Enterprises (SMEs)
- [ ] Consumer organization
- [ ] Financing organization
- [ ] Non-governmental organization
- [ ] Energy utility
- [ ] University/ education/research institute
- [ ] Energy Efficiency Agency (national, regional, local)
- [ ] OTHER

What type of activities are addressed by your organization (multiple choice question) (compulsory)

- [ ] Energy Efficiency services in the residential sector
- [ ] Energy Efficiency services in the tertiary and industry sectors
- [ ] Construction
- [ ] Energy-using products and appliances
- [ ] Transport sector
- [ ] Energy production, supply, transmission or distribution
- [ ] Other

Briefly describe the nature of your involvement in energy efficiency (optional)

1. General questions

In the context of this evaluation and the preparation of the envisaged new Energy Efficiency Action Plan, the Commission is open to re-evaluate its present legislation and policy portfolio.

1.1. The Action Plan for Energy Efficiency of 2006 identified 6 key areas and proposed 10 priority actions (out of a total of 85 actions and measures). Which of the actions and measures of the 2006 EEAP should be continued / redefined / discontinued, and why ? (Max. 4000 characters) (optional)

1.2. Which new challenges have emerged since 2006 and should be addressed in the new Action Plan for Energy Efficiency? (Max. 4000 characters) (optional)

2. Specific questions

Please provide an answer to each of the following questions and, if possible, justify it by quantifying the environmental, social and economic impacts.

2.1. The existing Energy Performance of Buildings Directive (2002/91/EC) and its recast, as well as other relevant legal acts, go a long way for introducing ambitious but realizable energy performance

requirements for buildings and increase consumers' awareness. However, much more can be done. (compulsory)

Yes No No opinion

How do you assess the need for moving towards a requirement that all new buildings have low or zero energy consumption and carbon emissions after certain date? (Max. 4000 characters) (optional)

How do you assess the need for introducing an EU level measures concerning training of architects, builders and installers? (Max. 4000 characters) (optional)

What other measures at EU level need to be undertaken? (Max. 4000 characters) (optional)

2.2. Sustainable transport and energy consumption of cars is currently addressed in the Greening transport package (COM(2008)433), the Regulation on Emission performance standards for new passenger cars (COM(2007)0856), the proposed Directive on labelling of tyres (COM(2008)0779), the proposal on greening car taxation (COM(2005)261) and the 'Green Cars' initiative. The Commission is also working on a proposal on light commercial vehicles and a revision of CO2/cars labelling. Do you consider that additional measures at EU level need to be undertaken? (compulsory)

Yes No No opinion

In your view what should these measures be? (Max. 4000 characters) (optional)

2.3. The Eco-Design (2005/32/EC) and Energy Labelling (92/75/EEC) framework Directives are significant steps as regard to product policy. A number of implementing measures have been already or are soon to be adopted and the ongoing amendments of the two Directives provide for their more ambitious and wider application. Do you consider that additional measures can be taken forward in order to increase the impact of these instruments? (compulsory)

◉ Yes ○ No ○ No opinion

In your view what should these measures be? (Max. 4000 characters) (optional)

2.4. Lack of access to appropriate financing is an important bottleneck for making a real step forward in our ambitions on energy saving. Innovative financing instruments are now being developed by institutions such as EIB, EBRD, national promotional banks and private banks in particular in association with the Covenant of Majors initiative. Demonstration projects of the application of energy efficient technologies in a competitive manner, e.g. 'smart cities', could also be considered. Do you think other financing measures at EU level are needed? (compulsory)

◉ Yes ○ No ○ No opinion

What best mechanisms and ways forward where the EU value added can be substantial would you recommend? (Max. 4000 characters) (optional)

2.5. Well targeted fiscal incentives could be a driver for energy efficiency investments and innovation. The EU has already taken measures to make it easy for Member States to allow for more advantageous VAT rates for some labour-intensive services, such as renovation and repairing of

private dwellings. Do you consider that additional measures at EU level need to be undertaken to shape consumer choices? (compulsory)

Yes No No opinion

In your view what these measures should be? (Max. 4000 characters) (optional)

2.6. Education and training on energy efficiency are vital ingredient of a successful energy efficiency policy. These were already mentioned above regarding buildings but the challenge is much broader. Do you consider that measures/actions at EU level to catalyze training at school and university level should be undertaken? (compulsory)

Yes No No opinion

In your view what should these measures be as regards different target groups? (Max. 4000 characters) (optional)

2.7. Awareness of final consumers on energy savings possibilities and their benefits is still low. This in particular concerns domestic consumers and SMEs. Some actions to target different groups are already undertaken at national and EU level. For example, the Sustainable Energy Europe Campaign is focusing on grouping social stakeholders and market actors to undertake joint action. Do you think that further communication action at EU level is needed? (compulsory)

Yes No No opinion

Which would be the content of such a communication strategy as regards each of the target groups concerned? (Max. 4000 characters) (optional)

2.8. Furthermore, small and medium size companies (SMEs) are the backbone of EU's economy as they make up more than 99% of all firms and employ 67% of the EU's workforce but may need more support for implementing energy saving measures. Do you consider that specific measures to target SMEs are necessary? (compulsory)

◉ Yes ○ No ○ No opinion

In your view what should these measures be? (Max. 4000 characters) (optional)

2.9. Public sector should lead by providing best practice examples. Positive progresses have been made under the voluntary Green public procurement policy and the proposals for mandatory procurement of energy efficient products in the framework of the recast of the Energy Labelling Directive. The leading role of public authorities has also been emphasized under the recast of Energy Performance of Buildings Directive proposal. Do you consider that further actions at EU level should be undertaken? (compulsory)

◉ Yes ○ No ○ No opinion

What further actions would you suggest at EU level? (Max. 4000 characters) (optional)

2.10. The role of energy utilities can be substantial but at present they have insufficiently developed a market for energy efficiency services. Ways to create adequate framework conditions for this market to take-up in liberalized electricity and natural gas markets should be sought, possibly in cooperation with the Regulators. Do you consider that actions at EU level should be undertaken? (compulsory)

Yes No No opinion

In your view what should these measures be? (Max. 4000 characters) (optional)

2.11. Energy efficiency offers significant market opportunities. Do you consider that specific measures at EU level should be adopted to provide incentives for companies to enter these markets, in particularly as regards SMEs? (compulsory)

Yes No No opinion

In your view what should these measures be? (Max. 4000 characters) (optional)

2.12. In relation to the above question do you consider that there is a need for the introduction of a EU-wide White Certificate scheme? (optional)

Yes No No opinion

How do you think this EU-wide scheme should be designed and what should the role of energy utilities be? (Max. 4000 characters) (optional)

2.13. The Directive on energy end-use efficiency and energy services (2006/32/EC) already provides for national indicative energy savings target which differs from the ones for renewables and for the greenhouse gas emissions. Giving the increasing priority for ensuring that investment in energy consumption reduction are made in all Member States do you consider that a move towards binding targets is needed? (compulsory)

Yes No No opinion

How should these binding targets be set up and at what level? (Max. 4000 characters) (optional)

2.14. Measurement and verification of energy savings is essential aspect for monitoring the results of any measures introduced at national and EU level. Although some targeted measures are being implemented, do you consider that more systematic and harmonized approach at EU level is needed? (compulsory)

Yes No No opinion

In your view what should these measures be? (Max. 4000 characters) (optional)

2.15. Energy efficiency should become a vector of international co-operation and a subject of international financing programmes, in particular regarding EU neighbouring countries. Do you agree with statement? (compulsory)

Yes No No opinion

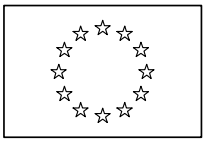
In your view what should these measures be? (Max. 4000 characters) (optional)

3. Other remarks

3.1. Please add your additional remarks in the section below. (Max. 5000 characters) (optional)

SUBMIT

Annex 3: Background document on the on-line public consultation



EUROPEAN COMMISSION
DIRECTORATE-GENERAL FOR ENERGY AND TRANSPORT

DIRECTORATE D - New and Renewable Energy Sources, Energy Efficiency & Innovation
Energy Efficiency

Background Information Paper for the Public Consultation on the Evaluation and Revision of the Action Plan for Energy Efficiency (COM (2006) 545)

Note:

This background paper is being circulated for consultation to all parties concerned by the Action Plan for Energy Efficiency (EEAP).

The sole purpose of the consultation is to contribute to the debate, collect relevant information and help the Commission develop its thinking in this area.

This document does not necessarily reflect the views of the Commission of the European Communities, and should not be interpreted as a commitment by the Commission to any official initiative in this area.

Parties concerned are invited to submit their comments no later than 3 August 2009 by means of an online questionnaire, available at:

http://ec.europa.eu/energy/efficiency/consultations/2009_08_03_eeap_en.htm

1. INTRODUCTION

The European Community aims to promote energy efficiency and energy saving as it is the most cost-effective way of reducing energy consumption while maintaining an equivalent level of economic activity. This supports broader Community objectives in the areas of security of supply, climate change mitigation and improving competitiveness.

On 19 October 2006 the Commission adopted the Action Plan for Energy Efficiency: Realising the Potential (EEAP)[8]. It gave an outline for a coherent framework of legislation, policies and measures with a view to save a substantial part of the 20% of EU annual primary energy consumption by 2020. It proposed a selection of cost-effective energy efficiency improvement initiatives to be put in place and implemented until 2012.

As announced in the Plan, the Commission will evaluate it in 2009 and prepare a revised Action Plan, as requested by the European Council.

This document initiates the Public Consultation that precedes the preparation of the revised Plan and allows stakeholders and interested parties to express their views and opinions on issues they believe should be covered by the new *Action Plan for* E*nergy Efficiency*.

2. THE ACTION PLAN FOR ENERGY EFFICIENCY AND EU POLICY OBJECTIVES

The full implementation of the EEAP can offer significant reductions in energy consumption and is therefore an important tool towards achieving the ambitious 20/20/20% targets for energy consumption and greenhouse gas emission reductions, and an increased share of renewables by 2020, as endorsed by the Heads of State and Governments during the spring 2007 European Council[9].

The EEAP will lead to achieving the above objectives in a cost-effective manner as it will:

(i) increase independence from energy imports which will contribute to the EU security of supply objectives;

(ii) contribute to EU economic growth and job creation;

(iii) contribute to the reduction of greenhouse gas emissions and of the harmful impact of energy generation on the environment; and

(iv) improve living conditions and comfort for citizens.

The implementation of actions and measures of the Action Plan sector is therefore of prime importance for realizing the strategic objectives of the European Energy Policy.

Moreover, on the basis of Directive 2006/32/EC on energy end-use efficiency and energy services, each EU Member State has prepared its National Energy Efficiency Action Plan which describes the energy efficiency improvement measures planned at national level to achieve the energy savings target of the directive, to be reached by way of energy services and other energy efficiency improvement measures. The Commission is currently assessing these plans. A Commission staff working document is to be published in mid-2009 and will present

[8] COM(2006) 545.
[9] 7224/1/07, REV 1.

the results of this assessment. The national Plans are expected to also contribute significantly to the EU's energy saving targets and are complementary to the EEAP.

The EEAP and the National Plans are two of the five pillars to the EU's specific energy efficiency policy. The other three pillars are i) the legal framework notably for the building sector and energy consuming products, ii) flanking policy instruments such as targeted financing and the provision of information and networks, and iii) international collaboration. The Commission stresses that the full implementation and enforcement of the existing and future regulatory frameworks is essential and the Commission will continue to pursue - through legal means - proper transposition and application of Community law affecting energy efficiency.

3. THE MAIN ELEMENTS OF THE ACTION PLAN FOR ENERGY EFFICIENCY

The Action Plan outlines a framework of policies and measures with a view to intensify the process of realising the over 20% estimated savings potential in EU annual primary energy consumption by 2020. The Plan lists a range of cost-effective measures proposing priority actions to be initiated immediately, and others to be initiated over the Plan's implementation period.

The Action Plan intends to mobilise the general public and policy-makers at all levels of government, together with market actors, and to provide EU citizens with the globally most energy-efficient infrastructure, buildings, appliances, processes, transport means and energy systems. Given the importance of the human factor in reducing energy consumption, the Plan also encourages consumers to use energy in the most rational manner possible as energy efficiency is also about informed choice by individuals.

The current EEAP identifies six key areas with the highest potential for energy saving:

- energy performance requirements for products, buildings and services
- energy transformation
- transport
- financing and pricing
- energy behaviour
- international partnerships

The current Plan also proposes 85 actions and measures to be taken at EU and national level. Among them, ten priority actions have been identified:

- appliance and equipment labelling and minimum energy performance standards
- adoption of building performance requirements and very low energy buildings
- making power generation and distribution more efficient

- achieving fuel efficiency of cars
- facilitating appropriate financing of energy efficiency investments for SME's and Energy Services Companies
- coherent use of taxation
- energy efficiency in built-up areas
- raising energy efficiency awareness
- fostering energy efficiency worldwide
- spurring energy efficiency in the new Member States

4. CURRENT IMPLEMENTATION OF THE ACTION PLAN FOR ENERGY EFFICIENCY

The implementation of the Action Plan is ongoing and will continue till 2012. The measures set forth in the Action Plan and its annex are expected to produce effects between 2006 and 2012 and many of them already between 2006 and 2009. That is why the mid-term review takes place this year, during the implementation period of the Action Plan.

One third of the actions of the Action Plan have been completed. The remainder are ongoing and still need active commitment both at EU and national level.

5. WHY THE ACTION PLAN FOR ENERGY EFFICIENCY NEEDS EVALUATION AND REVISION?

There are strong indications that with on-going actions the EU will not be able to reach its saving objective for 2020. In its Communication 'Energy efficiency: delivering the 20% target' (COM(2008) 772 final), the Commission provided a quantitative evaluation of the expected impact of specific energy efficiency legislation and measures when fully implemented. First hand information on the involvement and the implementation as well as other indicators suggested that the energy saving potential is not being realised fast enough: they would achieve energy savings of about 13% by 2020 if properly implemented by Member States. Even if this represents a major achievement, it falls short of what is needed. For this reason, all pillars of the EU's energy efficiency policy - including the EEAP - need to be reinforced.

Recent studies indicate that the opportunities for energy savings are significant: the estimated energy consumption reduction potential in 2020 is 19% for industry, 20% for transport and 30% for the households and services sector.[10]

There are a number of reasons why our energy saving potential is not exploited to the full:

[10] Study on Energy Savings Potentials in EU Member States, Candidate Countries and EEA Countries. Fraunhofer ISI *et al*; preliminary results.

- Energy saving and efficiency is by its nature a result from numerous small actions at the final consumption level.

- The Member States are formally implementing the current EU legislation. However, more needs to be done to reap all benefits available.

- The diversity of the 27 Member States is even more evident on energy efficiency policies than in other energy policy issues. The climatic conditions, consumers' possibilities to act, economic circumstances vary from one corner of Europe to another.

- Energy saving actions are needed at all levels of government including, but not only, the EU level.

- Consumers, companies and households are the final decision makers. Consumer awareness on the benefits of energy saving, though on the increase, is still too low. In parallel, the political decision makers are not eager to touch upon delicate behaviour-related issues.

- The financing of the energy saving investments is complex because of the small scale of the individual actions. Unlike other areas, such as renewable energy generation and transport, financial incentives for households have been rather limited. Further, even if funding is available, the missing organisational and administrative structures have been preventing its use.

- Energy prices and the environmental benefits have so far been the main drivers for energy saving. However, price do not yet fully internalise the environmental, social and economic benefits of higher energy efficiency (esp. there are benefits from energy security not valued on markets).

- Job creation benefits are equally important to justify new activities in the deepening economic downturn in Europe. Concerns about security of supply add to the urgency of action.

- A specific problem in energy saving is target setting. A concrete, verified target has proved to be successful in many sector policies. In energy saving, the results are difficult to measure.

- Energy efficiency in energy production and supply: a dynamic market for energy services has not yet fully developed, despite incentives created by the energy services directive for utilities to invest in energy efficiency and to promote an energy efficient behaviour of their customers

- In many Member States architects, builders and installers have not received training or have not certified their skills in order to implement energy efficiency practices.

The above list is not exhaustive but provides indications and avenues on how more energy can be saved and the actions to be taken to make that happen. Of course, additional challenges and avenues can be identified and proposed.

In its Energy Efficiency Package of November 2008, the Commission presented the over-all policy lines and first rough estimations on the expected impacts of the current policy

portfolio. In this context, the Commission also made a number of proposals to strengthen the legal framework for energy efficiency.[11] The impact assessments that accompany these proposals show the significant potential impact thereof and will serve as an important source of information for the evaluation of the EEAP.

6. ISSUES FOR CONSIDERATION IN THE CONTEXT OF THE PREPARATION OF A NEW *ENERGY EFFICIENCY ACTION PLAN*

A brief but not exhaustive overview of some of the challenges arising out of implementation of the present Action Plan is set out in the previous sections. The new EEAP will start from analysis of the successes and failures of the current one. The Commission will carry out this evaluation in particular on the basis of the observations and comments made by third parties under this Public Consultation.

The list of priority issues that will be discussed in the new Action Plan for Energy Efficiency are the following:

(1) The existing Energy Performance of Buildings Directive (2002/91/EC) and its recast, as well as other relevant legal acts, go a long way for introducing ambitious but realizable energy performance requirements for buildings and increase consumers' awareness. However, much more can be done. For example, measures on how to stimulate rapid uptake of training of architects, builders and installers need to be considered. Further discussion is also needed on whether EU should move towards fixing agreed date for all new build to be very low or zero energy and carbon and adopt a roadmap towards this.

(2) Sustainable transport and energy consumption of cars is currently addressed in the Greening transport package[12], the Regulation on Emission performance standards for new passenger cars[13], the proposed Directive on labelling of tyres[14], the proposal on greening car taxation[15] and the 'Green Cars' initiative. The Commission is also working on a proposal on light commercial vehicles[16] and a revision of CO2/cars labelling. Comments are needed as to whether additional measures need to be undertaken.

(3) The Eco-Design (2005/32/EC) and Energy Labelling (92/75/EEC) framework Directives are significant steps with regard to product policy. A number of implementing measures have been already or are soon to be adopted and the ongoing amendments of the two Directives provide for their more ambitious and wider application. Suggestions should be made as to how these can be taken forward in order to increase their impact.

(4) Lack of access to appropriate financing is an important bottleneck for making a real step forward in our ambitions on energy saving. Innovative financing instruments are now being developed by institutions such as EIB, EBRD, national promotional banks

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11 See the European Commission's website for details.
12 COM(2008) 433.
13 COM(2007) 856.
14 COM(2008) 779.
15 COM(2005) 261.
16 http://ec.europa.eu/environment/air/transport/co2/co2_home.htm

and private banks in particular in association with the Covenant of Majors initiative. Demonstration projects of the application of energy efficient technologies in a competitive manner, e.g. 'smart cities', could also be considered. Comments on the best mechanisms and ways forward are needed.

(5) Furthermore, well targeted fiscal incentives could be important drivers for energy efficiency investments and innovation. The EU has already taken measures to make it easy for Member States to allow for more advantageous VAT rates for some labour-intensive services, such as renovation and repairing of private dwellings and is considering further how energy taxation and other taxes can play a role in synergy with the EU ETS to achieve EU climate and energy objectives steps on products and other services. Comments on whether additional measures need to be undertaken to change consumption patterns are needed.

(6) Education and training on energy efficiency are vital ingredients of a successful energy efficiency policy. These were already mentioned above regarding buildings but the challenge is much broader. Measures on ways to catalyze training at school and university level need to be identified and discussed.

(7) Awareness of final consumers on energy savings possibilities and their benefits is still low. This in particular concerns domestic consumers and SMEs. Some actions to target different groups are already undertaken at national and EU level. For example, the Sustainable Energy Europe Campaign is focusing on grouping social stakeholders and market actors to undertake joint action. Further consideration of the appropriate level and means to better engage these groups is needed.

(8) Furthermore, small and medium size companies (SMEs) are the backbone of EU's economy as they make up more than 99% of all firms and employ 67% of the EU's workforce. Consideration should be given as to the best means to provide them with more support for implementing energy saving measures.

(9) Public sector should lead by providing best practice examples. Positive progresses have been made under the voluntary Green public procurement policy and the proposals for mandatory procurement of energy efficient products in the framework of the recast of the Energy Labelling Directive. The leading role of public authorities has also been emphasized under the recast of Energy Performance of Buildings Directive proposal but further measures should be envisaged.

(10) The role of energy utilities can be substantial but at present they have insufficiently developed a market for energy efficiency services. Ways to create adequate framework conditions for this market to take-up in a liberalized electricity and natural gas markets should be sought, possibly in cooperation with the Regulators. Further questions on how these framework conditions can best be created, for example through possible EU-wide white certificate scheme, would also need to be considered.

(11) Energy efficiency offers significant market opportunities. Measures to provide incentives for companies to enter these markets need to be considered, in particularly as regards SMEs.

(12) The Directive on energy end-use efficiency and energy services (2006/32/EC) already provides for national indicative energy savings target which differs from the ones for

renewables and for greenhouse gas emissions. Giving the increasing priority for ensuring that investment in energy consumption reduction are made in all Member States the question arises as to whether it is the time now to move towards binding "energy efficiency" targets.

(13) Measurement and verification of energy savings is a challenging but very important aspect for monitoring the results of any measures introduced at national and EU level. Some targeted measures are being implemented but whether a more systematic and harmonized approach is needed should be considered.

(14) Energy efficiency should become a vector of international co-operation and a subject of international financing programmes, in particular regarding EU neighbouring countries. Measures to this effect need to be identified and discussed.

Specific questions highlighting these issues are included in the online questionnaire, available at: http://ec.europa.eu/yourvoice/index_en.htm