



Documentation of Workshop ‘Climate protection potential of energy efficiency’

9 November 2011

at the Permanent Representation of the
Federal Republic of Germany to the European Union,
1040 Brussels, Belgium

Dear participant,

The international workshop on climate protection potential of energy efficiency took place at the Permanent Representation of the Federal Republic of Germany to the European Union on 9 November 2011. It brought together around 80 participants from EU Member States, representatives of the EU institutions as well as from industry, politics, and civil society. The workshop aimed to examine and discuss the current policy framework in the EU, including the European Commission’s new directive proposal, in order to gain insight into its implications for the legislative and administrative models in the different EU Member States. Moreover, it focused on the dissemination of knowledge and good practice examples of energy efficiency policies and measures by Member States and by the private sector.

We would like to thank you for your participation, including in the working groups and the discussion!

For your information, please find the comprehensive minutes of the event in the following sections.



Documentation of the event

Morning

Dr. Christine Wistuba of the Permanent Representation of the Federal Republic of Germany to the European Union gave a short welcoming speech to the participants and speakers.

Dr. Silke Karcher from the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Head of Division KI I 4, EU Affairs and Bilateral Cooperation ‘Environment and Energy’—as representative of the host of this event—also welcomed the speakers and participants. She gave a short introduction to the topic of the event, pointing out the importance of energy efficiency as well as the political commitments that have been made—both at the German and EU level. Energy efficiency is one of the cornerstones of the German energy concept published in September 2010. As for the EU, the Council agreed in 2007 to reduce primary energy use by 20% relative to projected levels by 2020. Ms. Karcher emphasized that energy savings are the biggest low-carbon energy source of the EU. The workshop therefore aims to discuss policies, studies, and best practice examples from Member States that could help to reach these targets. She pointed out that this is a good moment for such a discussion, as the European Commission has recently proposed a new Energy Efficiency Directive.

Subsequently, **Christine Lucha** of Ecologic Institute set forth the agenda of the event and gave the floor to the speakers invited for the morning session.

Dr. Michael Köhler, Chief of Staff of the EU Energy Commissioner, presented the European Commission’s view on the recent discussion. He especially welcomed Mr. Turmes, the Rapporteur of the Energy Efficiency Directive in the European Parliament. Mr. Köhler enumerated the potential benefits of successful energy efficiency policy, i.e. greenhouse gas emissions reductions, sustainable energy use, and energy security, explaining that the implementation of energy efficiency measures would not necessarily mean a burden for those affected, and that there is also great potential for the



economy. He stated that the EU already has the best framework for energy efficiency in the world: a comprehensive mix of measures has already been implemented at the national level in all relevant sectors. The Directive proposed in June would be an important contribution to EU energy efficiency policy. However, Mr. Köhler warned that despite the progress made so far, estimates show that not enough has been done and that targets made for 2020 might not be reached. Thus, more could be done, especially taking into account the economic benefits that energy savings have.

The question of how the 2020 target could be implemented has been answered in the new proposal of the Directive. The Directive would define what is needed to increase energy efficiency by 20% by 2020: 368 Mtoe would need to be saved by 2020. This corresponds to 1000 coal-fired power plants or half a million wind turbines that would not need to be constructed as well as employment gains of 400,000 jobs. The purpose of the proposal is to make a considerable contribution to reaching the 2020 target. The full chain of energy use is supposed to be covered. Key sectors addressed are the public sector, industry, transport, and private households.

Mr. Köhler elaborated further a few key elements of the Directive. First, he explained the intention of the 3% renovation obligation for buildings owned by public bodies. The Commission has set a realistic target, as it considered best practice examples from a number of Member States. Moreover, flexibility clauses were integrated into the relevant article. The same approach has been applied to creating the energy saving obligations for utilities: best practice examples from Member States served as role models, and flexibility is granted to those Member States that present alternative and effective means to achieve the target. As for consumers, they generally need clear, precise, and accessible information on energy savings. Polls have shown that the majority of consumers do not know how much energy they consume. This is reflected in the new Directive as well.

Mr. Köhler reported that he first was not sure when and in which form this proposal will be accepted and finally adopted at all. However, the biggest challenge would be the implementation of the binding measure of the Directive. The Directive will only be successful if it is implemented as soon as possible. Projections have shown that the EU and Member States need to make progress immediately in order to reach their energy efficiency targets.

As a conclusion, he pointed out his key messages. First, flexibility is granted to the Member States. The Commission would be satisfied with good results. Second, if acceptable results are not achieved, the Commission would not shy away from proposing binding targets. Mr. Köhler was pleased that the Danish presidency announced that it will make energy efficiency a key topic and hopes for an agreement before June 2012.

Prof. Krzysztof Zmijewski, Secretary General of the Public Board of the National Programme for Reduction of Emissions in Warsaw, held a presentation on the white certificate scheme that is being applied in Poland. He reported that sustainable development and energy efficiency policy are one of the five



main strategic targets in Poland. The drivers behind this include not only environmental concerns but also economic considerations: energy efficiency is the cheapest way to reach and guarantee energy security. He explained Poland's relevant quantitative targets and support mechanisms. By 2016, Poland wants to reach energy savings of 9% of energy consumption per year. As part of the white certificate scheme, companies selling energy, heat, or gas are generally obligated to generate and present white certificates for redemption or pay a substitution fee for missing certificates. Certificates can be acquired by undertaking energy efficiency projects. Interested enterprises can set up projects and file tenders at the responsible energy authority to receive certificates that can then be traded. Subsequently, Prof. Zmijewski presented a couple of graphics to illustrate the potential savings that can be achieved by the scheme. The operation of the scheme will start this year and end in 2016. It is in accordance with all principles of the new Energy Efficiency Directive. Finally, he pointed out the advantages of the scheme and synergies with other goals (such as economic development).

Franzjosef Schafhausen, Deputy Director General Environment and Energy, German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), presented the German perspective. He emphasized the potential benefits of energy efficiency and pointed out that the adoption of adequate measures has been discussed for decades. Germany has already implemented a broad range of measures, but more could be done. Mr. Schafhausen presented the German energy concept published in September 2010, of which energy efficiency is one key element. The concept is based on an analysis of the status quo, the identification of potentials and barriers, the creation of measures and policies, and finally their implementation and monitoring. The implementation of the concept requires time, money, and acceptance, the latter two from society and the economy. Successful energy efficiency policy especially would need a mix of instruments (regulatory, financial/economic, and soft instruments, such as information), rather than a single instrument. All relevant sectors need to be addressed. Subsequently, Mr. Schafhausen explained a number of existing and planned energy efficiency measures in detail. He concluded by saying that Germany has adopted a long-term climate and energy policy until 2050. The EU would need a more ambitious and binding energy efficiency policy to create a level playing field. Competition between Member States would facilitate the realization of the energy efficiency potential.

Dr. Peter Liese, MEP-D, Committee on the Environment, Public Health and Food Safety (ENVI Committee), shared the view of the ENVI Committee. He pointed out the importance of energy efficiency, especially regarding energy security and cost savings. Ambitious energy efficiency policy is one of the cornerstones of EU climate policy. The proposal on an Energy Efficiency Directive should not be weakened. The planned savings of 368 Mtoe should not be changed. He explained why coordinated action at the EU level is necessary for ambitious EU energy efficiency policies. First of all, the 27 Member States already agreed on a common energy efficiency target in 2007. Second, the legal basis for EU action in the field of energy efficiency can be found in the Treaty of Lisbon. Finally, there are a number of practical arguments: a common approach would reduce costs compared to solo efforts in Member States



and is in line with the idea of an internal market. Objections to a common approach are unacceptable. On the other hand, the support in the European Parliament for binding targets is growing. Finally, Dr. Liese emphasized the need for an energy efficiency strategy beyond 2020.

In the beginning of the **subsequent discussion**, the audience raised a number of interesting questions for the speakers. Some participants expressed their disappointment with the proposal in the building sector. Mr. Liese responded that he considers the proposal ambitious regarding public buildings. He agreed that more actions need to be taken on private buildings, but only with the necessary consideration of the interests of private house owners. They should not be burdened by binding targets. Instead, Member States should adopt national strategies regarding private buildings. Mr. Schafhausen used the opportunity to present the German strategy on energy efficiency in the building sector.

Other participants wondered whether the implementation of an effort-sharing system regarding the EU targets on energy efficiency is needed or envisaged. Mr. Liese welcomed the proposal and encouraged the stakeholders to insist on its implementation. He had already made a corresponding proposal a few weeks prior and received no criticism, only support. His proposal is based on the PRIMES-Model, which shows that effort sharing would be possible in the field of energy efficiency. Mr. Schafhausen agreed that the effort sharing approach—which has been applied successfully in the field of renewable energy—should also be discussed in the context of energy efficiency.

As for the non-binding 2020 target, Mr. Köhler added that at the time of the drafting of the proposal, the Council had unanimously been against a binding target. He is a bit skeptical about the intention of those that have changed from proponents to opponents. He pointed out the charm of the current proposal: the Commission suggested binding measures where the state is concerned and incentives for consumers. Regarding the strategy beyond 2020, he confirmed that the low-carbon roadmap focuses on 2050. But he is skeptical that the energy efficiency target could be integrated very easily into it, as the focus of the strategy is slightly different. Mr. Schafhausen stated that the German government has as yet no position on the Commission proposal. In principle, Germany seconds binding targets and binding measures. Mr. Zmijewski added that obligations are never really welcome, but practice has shown that they are needed. Implementations of obligations, however, should be cheap and fair. He pointed out the advantages of domestic offsets.

Following that, the participants discussed funding of the necessary investments. The fact that public financial support easily facilitates additional private investments in energy efficiency—as is recognized in the German system—was pointed out. Mr. Köhler stated that these best practice examples and studies should be advertised more in order to encourage public funding and private investments.



In the last presentation of the morning, **Mr. Wolfgang Eichhammer** and his colleague **Tobias Boßmann**, of Fraunhofer ISI Institute in Karlsruhe, presented the results of their study “Concrete Paths of the European Union to the 2°C Scenario: Achieving the Climate Protection Targets of the EU by 2050 through Structural Change, Energy Savings and Energy Efficiency Technologies” on behalf of the German Ministry for the Environment. The speakers pointed out that, so far, the role of energy efficiency has been addressed in insufficient detail. Their study aimed to analyze in depth the potentials and contributions of energy efficiency and energy saving options to the climate policy targets in the EU up to 2050, with a clear focus on the demand side in various economic sectors. The total final energy saving potential of analyzed measures would amount up to 26% (2020), 41% (2030) and 58% (2050). Applying only cost-efficient saving options would have a final demand reduction potential of 21%, 32% and 52% respectively, showing that it is possible to reach the EU20% efficiency target for 2020, already with demand side savings. Electricity savings may achieve a stabilization of the electricity demand by the middle of the century and reduce the pressure to build large amounts of interconnectors and transmission grids in Europe to cope with large shares of intermittent renewables in the power mix.

Afternoon – Working Group 1

In working group 1, the topic “Energy Efficiency in Buildings: Sustainable Cities and the Role of Energy Performance Contracting” was discussed. The session began with a number of short presentations by relevant actors and closed with a lively discussion among all participants. The working group was chaired by Dr. Hartmut Grewe from energiewaechter GmbH.

First, **Hans-Lothar Schäfer** from Techem GmbH presented the key elements of energy contracting. Energy contracting involves owners of residential and commercial property assigning the planning, installation, and financing of an energy system, the operation and optimization of a heating facility, and the delivery of heat and cooling energy as well as of electricity from combined heat and power generation plants to a service company. It is an intelligent financial instrument that helps put private money in the energy efficiency market. The mission of the service company—Techem GmbH—is to help save costs. Success hinges on a combination of third party money and third party operation. But Mr. Schäfer explained that this instrument is not used as extensively as it should be because it is a long-term business model that requires a certain legal environment that is currently not sufficient.

Ms. **Virginie Caujolle-Pradenc** of the Greater London Authority presented the London initiative RE:FIT Building Energy Efficiency, a project that aims to serve as a good practice example of energy contracting. It focuses on the public sector, and one of its key features is that an energy supplier financially guarantees the energy savings. The initiative selected and approved 12 suppliers, both large and small. All public buildings could benefit within this



framework. It is free of charge, and approved suppliers can be chosen without procurement procedure. Moreover, the initiative helps with alternative funding solutions and resources (know-how). The RE:FIT scheme has already been successfully implemented, with 42 buildings retrofitted thus far. The model is now supposed to be extended to the entire London public sector and is being promoted around Europe. Lisbon and other EU cities have already expressed interest in it.

Ms. **Susanne Berger** of the Berlin Energy Agency GmbH presented the Energy Saving Partnership, which was meant to serve as a good practice example. The Berlin model is successful and the leading example of energy contracting in Europe. Similar to the London initiative, the savings are financially guaranteed. The project was started in 1995; therefore, the Berlin Energy Agency has a lot of experience to share. Ms. Berger pointed out that political back-up and motivation have been key success factors over the years. So far, there are 26 contracts, covering 1,400 public buildings. Ms. Berger presented the key elements of the Berlin model and the basic facts on guaranteed savings and CO₂ emissions reductions. She reported that the guaranteed energy savings are achieved in most contracts. High savings of up to 35% are feasible. She pointed out that one of the key factors is the degree of freedom in every project. The specific customer interests are always taken into consideration when implementing measures. She concluded that energy contracting has great potential as an instrument for combating future energy challenges. She requested that EU policymakers establish a suitable legal framework for energy saving contracting.

Dr. Stephan von Hundelshausen, Managing Director of the ESCO Forum, which is imbedded in the German Electrical and Electronic Manufacturers Association made another contribution on behalf of the energy contracting suppliers. He pointed out the importance of energy efficiency and the technologies that already exist to exhaust the potential benefits. However, a number of legal obstacles to their implementation would need to be removed—such as the investor-user dilemma in the building sector. The solution would be to adapt the relevant legislation in order to enable uniform transition to commercial heat delivery by contracting. ESCO Forum also suggests that fixed heat-supply costs should not exceed previous heat costs by more than 10 % to overcome this dilemma. ESCO Forum supports equal opportunity, i.e., that the basic conditions for contracting solutions should not be less favorable than those of landlords with their own supply of heat. He stated that the difficulties of finding a common position within the German government could be explained by the interdependencies with other policy measures that are not sorted out (such as energy taxes).

Finally, **Dr. Klaus Nutzenberger** of the German Association of Towns and Municipalities commented on the short presentations that had been held so far in working group 1. He represented the local policy level that is particularly affected by changes in energy efficiency, as measures have to be implemented to a great extent at the local level. He stated that he is very skeptical about the plans of the European Commission. A lot of money would be needed to



implement contracting; from his experience, the minimal investment sum for cities would be at least one to two million €. Another obstacle—especially for the majority of small towns—is the complexity of these contracts. He pointed out that 300,000 € per year would be needed to reach the 3% renovation obligation target. This is too much money for towns and cities. Realistically, towns and municipalities could spend one third of that amount. Generally, the right of self-administration of local authorities—as guaranteed by the German constitution—is at stake. He also stated that the special retrofit needs of historical buildings were not sufficiently taken into account in the new proposal. Moreover, he argued that in most cases the construction of new buildings would be cheaper and more effective than renovation of existing buildings.

In the subsequent **discussion**, the participants addressed, inter alia, possible funding options. For example, structural funds were discussed as a potential source.

A number of participants were interested in the specific details of the London and Berlin good practice examples of energy contracting. Both speakers confirmed that contracting theoretically fits all types of buildings. Age of the building would generally not matter. Each building needs an individual assessment and an individual set of measures, in accordance with its needs. The projects so far generally do not focus on deep retrofitting, but on energy savings of approximately 20 to 35 %. Deep retrofit projects (70 % or higher) are still being looked at; however, deep retrofitting is more difficult to implement and requires long-term measures. The advantage is that only one renovation is needed, as energy saving potential has been thoroughly exploited.

The focus of contracting lies on existing buildings; that is why cooperation with engineers is more extensive than with architects and planners. Generally, there are no limits to the contracting aside from investment restraints.

The speakers agreed that energy contracting is a viable business tool, as best practice examples have shown, and the supply of these instruments is growing.

The importance of demand-side measures—also in the context of contracting—was brought to the participants' attention. People would have to learn how to manage the energy efficiency buildings. Therefore, smart metering is of crucial importance.



Afternoon – Working Group 2

The subject matter of working group 2, chaired by Ms. Christine Lucha, Senior fellow at Ecologic Institute, was the “Role of Energy Suppliers in New Energy Markets: Challenges and Opportunities for Business and Industry in Europe.” Also, this forum’s agenda began with a number of presentations and comments by experts that, as intended, triggered an intense debate on expected impacts of the EU Commission's draft Energy Efficiency Directive. Key questions that arose were: Should energy efficiency measures be supportive or regulative? If regulative, who should be obligated to take responsibility for binding savings targets? Would fixed unitary national savings targets for all member states be defined or would individual targets—depending on previous achievements efforts brought so far—be taken into account? Should power suppliers, distributors, or the industry be obligated to meet energy saving targets? (How) Would state funding and tax incentives help achieve the saving targets? Or would that only cultivate “subsidy addicts?”

Alexander Klötzel from Trianel GmbH, a business developer of municipal utility companies, gave a presentation on energy efficiency as a viable business model for local energy providers. Trianel Group’s main business segments are power generation, power trading, and sales support. He delineated Trianel’s vision—and strategic definition—that municipal energy suppliers will evolve from their traditional role as public utilities towards multi-service providers by offering solutions in the field of smart metering, electric mobility, “green IT,” energy efficiency, smart grids, zero energy building, building automation, decentralized power generation, and more.

Regina Wilde, as the representative of BASF, claimed that her company has in recent years been successful in systematically reducing the power demand of their industrial facilities and sites as a whole. Even though BASF, the largest chemical company of the world, has a high energy demand, it has been expediting energy efficiency through reuse of energy, materials, and compact structures (“Energieverbund”) as well as steady improvement of production technologies. Companies can achieve competitive advantages by producing efficiently. Moreover, the company produces several energy efficiency products.

Ms. Wilde pointed out that all sectors would have to share burdens based on the remaining economic potentials. Energy is an important cost factor in industry and efficiency potentials are being captured by the companies—because energy efficiency is a business model. Against that, she underlined that there are hardly any achievements in the residential field and transport: the largest potential remains in buildings and transport sectors. Consequently, industry should not be obligated to meet energy saving targets.



Frances Williamson from the UK Energy Retail Association (ERA) spoke about the UK's energy suppliers' experiences with utilities' savings obligations and their impact. The UK's government is seeking to meet the targets contained in the Climate Change Act 2008 through a range of energy efficiency measures; the obligations placed on energy suppliers are only one part of the strategy—even though a significant part. Ms. Williamson pointed out that, regarding energy savings obligations, clear targets based on simple metric standards work best. A clear and simple long-term target gives all parties clarity about what is to be expected and what still needs to be done. Overly-complicated rules over shorter time frames lead to misunderstandings and too much uncertainty for participants. Over-administration and micro-regulation of installations are debilitating and slow delivery. It is essential that the regulation of energy efficiency schemes be robust, but this must not lead to micro-management. In the UK, experience has resulted in long waiting times for new innovative technologies to be approved and a time consuming signing-off process for individual projects that has seriously reduced the effectiveness of policy. Partnerships add value in terms of brand awareness, providing access to properties and winning trust of consumers. Whatever the measures will be, they must not hamper a competitive market.

Peter Bach, chief advisor at the Danish Energy Agency, spoke about energy saving obligations in Denmark. Saving efforts in Denmark concern all final energy consumption in all economic sectors aside from transport. Obligations for energy utilities are a key element of the Danish energy saving strategy. The distribution companies are not allowed to do much on their own, as they are regulated due to their monopolistic market position. Thus, they need to involve further actors, e.g., private engineering companies, plumbers, or ESCOs (energy service companies that provide comprehensive energy solutions, design and implementation of energy savings projects, etc.). All market actors are seen as relevant, eligible, and therefore involved in fulfilling their obligations. The energy savings obligations provide the necessary help with the implementation of savings in existing buildings and private enterprises and provide a stable way to finance energy savings activities. But the rules should be kept simple. As there has been good progress, including within the industry, the targets will be increased from 2013 onwards. Obligations for energy utilities are—in the Danish case—a successful element of the energy saving strategy.

Dr. Thies Clausen commented on the presentations from the perspective of the BNE, the German Federal Association of New Energy Suppliers. BNE's position is that there is much potential for improvement in the draft Energy Efficiency Directive. They find the content of the proposals to be anti-competitive and regulatory—not likely to help reach the desired saving effects. As the Member States start from varying levels, unitary obligations for suppliers in all Member States would be inappropriate. Furthermore, inflexible obligations are not an appropriate instrument to raise other smaller scattered potentials. Each Member State should define for itself which instruments are helpful and necessary to obtain the efficiency targets. Rigid obligations for all the suppliers would imply considerable competitive distortions. Newer and smaller market participants would be compelled to set up



entirely new business divisions including new staff, know-how, processes, and products, which bring along unpredictable burdens for small and middle-sized enterprises.

Martin Bornholdt from DENEFF, the Deutsche Unternehmensinitiative Energieeffizienz (German Corporate Energy Efficiency Initiative), evaluated the draft as a step in the right direction and considered Article 6 as a central piece in the draft Energy Efficiency Directive; the energy savings target should be achievable throughout the EU. Even though there could also be more flexibility in the choice of instruments, technologies, and the general question of “who should be obligated,” it will be important to make *someone* responsible for the achievement of the targets. It should be possible to find the perfect solution for each country. Having a look at the supplier’s challenges, there are many examples in countries all over the world where energy companies have successfully changed their fields of business and developed new business portfolios. This could also become reality for energy suppliers and distributors in Europe. For example a confusing variety of incentives are available in many Member States, and it could be a new business model to provide expertise on these funds, bundle all the benefits in packages, and provide the “management” of funding as a service to customers. These services could be offered separately or in combination with the project management of refurbishment measures. Energy efficiency measures could also become a future “status symbol,” even for private people in the residential sector: energy efficient refurbishment could have an “iPhone effect” one day.

As mentioned before, the presentations and comments were followed by a lively discussion on future responsibilities and the consequences of potential obligations for market actors like power suppliers, distributors, and industry.

It became obvious that the perspectives of suppliers and the industry differ a great deal: while decision makers in industry should often have a “natural” interest in the reduction of energy costs in production processes and general corporate energy management, power suppliers and distributors do not yet have ambitions to reduce sales.

However, both suppliers and industry seem to consider the draft Energy Efficiency Directive as having an important impact; particularly Article 6 has been subject of the discussion.

Mr. Schafhausen emphasized that there is much flexibility in Article 6: plenty of ideas and measures could help to provide services with less energy. He concluded that future regulations should be both supportive and regulative.



Afternoon – Plenary Session and Final Remarks

The workshop was closed by a **plenary session** featuring **R. Andreas Kraemer**, Director of Ecologic Institute Berlin, who provided a summary and outlook. First, there was a report back from both working groups.

The proceedings in working group 1 were summarized by Dr. Grewe, who was the chair. Energy performance contracting appears to be a viable business model for private energy service companies, (ESCOs) and business is expanding though not yet booming. There are certain obstacles to surmount in order to make contracting attractive for private and public customers. Planning, financing, and operation of energy-saving technologies in public buildings, such as schools, kindergartens, hospitals, cultural and sports facilities, among others, is theoretically a win-win situation for both sides—ESCOs and clients. Good practice examples from London and Berlin have shown that contracting can work economically and produce considerable energy savings and CO₂ emissions reductions. Often, an intermediary can be useful in managing the contract relationship, as was the case with the Berlin Energy Agency, which provided expert advice and information for clients. Public authorities, especially from smaller communities, often lack the legal expertise required to handle the complex contract arrangement: here, judicial assistance from outside and standardization of leasing contracts can help. One noted pitfall was that contracting companies could choose to concentrate on “skimming the cream” or “picking low-hanging fruits” by concentrating on short-term measures with high savings potentials and forgetting about sustainable results to be achieved with more effective but cost-intensive measures. An independent third party (as intermediary) could be involved to control for such lock-in effects. Energy saving contracting as a financing tool to offset scarce public funds is a temptation, but it is an instrument which needs to be calibrated to serve the interests of both sides: communities benefit from private investments for the purpose of modernizing their energy-intensive urban infrastructure, and ESCOs benefit economically from guaranteed revenues for a period of 12 to 15 years generated from the utilization of energy-saving technologies. One recommendation was that politics should create a legal framework to promote the business of contracting by protecting the interests of both sides in a transparent and controllable manner.

Ms. Lucha summarized the findings of working group 2 under five headings. Under the first heading, she described the so called “iPhone effect.” Participants of the working groups discussed the need to make energy efficiency more attractive and even a status symbol to facilitate energy savings. A second heading or image given was the “gas station selling sandwiches.” This image is supposed to describe the fact that energy utilities are increasingly asked and also needed to sell other services, such as energy efficiency services. One other heading presented was the “axis of evil,” under which energy saving obligations was discussed. Participants stated that some energy saving obligation concepts are considered “good,” as they allow for flexibility. Others are considered “bad,” as they are very tight. Stakeholders could not agree at the moment whether the introduction of such an instrument was



good or bad. However, those obligated should in any case receive enough flexibility in order to minimize and balance the burden. Subsequently, Ms. Lucha reported that a mix of instruments to exploit energy saving potential was favored in the working group. Only a mix of instruments would be capable of considering specific issues in each sector. But consistency of these measures would need to be assured. Finally, she emphasized the good practice examples from the UK and Denmark that were presented in the working group. She concluded by thanking the speakers and the audience for their valuable contributions and the fruitful discussion.

Mr. Kraemer emphasized that the workshop managed to bring relevant stakeholders in energy efficiency policy together to discuss the framework of technology innovation and financial instruments as well as present their requests directly to policy makers.

In his final remarks, Mr. Schafhausen confirmed that a very intensive discussion on the topic took place during the event. The workshop was very fruitful and delivered plenty of useful insight. He concluded that all speakers and participants recognized the great potential of an ambitious energy efficiency policy. He pointed out the results recently published in the World Energy Outlook of the IEA, in which the importance of energy efficiency was clearly highlighted.

Finally, he summarized the lessons learned during the workshop: that exploitation of energy efficiency opportunities is no easy task, that results could only be delivered by a mix of instruments, that nothing will happen on a totally voluntary basis, and that coordinated EU action is needed.