



EnR discussion paper on the Energy Efficiency Plan

Introduction - The role of EnR

EnR is a voluntary network currently numbering 23 European energy agencies, with responsibility for the planning, management or review of national research, development, demonstration or dissemination programmes in the fields of energy efficiency and renewable energy and climate change abatement. EnR member organizations are the main implementers of policies on the ground in their respective countries and, as a result, they have a direct contact with stakeholders on a regular basis. In this sense, the network gathers information and experience from all backgrounds and can contribute this knowledge and act as a two – way channel of communication between central policy makers and the citizens of Europe.

Key Expectations from the upcoming EEP –Snapshot

➤ Structure for the EEP and National Targets

Setting binding national targets is essential to meeting the 2020 targets. Good coherence with the targets/goals of the ESD and the EU 20/20/20 is important in facilitating the process of reaching binding targets. However, setting binding targets for specific sectors poses difficulties and is not expected.

➤ Project cycles

The first NEEAPS suffered from the fact that national policy cycles were not in line with the one set for the European Commission. Given the fact that NEEAPS will be reformulated, guidance from the European Commission can help streamline reporting. The EU needs to come up with well defined policy cycles within the Commission to which Member States can adjust.

➤ Financing

The engagement/role of the private sector must be further encouraged and maximized through the further development of PPPs addressed to foster projects that can give benefits to both parties. More focus shall also be put on financing energy efficiency improvements, through transparent green taxation, including reduced rate VAT on energy efficient alternatives

➤ Key directives are vital in ensuring that goals are achieved

- Effective achievement of EEP will require a development, revision and review of directives covering all key areas: households, services, transport, industry, energy supply and transmission
- Suggestions have been voiced as regards a possible revision of the Directive on Energy Services. A recast on the CHP directive could also be beneficial. However, a first assessment of the existing acts is needed, with a view to the market advancements
- Where directives have recently been updated, focus on effective implementation by Member States (eg. EPBD recast) needs to be strengthened

➤ Monitoring and evaluation

The establishment of a uniform monitoring/ evaluation process could help in better allocation of resources and spreading the message.

Background to this paper

The EnR Working Group on Energy Efficiency published a discussion paper in August 2009, in order to actively contribute to the production of the forthcoming Energy Efficiency Plan (EEP) by voicing the opinions of its member agencies. This paper has been prepared based on a survey of 15 European energy agencies, which completed a questionnaire about their experience of NEEAPs and the first EEAP. This paper presents the results of that survey, highlighting the approaches that need to be promoted through the forthcoming EEP.

EEAP appraisal

There is wide consensus among the EnR members that the 1st EEAP has been a very important first step in promoting a consolidated energy efficiency policy across Europe. Member States without existing policies on energy efficiency benefited greatly from the amount of measures proposed in the EEAP, while Member States with existing policies addressing energy efficiency could benefit from a more ambitious action plan. A first review of EnR members' responses highlights the eco-design measures as very successful, while there are indications that the buildings and industry measures could have been more effective.

Additionally, EnR highlighted the following issues regarding the EEAP's effectiveness:

- Whereas there was a large number of measures proposed these were not paired with follow up measures for actions, and therefore progress could not be measured.
- Lack of timely and/or coordinated implementation also affected the priority action on financing, which despite the fact that it contained many of the right instruments including green taxation, it did not result in any policy measures from the Commission.
- Further to what was included in the Action Plan but not put into action, the choice of not including measures/ instruments for agriculture and SMEs shifted attention from these sectors, to a certain extent, and many of the Member States could benefit in the future by the development of these sector specific measures.
- As for now, the targets were formulated based on what was expected as a result of existing policy implementation, leaving the achievements of the targets unrelated to the current economic climate.

Some harder prioritization of measures, both at EU and national level, could also improve the rate of implementation and effectiveness. In spite of the shortcomings, the EEAP constituted a fine element in shaping European Energy Efficiency policy.

Financing

EnR agencies report that the EEAP has been fairly successful in increasing competitiveness through innovation and attracting investment. EU structural funds and national budgets partly support national programmes targeted for EE actions at end-use level.

Furthermore, there is a high reliance on subsidies as an economic incentive for the promotion of investments in energy efficiency / renewable energy – capital subsidies in almost all the countries, taxation and subsidies towards the price of energy produced in most of them. The 4 per cent ruling to unlock structural funds on energy efficiency was welcomed but administrative barriers at national level are preventing the full potential of this ruling.

In the light of economic recession, financial investment, both public and private, is likely to decrease while a drop in energy consumption is also envisaged. This negative environment could, nevertheless, be framed as an opportunity for further promotion of EE and the forthcoming EEP should be modified accordingly, so as to take the new conditions into account.

Key Expectations from the forthcoming EEP

Targets and monitoring

The forthcoming Energy Efficiency Plan (EEP) is anticipated with great interest. Given its trigger effect in increasing energy efficiency across Europe, it is expected to set ambitious targets that will serve even beyond 2020. Performance indicators for Member States could also speed up its implementation.

The majority of EnR members believe that setting binding national targets is necessary for meeting the 2020 targets. However, setting binding targets for specific sectors poses difficulties in target monitoring and the non-flexibility of certain market sectors would impose strains in the attainment of end-goals. Therefore, sectoral targets at EU level are not recommended.

As for now, the targets were based on what was expected as a result of existing policy implementation and economic projections. The recent economic turbulence has clearly shown that targets should be set so as to ensure continuous modernization and efficiency incentives, regardless of the economic growth rates.

An element that can also be examined in the forthcoming EEP is the inclusion of industries within the ETS, in such binding targets.

The timely establishment of a simple and reliable monitoring system in order to verify the achieved results is of paramount importance. It should be considered along with the target setting, in order to provide the Member States with the appropriate methodology and tools for assessing their performance.

Regulatory actions

The first NEEAPs suffered from the fact that the national policy cycles were not in line with the policy cycle of the EC. Given the fact that NEEAPS will be reformulated, guidance from the European Commission can help streamline reporting. The EU needs to come up with well defined policy cycles within the Commission to which Member States can adjust.

The EU would greatly be assisted by an adjustment of regulatory actions and ensuring that the existing legislation is put into practice. More emphasis could also be placed in the transport sector, not only because of its high efficiency potential but also because it has commonalities in the majority of countries. Suggestions have been voiced as regards a possible revision of the Directive on Energy Services. A recast on the CHP directive could also be beneficial. However, a first assessment of the existing acts is needed, with a view to the market advancements.

Technology issues

The positive combined effect of technology and energy policies should not be neglected, when planning future policy actions. Existing technology is adequate to meet the current targets. However, the priorities to be set in the forthcoming EEP can also showcase technological action and take advantage of technology advancements, while at the same time promote good existing technologies and state of the art technology.

The SET plan priorities pave the way for further collaboration and offer European added value in specific energy sectors. Any step changes in future technological EE improvement will provide additional thrust towards achieving targets. The technological parameter should be accentuated in order to enable us to reach larger uptake on the market and adopt solutions faster.

Financing

The role of the private sector must be further encouraged and be maximized through the further development of PPPs addressed to foster projects that can give benefits to both parties. More focus shall also be put on financing energy efficiency improvements, through transparent green taxation, including reduced rate VAT on energy efficient alternatives. Green public procurement policies and advice as well as long-term agreements could be further developed.

Stimulating private funding for Energy Efficiency projects is paramount in these conditions. Promoting ESCOs must be a priority. ESCOs have the potential to contribute to energy saving, but the current market arrangements do not allow for them to operate effectively or lead to market distortions and corrective

actions on regulatory-fiscal and standardization level must be adopted. Especially in a period of financial difficulties and high energy prices, further mobilization of ESCOs towards achieving the EE targets can be a good solution for investment promotion.

The idea of a European Green Fund is generally welcomed by the EnR members but its financing could prove challenging. Alternatively, funding of EE projects could be incorporated into existing structures and a further engagement of the EIB would be beneficial.

Sectors: A review

The built environment

Newly- built

The 1st EEAP along with the EPBD Directive have set the ground for the shift towards low-energy building principles and identified sufficient measures and mechanisms towards this shift. Financial inducement alone will not be enough to achieve this, thus, further effort should be given for the education of the public in order to be convinced on the rationale of choosing and living in an energy-neutral house (new buildings). Also, there is an urgent need for a change of lifestyles. Progress is expected in the rate of energy certification of buildings and the implementation of energy saving measures in new buildings can be increased by proper regulation. Moreover on regulatory level, energy neutrality can be a requirement in environmental- and building permits. In 2050 the built environment should be a net producer.

Existing stock

Emphasis should be given to energy efficient rehabilitation of buildings and urban areas, as well as on incentives for the implementation of measures identified in energy certificates. The development of ESCOs can assist in this field as well. Some member countries could benefit from providing building professionals with relevant training and establishing certification schemes for installers, while in others lack of quality assurance in the building process is observed. For existing buildings, a decline in the use of inefficient buildings can be promoted. A redesign of the local property taxes (applying to certain Member States) towards more energy efficiency and an obligation for home-owners to implement energy efficiency recommendations with short payback time are other examples of possible policies.

The effective utilization of awareness raising campaigns and behaviour change activities can strongly affect the energy efficiency of the building sector, from the design process to its end- use and progress is expected in this area for both new and existing building stock.

Industry

The industrial sector is extremely important as far as economic stimulus and leveraged savings achievement are concerned. Successful mechanisms with both long and short-term results are in place in several countries, and an emphasis on those could make an important contribution to reach increased energy efficiency within the industrial sectors. In fact, examples of long-term agreements and market trading mechanisms throughout Europe could be further publicized so that policy makers are fully aware of their advantages. The forthcoming EEP could allow for an increased use of Energy Audits and Energy Management Systems. Furthermore it could further promote Long-Term Agreements and/or Voluntary Agreements .

Bearing in mind that energy efficiency measures comprise the cheapest, or even profitable, opportunities to reduce emissions, the barriers between the Emission Trading Scheme (ETS) and Energy Efficiency could be removed, by extending energy efficiency measures into ETS. It could also be foreseen that the most energy efficient industries will receive more quotas for free emissions. This approach will also accommodate the work of ESCOs in the sector, where through energy performance contracting, energy saving targets could be reached more directly and promptly. At present, ESCOs/EPC do not operate in the energy intensive industries and that leaves room for improvement. Individual emission limitations should then be applied in small enterprises and other entities.

Transport

Given the increasing growth of transport on energy demand, further attention needs to be cast on to this sector. It constitutes a sector that faces common cross-country challenges and can benefit from large scale policy implementation (there are a lot of European projects eg. ECORDIVEN, where this homogeneity across Member States is observed). Reducing the demand for transport stresses the need for a more efficient spatial planning and calls for including spatial planning knowledge when drafting energy efficiency policy. The remaining transport demand can be better linked to public transport and to human traction options (walking, cycling). The same way goods distribution logistics should be looked at: think of local/regional distribution centers, avoid just-in-time supply; plan (in industrial areas production-supply chain close to demand). Eco-driving training leading to behavioural change could be supported while the use of ICT technology could also be promoted in order to reduce mobility. Education along with necessary infrastructure and planning works can also encourage a modal shift from road to railway and water ways, while markets can be guided towards increasing the supply and demand for energy efficient vehicles (low carbon/electric). The forthcoming EEP can act as a form of ensuring that transport targets set out in the existing regulations and directives are met and put emphasis on the importance of reviewing the above directives and regulations to ensure that they are being delivered effectively.

Production and distribution of electricity and heat

Production and Distribution would be aided by regulation to stimulate decentralised energy supply from renewables. Technology developments in conjunction with regulatory measures will foster the deployment of decentralised energy production and demand-side management from RES, enhancing the role of RES building integrated systems (Building-integrated photovoltaics, solar cooling), hybrid power production systems and energy storage technologies. The regulatory actions should be either in the form of building codes, obligations for the energy distributors, or even tax rebates/ subsidies for end-user's renewable installations.

The development of Combined Heat and Power (CHP) in industry could have as a consequence significant energy efficiency improvements relative to the coverage of large heat loads. Massive roll out of CHP, particularly for large buildings should be aimed mostly at the urban areas, while local tri-generation plants or district heating facilities are foreseen to be deployed as well. The development of micro CHP units will advance their installation in the building sector and will add further to the decentralised nature of the power production.

Moreover, the wider use of energy tariffs for the end-users, along with smart metering, will further promote the rational use of energy and facilitate demand-side management both at local and national level. At the legislative level, effort should be given towards the internalisation of the external costs (mainly environmental), either in the form of taxes or implementation of subsidies and/or penalties. Towards this direction the adoption of a new Directive could be considered, in which there is focus on CHP, micro-CHP and smart grids aspects in relation to supply side and distributed power generation.

Non- technological issues

Non technological issues are also prominent in shaping the European energy efficiency policy effectiveness. Awareness campaigns helping customers to discover efficient opportunities are considered effective. Raising awareness is essential for reducing consumption in the residential sector, which can have a multiplying effect. Raising awareness is not enough, people in all sectors in society needs to change their behaviour towards more energy savings. Acknowledging their important share in disseminating and promoting important European goals, we need to also face the problems that result from not monitoring and evaluating these initiatives, leading to a high cost that sometimes is spent on an unclear target. Interactive actions/ tools and the establishment of a uniform monitoring/ evaluation process could help in better allocation of resources and spreading the message. An additional focus on the public sector actions and it leading by example could also greatly influence the spread of an energy efficiency morale. Similar expectations are attributed to the initiative of the Covenant of Mayors. It has so far affected regions to a different extent, but given the fact that it is a recent development, the effect of any measures that have been taken so far remains to be seen.

Addressing factors that motivate and reinforce rational market behaviour as regards efficient use of energy has been a priority in the EEAP and needs to be given equal attention, when preparing the EEP. Soft measures need to be improved to realize their significant potential.

In conclusion

The Energy Efficiency Action Plan outlined a variety of measures, however the forthcoming EEP is expected to address issues in a more integrated approach. Mandatory targets seem to be the way of ensuring that Member States engage seriously in implementing initiatives. Binding targets may prove to be hard work but a good coherence with the targets/goals of the ESD and the EU 20/20/20 will facilitate the process of reaching them. Additionally, the forthcoming EEP can set the ground for the revision of existing legislation (ESD / Transport directives/ CHP), which can in turn, bring the targets further. The exploitation of technological advancement as well as behavioural adjustments can also be directed towards meeting the new binding targets. Stimulating investment and allocating additional funds to energy efficiency measures implementation are expected to generate interest and highly prioritize energy efficiency both on the political level and the wider European society.

Even though the binding targets have to be set on a national level, the importance of different sectors in achieving them needs to be strengthened. Meeting the national targets successfully is greatly interlinked with the performance of specific sectors and the rate at which the policy framework will interact with market responses. Developing a policy mix that contains sectoral initiatives that will foster both market and regulatory instruments will safeguard our path to an improved energy efficiency across Europe.

The EnR network has a vast experience in implementing and disseminating policy and can showcase diverse initiatives that have been successful in the countries, where its member agencies operate. It remains committed to promoting energy efficiency at all levels of the European society and has the capacity to provide its assistance, whenever needed, in realizing this goal.