

# ecee response to the stakeholder consultation on the Green Paper on 2030 Climate and Energy Policy

2 July 2013

## Executive summary

ecee welcomes the consultation as an opportunity to underline that a new, more coherent and framework of Climate & Energy policies and measures is needed to set the EU back on track towards sustainable growth.

The 2030 policy framework must fully recognise the key role of energy savings, making energy efficiency the starting point in a renewed effort to counter the current economic, environmental and social crises in the most cost-effective manner possible. This process must also put in place those instruments and tools (institutional, regulatory, financial, communication, educational, etc) to maximise cost-effective energy savings and thereby contribute to a sustainable and gradual reduction of energy consumption and de-linking from energy consumption that also ensures an acceptable and equitable standard of wellbeing. This framework should be placed within a 2050 perspective, with 2030 as an important milestone and checkpoint, respecting and promoting our long-term GHG mitigation goals while ensuring our competitiveness, employment, health and related objectives.

A GHG target alone where the EU ETS is a centrepiece may deliver in terms of decarbonisation, but this will fail to realise the additional benefits in the most cost-effective way of improved competitiveness job creation, security of energy supply, and improvement of health and labour productivity that energy savings will provide. Energy savings is also the least cost option for meeting the GHG target.

This is why we call on the EU to *put energy savings at the very core and at the heart of the new climate & energy policy* and establish in the 2030 framework three well-articulated and meaningful binding targets for (1)energy savings, (2)GHG reduction and (3)share of renewables.

While market forces have an important role to play, these forces working alone will never allow us to reach our goals, even with high energy and carbon prices. Our framework must therefore include a well-balance and mutually reinforcing set of policies and measures in the form of regulations, rules, support programmes, and incentives, taken at all levels, from global, down to local and individual.

The 2030 policy framework should include the following elements:

1. Energy efficiency as the first cornerstone of our Climate & Energy policy
2. Three meaningful, reinforcing and well-articulated binding targets, for energy savings, GHG reduction and an increasing share of renewables, respectively. The target design should have as its starting point an assessment of how the various policies contribute to overall sustainability, economic competitiveness and growth, security of supply and wellbeing. “
3. A long-term perspective, where 2030 goals are a milestone on the road to our more fundamental 2050 objectives.
4. Make ambitious energy savings in sectorial targets a cornerstone of our energy efficiency policies, building up and aggregating these targets for the industrial, building, appliance and transport sectors.

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## The 2020 framework

The 2020 framework for Climate and Energy has only partially delivered the energy savings needed to meet our long-term objectives.

The major deficiencies of the 2020 framework are the following:

### ***Ill-defined and poorly measured targets and measures that failed to quantify or capture energy efficiency improvements***

Despite the initial ambition to generate progress in all three areas (GHG reduction, renewables and energy efficiency), the energy efficiency target was the only non-binding element of the 2020 framework. And many of the measures in the framework have not been fully complied with or ambitiously implemented. Not surprisingly, this has also generated a lack of credibility for investors and industry, contributing to increasing untapped savings potentials and only partial realisation of our goals.

The under-achievement in this area led to the need to come forward with additional supporting measures, including those in the Energy Efficiency Directive (EED). The overall target set out in the EED, of a maximum primary energy consumption of 1474 mtoes for the EU has proven to be a useful “benchmark for comparison, notwithstanding to the difficulty of comparing and adding Member State contributions reported. A more systematic and uniform basis for comparison should be sought for 2030.

### ***The long-term vision has yet to generate the much needed predictability and investor confidence***

The 2020 framework lacked a clear, long-term vision. Its short-term framework, where the time horizon was set for little more than the coming decade, failed to provide a clear picture of where the EU is going in the longer term. In such a strategic field of action as energy policy (where investments need years to plan and realise), this does not provide adequate signals for market actors.

It must be said, however, that in recent years, the EU has come forward with several ‘Roadmaps’ addressing the long-term (2050) framework for a resource-efficient and low-carbon economy. This long-term approach is welcome, and needs to be encouraged.

### ***A top-down, macro-economic approach alone is inadequate***

The 2020 framework was largely focused on a “top-down” approach, where goals were often set without linking them to realistic policies and measures or means of ensuring measure, verification and ambitious compliance.

We believe that this has led to inconsistencies and contradictions in the EU climate & energy framework we have today. A consistent set of policies and measures should have taken as its point of departure a sound analysis of the most pragmatic and cost-effective roles that the individual sectors of the economy can play in responding to the major long-term challenges of sustainable growth, notably:

- Ensuring competitiveness for our industry, in a sustainable and equitable manner
- Creating and maintaining stable, local jobs,
- Safeguarding our economic growth and social wellbeing,
- Attaining our climate and environmental targets.

### ***Lack of coherence and consistency***

- *Between policies and measures and wider EU priorities:* The 2020 package, which mainly focussed on environmental deliverables, was not properly linked with the three pillars of the sustainable growth agenda (economy, society and the environment). The deliverables of a successful climate and energy package need to be clearly established and quantified in a consistent measurement and verification framework that takes into account the co-benefits and impacts on sustainable growth, competitiveness, health, social well-being and job creation.

- *Links between targets*: the interaction between the three 2020 targets was not really analysed. Energy efficiency was considered an “instrument” to deliver other objectives, not a target in its own right. The different policies and measures put in place by the EU for achieving the 2020 targets have proven to be overlapping to quite varying degrees, leading often to “policy-cannibalism” and resulting in the current situation of “conundrum” in the ETS-related policy, where energy efficiency is sometimes considered to be in competition with EU ETS.
- *Rationality*: the 2020 framework lacked rationality: Any energy efficiency and renewables policy should follow the well-established “*trias energetica*” principle, which states that we need first to reduce our energy consumption, before dimensioning and maximising the use of renewables and optimising the remaining (very small) use of fossil fuels. The 2020 framework neglected doing this, consequently giving energy savings a minor rather than an important role. This has placed a political yoke on the shoulders of energy efficiency policy during the past years.

This has led to the fact that the EU has missed an opportunity to tap the full potential of energy savings (and the subsequent multiple benefits in terms of increased competitiveness, job creation, security of supply, economic savings for households, etc). The EU cannot allow this same mistake in the policy-setting for 2030 and beyond.

The new Climate and Energy framework for 2030 and beyond

The new framework should build on the successes of the past one while learning from the mistakes and shortcomings that have been revealed.. The following success criteria should therefore be carefully considered when designing the climate & energy policies and targets for the future.

### ***Getting the foundation right: unlocking potentials***

A holistic approach is always better than partial analysis:

A GHG target alone where the EU ETS is a centrepiece may deliver in terms of decarbonisation, but this will fail to realise the additional benefits in the most cost-effective way of improved competitiveness job creation, security of energy supply, and improvement of health and labour productivity that energy savings will provide. Energy savings is also the least cost option for meeting the GHG target.

This is why we call on the EU to *put energy savings at the very core and at the heart of the new climate & energy policy* and establish in the 2030 framework three well-articulated and meaningful binding targets for (1)energy savings, (2)GHG reduction and (3)share of renewables. The design of the targets must be the result of a well-planned and co-ordinated approach that takes a long-term view, starting with a solid assessment of how the various policies contribute to overall sustainability, economic competitiveness, security of supply and social progress, and how and when the targets impact each in.

The 2030 framework must include *policy initiatives and regulations providing additional confidence to investors, industry and consumers*. The focus should be placed on ensuring a holistic and coherent approach that maximises the positive impact of each policy area for the three pillars of sustainable growth. “Binding targets” would build on a solid basis of coherent and cross-fertilising binding measures and legislation.

In addition, *all opportunities for review and revision, and for improved implementation and compliance must be used. For moving forward, not as excuses for inaction* For example, the recently adopted EED includes a clause stating that in 2014 the EU will evaluate the progress for reaching the 2020 target. Many argue that no decision on the 2030 framework for efficiency can be taken until this evaluation has taken place. In our view, this does not represent an obstacle for looking beyond and setting coherent and consistent 2030 targets. This applies also to the review of the Energy Efficiency

Obligation schemes in Article 7 of the EED, designed to consider an extension of the obligation. . This review, as set out in Article 24.9 of the EED, can also in principle take place before the stipulated date of 30 June 2016.

***Providing certainty and consistency: Only a long-term horizon can provide them***

It is essential to focus on the long-term objective of our climate and energy ambitions before designing the path to follow and its milestones. The design of the 2030 framework is instrumental and has to be an *important intermediate milestone in delivering the EU strategy for 2050*, where the latter provides a clear vision and investment security for companies and other stakeholders,

2030 is a relatively short timeframe for power plant investors, but also for other sectors such as buildings, which stand up to 100 years or more, and get renovated only every 30-40 years. *The 2050 “planning imperative” is thus not only valid for managing energy supply, but also for managing energy savings*, especially in the buildings sector.

The 2030 set of three mutually reinforcing targets should take into account this long-term perspective and back-cast from a 2050 perspective, thereby providing greater predictability and confidence for investors.

The recently adopted Energy Efficiency Directive (EED) also provides a good example of the right approach: its Article 4 calls on Member States to draw-up long-term strategies for mobilising investment for the renovation of their national building stock. This will lead to far-reaching building renovation roadmaps which will set the scene for long-term energy savings.

The adoption of a long-term view in the forthcoming Climate and Energy policy framework would help in generalising this approach to existing measures, therefore favouring a predictable legislative environment. As mentioned,, the EED establishes the obligation for Member States to set up national Energy Efficiency Obligation Schemes, aiming to provide annual cumulative savings, but these schemes are set to be in place only until 2020. This short-term approach will undoubtedly provide some energy savings, but they will be far from the enormous potential that a longer-term perspective would provide.

***Focusing on the right deliverables***

Climate and Energy policies are key areas for ensuring not only the long-term competitiveness of EU industry, but also the overall sustainable growth. *A number of strategic benchmarks and milestones need to be set out in the roadmap and design of the targets, including:*

- a. Economic issues: Competitiveness
  - *Trade balance:* Trade deficits today in most EU countries are largely due to deficits in trading energy. Therefore, one of the key success factors of the new framework will be i its ability to reverse this trend, increasing GDP while reducing energy costs for our industries and households, and ending our energy import dependency. The largest, most environmentally-friendly and most cost-effective indigenous energy source the EU has is energy savings.
  - *Securing supply and growth at the same time:* Security of supply is a key economic factor, evidenced by the fact that the EU wasted over 500 billion €on energy imports last year. It is also the key to resolving a serious social condition, because many EU citizens find themselves subject to fuel poverty, as well as to uncertainty regarding future gas and oil deliveries. “

Indeed, in 2009/2010, the EU imported 83.5% of its oil and 64.2% of the gas it consumed<sup>1</sup>. This is largely driven by the energy consumption of buildings, which account for 38% of total natural gas consumption in the EU27 and 59% of total electricity consumption in the EU27<sup>2</sup>. *Moreover, it has been calculated that every \$10 rise in the price of oil (bbl) leads to a 0.94% decline in GDP for those importing oil, whereas a 1% increase in efficiency leads to a 0.18% increase in GDP*<sup>3</sup>.

- *Freeing up the economy from waste.* The less efficient our economies are, the less able they are to benefit from any measures taken to improve growth in times of crisis, because of the disproportionate share of energy costs for enterprises', households' and public budgets. Public budgets should focus on areas of spending that are more relevant than energy waste, such as education, healthcare or research.

In addition, focusing on energy savings would be a strong case for comparative advantage for EU industry vis-à-vis its international competitors. In a world where all scenarios point towards higher energy prices, the strong development of EU energy saving technologies would put the European energy-efficiency industry in a *frontrunner or first-mover position* in this area, compared with their counterparts in other regions of the world.

- *Public finances:* The touchstone of a cost-effective energy and climate policy should be to ensure its broader goals while generating improvements for public finances. In an economic context, where public finances are stretched to the breaking point, and where substantial savings need to be made, the new climate and energy framework must also focus on those activities that have a positive impact on public finances. Research has demonstrated that investing in activities such as building refurbishment can bring vast and immediate benefits for public budgets<sup>4</sup>.
- Possible *uncertainty about other economies' progress* should not be an obstacle, but rather an incentive, to act as front-runners. For instance, the development of a powerful EU industry producing energy efficiency-related technologies would likely provide only benefits for the sector's competitiveness. With energy prices foreseen to rise worldwide in coming decades, energy efficiency-related markets will boom and the lead EU industries will already have a competitive advantage.

b. Social issues:

- *Employment:* It is increasingly clear that energy policies have multiple effects on economic and social development. From this perspective, the new framework must respond to one of the most compelling issues in the EU and help create stable, quality, local jobs in Europe. Energy-saving-related activities have the potential to put back to work millions of EU citizens, especially in those sectors having suffered most during the crisis, such as construction.

The best example is the German KfW scheme for building refurbishment, which in 2010 created or safeguarded –in Germany alone- some 340,000 jobs. By investing in an energy efficiency upgrade of the building sector,

<sup>1</sup> E3G, The macroeconomic benefits of energy efficiency, 2012

<sup>2</sup> IEA, Presentation to ECEEE, Nov. 2012 - <http://www.eceee.org/calendar/2012/WEO-2012-Brussels-launch>

<sup>3</sup> E3G, The macroeconomic benefits of energy efficiency, 2012

<sup>4</sup> Impact on public budgets of KfW promotional programmes in the field of energy-efficient building and rehabilitation", Jülich Institute/KfW, 2011. The Jülich study concluded that every Euro invested in building refurbishment programmes yielded a four- to five-fold return the same year through the creation of some 340,000 local jobs, reducing the cost of unemployment benefits and increasing income taxes generated.



the EU Member States can stimulate economic activity, create between 760,000 and 1,480,000 jobs and bring benefits to GDP of €153-291bn depending on the level of investments<sup>5</sup>

- *Focus on consumers:* High energy costs for consumers and resulting energy poverty can be eliminated with improved energy efficiency. Energy savings should therefore be a key element of social policy in EU Member States.

c. Environmental / Climate issues:

- *Climate commitments:* The EU must get serious about reaching its 2050 climate goal of reaching 85% less overall GHG emissions. The estimated 88-91% lower emissions from the residential sector is part of the path to do this, but ambitious action must start now and be maintained throughout the process, to 2030 and beyond.

By immediately focusing on actions in those sectors that could deliver wider benefits for the short, medium and long term, the new Energy & Climate framework will enable the EU to keep leadership in global climate policy-making ahead of the global climate agreement by 2015 and beyond.

The fear that the EU is undertaking unilateral action, and entering a “one horse race” –that would put EU industry in a disadvantageous position because other economies are not really making commitments on this front– is not well grounded. Evidence has demonstrated that the contrary is true because other major world economies are quickly progressing on this front, with comparatively better changes in terms of future legislative activity<sup>6</sup>. The EU can lead the way here.

- *What about “indigenous energy sources”?* At a time in which some seek “revolutionary new non-conventional technologies”, it is worth reminding ourselves that the biggest, most environmentally-friendly, less risky and most cost-effective and logical indigenous energy source in the EU is energy savings. Seizing the potential of this energy source will contribute to massive job creation and enhancement of EU industry competitiveness in the international arena through reduction of energy costs. We also need to remember that shale gas is also a fossil fuel, one that we need to move away from.

### ***Achieving the potentials***

The 2030 framework needs to maximise the outcome of all the energy-consuming sectors, because all of them can better contribute to overall sustainable growth. Therefore, in order to drive confidence and accuracy for policy-setting, the three targets must be elaborated in a pragmatic way, looking at where it makes most sense to achieve most of our energy savings and GHG emissions reductions.

The contribution of each of the main sectors in the context of the overall targets, e.g. buildings, transport, industry, etc..., should *derive from a bottom-up approach enabling an assessment of their respective cost-effective savings potential*.

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<sup>5</sup> “Multiple Benefits of Investing in Energy Efficient Renovations - Impact on Public Finances”, a Study by Copenhagen Economics, October 2012, available at <http://www.renovate-europe.eu/Multiple-Benefits-Study>

<sup>6</sup> The recent “3rd Climate Legislation Study”, released by GLOBE International, the Global Legislators Organisation states that 32 of 33 major economies have progressed -or are progressing- significantly in their climate and/or energy-related legislation, and that much of the substantive progress on legislative activity on climate change in 2012 took place in emerging economies, including China.

*In terms of energy savings, this means not only setting an overarching and ambitious binding target, but also undertaking sound sectorial analysis of the potential of each sector of the economy to contribute to environmental, economic and social sustainability in the long-term. The 2030 energy savings target must therefore be based on the identification of the main contributing sectors of the EU economy (Buildings, Transport, Energy Transformation, Industry, Appliances) and assessments of their maximum individual cost-effective savings, and how much each sector can deliver in terms of the cost-effective creation of local and stable local jobs, and societal co-benefits such as health improvement, air quality, etc).*

### ***Energy policy:***

*The current economic context, together with rising energy prices and aggravating trade imbalances, calls for a better prioritisation of energy savings following the “Trias Energetica” principle (which states as mentioned above, that reduction of demand should come first, and then focusing on supply-side oriented measures, ---in the latter case, with priority for RES--- and finally the rationale use of any remaining fossil fuels. Moreover, energy savings will reduce the investment required on the supply side, thus creating available investment capital on additional savings and other societal goals.*

### **Building blocks of the 2030 framework**

The 2030 framework should learn from the inconsistencies of the 2020 policy-setting, taking as a basis the following elements:

### ***Energy efficiency as the first cornerstone of a set of 3 binding targets***

*Energy efficiency should be the starting point of the Climate & Energy policy, which should be supported by three well-articulated and meaningful binding targets for (1)energy savings, (2)GHG reduction and (3)share of renewables.*

The design of the targets must be the result of a well-planned approach which takes a long-term view and begins with a solid assessment on how the various policies contribute to overall sustainability, economic competitiveness, security of supply and social progress.

All targets should be made binding in order to mobilise stakeholders towards implementation, improve the willingness of stakeholders in key sectors to achieve real change, and increase its chances to be met.

### ***Timeframe: 2030 target as a milestone toward 2050***

The 2030 target for energy savings has a much bigger role than mobilising stakeholders to deliver savings by 2030: it should enable the 27 Member States to be on the right track to achieve their 2050 objectives.

Rather than being looked at as a mirror or prolongation of the 2020 framework, energy savings should be an important intermediate step in delivering the EU’s strategy for 2050, providing a clear vision and investment security for companies and other stakeholders, and ensuring coherence with existing Climate & Energy objectives and with long-term Roadmaps. From this perspective, a pure “10-years-after-2020” approach would be too short-sighted; it would be a strategy that would risk perpetuating the current policy interference and incompatibilities between targets and measures.

### ***Methodology: Maximising the potentials through bottom-up targets’ design***

*Way to calculate and to assign meaningful targets:* Overall targets should come together with (and build on) in-depth sectorial analysis for sustainable growth. This will favour the realistic and much more credible approach of the overall target and will facilitate the subsequent effort-sharing among MS. The 2030 energy savings target must be based on the identification of the main contributing sectors of the EU economy (Buildings,



Transport, Energy Transformation, Industry, appliances ) and assessment of their maximum individual cost-effective savings potential .

*Breaking down a general EE target into sectoral targets reflecting their real potential* will also enable to *express specific targets in the most appropriate way*, e.g. in terms of absolute energy savings for sectors such as buildings or transport, compared to base-lines and base-years, and disaggregated energy consumption in processes and product production for sub- sectors in industry, replicating in a more accurate manner the concept of energy intensity. , .

Further, *the way to design climate and energy targets should enable to integrate future technological developments and learning curves*, without waiting for "miracle technologies". In other words, the point of departure should be available technologies (which already offer wide potential for contributing to targets, for instance energy savings in buildings). In addition, innovation should go beyond pure "technological" considerations. The EU needs innovative approaches and techniques involving environmental, economic and social, as well as behavioural aspects of the policy framework for 2030 and beyond.

### ***Mutually reinforcing energy efficiency and GHG targets***

There is a need to enhance the cross-fertilisation between instruments such as ETS and overall energy efficiency targets, so that they become mutually reinforcing. As explained, we believe that the GHG and EE targets are complementary and should support each other to deliver the most savings and GHG reduction.

The aim of the framework built-up of coherent, consistent and mutually re-enforcing targets and measures is to deliver a boost for European competitiveness and ensure reaching climate, economic and social objectives. Therefore, Climate and Energy policy is very much about maximising the cost-effective contribution of different sectors while releasing all possible ancillary benefits in term of promoting growth, employment, health etc...

*ecnee expects clear guidance and vision supported by clear targets, and at the same the assurance that its industry can continue to contribute to the energy transition now underway in Europe*, thus investing in a strong industrial base and creating economic activity in Europe. Consequently, carbon leakage exposure protection must also remain as a part of this system.

In addition, to underline the fact that EU-ETS is strongly embedded in an ambitious overall Climate and Energy Policy framework, the scheme should be re-structured and strengthened, requiring member states to earmark more EU-ETS revenues for low-energy/low-carbon investments, instead of just increasing government tax revenue in the spirit of recital 18 (and article 10.3) of the current ETS-Directive.

Strengthening the obligation to invest ETS-revenues in clearly defined low-carbon/low energy projects in the EU will not only provide "external" leverage-capital from the private sector to trigger these investments, but also, generate additional "savings-revenues", thus enabling revolving capital flows. This will boost confidence in the EU-ETS business-model.

Responses to Green Paper Questions:

### ***General***

*Which lessons from the 2020 framework and the present state of the EU energy system are most important when designing policies for 2030?*

The 2030 Climate and Energy policy is being developed in a different economic, social and environmental context compared to when the 2020 framework was developed. Energy savings objectives are now a necessity and no longer just an option. The growing importance of energy security (i.e. reducing the energy trade deficit and dependency)

and competitiveness/affordability (i.e. reducing energy costs) requires not only increasing energy savings objectives, and policies and measures, but selecting the most cost-effective and sustainable policies and measures at the disposal of the EU.

The 2020 framework was missing a mandatory target for energy efficiency, and a clear signal to reduce overall energy consumption, which, if included, would help prioritising investments in energy efficiency improvements. Out of the three 20% targets for 2020 (energy efficiency, renewable energy and greenhouse gas emissions), the energy efficiency target is the only one still non-binding and also the only one not yet on track to being achieved.

The currently projected reduction in energy demand for 2020 is only partially due to energy savings stemming from increased energy efficiency. Once economic growth picks up, energy consumption increases will return, and energy security, energy trade deficit and environmental challenges will become even larger. In addition it is evident that the current greenhouse gas related policies (the 2020 target, EU-ETS and effort sharing directive) are insufficient to tap energy saving potentials.

The approach to setting 2030 targets must be improved and start with a bottom up approach to assess the most cost-effective energy savings potentials from the main sectors linked to a 2050 perspective. This will result in much lower energy consumption than projected in the Commission's 2050 Energy Roadmap and contribute to reducing greenhouse gas emissions and increasing renewable energy shares. This will significantly support the viability, acceptability and predictability of renewable and climate policies<sup>7</sup>.

### **Targets**

*Which targets for 2030 would be most effective in driving the objectives of climate and energy policy? At what level should they apply (EU, Member States, or sectorial), and to what extent should they be legally binding?*

An ambitious and forward looking 2030 Climate and Energy Policy framework needs to have a legally binding target for energy savings. Energy savings, besides being an increasingly important individual EU objective, provide the most cost-effective, cheapest and easiest solution for achieving reductions in greenhouse gas emissions and increasing renewable energy deployment by reducing energy demand and increasing efficiency. Therefore, the suite of targets must be mutually supportive, built on the basis of the energy savings delivered through realising the most cost-effective efficiency potential.

The EU target should be established through considering the available cost-efficient potentials in the main energy-using sectors for 2030 linked to a 2050 perspective. The effort to reach the target should be shared, considering the national potentials, amongst Member States. At national level the contribution from different sectors should be guided by cost-effective potentials, taking into account other societal co-benefits and positive macro-economic impacts when these are present.

*Have there been inconsistencies in the current 2020 targets and if so how can the coherence of potential 2030 targets be better ensured?*

Targets for 2020 were consistent with the projections used. However, the projections were systematically underestimating energy efficiency and the combined effect of renewable energy and reduced consumption, and ignoring the impacts of different societal co-benefits and other GDP and macro-economic developments. This was partially due to the failure to use life-cycle cost analysis and to quantify many of the benefits present.

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<sup>7</sup> IEA "Summing up the parts – combining policy instruments for least-cost climate mitigation strategies", 2011

In light of this, the approach to setting 2030 targets must be improved. It has commence with a bottom up approach to assess the cost-effective energy savings potentials from the main sectors linked to a 2050 perspective and analyse their contribution to reducing greenhouse gas emission and increasing renewable energy shares. This will increase the predictability for climate and renewable policies<sup>8</sup>.

*Are targets for sub-sectors such as transport, agriculture, industry appropriate and, if so, which ones? For example, is a renewables target necessary for transport, given the targets for CO2 reductions for passenger cars and light commercial vehicles?*

In order to capture the full potentials while recognising uncertainties of future sector developments, an overall binding energy savings target is most appropriate to allow for flexibility and to avoid double counting. But setting overall 2030 targets must include a bottom-up approach to assess the cost-effective energy efficiency potentials, alongside their contribution to reducing greenhouse gas emissions and increasing renewable energy shares, as well as quantify societal and other private-economic benefits, such as improved indoor and outdoor air quality and health. . Thus a transport sector energy savings potential would serve an important coordination and integration function, as is the case in all the other sectors.

Targets based on the cost-effective energy savings potentials include the maturity and current application of today's technology, and to a limited extent future improvement and learning curves of current technologies, and even newer technologies. The latter effect means that the current potentials are in general rather conservative and thus almost certainly even more economically viable, and therefore could be stronger from the outset.

*How should progress be assessed for other aspects of EU energy policy, such as security of supply, which may not be captured by the headline targets?*

Other aspects of EU energy policy, and particularly security of supply, are captured by an energy savings target if they can be quantified and accurately measured *ex ante* and *ex post*. These methods need to be further developed and harmonised ion the EU Member States. For example, if the 20% energy saving target is achieved in 2020, this can mean an increase of 20% security in supply. As well as other benefits. This can be accurately measured in energy and in Euros.

## **Instruments**

*Are changes necessary to other policy instruments and how they interact with one another, including between the EU and national levels?*

- Public procurement – there should be rules and requirements to ensure all products and services purchased by public sectors organisations have high energy efficiency performance.
- Earmarking of EU budget for energy efficiency programmes, alongside energy efficiency as a condition of EU funding.
- Setting ambitious minimum energy performance criteria for granting EU funding and other public funding and financing, and making sure that thwese conditions actually are in line with available potentials.
- Public deficit accounting - Interpretations of accounting rules on public debt and deficit need to be modified so that investments in energy efficiency under energy service contracts are not necessarily counted as deficits in national and public accounts. This includes the so-called "off-balance sheet" obstacle that hampers the wider use of energy performance contracting in the public sector

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<sup>8</sup> IEA "Summing up the parts – combining policy instruments for least-cost climate mitigation strategies", 2011

*How should specific measures at the EU and national level best be defined to optimise the cost-effectiveness of meeting climate and energy objectives?*

Optimisation of the cost-efficiency of meeting climate and energy objectives requires tapping full cost-effective energy saving potentials. An overall energy savings target should be based on an assessment of cost-effective potentials a bottom up approach to assess the cost-effective energy savings potentials from each sector. Life-cycle cost analysis (LCAA) should be used to measure the impacts of the measures. This calculation should take full account of societal and the other multiple benefits of energy efficiency, including improved air quality, health, employment, etc.

*How can fragmentation of the internal energy market best be avoided particularly in relation to the need to encourage and mobilise investment?*

A binding 2030 target will encourage Member States to improve implementation of the EU acquis for energy efficiency, thereby contributing to the harmonisation of the regulatory environment. This is essential for attracting investments into Europe's energy system and helping to complete the internal market. Harmonisation of calculation methods and standardisation around energy efficiency will also add to this.

Energy savings and efficiency have shown to be very difficult to mobilise using only market mechanisms, a target approach will allow member states to implement standards and measures as the best option for positive payback (and LCAA) results for steering investment.

*Which measures could be envisaged to make further energy savings most cost effectively?*

In order to realise the cost-effective energy saving potentials, which is estimated to be worth €250 billion net savings per year for households and businesses<sup>9</sup>, it is necessary to overcome and remove the remaining non-market barriers to energy efficiency. The Energy Efficiency Directive takes the first step to doing this but strong and ambitious implementation is needed.

As stated in the Coalition for Energy Savings Guidebook to Strong Implementation of the Energy Efficiency Directive<sup>10</sup>, the following is needed to ensure strong implementation:

1. National energy efficiency targets reflect increasing ambition, lead to new actions to reach national energy saving potentials in 2020 and beyond and contribute a fair share to the EU 20% target.
2. An annual 1.5% energy end-use saving target is put in place by end of 2013, securing at least 10.5% savings in the year 2020, and the use of exemptions is kept to an absolute minimum.
3. The methodology for calculating the impact of energy efficiency measures to achieve the binding 1.5% annual end-use energy savings target does not exaggerate claimed savings. It counts only the savings that are realised during the period 2014-2020, deliver savings until at least the end of 2020 and are additional to a baseline, thus excluding savings from EU product or building standards.
4. The only savings counted in the target result from policy measures that explicitly aim to improve energy efficiency (no general taxation, like VAT, for example) and whose impact is verified. Double counting is avoided.
5. Obligation schemes are put in place and are an integral part of the mix of national energy efficiency measures.

<sup>9</sup> Ecofys, "Saving energy – bringing down Europe's energy prices for 2020 and beyond", 2012.

<sup>10</sup> <http://energycoalition.eu/guidebook-strong-implementation-0> Note that ecee is a member of the Coalition and has participated in developing the guidebook.

6. The costs of obligation schemes to end-use customers and potential market players are made transparent and the value of longer lived energy efficiency measures is fully reflected in the accounting and target design of the energy efficiency obligation schemes.
7. The public sector undertakes a comprehensive and accurate inventory of its own building stock, including energy performance and other relevant energy data that will serve as a starting point for renovations and as a model for an equivalent inventory of the national building stock.
8. The public sector leads by example and implements well-planned, high-quality deep renovations (including staged deep renovations) in all of its buildings. This activity should prepare and stimulate the entire market for the long-term deployment of such renovations, as part of the national renovation strategies.
9. Additional energy efficiency criteria in public procurement are set in a sufficient level of detail to avoid misunderstandings in their implementation.
10. Energy audits that meet the financial and economic criteria and demands of so-called investment grade audits are promoted. They are based on life-cycle cost analysis and provide guidance for future investments and maintenance.
11. SMEs and households are given clear and strong incentives to undertake audits and implement the recommended measures that result from these audits.
12. Interpretations of accounting rules on public debt and deficit are modified so that investments in energy efficiency under energy service contracts are not necessarily counted as deficits in national and public accounts.
13. Energy performance contracts and other types of overall energy service contracts are included as justified cases in public procurement, to ensure that public bodies are not obliged to divide contracts into separate lots when a holistic approach is more cost-effective and brings more energy efficiency improvements.
14. Spatial planning rules are linked to national comprehensive assessments of the potential for the application of high-efficiency cogeneration and efficient district heating and cooling to ensure an “integrated approach” to energy supply and demand.
15. Cost-benefit analyses for efficient heating and cooling options, particularly those at installation level for power plants and industries, are done in a transparent and participatory manner and explicitly include socioeconomic costs.
16. Distribution and transmission system tariffs are set in a transparent manner and to empower consumers, and those incentives are removed which are detrimental to improving energy efficiency activity, in particular demand response and energy efficiency obligations carried out by energy companies.
17. Clear provisions are provided for demand response actors and those able to provide other energy efficiency services to be included in market design in a non-discriminatory fashion to improve overall network efficiency.
18. National building renovation strategies are in place and aim at an 80% energy consumption reduction target for the country’s entire building stock, to be achieved through the gradual and systemic improvement of the energy performance of all buildings by 2050.
19. The multiple benefits arising from deep renovations are integrated into a policy framework to stimulate deep renovation (including staged deep renovations) of the building stock.



20. Energy Efficiency Funds that are capable of blending various streams of financing and backing high quality national energy efficiency investment programmes are in place.

*How can EU research and innovation policies best support the achievement of the 2030 framework?*

A larger share of the EU Research budget should be earmarked for programmes that help identify and remove all types of barriers to the rapid deployment of new, energy-efficient technologies and techniques.

### ***Competitiveness and security of supply***

*Which elements of the framework for climate and energy policies could be strengthened to better promote job creation, growth and competitiveness?*

Competitiveness is not served at all by addressing it through the narrow prism of energy prices. “Competitiveness is defined by the productivity with which a nation utilizes its human, capital and natural resources.... Productivity depends both on the value of a nation’s products and services – measured by the prices they can command in open markets – and by the efficiency with which they can be produced”<sup>11</sup>.

Energy efficiency is therefore one of the central elements deciding competitiveness. It can help to address the EU’s crises - the economic and financial crisis, the climate crisis and the unemployment crisis - by boosting competitiveness, creating jobs and protecting the environment.

Commitment to energy efficiency also aids the development of European industry to support this commitment with the development of new products and services. This in turn leads to innovation and growth of industries, creation of new jobs, and economic growth, including new export industries.

*What evidence is there for carbon leakage under the current framework and can this be quantified? How could this problem be addressed in the 2030 framework?*

eccee has not developed a view on this issue.

*What are the specific drivers in observed trends in energy costs and to what extent can the EU influence them?*

The main driver in increasing energy costs is the development of energy demand. Energy savings and efficiency can reduce energy demand, and thus the cost of the energy system and the energy cost for the individual who makes energy savings. Energy efficiency is also an EU objective in its own right and a shared competence of the EU. Improved energy efficiency can more than compensate for rising energy prices.

*How should uncertainty about efforts and the level of commitments that other developed countries and economically important developing nations will make in the on-going international negotiations be taken into account?*

Energy efficiency is the no regret option in the international climate context and at the same time a necessity to support an international agreement. Even in an EU-only context, the benefits of improved energy efficiency greatly outweigh the costs. This is also true when international competitiveness is taken into account.

*How to increase regulatory certainty for business while building in flexibility to adapt to changing circumstances (e.g. progress in international climate negotiations and changes in energy markets)?*

An ambitious Climate and Energy policy framework including a binding energy savings target would provide certainty for business to invest in energy efficiency and savings. In

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<sup>11</sup> Michael Porter, “The Competitive Advantage of Nations”, Harvard Business Review, March-April 1990.



addition, energy efficiency and savings would make businesses more resistant to changes within the energy market, for example increased prices. A target would also encourage EU industry to develop capacity to produce technology and services that can then be exported to help other countries meet energy- and climate-related challenges and obligations.

In setting the indicative target under the Energy Efficiency Directive a modelled baseline and set of assumptions on market conditions were used including energy pricing and CO<sub>2</sub> prices. This modelled approach should be continued but improved, with re-modelling at the appropriate intervals and with transparency and clarity in all assumptions.

*How can the EU increase the innovation capacity of manufacturing industry? Is there a role for the revenues from the auctioning of allowances?*

Providing investor certainty and strengthening deployment of energy savings and efficiency services and technologies in Europe through having a target for energy savings would increase innovation capacity in Europe. Member States should at least earmark significant parts of the revenues resulting from the auctioning of ETS allowances to energy efficiency. In particular, part of these revenues could contribute to the Energy Efficiency National Funds that Member States may establish under Article 20 of the Energy Efficiency Directive.

Technology and innovation procurement activities can stimulate innovation and market introduction of technologies that are developed but face problems entering the market. Similarly, strict public procurement policies would favour industries with the most advanced products.

Monitoring and compliance work to keep sub-standard products out of the EU market place also has a beneficial effect on those countries aiming for high-end products which need to sold at a price premium to recover innovation and development costs.

*How can the EU best exploit the development of indigenous conventional and unconventional energy sources within the EU to contribute to reduced energy prices and import dependency?*

The EU's largest indigenous energy resource is energy savings. As an example, the Commission's contribution to the European Council of 22 May recognizes that "Meeting the EU's 20% energy efficiency target by 2020 means saving the equivalent of 1.000 coal power plants or 500.000 wind turbines".

*How can the EU best improve security of energy supply internally by ensuring the full and effective functioning of the internal energy market (e.g. through the development of necessary interconnections), and externally by diversifying energy supply routes?*

The best way of increasing security of supply is first to reduce demand along the whole energy supply chain driven by a target for energy savings that realises the available cost-effective potential. This will also help determine the necessary size and optimal structure of the energy generation, transmission and distribution system. It will also help ensure resilience and make back-up generation and energy storage cheaper in relation to the defined needs.

### **Capacity and distributional aspects**

*How should the new framework ensure an equitable distribution of effort among Member States? What concrete steps can be taken to reflect their different abilities to implement climate and energy measures?*

Energy savings should be a important parameter in effort sharing considerations, because the expected social and economic benefits of realising cost-effective potentials at national level should leverage acceptability and support fairness across Member States. The main issue will be the differences in financing capacities, but this should be

reduced through providing a strong common framework for all Member States and further developing/using existing and new European financing tools to support those that need it.

Other macro-economic factors may need to be taken into account, including the level of education and training, potential bottle-necks in the national labour markets, level of standardisation, available institutional frameworks, monitoring and compliance tools, etc. These factors impact on the uptake of energy efficiency, but putting resources into these issues would help even out the differences in the longer term.

*What mechanisms can be envisaged to promote cooperation and a fair effort sharing between Member States whilst seeking the most cost-effective delivery of new climate and energy objectives?*

Energy savings targets need to be established through summing cost effective sector and national energy savings potentials and understanding interactions with other targets. This would provide guidance on the potential share of responsibility, together with GDP, levels of investment and differing sector potentials and growth possibilities. However, an overall target is also needed with allowance for flexibility in implementation for Member States.

*Are new financing instruments or arrangements required to support the new 2030 framework?*

The framework for financing needs to be strengthened and improved:

- Public procurement – there should be rules and requirements to ensure all products and services purchased by public sectors organisations have high energy efficiency performance. Support programmes are needed to ensure the proper implementation of those policies.
- Earmarking of EU budget for energy efficiency programmes, alongside energy efficiency as a condition of EU funding.
- Setting ambitious minimum energy performance criteria for granting EU funding and other public funding and financing.
- Public deficit accounting - Interpretations of accounting rules on public debt and deficit need to be modified so that investments in energy efficiency under energy service contracts are not necessarily counted as deficits in national and public accounts. This includes the so-called "off-balance sheet" obstacle that hampers the wider use of energy performance contracting in the public sector.
- Special efforts must be made to promote and optimise the use in MS of different national schemes that are more common, as these may differ between member states.

#### About ecee

ecee, the European Council for an Energy Efficient Economy, is a non-profit, membership-based NGO. The goal of ecee is to promote energy efficiency through co-operation and information exchange.

To facilitate this, ecee provides evidence-based knowledge, analysis and information. Ecee provides an information service through its web site and news service, arranges conferences and workshops and takes active part in the European energy efficiency policy discussion.

One of ecee's principal events is the Summer Study. Since 1993, each of the summer studies has received very positive participant evaluations. For more information, see [www.ecee.org](http://www.ecee.org).