



7 March 2011

## Public consultation on the EU Energy Roadmap 2050

### BUSINESSEUROPE views

#### Introduction

This document presents BUSINESSEUROPE's preliminary views on the upcoming "Energy Roadmap 2050" to be published by the European Commission end 2011. As this roadmap will be closely linked to the measures and pathways proposed in the "Roadmap for a Low-Carbon Economy by 2050" to be published in March, this document will be based on the existing BUSINESSEUROPE position paper "Preliminary Views on the Roadmap for a low carbon economy in 2050" (annexed to this document). As suggested in the accompanying document to the public consultation on the energy roadmap 2050, this paper will treat the concrete questions accompanying the public consultation merely as a thematic guidance.

Against that background, BUSINESSEUROPE would like to put forward the following points in particular:

#### Transparency of data and models used

The various EU roadmaps 2050, which are being developed under the Resource Efficient Europe Flagship, and the analysis of their potential impacts on society are based on a complex interaction of models, most notably *PRIMES* and *POLES* for the energy sector. BUSINESSEUROPE recommends that the highest degree of transparency of the data and the models used should be guaranteed. Making data available on the internet could be a good way to improve transparency.

#### Importance of communication and interaction with the public

Given the profound changes, the planned energy transformation will imply for Europe's economy and society, and given the experience some Member States have made with public resistance to large energy infrastructure projects, resources should be foreseen to ensure an early and open communication and interaction with the European public on the possible implication of the energy roadmap 2050.

Good practices can be found in respective exercises by Member States. For example, the UK government recently published a website "2050 Pathway Analysis" including an interactive "2050 calculator".<sup>1</sup>

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<sup>1</sup> [http://decc.gov.uk/en/content/cms/what\\_we\\_do/lc\\_uk/2050/2050.aspx](http://decc.gov.uk/en/content/cms/what_we_do/lc_uk/2050/2050.aspx)



### **Effects of energy policy on prices and competitiveness of energy-intensive Industry**

It is of vital importance to protect energy consumers from negative effects of energy price hikes. Energy prices in Europe are higher than in many others of our major economic partner countries, thus weakening overall competitiveness especially of European energy-intensive industries and increasing the risk of carbon leakage.

Therefore, and in line with the renewed EU industrial policy which was recently endorsed by the European Council, an industrial competitiveness proofing of the cumulative costs of all EU energy and climate policies should be regularly carried out and become an integral part of the new energy strategy 2020 and the energy roadmap 2050.

### **The roadmap must be policy driven and not choose technological “winners”**

The scale of the energy challenges that the EU must meet is such that it is crucial to deploy all technologies available now and in the future. The energy roadmap 2050 must therefore not lock Europe into specific technologies, but remain technology- and fuel-neutral. By politically picking technology “winners” Europe could short sight itself and loose competitiveness globally. Therefore the roadmap should be “policy”-driven rather than a technology-driven in order to remain realistic and credible. It should also be regularly updated.

### **Ensure coherence between the different roadmaps 2050**

The Commission is currently preparing a number of papers and roadmaps, linked to the flagship initiative “A resource-efficient Europe”, namely the “low carbon economy roadmap 2050”, the “White Paper on Transport”, the “resource efficiency communication”, and the “Energy 2050 Roadmap”.

EU policies must be fully integrated, and we therefore emphasise that the coherence between the different roadmaps 2050 and related papers must be guaranteed. Moreover, these papers must respect the principles outlined in the Commission’s Communication on industrial policy.

### **Development of suitable energy infrastructures**

EU energy policy goals, as well as the Europe 2020 economic aims, will not be achievable without a major shift in the way European infrastructure is developed. Consequently, it is of vital importance to promote investments in infrastructures in order to reach an integrated European grid that will reduce the costs, improve energy security and achieve the EU’s low-carbon ambitions.



Annex:

15 December 2010

## **BUSINESSEUROPE'S PRELIMINARY VIEWS ON THE ROADMAP FOR A LOW CARBON ECONOMY BY 2050**

### **Introduction**

This document presents BUSINESSEUROPE's Climate Change Working Group's preliminary views on the "Roadmap for a low carbon economy by 2050" as presented in the Commission's public consultation on the matter published on October 27, 2010. More detailed comments to this process will be provided in 2011.

European business supports action to combat climate change and is committed to taking its share of the responsibility by reducing emissions, investing in modern and innovative technologies and by delivering products helping customers to reduce emissions. It is vital that the roadmap includes measures needed to bring about more sustainable growth, extra jobs, accelerated innovation, cleaner air, increased energy security and lowering our vulnerability to external energy shocks. Whilst Europe must be willing to take the lead towards a new low-carbon, global economy, it cannot move alone. We argue in this position paper that ambitious 2050 EU targets must be accompanied by strong commitments from our main trading partners to have a true effect on climate change mitigation; that intermediate targets would be useful but should be carefully defined; and that a proper balance between the EU ETS and other sectors must be struck. Finally we argue that cost efficiency, preservation of EU competitiveness, creating the right framework for low-carbon investment and a move towards greater cooperation on the EU level are key considerations in achieving our objectives without prejudicing European employment, growth and overall wealth.

Concrete suggestions on how to integrate EU policies for climate, energy and industry are found in a separate position paper in annex to this document.

In this context, the main objective of the roadmap must be to show a feasible and practical trajectory to meeting the 2050 ambition level in the most cost-effective way. This feasible trajectory must be designed on the basis of very thorough impact assessments giving special consideration to availability of financing, skills and resources – as well as to the consequences for wealth and prosperity in Europe, including impacts on the sector level. The current more medium term impact assessments have weaknesses which make them less suitable as a solid basis for EU policy development.

BUSINESSEUROPE acknowledges that the Commission currently is preparing two other closely related papers, namely the *roadmap for low carbon energy*



system by 2050 and the *white paper on future transport policy*. We argue that EU policies for climate and energy must be further integrated and we therefore think that the roadmaps for “a low carbon economy” and “low carbon energy systems” must be merged, while integrating relevant parts of the white paper on transport. Moreover, these papers must respect the principles outlined in the Commission’s Communication on industrial policy.

#### **A. 2050 target**

BUSINESSEUROPE supports the idea of a low carbon roadmap, and we agree that the goal is to at least halve global greenhouse gas emissions by 2050 compared with 1990 levels, in line with science. However, we consider it premature to set a hard EU target for 2050, but if this is to be done it must be subject to a proper impact assessment, based on due consideration to the effects on European competitiveness and jobs. The 80 to 95 percent reduction currently under discussion could only be considered if deemed feasible by this impact assessment and if it is part of a legally enforceable, international climate agreement that demands strong efforts from all other industrialised countries and the main developing countries.

Overly ambitious unilateral action in this direction could significantly impede European employment, competitiveness and the overall wealth of the European society. Furthermore, further unilateral action would only modestly contribute to mitigating climate change, as the EU’s share of global CO<sub>2</sub> emissions is 13 percent and rapidly decreasing. To the contrary, further unilateral action may lead to increased global emissions as certain energy intensive production would move from the EU to countries with higher carbon intensity in the electricity mix. As production leaves the EU, companies are less likely to continue to invest in low-carbon solutions. All efforts must therefore focus on achieving a comprehensive global climate agreement.

#### **B. Trajectory to 2050**

BUSINESSEUROPE tentatively supports the idea of intermediate targets, such as a target for 2030, as this would provide European business with much needed predictability. For many sectors, setting realistic objectives for 2030 and beyond is a clearer incentive to invest in low-carbon solutions than changes to already established targets for 2020, which from an investment perspective is relatively soon.

However, the low-carbon path to 2050 outlined in the Commission staff working document of 26 May 2010<sup>2</sup> is not necessarily the most cost-efficient path. The proposed linear path would generate extra costs for those European companies which already bear the largest part of the low-carbon transition efforts. BUSINESSEUROPE rather advocates a path which takes account of the commercialisation cycle and learning curves of new low-carbon technologies, such as *Carbon Capture and Storage*, and their growing profitability over the years, as well as the permitting and construction times for large scale investments in low-carbon energy infrastructure. Such a strategy

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<sup>2</sup> “Analysis of options to move beyond 20% greenhouse gas emission reductions and assessing the risk of carbon leakage”, SEC(2010) 650.



will be better adapted to the real evolution of technologies for a transition to a low-carbon society. The optimal path towards a 2050 target should be set on a bottom-up sector by sector basis following a thorough cost and feasibility analysis.

We acknowledge the risk that the cost of mitigating climate change may rise over the years, but the scale of investment needed makes it necessary to strike the balance between this risk on the one hand and feasibility and optimised cost efficiency on the other. Realistic 2030 targets will allow the European business community time to carefully prepare for long-term investments, escalating with the availability of new technologies.

### **C. Effort sharing**

BUSINESSEUROPE underlines the utmost importance of a balanced and fair effort sharing between all parts of the European society. A continued focus on some already heavily regulated sectors (such as those subject to the EU ETS) would not be cost-effective and would have significant adverse effects on those sectors and the overall economy. It is important therefore, that EU policies focus on low-carbon growth across all sectors, and look at improving the efficiency and cost-effectiveness of the whole energy system.

As regards the ETS, a continuation of the present annual reductions in the EU ETS would in the 2030 horizon result in a total reduction of 38 percent between since 2005.<sup>3</sup> The technical and economic feasibility of such reductions would have to be carefully assessed on sectoral and regional levels, as many sectors are already operating at or close to physical efficiency limits. Reductions of this order should in all cases be considered as part of a legally enforceable international climate agreement demanding strong efforts from all other industrialised countries and the main developing countries.

BUSINESSEUROPE supports ongoing initiatives to improve the energy efficiency of – for example – buildings, domestic appliances and the transport sector. We underline the importance of achieving further improvements in the non-ETS sectors to reach the long term targets as far as this is more cost efficient, recalling that these sectors constitute more than half of current CO<sub>2</sub> emissions in the EU. Raised awareness among users of products and services will increase in importance. BUSINESSEUROPE acknowledges that there is a challenge in ensuring emission reductions outside the EU ETS are achieved with certainty and that the abatement cost in some of these sectors is higher than in some EU ETS sectors. However, the relative simplicity of calibrating the cap for the EU ETS should not be seen as an alternative to more cost-efficient abatement possibilities elsewhere.

### **D. Main issues for continued reductions**

The way in which the world produces and uses energy must be revolutionised in order to mitigate global climate change. The task must not be underestimated. It is clear that

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<sup>3</sup> In the 2050 perspective, a continuation of the present annual reduction of emission allowances in the EU ETS<sup>3</sup> would result in an additional 52.2 percent decrease between 2020 and 2050 compared with 2005 levels. This reduction would be in addition to the 21 percent that will be achieved by the EU ETS sectors between 2005 and 2020, and the 10 percent reduction that was already achieved between 1990 and 2005.



all sectors and all countries must make efforts to reduce emissions, but reductions must be achieved in a cost-efficient way and must consider the impact on European energy security, energy competitiveness, and overall growth and wealth. The EU will only lead by example if it shows that reducing emissions and securing energy supply can be reconciled with economic development. In this context, European business must be considered the *solution provider* rather than part of the problem.

Concrete suggestions on how to strike the right balance between the various concerns are provided in BUSINESSEUROPE's position paper "*European business recommendations on EU policies for climate and energy*" in annex to this document. Building on this, four main issues must be considered in the long-term perspective (let it be 2030 or 2050):

1) First priority must be given to cost-efficiency.

Any future regulatory approach must ensure that emissions are cut where it costs the least. The ultimate tool to attain this objective is a global carbon market where emission allowances are traded freely at a single global price. In a functioning market, the carbon price would equal the global marginal carbon abatement cost. We must get back to the basic logic and rationale of carbon trading, namely cost optimisation of reductions, and not look upon carbon trading as a tool to achieve other policy objectives.

We acknowledge that a true global carbon market cannot be achieved without a comprehensive global climate agreement. A substantial expansion of the international carbon offset mechanisms and their use in the EU ETS is a necessary intermediate step.

2) Global competitiveness of EU industry must be ensured

Measures to protect jobs and competitiveness in Europe must be continued and enforced in case of persistent failure to achieve a comprehensive international climate agreement.

While bilateral agreements and sectoral approaches to international carbon offset mechanisms may be warranted to facilitate investment and ensure environmental integrity, these approaches must not result in undue restrictions. The long-term use in the EU ETS of credits coming from international carbon offsets must be ensured, encouraged and expanded - as this would enable the EU to take strong responsibility for mitigating climate change at a lower cost. Likewise, free allocation of emission allowances in the EU ETS must continue to protect industries particularly prone to carbon leakage and the impacts on EU energy competitiveness must also be taken into account.

3) Improve the framework for investment in low-carbon technologies.

While much of the needed energy efficiencies can be driven by the carbon market mechanisms and to some extent by regulation, it is clear that the revolutionary shift in energy production and supply will need public support. The



private sector will drive the development of new products and services - but the sheer scale of investment needed for low carbon energy production, the related energy infrastructure and energy efficiency improvement means that the public sector must take a large share of the responsibility. Subsidies, tax credits and when necessary public sector financing are all tools that will have to be used. Options to harmonise and centralise such schemes must be considered in order to avoid distortion of competition between Member States.

Funding to bring low-carbon technologies forward is crucial, but care must be taken not to direct resources into specific technologies too early, i.e. to try to pick a winner at an early stage.

Many promising low-carbon technologies currently have higher costs than fossil-fuel incumbents. Here it is not appropriate to build the development and commercialisation purely on the carbon price. Most new technologies will require, at some stage, both the “push” of R&D support and the “pull” of market development. Therefore the EU should pursue energy technology innovation through a number of policies. The EU Strategic Energy Technology (SET) Plan sets the right direction for a low-carbon and secure energy future but lacks financing.

4) Greater cooperation at EU level could lead to most cost-efficient emissions reductions

A focus on cost-efficiency (point 1) and a more harmonised approach to public sector intervention (point 3) leads to the question of WHERE compliance should be ensured to optimise cost-efficiency. Current Member State targets for emissions and renewables are first and foremost *tools* of achieving the overall EU targets. National targets could however lead to efficiency losses and perverse incentives, as seen by some current national plans for wind and solar energy in areas where conditions for such energy production are suboptimal. Although specific emission and renewable targets for specific Member States may be politically desirable, it is not always efficient as abatement costs vary among Member States. As an intermediate step towards single EU targets, Member States should have the possibility to contribute to national targets through activities across the EU. This approach would result in lower abatement costs on the aggregated EU level and boost low carbon investment.

Finally, BUSINESSEUROPE acknowledges that a high carbon price in certain cases can incentivise investment, but we would like to underline that a low carbon price is not necessarily a symptom of market failure. It must be recalled that the objective of carbon trading is to minimise the societal cost to achieving a set target. The EU's goal in this context is to contribute to climate change mitigation by setting targets for CO<sub>2</sub> reductions, and accordingly cap the emissions from certain sectors. The lower the cost at which this can be achieved the better, as a high carbon price increases the risk of carbon leakage. Moreover, a lower carbon price resulting from an internationalisation of carbon markets will not prevent investment and innovation, but make sure that action is taken where it is the most cost-effective. It must be recalled that the environmental value of each ton of reduced emissions is the same - independently of the abatement



cost, and independently of where on the planet the reduction is achieved. By restricting (or failing to deliver) an international carbon market, the resulting artificially high carbon prices will make expensive reduction efforts profitable and will deter less costly investments with higher environmental integrity, but not covered by the market mechanisms.

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