

The Green Package – Proposed EU ETS and Renewables Directives

A CEER Position Paper

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1 Executive Summary

The Council of European Energy Regulators (CEER) shares the EU concerns on climate change and recognises the need to take immediate action in this area. As such, we welcome the EU's "Climate action and renewable energy package" (Green Package) which will facilitate the achievement of binding targets on greenhouse gas emissions (GHG) to which all Member States have committed and where renewable energy has a key role to play.

The draft directives have very ambitious and challenging targets. It is therefore vital to deliver them through the most efficient and effective means possible, without adverse unintended consequences. In this paper, we set out a few areas where we feel the mechanisms for delivering the targets need refinement to reflect the particular circumstances of the energy sector, and we propose ideas for how this can be achieved.

Overall, it is important to locate the Green Package in the context of EU energy policy. Explicit reference to the three pillars of EU energy policy - competitive markets, security of supply and sustainability - will help ensure that this can then be accounted for in implementation measures at Member State level.

In seeking to meet its renewables targets, the EU must carefully consider the impacts on security of supply, network investment and operation, and market functioning. It is important to recognise and address these challenges if the targets are to be met. For example, significant investment in electricity, and potentially gas, transmission and distribution networks will be required. Effective arrangements will need to be in place, specifically processes for granting authorisations and consents (also known as planning permission), to ensure the above infrastructure can be put in place in a timely way. A greater volume of intermittent generation from renewable sources will bring challenges in ensuring that electricity systems remain balanced. In that sense, the draft provisions relating to priority access could exacerbate the implications for system balancing as well as impacting competition and security of supply. It is also likely that these provisions will increase the risk of blackouts due to uncertainty in the availability of electricity and the CEER therefore considers that requirements for priority access should be discretionary, or at least subject to considerations of security of supply, cost, competition and internal market principles, etc.

The design of the support schemes for renewables will be critical in implementation of the Directive. While the details may be for Member States to decide, there could be value in setting out key principles, such as that the support schemes should be designed to deliver cost-effective solutions and should work with the Third Package to deliver competitive markets. In this regard, it is important to clarify the role of Guarantees of Origin (GoOs) to ensure that double support and associated costs to customers are avoided.

In CEER's view, energy efficiency should play a crucial role in achieving the Commission's GHG reduction target as it represents one of the most economic and efficient means of reducing GHG emissions. We welcome the proposed approach to Phase III of the EU ETS including the removal of individual National Allocation Plans (NAPs), the increase in the level of auctioning and the increase in transparency.



However, whatever measures are adopted to facilitate the achievement of the targets, it is important to acknowledge that significant costs will be incurred by both market participants and, more importantly, the end consumer. These costs need to be factored into any decisions reached regarding the finalisation of the legal framework supporting the climate change package (i.e. the Directives) and the implementation measures that follow.

2 Introduction

The purpose of the Council of European Energy Regulators (CEER) is to facilitate the creation of a single competitive, efficient and sustainable internal market for gas and electricity in Europe. We act as a platform for cooperation, information exchange and assistance between national energy regulators and as an interface at European level with the European Commission. We also cooperate with the European Commission and competition authorities in order to ensure consistent application of competition law by the energy industry.

In March 2007, Heads of State agreed to a binding target of a 20% reduction in carbon emissions, as compared with 1990 levels. To facilitate the achievement of this target, the Commission published the "Climate action and renewable energy package" (Green Package) on 23 January 2008 which is a set of legislative proposals, accompanying documents and related Communications¹. This position paper represents a coordinated response from the CEER with respect to the proposals contained within the Green Package and outlines the key issues that it is important to address in discussions regarding the Green Package.

3 Key elements of the Green Package

There are three main elements to the Green Package. These are:

- **Proposals for the Third Phase of the EU ETS (2013-2020):** The proposals set an EU binding target of a 21% reduction in emissions in participating sectors by 2020, as compared to 2005 levels. In addition, they provide for increased auctioning of permits, extended coverage of sectors and gases included in the ETS and allow for emissions offset through carbon capture and storage (CCS) to be credited.
- Proposal for a Directive on the promotion of the use of energy from renewable sources: This seeks to place the binding targets on renewable generation agreed by Heads of State in March 2007 within EU legislation. These include a target to source 20% of final energy (electricity, heat and transport) consumed from renewable generation and to source 10% of energy used in transport from biofuels.
- National Energy Efficiency Action Plans: The Commission has issued a Communication to the Council and Parliament on a first assessment of the National Energy Efficiency Action Plans that Member States have put in place, in compliance with the Energy Services Directive and in light of the non-binding 20% target.

¹ On 23 January 2008 the European Commission put forth an integrated proposal for Climate Action: All information related to the energy aspects of the Climate Action proposal can be found on: http://ec.europa.eu/energy/climate_actions/index_en.htm



4 Key issues

4.1 <u>The Green Package</u>

It is clear that the targets proposed in the Green Package are very ambitious and represent a considerable leap forward from where we are at present. As regulators, we consider that it is important to deliver them in an as efficient and effective way as possible, taking care to avoid adverse and unintended consequences.

4.2 <u>Energy Efficiency</u>

We welcome the Commission's proposals² for Member States to extend their required energy efficiency from the existing target of 9% by 2016 under the Energy Services Directive to 20% by 2020. Although not all regulators have competencies on end-user energy efficiency, the CEER would emphasise the importance of the role of energy efficiency measures in achieving the Commission's GHG reduction target. Broadly speaking, energy efficiency measures are one of the most cost-effective means of reducing GHG emissions. As the carbon price begins to feed into the electricity price, this will increasingly encourage consumers to undertake measures to conserve energy and reduce their electricity consumption. The costs of investment in energy efficiency may even be offset by money saved through a reduction in energy consumption. In light of this, the CEER thinks facilitating greater energy efficiency should be a key objective for all Member States recognising, however, that some Member States will already have implemented a certain level of energy efficiency and that it will be more difficult for them to achieve further savings.

In addition to this, we consider that there is a role for Member States in making consumers aware of the part energy efficiency can play in reducing their energy consumption and energy costs. Although this is a non-binding target, we also question whether amendments to the Energy Services Directive may be necessary to reflect this new target.

4.3 <u>Renewables Directive</u>

The CEER recognises that the proposed Renewables Directive³ is important to deliver the binding targets on renewables agreed by Heads of State in 2007. The CEER also recognises that renewables must play an important role in meeting the carbon reduction objectives, bearing in mind that each Member State has a unique fuel mix. Increases in renewable energy are likely to entail a significantly greater deployment of renewable electricity generation. While the CEER's remit does not include responsibility for heat or transport, we recognise that it is vital, in seeking cost effective implementation of the Directive, for implementation measures to be

² COM(2008) 11 final: Communication from the Commission on a first assessment of National Energy Efficiency Action Plans as required by the Directive 2006/32/EC on energy end-use efficiency and energy services moving forward together on energy efficiency.

³ COM(2008) 19 final, 2008/0016 (COD), Proposal for a Directive of the European Parliament and the of the Council on the promotion of the use of energy from renewable sources.



consistent across the sectors in order to ensure that renewables solutions are deployed where they are most cost effective.

The large growth in renewables as required by the proposed Directive carries substantial implications for both networks and the operation of markets. Turning first to the network issues, it is apparent that some forms of renewable electricity will be remotely located and investment in new transmission infrastructure will be required in order to connect this generation to the electricity grid.

Given the significant volume of new renewables that will be seeking to obtain access to the system, there may be relatively long lead times in connection dates due to insufficient capacity being available to accommodate the new generators. It will also take time for the necessary investment to be made to provide further transmission capacity, not least because of the need to obtain relevant authorisations/consents. For example, in December 2004, OFGEM approved funding for £560 million of investment associated with the Scottish transmission system to accommodate renewables, but construction work on the main upgrade has yet to commence due to delays awaiting the outcome of a planning inquiry. As a result of the limited capacity in the meantime, it is likely we will see an increased level of constraints on the system and a greater need for active constraint management actions from Transmission System Operators (TSOs).

The complex processes and unpredictable timetables for building and construction authorisations and permissions processes in many Member States are a major issue. In February 2007 CEER hosted a workshop concerning electricity transmission infrastructure attended by representatives from the European Commission (DG ENV and DG TREN), TSOs, industry, Member States, regulators, and other interested parties. The stakeholders were particularly concerned with the issue of building and construction authorisations and permissions for transmission infrastructure projects. The workshop was a part of the work undertaken by the regulators to look at the cross-border framework for electricity transmission infrastructure investments⁴. The regulators concluded that processes for building and construction authorisations and permissions, including land planning, should be expedited, with the introduction of clear criteria, transparent guidelines and deadlines, with appropriate appeals mechanisms and with the consistent and transparent definition of roles of various authorities.

Linked to the above, there will also be associated issues to consider with regard to investment in distribution infrastructure, in particular brought about by increases in renewable distributed generation – that is electricity generation that connects directly to distribution networks. Work undertaken by the SmartGrids European Technology Platform for Electricity Networks of the Future⁵ has demonstrated the challenges and potential in this area. These issues will require consideration along with the need to improve authorisation timescales and increase network investment.

In meeting the ambitious targets presented within the proposed Renewables Directive, taking account of the issues associated with the intermittency of this type of generation, there is a need to maintain the security of supply overall. It is important that there is a sufficient reserve of

⁴ Cross Border Framework for Electricity Transmission Network Infrastructure, An ERGEG Conclusions Paper, Ref E07-ETN-01-03, 18 April 2007

⁵ www.smartgrids.eu



conventional generation that can be called upon at times of reduced generation from renewables. However, the generation to perform this role will need to be sufficiently flexible to provide a fast response service which could involve increased costs.

Turning now to the issues that may be encountered from a markets perspective, there are also concerns associated with the balancing of the system that will need to be addressed. Due to the inherent intermittency of some renewable generation (e.g. wind) it is likely to prove more difficult to ensure that the system remains in balance. In this respect, at times of high renewables generation, the system may have excess generation and where there is limited generation from renewables the system is likely to be under-supplied. Clearly these trends can be mitigated to some extent by the existence of appropriate reserve generation, greater interconnection across Member States to allow electricity to be imported or exported as required and effective constraint management. However, it is likely that there will be a significant impact on market prices. For example, when there is a surplus of generation (e.g. windy times), prices will likely tend towards zero and this will particularly affect the conventional generation which will not benefit from government support schemes, but which is needed to support the renewable plants which will operate at the margin, behind the prioritised "must-run" renewables. This trend is likely to have an impact upon investment incentives for conventional generation needed to support renewable plants as it will have a large impact upon the potential returns that could be earned by the conventional plant. As discussed previously, the proposals regarding priority access may have unintended consequences for security of supply if sufficient reserve (i.e. conventional) plant is unable to access the system.

It is important that the proposals for the facilitation of further renewables deployment are considered alongside the wider objectives of EU energy policy, in particular issues relating to security of supply, competitive markets, cost, network security and interconnection. In some respects, the increase in renewables may have a positive impact on security of supply where it increases diversity and reduces the EU's reliance on imported fuels, but the increase in intermittency of generation may lead to a negative impact on security of supply. In addition, the volume of investment in new renewable technology over a short period brings other risks. It is likely that the current proposals on priority access will mean that there will be a negative impact on security of supply overall.

Priority access: The existing Renewables Directive⁶ includes provisions to allow priority access to the electricity network for renewable generation. In this regard, it states that Member States "*may* also provide for priority access to the grid system of electricity produced from renewable energy sources". The Commission's proposals redraft this statement and strengthen the provisions to provide that Member States "*shall* also provide for priority access to the grid system of electricity produced from renewable energy sources".

The CEER suggests that it is important to look at the combined impact of changing the wording to 'shall' in relation to both priority access and priority dispatch in light of the impacts that this will have on Security of Supply, network operation and investment, market functioning and consumer prices. We would be keen to understand how these provisions will be applied to generation facilities with a mixed generation from renewable (typically biomass) and conventional sources. It would seem appropriate that the provisions only apply to 100%

⁶ Directive 2001/77/EC (OJ L 283, 27.10.2001) of the European Parliament and of the Council on the promotion of electricity produced from renewable energy sources in the internal market.



renewable projects to avoid creating overly complex arrangements under which the renewable part of a generating facility would be eligible for priority connection and dispatch but the conventional part would not. In addition, allowing for a plant that burns a minimal amount of renewable fuel to avail of priority access could create perverse incentives as a significant proportion of these types of plants could avail of priority access, the effect being to eliminate the benefit of such measures.

The CEER is concerned that the proposed redrafting from "may" to "shall" could also have substantial implications on network balancing and security of supply. At the extreme interpretation of "priority", all renewable generators currently queuing could be connected in advance of conventional plants. Due to the intermittency of renewables, back-up generation from conventional sources will be required to protect against the variability of generation through renewables. It will therefore be necessary to ensure that there are sufficient volumes of reserve available to preclude blackouts through lack of secure generating capacity. This reserve may not be available if all renewables must get priority access.

Additionally some regulators have expressed concerns that the increase of production of electricity by renewable energy sources which is not accompanied by the necessary network investment and build, carried out in a timely manner, might lead to severe network security situations and even blackout of systems. Currently, in some Member States it can take 10 years to put new power lines in place, even those which are urgently required for the transport of electricity generated from renewable energy sources. This will impact on the achievement of targets, regardless of the support schemes put in place.

The CEER also feels that cost should be factored into decision making regarding issues such as network investment. For example, the absence of provisions in the legal framework for consideration of cost could result in the requirement to underground a significant proportion of new lines, which could have huge implications for electricity prices. The CEER therefore requests that cost be included as a factor to be considered in relation to provision of priority access.

Given the above issues, the CEER proposes that Article 14 of the draft Directive is amended to ensure that the reliability and safety of the system, economic and efficient investment and security of supply, competition and the promotion of the internal market can be taken into account when implementing priority access and dispatch provisions. This can be done by reverting to allowing ("may") rather than requiring ("shall") priority access. Alternatively, these considerations could be reflected directly in the text of the article.

Flexibility: Overall, the CEER would support maximising flexibility within the scope of the Renewables Directive. This includes a pragmatic interpretation of the interim targets and the inclusion of long lead-time projects where these will make a genuine contribution to deployment of renewable energy. The CEER is also keen that EU policies designed to facilitate the achievement of these targets do not introduce distortions to the energy markets by requiring or indirectly encouraging carbon abatement to take place through specific means.

Guarantees of Origin: The CEER considers that the role of Guarantees of Origin (GoOs) is important, for example in ensuring that a clear and consistent approach can be taken which helps to eliminate double counting and protects against fraud. GoOs should be used to demonstrate progress towards the targets, to help improve transparency of renewable sources in consumer decisions and to facilitate trade in renewables. They may also have a role to play in financial support mechanisms insofar as they could demonstrate the amount of renewable energy created as a result of specific financial support mechanisms.



The detail of the GoO arrangements is critical in this regard. This needs further discussion, to ensure that the arrangements are workable and economic in the context of individual Member States. This may include further definition of GoOs, their calculation, control and utilisation in trading as well as ensuring that the design of the GoOs is compatible with the existing and well-functioning support systems. In this regard, we would note that the current definition of GoOs under the Fuel Mix Disclosure arrangements does not place a restriction upon the type of GoO that can be used to verify suppliers fuel mix claims. However, under the proposed Renewable Directive the GoOs used to meet the renewables targets need to be consistent with the requirements of the current Directive. To reduce inconsistencies, these differences in approach would need to be addressed.

It is important to clarify the intention of the Directive⁷ regarding the introduction of trade between Member States rather than simple transfer. If this is the case, it needs to be recognised, and included in the definition of support schemes. Member States will need to address the issue of cost recovery associated with operating a GoOs system which will be complex, involved and must be auditable.

In the proposed Renewables Directive it is only possible for GoOs to be transferred where these relate to new rather than existing plants and we have concerns that a distinction should not be made between these classes of renewables. We think it would be more appropriate to provide that where a country has met their own national target any renewable GoO can be traded with other Member States.

Further, according to the principle of the free movement of goods, it is important that crossborder transfer or trade of GoOs – representing green electricity – for the purpose of electricity disclosure (Art 3 (6) Directive 54/2003/EC) is possible not only for new installations but also for old installations. As discussed in the previous paragraph, such trade is limited to new installations and therefore Article 28 of the EU Treaty might be violated.

The issues of electricity disclosure and target fulfilment are of a different nature. In the former case, electricity suppliers are the obliged parties, and in the latter case, Member States are the obliged parties. If electricity and target fulfilment were linked together – bearing in mind the principle of free movement of goods – target fulfilment would depend on the commercial flow of green electricity only. Hence Member States would be forced to design demand-side driven support schemes (e.g. quota obligations based on electricity disclosure) in order to ensure that they meet their renewable energy targets. However, such harmonisation of national support schemes is not yet envisaged by Member States, thus it will be necessary to split target fulfilment from electricity disclosure, at least for old installations.

Support Schemes: Within the framework of the Renewables Directive, it is vital that each Member State employs the most efficient and effective support scheme to facilitate the achievement of the renewables targets. Support schemes of this nature should be developed, implemented and reviewed in recognition of the specific characteristics of the electricity market within that Member State, taking into account schemes in adjoining Member States to ensure minimum effect to the regional and internal energy markets. Moreover, there should be a

⁷ Specifically at Articles 6, 7.3 and 9



general objective that the support schemes do not distort the operation of the internal market any more than necessary – they should work with the grain of competition. In the context of the potential for tradable GoOs it is important that no "double support" results from the Directive. As such, it is also important to ensure that there is no ability for double counting through arbitrage between Member States.

Further, the CEER considers it is important to ensure that support mechanisms complement the introduction of competition in the internal market for electricity. The Green Package and third Energy Package must necessarily be seen together in this context. The third package proposals are a vital step in delivering a fully liberalised EU energy market, while the green package sets out a clear and significant commitment to reducing carbon emissions. The Commission outlined in its Strategic Energy Review, published in January 2007, that its policy direction is to work towards sustainable energy markets. As such, it listed options aimed towards the achievement of sustainable, competitive and secure energy supplies in the EU. It is important that one objective is not pursued at the expense of another.

4.4 <u>EU ETS</u>

In November 2006, the Commission published a Communication setting out the review process for the EU ETS. The CEER responded to this review⁸ and welcomes the reflection of many of our recommendations within the current proposals. These recommendations included the extension of the EU ETS to include more sectors and gases, the phased transition toward full auctioning of allowances and linking the scheme with third countries.

The CEER welcome the proposals, as they provide clear medium-term carbon reduction targets which will provide clearer investment signals for market participants, at least to 2020.

Auctioning: The majority of CEER members welcome the introduction of full auctioning in the power sector as it promotes economic efficiency, with permits going to those who value them the most, subject to development of an effective auctioning method. It should help with the development of a robust carbon price, which in turn will send economic signals to market participants to deploy the most efficient technologies. However, the implementation of this proposal should take into account its potential impact on EU economies. For example, in some Member States, preliminary analysis suggests that the impact on energy prices could be significantly above the Commission's assessment of 15%.

Full auctioning of power sector allowances will harmonise arrangements under the EU ETS and help avoid distortions in trade between Member States and discrimination in the way that similar installations are treated under the scheme, due to their location. An unpublished small-scale survey undertaken by the CEER's Environmental taskforce in 2007 highlighted clear differences in the treatment of new entrants and plant closures under the EU ETS in various Member States. These are the kinds of differences inherent within the current NAPs that lead to distortions between markets as a result of the operation of the EU ETS.

⁸ CEER Response to the Commission's Review of the European Union Emissions Trading Scheme (EU ETS), (Ref. C07-ENV-09-03



Impact on Prices: It will be important to consider the potential price increases that the proposals for the third phase of the EU ETS could lead to, both in household and business customer bills. There may be a particular impact on vulnerable customers and also on energy intensive industries. However, to the extent that increases in the carbon price are observed, the introduction of auctioning arrangements will provide comfort that this increase is a result of changes in supply-demand fundamentals rather than an increase in windfall profits earned by installations due to free allocation of permits. The CEER welcomes flexibility for Member States in how they might use a part of the auction revenues, for example to mitigate other impacts of climate change and to help finance environmental projects, or to mitigate the ability of vulnerable customers to pay increased prices. The CEER would note that consideration should be given to the potential impact on the price of carbon if limits are placed on the Clean Development Mechanism or the Joint Implementation, within the framework of the Kyoto Protocol.

Transparency: The CEER welcomes the proposals to improve monitoring, reporting and verifying of emissions as this will allow participants to access data on actual emissions on a timely basis. Greater transparency should help the market function and enable efficient investment decisions to be made. It also helps to harmonise the monitoring and verifying of emissions, thus ensuring a level playing field to all actors.

Other

Red Tape Issues: Any unnecessary administrative burdens need to be removed in order to meet the targets. This is particularly important in the context of protecting the interests of consumers as well as resolving consenting delays such as extended timings and the associated uncertainty for renewable generation. For example, simplification and reduction of the length of time required for building and construction authorisations and the revision of EU environmental laws should be explored to speed up grid extension. Notable here is the need to ensure that state aid clearance procedures do not result in long timelines for approval with subsequent impacts on the timing of investment in renewable projects.

5 Costs to consumers

We understand that inaction is not an option and welcome the Commission's stance in setting challenging targets to meet its goal of reducing GHG emissions. The changes to energy markets and networks implied by the proposed Directives are potentially very substantial (particularly for electricity). Thus, we believe that it is important to recognise that, even in their most efficient form, these necessary proposals imply a significant increase in costs and therefore final electricity bills, perhaps of the order of hundreds of Euros a year for household customers. We therefore consider that it may be appropriate for the Commission to carry out an assessment to more fully understand these potential costs. The savings that could be achieved from energy efficiency and from moving towards a fully liberalised EU energy market as set out in the Third Energy Package could help to ease these cost pressures. Even so, we would urge that consideration is given to the impact on consumers and suggest that this takes two forms. The first is through a commitment to ensure that GHG emissions reductions are implemented as efficiently as possible, to minimise the costs on end consumers. The second is to draw the attention of Member States to the possible impacts on vulnerable and poorer consumers and to encourage them to implement measures (perhaps through targeting energy efficiency measures) which protect those consumers from the full impact of the costs.