# EFET response to CEER Consultation on

# Implications of Non-harmonised Renewable Support Schemes

## C11-PC-67

### General

In order to provide global leadership, the 2020 agenda of the EU must demonstrate the role that green innovation can play in boosting economic competitiveness. Efficient mechanisms are crucial, since over the next ten years complying with the 20% target for renewable energy will require investment of hundreds of billions of Euro in renewable energy production and transmission. It is essential that EU companies can plan ahead in a transparent, non-distorted *internal European market,* where choice of location and technology is based on comparative economic advantage. Investment decisions should be based on natural, geographic, climate and hydrological considerations and technological efficiency criteria, not on arbitrary decisions about level and location of subsidies.

Harmonised support schemes to deliver a level-playing field for investment in renewable energy production are, therefore, essential. This will, in turn, help EU-based companies to develop and deploy cost-effective solutions, which can be sold in global markets thereby, enhancing their competitiveness. Greater harmonisation also means achieving the 20% goal in the most efficient way and at the least cost for customers. That should facilitate the competitiveness of energy consuming companies and increase the acceptance by society of the difficult process of transformation towards a green economy.

By contrast, non-harmonised support schemes currently have a number of significant negative effects on European policy objectives:

- Sub-optimal design of support schemes increases the cost of development of renewable energies since (a) deployment of technologies is driven by differing national support levels rather than economic efficiency, and (b) the incentive on developers to control costs is eroded by the prospect of guaranteed support levels.

- National renewable targets and support mechanisms have undermined the other policy instruments aimed at reducing greenhouse gas emissions, notably the EU Emissions Trading Scheme (ETS). EU ETS has been weakened to the extent that national governments are further undermining the policy, e.g. through the introduction of national $CO_2$ taxation measures.

- Non-harmonised arrangements for the trading and dispatch of renewable energies are undermining the objective of the internal electricity market. In particular, priority dispatch of electricity from renewable sources artificially

increases electricity price volatility, which erodes market liquidity, and has a large negative impact on the ability of TSOs to make available transmission capacity across bidding areas. Technical and market integration of RES-E will only be possible if harmonisation efforts are successful. The goal of achieving the internal market by 2014 necessitates harmonised support schemes.

It is thus, in the view of EFET members, essential that a harmonised market-based system of renewable support be developed across the European Union. If this does not happen, EFET believes that the 2020 targets will not be achieved. And there will be little prospect for successful expansion of renewable and low carbon technologies post 2020. The objective of completing the internal electricity market will also be put at risk.

However, although support schemes need to be changed, the subsidies to existing plants under the current national schemes do not necessarily have to be altered. These investments have already been made and the expected levels and methods of support should be maintained. The existing national subsidy frameworks and promotion schemes should be phased out gradually. Of course, existing plants should also be able to opt in to new schemes, facilitating and speeding up the phasing out of the older subsidy schemes.

**Question 1**
How significant do you consider the impacts of non-harmonisation of support schemes to be for the development of RES and RES technologies?

**EFET:**

Harmonisation is needed to make RES affordable by encouraging efficient investment and dispatch. Better design of support schemes should encourage sites for RES-E production to be chosen on the basis of the best available natural resource and grid connection rather than the highest support level. This will make RES-E more competitive with conventional generation. Hence, it is crucial to reaching economic sustainability and guaranteeing the continued support of EU citizens.

As noted in the consultation paper, it is clear that the most obvious incentive for investors to locate generation in a certain Member State is the level of support. However, high levels of support are not necessarily good for the long-term development of renewable energies. High subsidy levels may encourage RES to be developed in areas with relatively low resource endowment, while low subsidies may deter investment in areas rich in resources. This attitude needs to change as the economic and financial crisis will put stronger emphasis on efficient investment. In fact, a number of promotion schemes in Europe have already undergone severe retrospective changes in recent years, since the financial burden for the customers was too high. This uncertainty has actually damaged prospects for renewable investors.

In addition, harmonisation is increasingly needed to help develop certain new technologies. In particular, offshore wind, with its ability to deliver from its production sites into several countries, would benefit significantly from a harmonised approach. The developer could concentrate on technical issues, instead of the niceties of the various promotion schemes. In any case, as they stand, these schemes (around the North Sea for example) are not easily amenable to changes in national support driven by variations in production, spot price and congestion management and their effects on the relevant cable systems and HV networks.

In the very short term, i.e. before 2014, there is an urgent need to harmonise grid access arrangements and to develop better connection rules for offshore wind energy in order to avoid perverse incentives, e.g. support schemes competing for offshore wind production by increasing feed-in tariffs. The same applies to investment in renewable energy outside the EU, such as solar energy in North African countries.

For the advancement of new RES technologies research and development is the crucial factor. In some promotion schemes there is a tendency to mix more general renewable support with the specific goal of promoting research and development in individual emerging technologies. Non-harmonisation then leads to situations where immature technologies are operated in sites with a lower number of operating hours, e.g. PV in northern European countries in comparison with Southern Europe. For

research purposes, however, a higher level of operating hours is desirable in order to facilitate technological progress.

Harmonisation at the EU level implies a higher level of coordination between the existing systems. For the moment, the Cooperation Mechanisms proposed by the EU Commission are not clear in their implementation rules and there are no comprehensive guidelines to follow. Consequently, a smooth transition from national to regional markets for RES-E has not been stimulated. Furthermore this will undermine the development of certain technologies as offshore wind.

The significance of the flexibility mechanisms set out by the RES Directive and the adverse effects of a failure to make use of them can be illustrated by a recent legislative change in Italy. Italy operates a Green Certificate system with a quota obligation placed on importers and producers. Until now, importers have been able to cover the quota obligation by using foreign Guarantees of Origin. As of 2012, however, Italy will only recognise imported renewable power if it can count towards Italy's 2020 renewable target. Given that Italy has not entered into any agreements regarding statistical transfers under the RES Directive, importers will no longer be able to use foreign Guarantees of Origin to meet the quota obligation. This can be expected to hinder power from flowing in the most efficient direction at the Italian borders when the price spread between Italy and neighbouring markets would have otherwise provided an incentive to do so.

To facilitate such co-ordination the EC should consider revising the existing state aid guidelines for Member States on support mechanisms. For example, given the positive developments in cross border exchange of electricity, it may be considered that Articles 28 – 30 of the Treaty should now be applied to renewable electricity.[1] Improved guidelines for Member States will provide a basis to avoid "regulatory shocks" at the national level. This will encourage RES-E investment, since there will be clear and transparent administrative and legislative energy policies, which will expand the RES-E market in Europe.

[1] Although the judgement in the Preussen Elektra case (13 March 2001) suggested that Article 28 of the Treaty (prohibition on quantitative restrictions) (now Article 34) could not be applied, this was in part due to the underdevelopment of the legal framework for cross border exchange in electricity at the time (para 78). There have been significant improvements in the ten years since that judgement was reached. The judgement also envisaged the development of a functioning scheme for mutual recognition (para 80), which, in fact, has not materialised.

**Question 2**
In comparison, how significant do you consider the impacts of non-harmonisation of factors other than support schemes, explored in this report (or in addition to those explored) to be for the development of RES and RES technologies?

**EFET:**

Other than support schemes, the arrangements for access to the network - congestion management and dispatch, are the main factors affecting the sustainable deployment of renewable energies. For affordable RES-E production to cover a major share of electricity generation, it is essential that there is harmonisation of access and dispatch rules based on the market integration of renewable electricity and on the principle of self-dispatch. In the future, every RES-E generator must become a balance responsible party, must be obliged to contribute actively to the stability of the system and must be exposed to the functioning of the internal market in the same way as any other generator, i.e. in forward markets, coupled day-ahead markets, intraday cross-border trading and the provision of ancillary services. If this does not happen, there is a real risk that the single market in electricity, a cherished goal of the Third Energy Legislative Package, will cease to function properly at the wholesale level. Additionally, the investment challenges facing grid owners and operators will become increasingly insurmountable. Then, policymakers may be faced with a conflict between the objective of increasing the share of renewable electricity in the consumption mix and the stability of the electricity system at any reasonable cost.

Another key area of policy requiring harmonisation is the general design of wholesale and retail markets. It is our view that wholesale market prices need to better reflect the underlying supply-demand situation and that there needs to be a more direct relationship between wholesale and retail electricity prices. This becomes more important as the share of intermittent generation increases. Currently, however, there are a number of Member States with restrictions on the bidding behaviour in wholesale markets and more or less regulated retail prices. These restrictions tend to provoke further interventions in the market. The future role of SMART meters is also an issue that needs to be harmonised at European level if the role of renewable energy is to increase in a sustainable way.

**Question 3**
Please place the factors of non-harmonisation (whether explored in this report or not) in order of materiality/significance. Please separate non-harmonisation of support schemes into type, level, structure, history and stability of support as explored in the public consultation document (Table 1).

**EFET:**

EFET believes that regulators should not view the shortcomings of national support schemes and the overall current EU approach to RES *only* through the lens of "non-harmonisation". This would mean turning a blind eye on potential improvements that have already been identified. Many of these mechanisms, which would help to integrate electricity from renewable sources into the internal electricity market at the wholesale level, need not wait for the complex process of EU-wide harmonisation of support mechanisms. The main priorities we suggest for improving support schemes are set out in the sections below.

**Short term (2012-14) – RES-E should participate in markets**

**These points generally relate to the "type" and "structure" of support.**

- Renewable generation facilities should be subject to balancing rules, in the sense that deviations from forecast power production should be subject to the same cash-out rules as for other generators. This would give producers the incentive to make their schedules as accurate as possible.

- Renewable producers, rather than TSOs, should be responsible for selling their own power. Unbundling rules, in fact, should prohibit the participation of TSOs in trading activities.[2] In the meantime, transparency is required where TSOs are currently selling renewable output to the market and making such adjustments. TSOs should be obliged to disclose more complete information about the dispatch of renewable generation, especially from wind farms, and about resulting network flows.

- Although RES producers must be assured of network access, they should also be given incentives to contribute to managing congestion and imbalances, even under feed-in tariffs. This means that RES generators should be required to make a nomination and offer terms to the transmission system operator to deviate from the nominated amount. In practice, this would mean that TSOs would have discretion to turn down renewable output, provided that compensations were paid to renewable producers. This would have the effect of making the feed-in tariff more of a "take-or-pay" arrangement in cases of network congestion.

[2] For example: Article 9(1)(b) of Directive 2009/72 postulates that transmission system operators (and ISOs) "are not entitled to perform any of the functions of generation or supply". Selling power in wholesale markets is a central function of a generation business.

- Transparency is required where TSOs are (under the current conditions) selling renewable output to the market and making such adjustments. TSOs should be obliged to disclose more complete information about the dispatching of renewable generation sources, especially wind farms, and about resulting network flows. In order to support and work toward joint and harmonised EU RES market, the European Commission and responsible bodies could develop Standards or Best Practice Requirements for each type of support scheme existing within Europe. Such Guidelines should be adopted by the Member States and implemented in their own national legislation. Considering the financial and economic situation EU Member States could continue to support renewable energy through market based mechanisms rather than feed-in schemes in order to address the "Public Debt Deficit Issue".

**Medium term (2014-18) – Change support schemes for new RES-E**

**These improvements largely relate to the "structure" and "level" of support since cooperation mechanisms would encourage Member States to harmonise support schemes.**

- Phasing out of feed-in tariffs (for new investment) in favour of support mechanisms based on RES producers receiving a market price and a support premium (based on either a certificate mechanism or some form of premium): This would improve the incentives for RES generators to produce at times of highest demand and would encourage investment in smart technology. It would remove some of the perverse incentives created by the operation of feed-in tariffs and reduce volatility. A "virtual" FIT could be stimulated through a smart certificate system or a contract for difference arrangements.

- Further development of the co-operation mechanisms in the Directive, which would allow Member States and also 3rd European Countries to share the burden of meeting the overall EU target across Member States , as well as within the electricity, transport and heat sectors: The flexibility mechanisms as envisaged by the Directive should be the first steps towards a real EU-wide market integration of RES. Going even further and including third countries will provide further opportunities to support RES in a more efficient way. The following elements would work towards the objective of greater flexibility:
    - Member States and 3rd European Countries to reach at least a minimum level of opening of their national support systems to cross-border trade in GoOs or an equal certificate for target counting;
    - To make arrangements for the mutual recognition of transfers of internationally compatible (even if nationally issued) renewable production certificates and to set up a secure registry system. This

may need to be under certain conditions to prevent double counting and to allow for fair profit sharing. A next step could be harmonising and later merging of existing national schemes for the issuance and redemption of renewable energy-related certificates, whether based on voluntary underwriting and purchase of GoOs, or on obligatory certificated supply quotas;
    - Voluntary trade relying on sourcing from existing renewable generation units should not be precluded.

- European countries to agree that national levels of new investment support should approximate the expected market value of the "green" certificates to be issued under an assumed harmonised European-wide scheme.

**Long term (2018 onwards) –Harmonisation and/ or market parity**

**This section relates to the future stability of support schemes.**

- The EU should aim to establish conditions where renewable energy no longer requires explicit support and where all low carbon generation is incentivised through the CO2 price.

- This is the most economically efficient way to reach sustainable levels of renewable energy supply and production across Europe. To supplement this, it may also be necessary to create an additional mechanism for some renewable energy technologies backed up by cross-border trade in renewable energy certificates. This scheme should cover only new investment in order to avoid windfalls for existing production. National schemes should be restricted to pre-2015 investments.

- Finally, carbon reduction and/or renewable requirements should be imposed on all energy suppliers (including heat and transport).This would constitute the means to giving the certificates an intrinsic value at the national level.

**Question 4**
In your view, does this consultation document capture all major implications of non-harmonisation of support schemes? Are there additional impacts on investment decisions, market functioning or any other areas you consider relevant?

**EFET:**

See the beginning of our answer to question 3.

A major issue that is not addressed by the CEER consultation is the basic incompatibility of the way that Member States have chosen to implement the EU RES Directive with the objective of the European Union to complete the internal electricity market by 2014. Given the increasing share of renewable generation, RES-E promotion schemes will have to undergo changes in the future if they are to allow market integration to proceed. Fixed support and priority rules have an increasingly negative impact on the functioning of the European wholesale market for electricity. A key problem with most national schemes is that electricity from renewable sources is not sold by the producer into the wholesale market. Instead, it is provided with priority dispatch at a guaranteed "feed-in" price (either by the TSO or a nominated agency or company). This leads to a number of negative consequences for the development of reliable wholesale markets, the operation of the network and for investment decisions:

- Priority dispatch means that renewable producers would always choose to run their plant, regardless of market conditions. With relatively small penetration of renewable electricity, this is not a major issue. However, as the RES share grows there will be frequent instances where conventional generator has to perform a stop-start operation. Such operations are costly and mean that prices are more volatile than they need to be (e.g. negative prices and high price spikes). This problem would be moderated if RES generation is also encouraged to self-dispatch, selling its own output into the market. This could also provide a source of additional revenue for RES generation and would generally improve the liquidity of the market.
- Priority dispatch is also a major contributory factor to the current prevalence of loop flows in the European network. These loop flows mean that TSOs are less inclined to make cross-border capacity available, which is damaging to the objective of greater cross-border competition. Furthermore, this has led some to call for a revised de-limitation of price zones, generally focused on splitting existing zones. EFET clearly rejects this idea as it would be a step back in the development of the EU internal energy market, as smaller zones would inevitably lead to reduced liquidity in markets and heighten concerns about market power. Current non-harmonised support mechanisms for renewable energies mean that the (limited) transmission infrastructure that exists is not used efficiently.
- Given the increasing share of renewable capacity, future power systems will have to accommodate high levels of intermittent, non-dispatchable capacity. In

that context, flexibility and connection between production and consumption areas will be key. With respect to balancing markets, RES-E plants will trigger the need for further investment in storage, demand side management (DSM), grids and also conventional generation. The latter are needed to keep the system stable and ensure a secure supply with electricity. An internal EU market for electricity would set the optimal investment incentives for a balanced implementation of storage, DSM and grids (international and national). Efficient intra-day markets are a crucial cornerstone for the internal EU market.

A second issue not explicitly addressed by CEER is the impact on the overarching objective of reducing greenhouse gas emissions. The three EU 2020 targets: RES, $CO_2$ and energy efficiency are not independent from each other, as they have the common goal of reducing greenhouse gas emissions. Hence, the $CO_2$ target is the dominating target. In the longer term measures for abating $CO_2$ must prevail, while promotion schemes for RES and energy efficiency should ideally be phased-out and renewable energy should not require any subsidy at all. Projects would then be developed in response to the price of carbon. This would promote $CO_2$ emissions reduction in the most efficient way. We assume mandatory reduction of such emissions should be the overriding objective of the European Union, since it is the policy instrument having the most direct beneficial impact on climate change. EFET believes that non-subsidisation of RES, at least in the context of power generation, should be the long-term political objective.

Finally, renewable energies are not only used for electricity generation but also in other sectors including heat and transport. If the RES target is broken down to its various components, i.e. electricity, heat, and transport, and sectoral targets are set, the least-cost solution will certainly be impossible to reach. It is essential that reaching the RES targets goes hand in hand with the successful integration of renewable energy into the EU internal market.

**EFET (European Federation of Energy Traders)**
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