

Position paper on support schemes for renewable energy sources

September 2013

Summary

Recommendations for proper reform and design of support schemes for renewable energy technologies in Europe

The European Commission should ensure that regulatory frameworks set by Member States to support renewable energy sources do not undermine investors' confidence and provide a sustainable economic environment for the growth of the sector.

Thus, support schemes should be **reformed** in order to be:

- **Reliable**, reducing investment risk and thus project costs;
- **Predictable**, avoiding sudden changes and increasing transparency;
- **Easy to understand**, allowing domestic and community users to navigate the scheme;
- **Flexible or dynamic**, ensuring that there is not overcompensation but at the same time; maintaining high enough levels to attract investments and trigger innovation; and
- **Inclusive**, providing market access for all.

Support mechanisms should be **designed** in ways that:

- Apply **technology-specific** approaches to ensure innovation and commercialisation in technologies that promise to be socially and environmentally acceptable due to potential for low impacts and costs;
- **Distinguish between different market segments**, to avoid over-compensation;
- **Distinguish between (national) markets** to reflect the maturity of the sector and the associated administrative and legal costs;
- **Set the remuneration fee based on a transparent and proper assessment** of the technology cost, including market and legal related costs; and
- **Guarantee grid access** for renewable energy systems.



1. Background

Certain Member States have already achieved excellent results in developing their renewable energy potential over the last decade thanks to the combination of feed-in tariffs and priority access to the grid. For those that still lag behind, ensuring a cost-optimal deployment of renewables (RES) in Europe still remains crucial. The Renewable energy directive 2009/28/EC required member states to adopt a National Renewable Energy Action Plan to ensure they fulfill their national 2020 binding renewable energy target. Complementary to the target, Member States have adopted measures to reduce administrative and grid access barriers, and have put in place financial support mechanisms to attract investments. Each country is free to establish the framework it believes to be most effective and efficient; however, evidence of the growth rates in different countries tends to show that long-term feed-in tariffs combined with priority access to the grid are most suited for goal effective achievement. These elements have provided an incredibly important framework in Europe to give long-term investment signals in the sector, with the associated positive effects on economic growth, job creation, climate change mitigation and environmental protection.

However, with the pretext of windfall industry profits and consumers electricity tariff increases, a large number of (in many cases) unjustified political decisions and unpredicted and sudden regulatory changes to national frameworks have been taking place across Europe. Support schemes have been subjected to sudden changes, in some cases retroactively, and entire frameworks have been put under moratoriums. This chaos has had negative effects on existing investments and projects, leading to bankruptcy of project owners, developers and industry. But it has also had a very negative effect on future investments. Since regulatory risk is much higher, renewable energy projects are more costly, discouraging investors from the sector and making the cost of decarbonisation higher by raising the cost of capital.

In parallel, the European Union is working intensively to achieve the completion of a single European energy market through the implementation of the “3rd Energy Package”. Such a liberalized market should allow all energy players (i.e., suppliers and consumers) to participate in the market at an equal level. Renewable technologies, as they become competitive¹, are also meant to participate fully in the market, and thus renewable energy producers should eventually be exposed to market and price risks. There is a need to provide more clarity on how renewable support schemes could evolve and be adapted to ensure this happens, and to ensure that successful schemes are continued and replicated elsewhere.

For all these reasons, the European Commission (EC) has decided to work on guidelines that provide common principles and highlight best practices for support mechanisms. This guidance should help Member States to achieve their 2020 binding targets in a cost-effective manner. It will also help in streamlining the application of environmental support measures in the General Block

¹ Some kind of support to renewable energies will be appropriate, as besides leading to carbon emission reductions, many other benefits are not yet internalized in the cost of other technologies (health impact cost, security of supply, risk of accident, etc.). Further, for many existing and novel technologies there will remain a need to address innovation-related market failures. Where technologies have the potential to supply large quantities of clean energy, with low impacts on nature and the environment, and at acceptable cost, it makes sense to provide the R&D support needed to bring these to the market.

Exemption Regulation². The EC's guidelines on support schemes are expected to be published in September 2013. The following chapters present a number of elements that should be considered when designing and reforming national support schemes for renewable energy sources.

2. Recommendations for the Reform of Support schemes

The European renewable energy sector has been suffering for a few years from abrupt **retroactive changes** introduced to legislations in several EU Member States, harming the industry and shattering investors' confidence. These changes have been impacting existing investments, seriously damaging the investment climate for renewables, not only in the countries where they occur, but also throughout Europe. Two clear examples are Spain and Czech Republic, where the photovoltaic sector has been erased through unexpected and retroactive legal interventions. The industry as a whole has been denouncing these national practices and has been supported in this endeavour by the European Commission. **Moratoriums** are also wide spread. Even if not retroactive, the adoption of a moratorium entails major damage to the industry by abruptly stopping all support to the sector, leaving the industry without a market which then leads to massive bankruptcies and job losses.

These sudden changes are often a consequence of **badly designed support mechanisms**, which are unable to sufficiently adapt to cost decreases for a particular technology. **Sudden policy adjustments in the level of the financial support create "stop-and-go" effects that have a negative impact on the industry and related sectors**, and make market evolution difficult to control. Boom and bust phenomena increase overall system costs and delay the overall decrease of technology cost.

The lack of reliability in the support policies turns investment into renewables into a perceived risky operation, thus increasing the cost of capital for private operators. These changes, in addition to raising legal issues, also make achievement of the three 2020 targets (for greenhouse gas emission reduction, for renewable penetration and for energy savings) more challenging and expensive.

What is needed?

+ **Policy intervention at national level should no longer affect existing investors in renewable energy projects through retroactive changes.** The European Union should ensure that bad practices in member states do not occur in the future, as otherwise investors will no longer rely on the European market.

+ **Gradual support adjustments reflecting market development and the latest technology improvements will ensure cost-efficient development of renewables.** These adjustments should be based on a dynamic, predictable market control mechanism (or "volume corridor" concept, such as the EEG in Germany).

² The General Block Exemption regulation refers to European rules for state aid, which allow state support for the promotion of environmentally friendly technologies, such as renewable energy.



+ **A long-term target, with approximate annual growth trajectories, will help define the market size through volume corridors.** When the volume of installations overtakes or falls short of the expected market, financial support will be reduced or increased respectively, and proportionally to adjust market growth in line with the long-term target. For this to happen, data collection on installations and connections needs to be done quickly, transparently and by an appointed body and the market corridors need to be regularly updated.

+ **Support mechanisms will need to remain open for all kind of investors and energy users.** Including citizens as part of any promotion scheme will ensure that the socio-economic benefits linked to renewable energy are well distributed within society.

3. Recommendations on the design of support schemes

In order to tap into the vast potential of renewable energy solutions, **Member States will have to rely on a portfolio of different technologies, as well as on a number of different support schemes, reflecting the technology in question and the market characteristics.** In most Member States some relatively costly technologies, for example solar PV and offshore wind, have been favoured for reasons of social and environmental acceptability, resource availability and long-term low-cost generation potential, thereby promoting innovation and bringing costs further down. Furthermore, support schemes have sought to promote renewables technologies to fill the wide range of uses across sectors, and at varying scales from microgeneration upwards, to which they can make a contribution. Member states have opted for a number of support mechanisms, mainly feed-in-tariffs, feed-in-premiums and quota systems. Other measures, especially outside the electricity sector, include investment grants, tax exemptions, fiscal incentives and use obligations.

In any case, the type **of financial support should vary, depending on the technology and on the maturity of the market** considered. Today, significant differences in market maturity can be observed, even between neighbouring countries (e.g. Germany and Poland). The difference comes in forms of administrative and grid connection costs, which can be as much as double from one country to another. They come also from installation costs, which depend on the maturity of the work force and market competition.

Support should also differentiate between market segments and size of the installed power, as economies of scale can play an important role in setting the initial system cost, as well as the cost related to operation and maintenance

Taking into account the need to overcome environmental and innovation-related market failures, **the level of dedicated financial support should be based on a proper assessment of the profitability of the financial support through *internal rate of return (IRR)* calculations,** and for a fix number of years, promoting innovation and deployment while allowing for sustainable but not excessive profit margins. This approach should be transparent and regularly updated. Because of the different market conditions in member states, the level of financial support will be different among countries. There is hence a strong case for leaving the Member States in charge of the definition of the measures most appropriate for their specific market, as long as the above mentioned design recommendation are taken into account. A “one size fits all” approach for all European MS is unlikely to work.



Last but not least, **grid access for renewable energy systems must be guaranteed in order to reduce the grid access barriers** that are currently faced by many renewable energy project developers.

4. Recommendations on complementary measures to financial support schemes

By working on a series of accompanying measures, Member States will be able to better tap into cost savings potentials that are currently underrated. Some of these measures include:

- Streamlining of administrative and grid connection procedures, provided this can be achieved without compromising on standards and procedures for transparency, public participation and environmental protection;
- Proper implementation of the provisions of the Art. 16 of the RES Directive (priority access/dispatch);
- The promotion of a qualified and certified workforce of installers;
- A continuous commitment to R&D and innovation policies that will help reduce costs of renewable technologies;
- Specific measures aimed at facilitating access to and reducing the cost of capital/investments;
- A grid development plan, which is regularly updated and publicly consulted (such as the case in Germany³);
- A national agency that is the one stop shop for information on getting renewable projects onto the grid. Where all the information about planning, support schemes and grid can be found.

5. Conclusions

The current unstable regulatory situation is putting at risk the chances of achieving the European 2020 renewable energy target of 20%, and do not allow to address the 2030 energy and climate framework adequately. The European Commission guidance should ensure that support schemes in Europe are well designed, and that they aim to fulfil the following objectives:

- Create a level playing field by addressing market failures such as under-support for innovation, environmental externalities and subsidies to conventional energy sources;
- Reduce regulatory risk and thereby reduce costs;
- Provide a long-term stable investment framework,
- Attract investment in a portfolio of technologies, selected based on present and projected costs and available resources and also on environmental and social acceptability considerations;
- Ensure continued cost reduction of the technologies;
- Allow industry to become fully competitive in a fully liberalized internal energy market, while correcting for market failures;

³ The German power grid development plan is regularly updated and widely consulted with a large range of stakeholders http://www.netzentwicklungsplan.de/sites/default/files/NEP_2012/20121001_NEP_slides_ENG.pdf



- Allow individuals, communities and cities to benefit directly from renewable energy development
- Enable renewable energy supplies to fill the range of niches and scales available, from the smallest applications in devices such as phone chargers, through building-scale applications such as rooftop solar, and up to the largest centralised sources such as offshore wind farms.

Member States should be able to define the most suitable mechanism, based on their market conditions and energy policy strategy, and following the above-mentioned objectives. Support schemes across Europe should not converge on the type of instrument (feed-in-tariff vs. green certificate or feed-in-premium) used, but rather on the way those instruments are defined (e.g. corridor approach, calculation of Internal Rate of Return).

The urgent reform of national support schemes is fundamental for the European Union to reach its 2020 renewable energy target. At the same time, it cannot be disconnected from the discussion on the post-2020 regulatory framework and the internal energy market, as it affects the operation and overall cost of our energy system.

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Climate Action Network (CAN) Europe is Europe's largest coalition working on climate and energy issues. With over 120 member organisations in 27 European countries, CAN-Europe works to prevent dangerous climate change and promote sustainable energy and environment policy in Europe.