



Renewables Support Mechanisms Across Europe

A Comparative Study

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Introduction

I am delighted to present this latest update to the Comparative Study of Renewable Energy Support Mechanisms in Europe. Renewable energy remains a key sector for both Europe and CMS. As a leading legal advisor to the sector, with expertise right across Europe, we are ideally placed to guide our clients through the volatile and changing landscape for developers, investors, financiers, supply-chain providers and policy-makers.

Renewable energy has fired the imagination of industry to develop new technologies and approaches in order to meet our aspirations for a decarbonised electricity sector. It is a sector that depends heavily on a compact with government built on trust and stability. Its challenge is to address the triumvirate of issues that the modern industry must face: security of supply, affordability and environmental concerns. Based on our review of regimes across the region, we have reached the following conclusions that we would draw to the attention of policy makers in the renewable energy area:

- **Capitalise on the benefits of scale:** Projects are getting larger and more expensive. Governments expect to see cost reductions from scale benefits being passed back to customers and overall subsidy support requirements coming down. Meanwhile, investors and capital-constrained utilities are struggling to commit to larger equity contributions and to secure debt leverage. Subsidy regimes that add more risks to the sector are pushing up the cost of capital and equity and reducing the realisation of these benefits for consumers.
- **Implement change without creating an investment hiatus:** It is understandable that regimes need to change to ensure value for money for electricity consumers. However, governments are not sending out comforting signals to industry, leading to a “wait and see” attitude from investors, and an investment hiatus, as each cycle of change is initiated. “Grandfathering”, (maintaining pre-existing rules for pre-existing investments), transition management and allowing project owners a period to choose between the old and new regimes can help maintain investment continuity.
- **Avoid creating arbitrage between jurisdictions:** The variety of regimes, and the different basis on which they assess their respective levels of support, has led to arbitraging by investors between jurisdictions as they search for the most attractive return. At the European level, some convergence of approach would benefit the achievement of European-level ambitions for the sector.
- **Have a vision and avoid a reactive, constantly changing regime:** Quickly-implemented regimes have led to temporary investment hot-spots by over-rewarding projects. While these have been a small overall part of the sector, they have led to negative press for the industry as ‘hot money’ chases quick returns across the continent. They have also had a negative impact on investment in jurisdictions that have reneged on commitments. Governments need to communicate their vision clearly to the industry and provide long-term stability to allow industry to plan investments.

The renewable energy experts at CMS remain at the very heart of the discussions across Europe, guiding the industry and investors as they rise to the opportunities and challenges presented by this dynamic sector.



Cornelius Brandi
Executive Chairman, CMS

The Renewables Sector – Dealing With Constant Change

The electricity sectors in Europe appear to have come full circle, with liberalised competitive markets once more giving way to governments picking and choosing the projects and technologies that best meet their social and policy objectives. A decade ago, developers generally responded to ‘price signals’ from competitive markets in deciding whether to build new capacity. Now, developers are having to respond either to policy signals or, in some cases, respond more directly to tenders for government contracts.

The pace of change in each of the technologies means that it is no longer even helpful to approach renewable energy as a single cohesive sector. Wind and solar continue to dominate, but investors and developers further distinguish even these into subcategories of offshore wind (fixed and floating), onshore wind, ground-mounted solar PV, rooftop solar PV and solar thermal, each coming with its own jargon, economic drivers, rules, legal and technical requirements and government subsidy arrangements. Beyond that we have a range of technologies each vying for market position and often each having their own separate levels of support. These include advanced gasification, advanced pyrolysis, anaerobic digestion, biomass conversion, co-firing of biomass (enhanced and not enhanced), co-firing of biomass with combined heat and power (CHP), co-firing of energy crops, co-firing of energy crops with CHP, dedicated biomass, dedicated energy crops, dedicated biomass with CHP, dedicated energy crops with CHP, energy from waste with CHP, geothermal, geopressure, hydro-electric power, landfill gas, microgeneration, sewage gas, standard gasification and pyrolysis, tidal impoundment, tidal barrage, tidal lagoon, tidal stream, wave and renewable heat.

This dazzling array of technologies straddles a range from those that are in research & development and anticipate huge development potential through to those that are now in a highly commercialised phase. Alongside this maturing of the industries, the size of individual projects has also been steadily increasing: the next wave of European mega-projects lining up for consent have development costs in the tens of billions. As you would expect, the perception of risk heightens at those levels and what was considered a marginal risk for smaller projects can easily become a deal breaker for a mega project.

In this context, it should be noted that, with a few exceptions, renewable projects have very high front-loaded costs to build their infrastructure but lower operating costs (for example, no fuel costs). With political support for the sector

remaining volatile, the prospect of a government changing the law or tax regime once developers have spent significant sums on the upfront infrastructure can erode the value of operational projects. This remains a key concern for developers. If governments want the lowest cost of capital, i.e. the ‘cheapest money’, to come into new projects, they need to provide long-term certainty and stability of returns to investors. In particular, when establishing or amending legislative arrangements they must ensure that the arrangements provide for long term certainty to allow both domestic and foreign investors to view the renewables market as a long-term investment opportunity.

Of course, it is understandable that governments across Europe wish to learn from what has worked well, and less well, in the process to-date by updating their support frameworks for renewables. But the uncertainty that a change in regime creates is having a number of detrimental effects. It is allowing emerging renewables markets in places such as South America, Asia and the Middle East to draw precious capital away from European economies. It also means that the European supply chain (as evidenced in particular by the recent travails of key turbine suppliers) is finding it difficult to commit to investments in long term infrastructure – ports, vessels and manufacturing facilities – which will be the key to delivering on the sector’s ambitions.

There is a general awareness among the citizens of Europe of the rationales for the transition to a more renewable electricity sector. They also understand that they will bear some associated higher energy tariffs to fund the cost of building the necessary infrastructure in the short term. Nevertheless, affordability remains a key issue and managing the costs of the decarbonisation agenda is critical if public support is to be maintained.

At a broader level, the complexity of the energy markets and security of supply calls for a more joined-up European approach. Legislators should be careful to avoid a route for “legislation arbitrage”, creating temporary hot-spots with investors hopping from one temporarily attractive national renewables regime to the other. Instead, European jurisdictions should initiate measures to transform the continent into the most attractive location for profitable long-running investments in renewables.

This does not mean that each jurisdiction needs to take an identical approach. Indeed, governments across the various European jurisdictions have implemented a diverse set

of financial, non-financial and tax arrangements looking to ensure the desired conditions for promotion and development of their favoured renewable energy technologies. Financial incentives take the form of feed-in tariffs, green-bonuses, green certificates and contracts for differences, while non-financial support mechanisms include mandatory offtake arrangements, priority grid access and building codes. Each jurisdiction places differing emphasis on the types of renewable energy sources available based on its national priorities. For example, Albania is promoting hydropower while Spain and Italy have focused previously on solar energy. These differences, combined with the fact that the integration of renewable energy into the national energy mix in each jurisdiction is at a different stage, contribute to the range of incentives employed.

Partly, the levels of support are reflexive, responding to growth or contraction of investment, after a time lag in which policymakers catch up with developments. In countries such as Serbia and Poland, potential for growth is predicted whereas in Slovakia growth is determined by energy type. Support for wind and solar is declining while support for biomass used in the cogeneration of heat and electricity is increasing. In France, the level of feed-in tariffs available for solar energy has been reduced as a reflexive measure. Despite these examples, a stable regime does not necessarily guarantee investment. The level of support and the wider climate also need to be favourable. For example, in Croatia the feed-in tariff regime has been amended only once since its implementation in 2007 and yet uptake of the regime has been much slower than in other jurisdictions.

Change remains a constant in the sector. Many jurisdictions are in the midst of implementing changes to their incentive systems as governments seek to address the costs of subsidies while creating a framework that promotes the long-term, sustainable growth of renewable energy. Poland has a new regulatory framework in the pipeline that it is hoped, after a long period of waiting, will provide greater certainty for investors and promote the further development of renewable energy sources. In contrast, discussions about changes to the support framework in Germany are creating investor uncertainty over the long-term economic viability of renewable energy projects. The changes in the UK fall somewhere in between. The Energy Bill in the UK will replace the multi-faceted support under the renewables obligations with a stabilised revenue stream in the form of contracts for differences. Unlike feed-in tariffs, such as the feed-in premium subsidy scheme awarded through tendering introduced in the Netherlands, these contracts for differences would leave power price volatility risk with the investor. Whether this will promote investment or create an investment hiatus remains to be seen.

Conversely, in Italy the legal and regulatory framework for the implementation of renewable energy sources appears to have developed into a fairly stable and comprehensive system. While incentives for some forms of renewable

energy are decreasing, the development of new renewable energy sources is likely to continue. A similar pattern can be seen in Slovenia.

The increasing penetration of renewable energy has also required finding measures to deal with practical and technical impacts, particularly on transmission and distribution networks that need to be upgraded to cope with the amount and type of renewable energy sources exporting onto them. The response is very much specific to the jurisdiction and its issues. For example, in Poland grid operators will be obliged to complete grid upgrades necessary to connect renewable energy sources by specific dates, while Bulgaria has implemented a capacity system, whereby capacity for the connection of new renewable energy source facilities is announced each year and filled on a first-come first-served basis.

In the background to this highly dynamic landscape, of course, are the targets adopted by each jurisdiction to achieve a particular percentage of renewable energy by 2020 and beyond. Alongside this, governments are increasingly looking at the net cost of the arrangements they put in place. The so-called “levy control framework” proposed in the UK is one example of a financial upper limit to the amount of support that may be available. Switzerland’s budget for the feed-in remuneration scheme is nearing its limit due to the fast uptake of financial incentives, while discussions about incentive schemes in Germany have been prompted by cost concerns. The Czech Republic has also implemented a yearly target capacity system for each type of renewable energy source.

What is clear from our comparative study of support mechanisms across the continent is that renewable energy sources will continue to be vital in Europe’s long-term energy ambitions and that renewable energy will remain an exciting and dynamic environment in which to be involved.



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