

The future of renewables support in light of ongoing cost reductions

Significant contributions by the energy sector will be necessary if the EU is to achieve its decarbonization objectives and to live up to the commitments under the Paris Agreement. A cost-efficient deployment and market integration of renewables will be key in this endeavor. In recent years, we have already witnessed significant cost reductions in that area. Decoupling renewables build-out from dedicated financial support even seems to be within reach. Still, it is not the new normal yet for all projects. Reforms of support schemes should consider transitional revenue stabilization instruments, for instance in the form of the Contract for Difference (CfD) mechanism, to ensure European renewable energy targets are met.

The evolution of support schemes needs to continue

Over recent years, a rapid uptake of renewable energy deployment accompanied by cost-reductions for all technologies took place in Europe. The European climate and energy framework for both 2020 and 2030 is a key driver for the deployment of renewable energies. Back in the early stages of renewable deployment, the 2020 targets triggered a number of national financial support schemes. The deployment would not have happened at the same speed without those regulatory frameworks.

In 2014, the EU State aid guidelines for energy and environment reflected on the increasing maturity and accomplished cost reductions in the sector. Competitive bidding procedures were identified as a means to promote further competition and to harmonize the frameworks for awarding financial renewables support across Europe. For some markets, this was a significant change as it triggered the move away from feed-in tariffs.

After tumbling bid prices in auctions throughout 2015 and 2016, the bidding procedures for offshore wind in Germany led to the first-ever zero-bids in Europe in April 2017. This is the result of the significant cost reductions accomplished in the renewables industry over recent years, proving that renewables are on a rapid track towards full market competitiveness.

Vattenfall believes in the market integration of renewables

At Vattenfall, we are convinced that, with renewables being further integrated into the market, their need for support will continue to decrease. Ultimately, renewables will be able to be built on the same terms as other technologies. The implementation of the proposed European post-2020 regulation of power markets, a strengthened EU Emissions Trading System and large-scale transmission infrastructure build-out are important pre-conditions for this development. We expect that significant shares of renewables can and must be triggered in the future in the European power market.

A transitional support mechanism is needed to ensure renewables investment stability

For the time being, differing auction outcomes are to be expected that simply reflect different bidding procedure modalities, project scopes (e.g. including grid connection or not) and conditions (e.g. wind

speed/irradiation, permit envelop, water depth) across Europe alongside the progressing market integration of renewables. A total abolishment of support schemes or the general introduction of zero-bid or even negative bidding tenders as default system would therefore send the wrong signals, in particular to investors.

In recent years, a diverse range of investor types joined the industry providing the required funds (e.g. institutional investors, infrastructure funds) – without these funds, neither the renewable growth across Europe nor the cost reductions would have been possible. Going forward however, renewable auctions with full merchant price risk and limited revenue predictability would significantly decrease the required funds available from financial investors and thus risk the realization of the renewables growth targets.

Overall, whilst the momentum of the renewable industry and supply chain would allow for scaling up affordable renewable growth in the 2020s and for strengthening its role as significant cornerstone of the energy transition, the recent political considerations around zero-bids are also putting the industry foundation, including the supply chain, created over the past years at risk.

Instead, an adjustment of current support systems should be envisaged to increase further efficiency of awarding support and to thereby cover the transition until all projects can compete on the same terms as other technologies.

The ‘Contract for Difference’ can serve as transitional revenue stabilization mechanism

The current European renewables market already offers successful auction designs – the so-called ‘Contract for Difference (CfD)’ mechanism represents a transitional instrument.

In a two-way CfD mechanism, a strike price is agreed between the generator and the government, following a competitive bidding procedure. Hence, the CfD mechanism promotes competition on developing, constructing and operating renewables at lowest cost. The CfD allows for risk-hedging for operators as revenues are stabilized. At the same time, revenues are also capped – in case the market price rises above the known strike price, the generator pays the financial support back to the off-taker.

A CfD can be considered as a loan: it allows for upfront investments, it decreases the risk and hence the risk premium. With market prices recovering, money is very likely to be paid back over the project lifetime. The CfD mechanism thereby clearly has advantages in comparison to today’s variable feed-in premiums that only foresee a one-way payment. Due to it being based on a competitive bidding procedure, a CfD will ensure continued overall cost reductions for renewables and will support the projects needed to realize Europe’s energy transition and to live up to Europe’s decarbonization commitments.

Both generator and off-taker should be bound to a contractual agreement without opt-out clauses, which creates revenue stability and visibility on both sides. Following the introduction of such a mechanism, a review of the need for further support through CfD should be periodically carried out in the respective markets in order to acknowledge technology and market developments.

Corporate renewable power purchase agreements (PPAs) are a complimentary revenue stabilization instrument

In addition, industry and policy should jointly create a framework that triggers the maturing of a market for corporate renewable power purchase agreements (PPAs). Those PPAs can serve as a complementary revenue stabilization instrument for producers of electricity from renewable sources and thereby de-risk investments in renewable energy. For energy-intensive industries, PPAs are an important instrument in the scope of their decarbonization efforts and hedge against rising costs for power supply. As the European corporate PPA market is still in early development stages, it depends on an appropriate regulatory framework, in particular with regard to the issuance of guarantees of origin. Guarantees of origin are essential for meeting the off-takers' high demands as regards the proof for the origin of the purchased renewable power.