

Facilitating the growth of renewable electricity through markets

A five-point plan

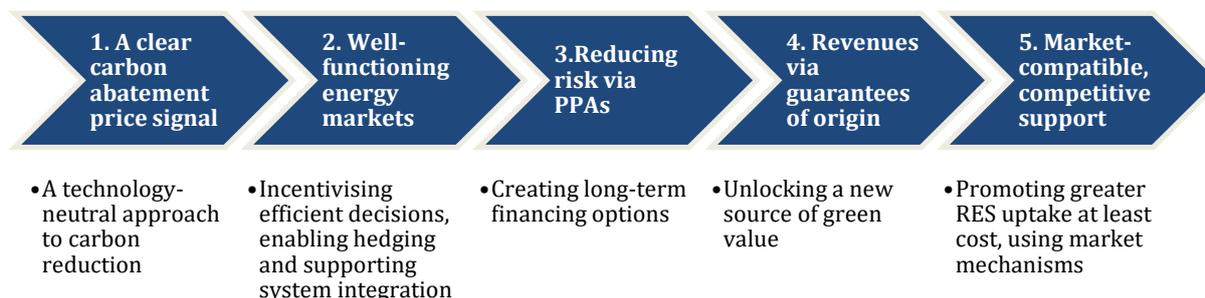
Reaching carbon neutrality by 2050 is critical for addressing the climate challenge. This will require a radical overhaul of every aspect of Europe's economy, including fundamental changes to the energy sector.

Electricity from renewable energy sources (RES-E) is already a key component of electricity generation. No matter what technological developments occur in the energy industry in the coming years, all European countries will need to encourage a considerable

further ramp-up of RES-E output if we are to achieve our decarbonisation objectives.

This paper proposes a five-point plan to help RES-E investors and operators minimise their risks and maximise their revenues without necessarily resorting to public financial support. The plan foresees harnessing markets for this purpose, especially through the greater integration of RES generation and supply in the wholesale electricity market.

Five-point plan to facilitate RES-E growth through markets



Step 1: Relying on a clear carbon abatement price signal to incentivise a switch to low-carbon or carbon-free technologies

The carbon market, by setting a price on carbon emissions, functions as a tool to incentivise investment in low-carbon or carbon-free technologies. A clear, economy-wide carbon abatement price signal will incentivise a switch away from carbon intensive forms of generation or consumption. It will encourage the uptake of least-cost emission reduction technologies and solutions.¹ At the moment, those technologies are likely to be RES.

Recommendations:

- I. Enhance the role of the EU Emissions Trading System (EU ETS) as the centrepiece of EU decarbonisation policy.
- II. Ensure that RES financial support schemes are compatible with the operation of the EU ETS and do not cause policy overlaps, unless these overlaps are counteracted by adjustments to the supply of emission allowances.

¹ See also EFET reaction to the EU Fit for 55 Package, <https://efet.org/files/documents/210715%20EFET%20PR%20Reaction%20Fit%20for%2055.pdf>

Step 2: Obtaining revenues from well-functioning electricity markets

RES-E generators can earn revenues through participating in electricity markets – from the balancing, right through to the forward timeframe. The vision is for a virtuous circle in which:

- RES-E generators receive more revenues,
- Markets send more reliable price signals, and
- Better dispatch decisions are made as to whether to generate electricity, power an electrolyser to produce green hydrogen, or charge a battery, for instance.

Wholesale market timeframe	Value/ benefit for RES-E generators
Forward market	Able to sell electricity long-term to hedge price risks and have price certainty
Day-ahead market	Able to sell electricity short-term in a liquid market with a robust reference price
Intraday market	Able to react close to real time to changes in weather or short-term availability
Balancing and ancillary services	Opportunity to obtain revenues from providing services to system operators ²

Recommendations:

- I. Remove any restrictions which prevent RES-E generators from participating in the different market timeframes or in the provision of balancing or ancillary services to system operators.
- II. Expose all market participants to balance responsibility.³
- III. Ensure that RES financial support schemes and market rules do not incentivise RES-E generation when prices are negative.

Step 3: Reducing risk for RES investors by using PPAs

RES-E developers need stable revenue streams to finance their projects. Renewable energy Power Purchase Agreements (PPAs) can help to provide such revenue streams and speed up the deployment of renewable technologies, even in the absence of financial support.

Since a growing number of business users of energy are making commitments to reduce their carbon footprint, it is important that they and their advisors have access to a simple, standardised contractual tool when agreeing the conditions of purchase. This brings down transaction costs and makes negotiations easier and quicker. To help facilitate the corporate procurement of renewables, in June 2019, EFET, together with Re-Source, launched the first international standard PPA for use in Europe.⁴

Recommendations:

- I. Promote the PPA market as a matter of priority in the coming years.
- II. Use the standard EFET PPA (the template for which is freely available).
- III. Remove national-level barriers or disincentives to the use of PPAs.

² Such as downward regulation.

³ In most jurisdictions balance responsibility may be legitimately delegated or pooled, which helps smaller RES-E market participants.

⁴ See our EFET webpage on CPPA standardisation, <https://efet.org/home/documents?id=26>

Step 4: Obtaining revenues via guarantees of origin (GoOs)

Guarantees of origin (GoOs) allow RES-E generators to have the renewable nature of their output certified and to sell that certificate to suppliers (who then use it as proof of origin for their customers), industrial/ corporate consumers, or in a secondary market. This makes GoOs an additional revenue stream for RES producers. Not all countries in Europe, however, currently ensure that GoOs are issued at the request of generators, irrespective of financial support. Public financial support could be disclosed in a data field of the GoO to meet transparency requirements in relation to both customers and public authorities.

Recommendations:

- I. Issue GoOs across Europe to any eligible producer who requests them.
- II. Align further schemes for the issuance of GoOs across Europe - ensure that the issuing and cancellation processes are transparent and harmonised to facilitate cross-border tradability.

Step 5. Allocating remaining financial support on a competitive basis

We recognise that the scale of the decarbonisation challenge may require temporary financial support for some technologies. It is, in our view, important to keep the cost that customers pay for this support to a minimum. This can be achieved by allocating support on a competitive basis, and through maximising competition in the allocation mechanisms, for example by avoiding technology or size-specific restrictions. Member States should also cooperate in the design and allocation of support.

Furthermore, support schemes should be designed in a way that does not distort the operation of markets. By default, RES-E generators should face the same rules and be exposed to the same price signals as market participants using other technologies.

Recommendations:

- I. Use competitive mechanisms to allocate support and maximise competition when allocating support.
- II. Seek to enhance competition through extending eligibility to participate in RES auctions across borders.
- III. Ensure that support schemes preserve incentives for RES-E generators to respond to the price signals sent by markets.
- IV. Reflect the expected beneficial impact of financial support mechanisms in terms of RES-E growth in the design of the ETS (and other carbon neutrality policies), so that they pull in the same direction.
- V. Ensure financial support is phased out as soon as it is no longer needed.

Conclusion

RES-E is already playing a key role in decarbonising the European energy sector and that role is certainly going to grow in the future. As the volume of RES-E output expands, the importance of robust and consistent policies to encourage renewable output on the one hand, and discourage carbon intensive energy consumption on the other, also increases.

Implementing the five steps presented here can provide greater certainty to owners and operators of RES-E installations. It can preserve competition, harness the strength, and enhance

the functioning of markets across Europe, thereby helping to minimise the costs of the energy transition to consumers.

We are proud to be playing our part in this process through the development of the EFET PPA standard, supporting work on the development and harmonisation of electricity GoO schemes, promoting expansion and strengthening of carbon markets and contributing to improvements in electricity market design.