ENABLE FULL MARKET INTEGRATION OF RENEWABLES

POLICY RECOMMENDATIONS

FOSTER MARKET-BASED REMUNERATIONS

Renewable support schemes distort the market price and should be stepwise replaced by all possible market-based remunerations, to save the money of tax payers, electricity consumers and of industries.

LIMIT SUPPORT SCHEMES

In the transition phase, support schemes shall be as least distortive as possible, limited in time, market-based, and harmonised at European level.

epexspot

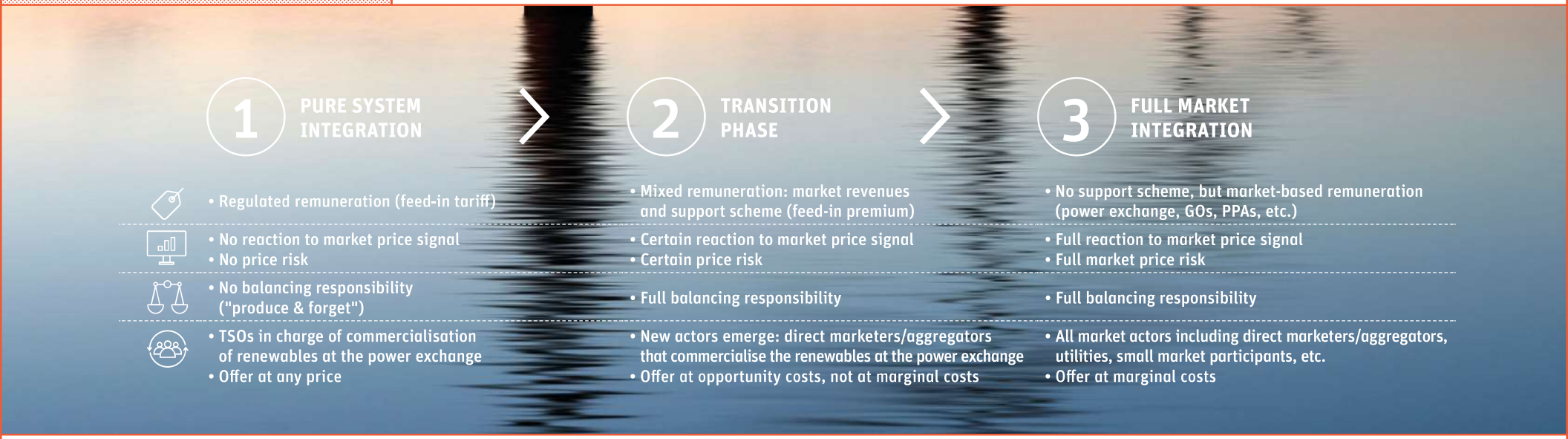
Price formation in the transition phase to a decarbonised energy sector

We face **a transition phase** on the path to decarbonisation, with the goal to fully integrate renewable sources in the market. Certain support mechanisms are likely to be still needed during this phase. To ensure sufficient new renewable installations during the transition phase, one can imagine support for renewables in form of upfront capacity payments (for each kW installed) instead of feed-in premium payments (for each kWh produced). Capacity payments would mean a further step towards full market integration as renewable generators would offer their electricity at marginal costs, as any other electricity source.

Remuneration will come from market-based revenues, i.e., the power exchange price for every MWh produced, as well as from the payment for the source of the electricity (guarantee of origin – GO) and other system services (balancing, congestion management and ancillary services). Therefore, well-functioning CO_2 and GO markets are also needed. Electricity consumers or taxpayers would not need to pay for subsidies anymore.

In hours of high renewables output, the prices will be close to zero, in hours with low generation from renewable sources, conventional power plants will set the price. With an increasing price tag of carbon emissions and global competition in demand for natural gas, these spikes will be considerable.

The European power market already offers an antidote in the form of hedging on the derivatives markets. In addition, those spikes are needed to attract demand side response and storage assets.



Price formation in the enduring phase

In the enduring phase, with an even higher share of renewables, these developments will continue. Consequently, the market price signal must remain undistorted to drive demand side response and to make full use of storage assets. The price signal must not be biased downwards to stimulate investment in generation capacity. Renewables will be fully exposed to the market price signal and will react to it.

The main fear concerning the price signal in this enduring phase is that power will either be abundant or scarce, resulting in low prices if power is available and can be sold; and considerable price peaks if demand cannot be met by the volatile sources.

Policy makers have already identified the need of demand side response and storage assets to complement volatile generation.

- **A higher degree of flexibility of demand** shall help to ensure a constant equilibrium.
- **Storing electricity** can be interpreted in the same way as it allows for the capability to control the time when electricity is offered.

Power Exchanges as enabler of efficient renewable market integration

EPEX SPOT has developed the power market by enabling renewables integration through performant systems and product innovation:

- **Trading close to real-time/ Lead time reduction:** With an increasing share of renewables, trading activity shifts closer to real-time when forecasts are most precise. EPEX SPOT continuously shortened the lead time on all its continuous Intraday markets. Trading is possible until 5 minutes before delivery in Belgium and the Netherlands, in Germany (within a single control area), in France and in Austria. In Finland trading is possible until delivery.
- **15- and 30-minute products:** Intraday products with smaller granularity, in particular 15- and 30-minute products, give market participants better possibilities to adjust hourly forecast deviations and fine-tune portfolios.
- **Complementary intraday auctions:** EPEX SPOT offers complementary local 15- and 30-minute Intraday auctions in Central Western Europe, Great Britain, and Switzerland. These flexibility contracts facilitate the integration of intermittent electricity flows into the market. They are essential in delivering a reliable reference price to facilitate a cost-efficient energy transition.
- **After-Market products:** These products enable market participants in Belgium and in the Netherlands to trade until one day after delivery. By balancing their positions when all information on production and consumption is available, market participants can reduce their imbalance costs.