RENEWING EU ELECTRICITY MARKET DESIGN FOR REACHING OUR CLIMATE TARGETS

1/ Limits of the current market design in light of EU climate ambition.

The current market environment for electricity relies on the principle that the price set for all the volumes exchanged on the market is the price of the most expensive offer retained. As offers from energy producers are posted at their marginal cost under market efficiency hypotheses, this approach can be demonstrated to ensure optimal dispatching of energy production capacities, and, through market coupling, the optimal use of interconnectors. In that regard, marginal cost pricing is the bedrock of an integrated EU energy market, contributing to collective security of supply and European solidarity.

While efficient short term markets are instrumental to building a more integrated European energy system, the marginal pricing approach fails to ensure long term signals matching the needs of the Energy Transition.

First of all, due to numerous market failures and in particular because it generates an uncertain and volatile price signal serving as market reference for all stakeholders, the marginal pricing approach fails to ensure the adequacy of available supply to meet reliability standards defined by Member-States. This is the reason why many Member-States have opted to implement strategic reserves or capacity mechanisms, in full compatibility with Treaty and EU sector law requirements for such mechanisms. Pricing capacity, in a dual market parallel to the energy market, inasmuch as it contributes to peak load, allows for the preservation of adequacy of supply in a market based, efficient way, while covering the missing money of generation assets and ensuring their long term financial stability.

A second, more crucial failure of a strong short term marginally-priced markets is that it creates a price signal that completely fails to ensure exposure of consumers to systemwide long term complete costs. Indeed, consumers will pay, over the long term, the expected marginal price of the different production technologies, weighted by their probability to be marginal over time, whether through forward markets or through spot markets. Nothing guarantees that this weighted average corresponds to the long term complete cost of power generation (including investments) of the assets supplying them.

In particular, in high fossil fuel and carbon price environments, as experienced since 2021, low carbon assets, and generally speaking inframarginal assets, retain a substantial windfall gain, while the costs paid by consumers for their supply increase dramatically, way beyond the coverage of the long term production costs of the electricity system supplying them. In theory, the gains of inframarginal assets can be demonstrated to cover their fixed costs under market efficiency hypotheses: it can be convincingly argued that those hypotheses are almost never fulfilled. They are obviously not in the current environment as gas prices are manipulated aggressively. Thus, it can be demonstrated that certain assets may today exceed the coverage of their complete costs, including asset amortization and cost of

capital at a normal WACC and a reasonable remuneration. For some, they may never cover them if prices were to drop drastically after 2024. In that regard, if left without any regulatory instrument, the current market principles lead to a succession of periods where massive transfers occur from the consumer to producers, such as the current year, and periods where producers may struggle to ensure the financial viability of peak load assets.

This runs contrary to the desired outcomes of the market design, if it is to facilitate the energy transition and reinforce energy autonomy:

- consumers should be provided with stable and inexpensive access to long term reliable coverages for low carbon electricity, to <u>facilitate investments</u> in decarbonization, which almost always requires sustained electricity consumption to substitute fossil energy;
- conversely, <u>producers</u> should also be provided with reasonable guarantees of the coverage of their complete costs, to <u>maintain an investment environment</u> favorable to the development of the low-carbon assets necessary to achieve carbon neutrality by 2050, and to ensure the <u>security of supply</u>.

Worse, in the current context, the last interconnected bidding zone in the Union to phase out fossil fuels will influence electricity prices all across Europe, making them more volatile, more dependent to fossil import prices and carbon price, and generally speaking higher. This will be detrimental to consumers that have opted for low carbon options for their mixes, often consenting to significant public supports to advance the Energy Transition. This effect, inherent to the current market design, disincentives Member-States to advance faster than the European trendline, and disincentives the broader development of interconnectors all across Europe. It needs to be curtailed.

2/ Profile of the new electricity market design in line with EU climate ambition.

In this context, it is fundamental that **regulatory instruments be designed and implemented to ensure the « automatic stabilization » of those transfers.**

Along with the necessary deployment of emergency market interventions, the European Union must undertake a thorough and long-term oriented reform of its electricity market design with no further delays, taking into account the aforementioned issues in the current market design.

This is why the French authorities welcome the initiative of Commission President von der Leyen in ushering in this reform, and stand ready to contribute meaningfully, in close coordination with all stakeholders of the electrical system.

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The EU electricity market reform should be based on the principle of **post-market** compensatory instruments that would ensure that additional value from generating assets in high prices environments, exceeding the coverage of their complete costs and a normal remuneration, be transferred and redistributed to

all consumers, and that would allow for symmetric transfers in low prices environments.

Such compensatory instruments would play a comparable role to a contract for difference (CfD) for the different inframarginal assets, with a contract strike price set at the complete long term cost of these assets. They would intervene after energy has been produced and sold over the short term market, ensuring that short term market bidding corresponding to the marginal pricing principles remains fully unaffected, and preserving the efficient dispatching of generation assets and market coupling. The example of renewables support, with more than 20 years of return on experience, shows that such symmetric CfD do not distort the bidding practices of market players, and ensure both the efficient market participation of generating assets benefitting from such coverages, and the desired long term visibility.

The EU electricity market reform should be designed to allow Member-States to implement such compensatory instruments, covering the existing and future low carbon assets that are necessary to the transition and carbon neutrality by 2050, and the most concerned by the double challenge of cost coverage in low prices periods, and adequate redistribution of value to the consumers in high prices environments. The common framework should in particular ensure that a shared approach be designed to facilitate the evaluation of the CfD strike price and setting it in a transparent, non-discriminatory and externally auditable way, with periodic reviews to ensure its adequacy and cost coverage. It should also ensure that such compensatory instruments may only be designed at the maximal extent over a given bidding zone, but not over larger geographic areas: otherwise, it would lead to cross-zonal transfers displacing market signals for the siting decisions of asset generation projects, and for consumption and energy efficiency efforts. It may also challenge the development of interconnectors, which is an important component of a more integrated European electricity market.

By ensuring the long term exposure of consumers to the full costs of electrical systems, this approach also **secures the political acceptability of the transition**. Investments in low carbon assets would ensure the long term protection of the consumers and their protection from situations such as experienced currently by our continent vis-à-vis its gas supply. To be a success, the Energy Transition needs to be a just transition. Such instruments ensure a fair balance between consumers and producers, over the EU.

3/ Parameters of the new electricity market design.

Such an instrument, replicating the economic effects of a CfD, passed between low-carbon including renewable inframarginal assets on one hand, and consumers of their local electrical system on the other hand, has a **strong resemblance to the inframarginal redistribution described in articles 9, 11 and 12 of Regulation 2022/1854**.

To ensure that it does not raise any proportionality or discrimination issues, it can be designed as a broadscale measure, open to any consumer, residential or professional,

in a given electrical system, covering the share of their supply from the low carbon including renewable assets covered by the scheme.

The most easily implementable, and most closely related to the inframarginal redistribution scheme, relies on **two distinct mandatory financial flows**, between covered producers and a dedicated fund on the one hand, and between this fund and consumers on the other hand. In such a context:

- <u>Covered producers</u> would transfer the value generated, over their entire production, by the difference between the observed prices realized on the markets and a strike price, defined to ensure the coverage of their complete costs, including asset amortization, cost of capital at a normal WACC, and a reasonable remuneration.
- The <u>observed prices</u> realized on the market, designed to replicate a normative selling strategy for their volumes on the market (just as practiced for renewables supports today), and the <u>strike price</u>, would be defined in a transparent, non-discriminatory, and externally auditable approach, following a clear methodology established by national regulatory authorities, as it is the case in several renewables support schemes across the EU.

The funds raised through this transfer would then be used by the fund to ensure a symmetric transfer to consumers, that would all, through their supplier, be entitled to a transfer corresponding to the share of covered producers in the local consumption, multiplied by their individual consumption, multiplied by the difference between the observed prices realized on the markets and the strike price.

This scheme ensures that both parties, producers and consumers, remain incentivized to fully participate in the markets and ensure their liquidity, and seek actively the most efficient strategies to sell their production or acquire their consumption, while also providing them with the guarantee that they can obtain a proportionate exposure to the complete costs of those covered assets ensuring their supply with low carbon electricity.

Using dedicated funds to manage the financial flow between producers and consumers would have the advantage of separating the financial flows induced by the mechanism from the State expenditure, which ensures its **financial neutrality**.