



Brussels, 23.3.2022  
COM(2022) 138 final

ANNEX

ANNEX

*to the*

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN  
PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN  
ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE  
REGIONS**

**Security of supply and affordable energy prices:  
Options for immediate measures and preparing for next winter**

## ANNEX

### **Overview of Options**

Several options for emergency measures to limit the impact of high electricity prices have been put forward by Member States, stakeholders and in the academic debate. They aim at providing relief to end-consumers, while not distorting the longer term overarching Green Deal, including decarbonisation and energy efficiency objectives. To be successful, these temporary and targeted exceptional options need to be fiscally manageable and should not compromise security of supply and level playing field in the internal market. The magnitude of the pros and cons described in the options depend on the design-features of such options. **I – Electricity Market Interventions involving financial compensation to consumers**

#### **A. Interventions at retail level: direct support to consumers through vouchers, tax rebates or through an “aggregator model”**

The REPowerEU Communication announces a new State aid Temporary Crisis Framework. That Framework will enable limited direct grants and liquidity support for all undertakings directly or indirectly affected by the Russian aggression against Ukraine, sanctions imposed or by the retaliatory counter measures, as well as aid to undertakings, in particular energy-intensive consumers, to compensate a part of their energy costs. The Communication also clarifies that, under the current circumstances, it is possible for Member States to regulate retail prices for all households and micro-enterprises.

Another way to shield household consumers, in particular the poor and vulnerable, (but also companies) would be for Member States to use an “aggregator model”, under which a State-controlled entity purchases electricity on the market and makes it available to certain consumer categories – directly or through suppliers – at prices below current market prices based for example on a strike price. Any extension of this approach beyond what is foreseen under the existing Article 5 of the Electricity Directive and State aid rules should be carefully assessed to avoid distortion in the Single Market.

**Most of these could be taken nationally.**

#### **Benefits**

As these options directly target consumers, they are particularly effective at moderating the impact of high prices for end users. They leave flexibility to Member State as regards the categories of household and business consumers to be supported, taking into account national circumstances and competition rules. Member States wishing to set up an aggregator model would need to decide on the design features, including the volumes sold and which specific consumer categories/suppliers would benefit from this option. The Commission could provide Guidance on how to implement such a model so as to ensure level playing field and fair competition in the Single Market.

#### **Drawbacks**

This option could limit competition on retail markets, which would need to be mitigated by ensuring fair and non-discriminatory treatment of all suppliers. The guidance on regulated prices annexed to the REPowerEU communication illustrates how this could be achieved for the aggregator model.

If a large part of consumers get support compensating for the full price increase, the incentives to reduce their consumption would be more limited. As with all options that reduce consumer costs, it could increase fossil fuel use, the EU's dependence on imports and increase security of supply concerns. The availability of this option depends on the budgetary means of Member States.

## **Costs**

The costs and the way they are covered would depend on national choices as regards the coverage of certain consumer categories and the extent to which the financial burden on consumers is relieved. Such choices will also be guided by Member States' fiscal space.

## **II – Electricity market intervention at wholesale level: price setting coupled with financial compensation to producers**

### **B. Wholesale Intervention on the Fuel Price for Fossil Generators**

This option would entail introducing compensation on the price which fossil electricity generators pay for their fuel (coal, gas, oil, diesel). As this would shield fossil fuel generators from the effect of the current price spikes on international commodities markets, it would allow them to offer their electricity cheaper than it is currently the case. This option would be operationalised by paying electricity generators the difference between their actual sourcing costs for fuel (gas, coal) and a pre-established reference price for these commodities.

#### **Benefits**

This option is expected to influence the bidding behaviour of fossil power plants in the EU and is likely to trigger a reduction of the cost of electricity sold by these plants and thus of the marginal price in the wholesale market. This in turn should lead to lower retail prices.

Depending on the design-features, it would not affect the merit order of the generation power plants and thus would not interfere with the market functioning.

#### **Drawbacks**

If introduced at national level, it could distort the flow of electricity in neighbouring countries (EU and non-EU) and trigger flows from countries with the reference price to those without it without consideration for scarcity considerations, security of supply or relative costs.

As with all options that affect the relative-price competitiveness of fossil fuels, this option could hinder efforts to decrease fossil fuel use.

#### **Costs**

The costs and the way they are covered would depend on choices. The cost could be financed through contributions from electricity consumers. Whilst this cost could in principle be offset by the reduction in wholesale electricity prices brought about by the measure, the net impact on consumers will depend on changes in the prices of fossil fuels, the quantities of fossil fuels imported and the volumes of electricity exported to neighbouring countries. The introduction of such measures would lower the revenues from excess profit taxation.

## **C. Wholesale intervention introducing a Price Cap on the Wholesale Electricity Market**

This option would entail capping electricity prices at a predefined level.

To keep generators running that use fuels which currently involve costs that prevent profitable generation at the cap (e.g. gas, coal), financial compensation would be required to cover the difference between the market price for the generated electricity and the pre-established cap. Strong regulation may be required to ensure that electricity generation offers above the cap (which set the entitlement to financial compensation) are 'reasonable'. Similarly, regulation may be required to ensure that generators whose costs are below the cap do not bid above the cap (in order to obtain a higher price). This may eventually require a close regulation of bids, which could lead to complexity.

### **Benefits**

This option would cap the wholesale prices which in turn should lead to lower retail prices. It would lead to reduced infra-marginal rents for generators not directly affected by the cap.

### **Drawbacks**

This option requires detailed knowledge by the administration of cost structures and operating modes of individual power plants.

As for Option B, **if not introduced at EU-level**, this option could distort the flow of electricity in the internal market and trigger flows from countries with the cap to those without it without consideration for scarcity consideration.

As for option B, this option would unduly benefit the EU's neighbours, who would receive electricity subsidised by Member States.

Finally, this option could distort the flow of electricity in the internal market because of lack of price signal and could lead to security of supply risks.

As with all options that reduce consumer costs, it could increase fossil fuel use, the EU's dependence on imports and increase security of supply concerns.

### **Costs**

Funding would be needed to compensate the difference between the market price and the price cap. This cost would be harder to sustain for Member States with more limited fiscal space.

Over time, there could be security of supply risks linked to lack of differentiated price signal in the EU market as well as following regulatory uncertainty. Similarly, unsubsidised renewables projects would be discouraged as market revenues would be lower (also because consumers would have reduced incentives to sign long term power

purchase contracts with renewables because the price cap reduces their need to hedge high prices).

## **D. Regulatory intervention on the electricity market: limiting returns of certain market players**

In electricity wholesale markets, the price is set by the last source required to meet all demand. Fossil fuel electricity generators face at present extremely high costs of fossil fuels as well as increased prices to emit CO<sub>2</sub>. This means marginal electricity prices are high. Baseload generators which do not depend on fossil fuels do not have a similar cost structure in this situation and earn additional returns well beyond their expectations when deciding to invest.

Annex 2 of the REPowerEU Communication sets out that Member States may exceptionally introduce tax measures that capture some of these high returns.

The same objective pursued by such taxation measures can also be achieved via **regulatory interventions**. This can be done by temporarily allowing Member States to set a strike price or a clawback mechanism limiting excessive returns of generators. The relevant strike price may need to vary to reflect the characteristics of different market participants and would have to be set by national regulatory authorities. In effect, this option works as a **one-way contract for difference**, where payments become due only when the reference price (market price) is higher than the strike price. Similarly to the excess profit tax contained in the REPowerEU Communication, a separate mechanism would be needed to redistribute the revenues from such a regulatory intervention to consumers.

Member States could turn their support schemes for new generation into systems of **two-way contracts for difference**. By asking the power generators to repay their investment support when prices are high, this mechanism would prevent a situation where new generation built at the moment will in the future benefit from subsidies also in situations when market prices are very high and volatile.

Where players in the natural gas markets earn excessive returns due to the current crisis situation, e.g. because they are able to sell volumes contracted long term at significantly higher prices on the spot market, the returns could be covered by similar tax interventions.

### **Benefits**

If well designed, such option does not interfere with price formation in the wholesale electricity markets, preserving signals for intra and extra-EU trade and security of supply. It does not affect EU-wide electricity trading.

Reforming the design of support schemes for new investments could pave the way for possible more long-term market design changes.

## **Drawbacks**

This option will in itself not reduce prices to consumers but the generated revenues can be used to provide direct relief to energy consumers most suffering from the high prices, for instance, through vouchers to households, and financial support to businesses in line with State aid and competition rules.

In order to determine accurately the existence of excessive infra-marginal profits, national authorities would need to have detailed information about generators' costs, to which they may not have access. A fast implementation may give rise to legal challenges as market participants will be differently affected.

Competition questions would need to be carefully assessed and contained by following the Commission's guidance on regulated retail prices and fiscal measures on infra-marginal rents as well as by complying with state aid rules.

Implementing windfall taxation is likely to impact investor certainty, which may mean support may be needed for all future electricity generation. This regulatory risk will be reflected in higher costs of capital and lower renewables deployment in future.

### **III- Interventions in Gas Markets**

#### **E. Price limits for trading gas in the EU**

This option relies on defining an EU-wide maximum price at which gas can be traded between operators in all EU Member States or, alternatively, on setting price limits within which the price of gas can evolve. Such a price cap/bands would limit bids on European exchanges. The capped gas price would become the new contractual reference price for long-term and derivative contracts.

**To be effective, this option would need to be implemented across all Member States.**

#### **Benefits**

A price cap for trading gas across Europe would reduce excessive volatility and directly lead to lower gas prices. This would in turn reduce the costs of electricity generated by gas-fired power plants and consumer prices for both gas and electricity.

#### **Drawbacks**

The right level of the cap would need to be determined. If the gas price cap is set too low, it would be difficult to attract more gas to Europe. It could even incentivise European companies to export gas to countries where prices are higher. A lower price would promote more gas consumption and therefore increased demand in Europe. In order to mitigate this risk, this option would have to be accompanied by strong demand management. In combination, these factors could lead to additional tightness on the gas market and pose risks to security of gas supply.

If the same cap price applies across the EU, it would become difficult to ensure that gas flows to the destinations where it is needed and to ensure that the grid can operate safely keeping supply and demand in balance.

Consumers that have purchased gas on long term contracts at a price above the cap would not benefit from a price cap until their contracts expire.

Depending on the level of the cap and the period during which it is applied, it may attract supplies from our trading partners. However, their reaction to an administratively set price is uncertain and cannot be anticipated. They might challenge this option in the courts and/or restrict or suspend supplies.

#### **Costs**

Costs are related to possible supply disruption depending on how suppliers react to the cap.

## **F. Negotiated volume and price with international suppliers**

An option would be to establish more specific gas volume and price targets for different supply routes/suppliers and to work these volume and price targets on the basis of a joint negotiating strategy coordinated at EU level vis-à-vis the EU's trading partners. The relevant target prices would concern the supply contracts with third countries but would not affect transactions taking place inside the EU (e.g. for balancing in the internal market).

In order to secure well-priced LNG and gas imports, the EU should take a longer-term perspective on the gas partnerships with its suppliers and extend the scope of the negotiations to securing long-term hydrogen imports.

Such partnerships could consist of:

- Long term contracts for increased **LNG and pipeline supplies**;
- EU investment in additional **LNG import capacity**, hydrogen-compatible;
- **A H2 partnership** with a 5-10 year horizon to establish infrastructure and a sound framework for and a partnership on investment (a common framework that would ensure predictability and stability of investments and demand in the EU as well as stable investment conditions in partner countries).

**The success prospects of such a negotiating strategy would depend on a common approach at European level.**

### **Benefits**

If successful, a negotiated lower price across Europe would lead to significantly lower gas prices combined with agreed import volumes of gas. This would in turn reduce the costs of electricity generated by gas-fired power plants and consumer prices for both gas and electricity.

As the option would be based on negotiations and would not impose any restrictions on the trading of gas inside the EU (e.g. for balancing), disruptions of intra-EU gas flows would be avoided.

### **Drawbacks**

The success of this option ultimately depends on the outcome of the relevant negotiations with third country suppliers.

### **Costs**

If successful, this option would lead to a lasting reduction of sourcing costs for natural gas.