



E3G

European framework for capacity mechanisms

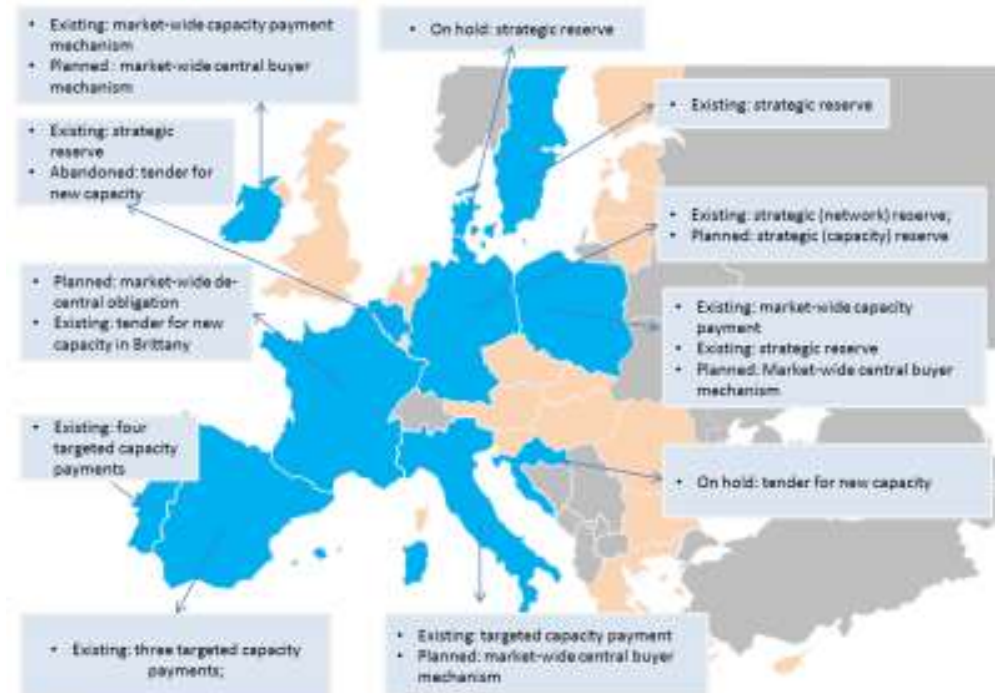
June 2018

Context

The Commission's sector inquiry on capacity mechanisms confirmed that...

- Many Member States have yet to implement market reforms that are indispensable to deliver on security of supply issues.
- Member States have often failed to adequately assess the need for a capacity mechanism before introducing one.
- The design of most capacity mechanisms could be significantly improved to minimise competition distortions.

Figure 23: Capacity mechanisms (existing, planned and on hold) in the 11 Member States – excluding interruptibility schemes



Source: European Commission based on replies to sector inquiry

What the clean energy package can achieve



E3G

1. Make capacity mechanisms only a temporary, last resort option.
2. Evaluate on the basis of a common assessment framework.
3. Minimise the impact on sustainability and competition.
4. Ensure rules are applied to all schemes.

Extra: The case of strategy reserves.

1. Capacity mechanisms as a temporary, last resort option



E3G

European Parliament



European Parliament

LAST RESORT (EMR Art 18)

MS to develop an **'implementation plan'** to eliminate distortions and market failures at the root of the adequacy concern.

The plan must be **approved** and **reported on**, with **scrutiny** from COM and ACER. No capacity mechanism can be put in place without an approved plan.

Capacity mechanisms shall be approved by the Commission for **no longer than five years**.

Council GA



Council of the European Union

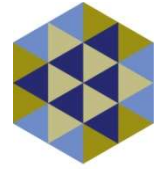
MS to identify issues contributing to their adequacy concern and publish a **'roadmap'** with a concrete timeline for eliminating them.

No approval process, no follow-up, no role in approval of capacity mechanisms. Capacity mechanisms may be introduced to address residual concerns.

"Capacity mechanisms shall be temporary but..." (but are permitted as long as the relevant resource adequacy assessment identifies a resource adequacy concern)

TEMPORARY

2. Assessed on the basis of a common framework



E3G

European Parliament



European Parliament

- MS to monitor resource adequacy on basis of the European resource adequacy assessment (ERAA).
- ERAA to contain a **worst case scenario** (but not best case scenario).

Council GA



Council of the European Union

- MS to monitor resource adequacy on basis of the European, and **potential national resource adequacy assessments** (NRAA).
- ERAA based on “**appropriate central scenarios**” of projected demand and supply.
- One NRAA must be based on the **same methodology** and use the **same modelling tool** as the ERAA, take into account contribution of foreign capacity, **but can include additional scenarios, sensitivities and assumptions**. MS may also perform a **2nd assessment using different modelling tools**.
- If the national assessment alone identifies adequacy concerns, ACER to provide opinion on basis of input from relevant body and ENTSOE.
- Capacity mechanisms shall not go beyond ‘what is necessary to address the resource adequacy concern’ – **according to which assessment?**

3. Minimise the impact on sustainability and competition

Competition



E3G



European Parliament

European Parliament

COMPETITION - BETWEEN ALL MARKET PARTICIPANTS

CRMs shall be open to participation of all resources (“including storage and demand side management”).

Contracts for existing installations limited to length of 1 year.

COMPETITION – CROSS-BORDER PARTICIPATION

CRMs other than strategic reserves shall be open to direct participation of capacity providers located in another MS.

MS shall not restrict capacity located in their territory from participating in CRMs in other MS.

Council GA



Council of the European Union

CRMs shall be open to be open to participation of all resources (“including storage, energy efficiency and demand response”).

CRMs including strategic reserves when possible, shall be open to direct participation of capacity providers located in another MS.

MS shall not restrict capacity located in their territory from participating in CRMs in other MS.

3. Minimise the impact on sustainability and competition

Sustainability (1/2)



European Parliament

SUSTAINABILITY CRITERION (“550”)

Council GA



Council of the European Union

No payments to new plants emitting more than 550gCO₂/kWh **right after entry into force**.

Some **lax restrictions** to payments to new plants emitting more than 550gCO₂/kWh from 2026 (but **no actual end date**).

No payments to existing plants emitting more than 550gCO₂/kWh 5 years after entry into force, with some **restricted** derogations for strategic reserves.

Some **lax restrictions** to payments to existing plants emitting more than 550gCO₂/kWh after 2030 (but no actual end date).

‘New’ defined as capacity **which has started commercial production** after entry into force.

‘New’ defined as capacity for which a final investment decision has been made after entry into force – **plants which will be built in a couple of years could be considered as ‘existing’**.

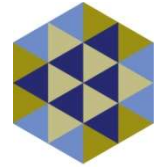
Criteria calculated for emissions per unit of **electricity**.

Criteria calculated for emissions per unit of **energy**: could fully exempt coal plants providing heat as well as electricity.

To apply to **all schemes**.

Risk of it applying **only** to entirely new schemes.

3. Minimise the impact on sustainability and competition



E3G

Sustainability (2/2)

- Building on the Commission’s original proposals, both the European Parliament and the Council have decided to grant exemptions to plants emitting more than 550gCO₂/kWh, by introducing new criteria expressed in kgCO₂/kW.
- These criteria limit the number of hours a given plant can run in a year, in function of how much it emits – it sets a ‘carbon budget’ per plant. For instance, a coal plant emitting 750gCO₂/kWh could run at full capacity:
 - up to 267h a year and stay under the threshold set by the European Parliament
 - Up to 933h a year and stay under the threshold set by the Council GA

	200 kg/kW (EP)	350 kg/kW (Original FR proposal)	700 kg/kW (Council GA)
550 gCO₂/kWh (Some oil, diesel, gas plants)	364 h / 15 d	636 h / 27 d	1273 h / 53 d
750 gCO₂/kWh (Hard coal)	267 h / 11 d	467 h / 19 d	933 h / 39 d
1000 gCO₂/kWh (Lignite)	200 h / 8 d	350 h / 15 d	700 h / 29 d



E3G

4. Ensure rules are applied to all schemes



Council of the European Union

Member States applying capacity mechanisms shall adapt their mechanisms to comply with the new rules.

... without prejudice to commitments or contracts, concluded before that date, and without prejudice to the Union State aid rules pursuant to Articles 107 to 109 TFEU, including state aid decisions taken thereafter before that date.



European Commission - Press release

State aid: Commission approves six electricity capacity mechanisms to ensure security of supply in Belgium, France, Germany, Greece, Italy and Poland

Brussels, 7 February 2018

The European Commission has approved under EU State aid rules electricity capacity mechanisms in Belgium, France, Germany, Greece, Italy and Poland. The Commission found that the measures will contribute to ensuring security of supply whilst preserving competition in the Single Market.

Commissioner Margrethe Vestager, in charge of competition policy, said: "Capacity mechanisms can help to safeguard security of electricity supply, but they must be designed so as to avoid distortions of competition in energy markets. I am glad that our close cooperation with national authorities has enabled us to today approve well-designed capacity mechanisms in six EU countries. They will foster competition among all potential capacity providers to the benefit of consumers and our European energy market."

Capacity mechanisms have the important objective of ensuring security of electricity supply. But if they are not well-designed they may cause higher electricity prices for consumers, give undue advantages to certain energy operators or hinder electricity flows across EU borders. That is why the Commission has, in close cooperation with the relevant national authorities, assessed six mechanisms in Belgium, France, Germany, Greece, Italy and Poland to ensure they meet strict criteria under EU State aid rules, in particular the Commission's 2014 Guidelines on State aid for Environmental Protection and Energy. In this context, the Commission has also taken into account insights from its 2016 State aid sector inquiry on capacity mechanisms. Today's decisions complement the Commission's Energy Union Strategy to deliver secure, sustainable and competitive energy in Europe.

Even if capacity mechanisms are well-designed, they cannot replace electricity market reforms at national and European levels. In parallel, important legislative work is ongoing to address market and regulatory failures, which undermine the incentive for energy operators to invest in electricity capacity and maintain security of supply. The Commission's Clean Energy for All Europeans Package of November 2016, a key proposal to meet our Paris agreement commitments, is currently being discussed by European co-legislators. This package includes a new Market Design to create the right investment incentives and to enable further development of renewables in the electricity sector. When adopted Member States will have to adapt all existing State aid measures to the future legislation.

Including DG COMP: when it approved new FR, BE, DE, EL, IT and PL schemes in February 2018, it introduced a 'review clause' as part of its decisions...

"When [the clean energy package is] adopted, Member States will have to adapt all existing State aid measures to the future legislation". (see [press release](#))

Extra: the case of strategic reserves



E3G

European Parliament



European Parliament

STRATEGIC RESERVES & OTHER TYPES OF CRMs

Promotes a “strategic reserves first” approach: MS shall assess whether a SR can do the job before introducing a different type of CRM.

Strategic reserves do not have to be open to cross-border participation.

Council GA



Council of the European Union

All CRMs are equal.

Strategic reserves, when technically feasible, must be open to cross-border participation.

DEFINITION OF STRATEGIC RESERVES

More **stringent** definition: capacity in strategic reserves must be held outside of the market, and be dispatched only when all other options have been exhausted.

Weaker definition: capacity in strategic reserves must be held outside of the market, and can be dispatched when TSOs ‘are likely’ to exhaust all other options.

Other resources



- European Commission [FAQ on sector inquiry](#)
- [“Capacity payments, the final ingredient to supercharge coal”](#) by Sandbag
- RAP [“Realising the benefits of European market integration”](#)



European and regional adequacy assessments at the core of an efficient and secure energy transition

To Permanent representations of the EU, Energy attachés

Dear Madam,
Dear Sir,

COGEN Europe, E3G, Energy Cities, Greenpeace, SolarPower Europe, WindEurope and WWF would like to express their concerns regarding the latest developments within the Council on the Electricity Regulation.

More information



E3G

Manon Dufour

+32 (0)4 77 76 78 01

manon.dufour@e3g.org

www.e3g.org