Current state aid issues in the green transition

Alejandro Donnay
DG Competition – State aid Energy

Danish State Aid Law Association
30 November 2023

Evolution of State aid control

State aid for environmental protection and energy

- State Aid is generally regarded as a distortion of market competition. However, environmental protection and clean energy are considered legitimate objectives of the economic activities to be subsidised.
- The State Aid framework for energy and environmental protection is as follows:

STATE AID		
DE MINIMIS	***GBER***	***CEEAG / TCTF***
No notification to the Commission for aid below **200.000 EUR** to a single undertaking over any period of three fiscal years	No notification to the Commission for aid below some thresholds defined per objective and type of aid. MS are only bound to transparency obligations laid out in arts. 9 and 11 GBER.	Notification to the Commission

Guidelines on State aid for Climate, Environmental Protection and Energy (CEEAG)

European Commission

The new guidelines (CEEAG)

- From EAG (2009-14) → EEAG (2014-20/21) → CEEAG (2022-…)
- CEEAG provide MS with an updated, flexible and future-proof **framework for a coordinated support to the European Green Deal** objectives.
- The revised rules aim at finding **the right balance** between different needs:
  - Widen the possibilities to address Green Deal goals (broader scope)
  - Increase flexibility and streamline the existing rules
  - Direct aid where it is needed (no crowding-out of private investment, no greenwashing / avoid favouring incumbents)
  - Calibrate aid to the amount needed to trigger the project
  - Limit competition distortions to the minimum needed to address the problem at stake
  - Cost-effectiveness (minimum cost to the taxpayer in relation to the problem)
- Ensuring **coherence with the relevant EU legislation** and policies in the environmental and energy fields.

The new guidelines (CEEAG) cont.d

- **13 sections**
  - 4.1 Decarbonisation
  - 4.2 Energy efficiency in buldings
  - 4.3 Clean mobility
  - 4.4 Resource efficiency and circular economy
  - 4.5 Other environmental protection
  - 4.6 Remediation of environmental damage, biodiversity, …
  - 4.7 Reductions of taxes and parafiscal levies
  - 4.8 Security of electricity supply
  - 4.9 Energy infrastructure
  - 4.10 District heating and cooling
  - 4.11 Reduction of electricity levies for energy intensive users
  - 4.12 Closure of coal plants
  - 4.13 Studies and consultancy services

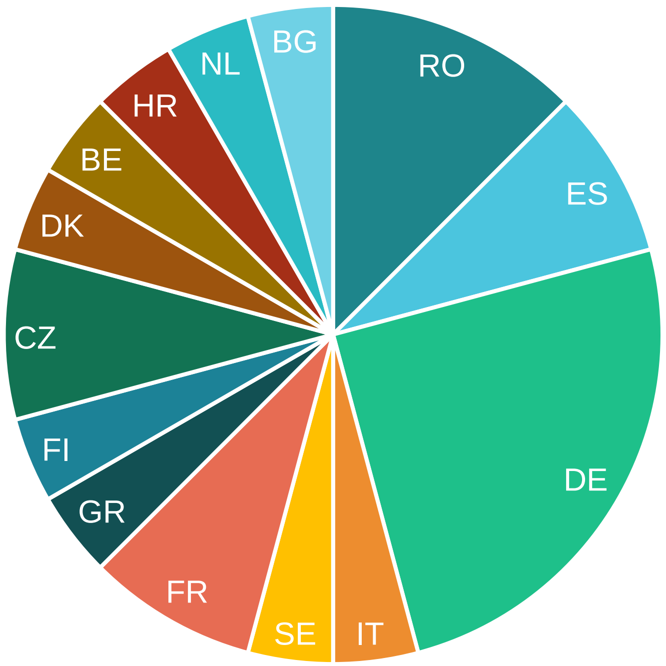
- **Common assessment principles**
  - Rationale for ther aid (market failure)
  - Scope and supported activities
  - Incentive effect
  - Minimisation of distorsions of competition and trade
    - Necessity
    - Appropriateness
    - Eligibility
    - Public consultation
    - Proportionality
  - Avoidance of undue negative effects on competition and treade and balancing
  - Evaluation
  - Transparency

How are green measures facilitated further?

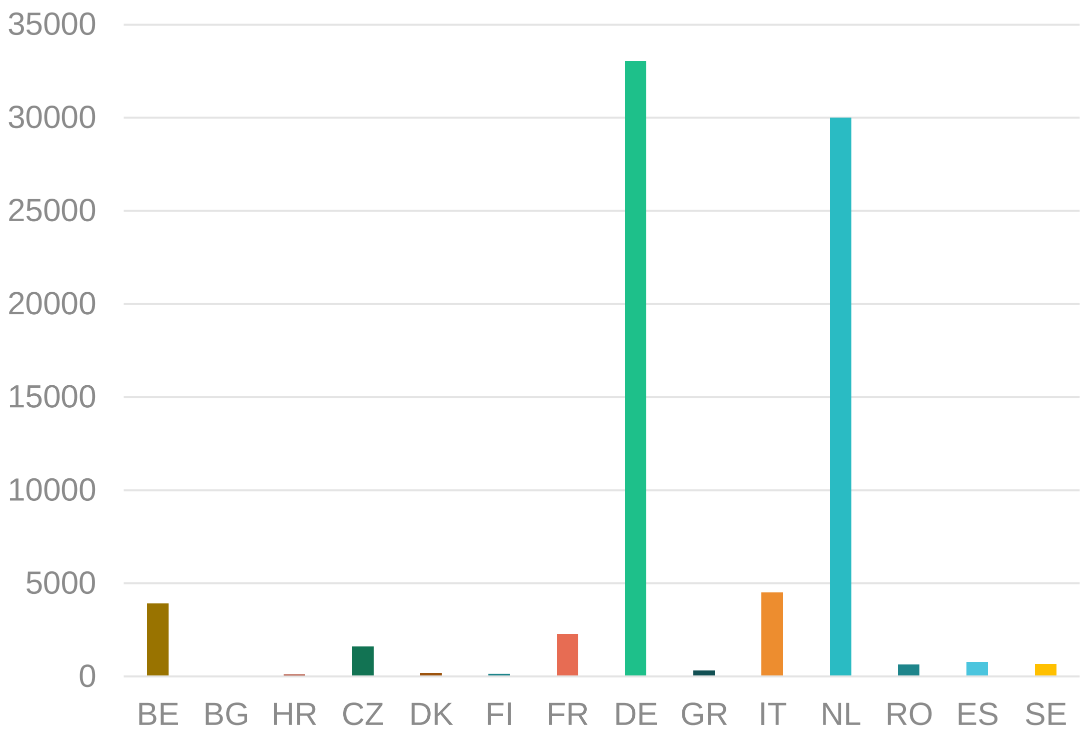
ENLARGING THE SCOPE OF THE GUIDELINES	• New areas and dedicated sections (e.g. industrial decarbonisation, clean mobility, resource efficiency, biodiversity) • All technologies that can deliver the Green Deal (e.g. renewable and low carbon hydrogen, e-storage)
FLEXIBILISING COMPATIBILITY RULES	• Higher aid amounts (100% of funding gap) and new aid instruments (e.g. contracts for difference) • Simplified assessment of cross-cutting measures • Generally no individual notifications for large green projects within approved schemes
ENDORSING GREEN SECURITY OF SUPPLY	• Allow stricter environmental requirements • Allow more generous contract terms for green technologies
GBER-ISING GREEN ELEMENTS	• New articles for new measures and broader scope of existing provisions • Increased thresholds • Higher aid intensities

CEEAG: decisions and budget

Graph 1: Number of decisions by Member State



Graph 2: Budget (Million EUR) per Member State



- 24 decisions so far concerning CEEAG
- Germany is the Member State with the most decisions (6) and the highest budget (33030 Million EUR)

DG COMP's data as of 26.10.2023

European Commission

Decision making practice (section 4.1 CEEAG): *EEG* SA.102084 (2022/N) – Germany – EEG 2023

- The **European Commission** has approved the modification of a German scheme to support the production of electricity from renewable energy sources. The scheme reflects an amendment by Germany to its **Renewable Energy Act** (EEG 2023), and will contribute to achieving Germany's energy and environmental targets and the EU's strategic objectives relating to the **European Green Deal**

- The **EEG 2023** support scheme, with an overall budget of **€28 billion**, aims at achieving a share of 80% of electricity produced from renewable energy sources by 2030, with a view to achieving climate neutrality by 2045.

- Aid will generally take the form of a market premium paid by the network operator to the producer on top of the market price. In case of very small installations, the aid will take the form of feed-in tariffs. Beneficiaries are selected through competitive, transparent and non-discriminatory bidding processes.

- **EEG 2023** scheme introduces new elements:

    - **Tender procedures** have new provisions to ensure their **competitiveness**
    - A **new transitory solution** is introduced to address Germany's continued grid congestion issues
    - Germany will completely **phase out as of 1 January 2027** the support for renewable electricity production at times of negative prices

- The Commission found that the aid is necessary, appropriate and proportionate as it is limited to the minimum necessary

Decision making practice (section 4.1 CEEAG):

H2 SA.102003 (2022/N) – RRF – Romania Scheme to support capacity for renewable hydrogen production

- The European Commission has approved, under EU State aid rules, a **€149 million** Romanian scheme made available through the Recovery and Resilience Facility (**RRF**) to support the **production of renewable hydrogen through electrolysis** for the purpose of reducing greenhouse gas emissions.

- The scheme is aimed at supporting the construction of new installations for the production of renewable hydrogen, to achieve by **31 December 2025** renewable hydrogen production capacities of at least **100 MW** in electrolysis installations producing at least **10,000 tonnes** of hydrogen per year.

- Under the scheme, the support will take the form of **direct grants**. The maximum amount of aid that can be granted per project will not exceed **€50 million**.

- The projects will be selected through a **transparent and non-discriminatory bidding** process, where beneficiaries will compete for the lowest amount of aid per MW of installed electrolysis capacity.

- The Commission found that the aid is necessary, appropriate and proportionate.

Decision making practice (section 4.8 CEEAG): *Capacity Remuneration Mechanism*

- Belgium notified amendments to the market-wide CRM approved by the Commission in August 2021 whose aim is to ensure that there is sufficient capacity to produce electricity and that such production meets the expected demand of electricity.

  - The modifications include: (i) tightened CO2 emission limits for beneficiaries; (ii) a change in the financing mechanism; (iii) improvements to the daily operation of the CM based on experience gained during the first two capacity auctions held.

- The Commission approved the measure in Sep. 2023 and found the following:

  - The scheme support the development of economic activities in the electricity sector by providing aid to electricity capacity providers to ensure security of electricity supply. It also has an 'incentive effect': the beneficiaries would not keep operating existing units or invest in additional units to the same extent without the public support.

  - Proportionality: the level of the aid corresponds to the effective financing needs + necessary safeguards limiting the aid to the minimum will be in place, including a competitive bidding process for the aid award.

  - Any potential distortion of the energy markets is kept to the minimum, as the CM remunerates for availability and not electricity production, and is open to all technologies.

  - The aid complies with the relevant provisions of the EU Electricity Regulation.

Temporary Crisis and Transition Framework (TCTF)

4th amendment

Overview of types of aid provided under TCTF

Temporary Crisis and Transition Framework

Prolonged until June 2024

1. Limited amounts of aid (up to EUR 2.25 million)
2. Liquidity support in form of public guarantees (expiring end-2023)
3. Liquidity support in form of subsidised loans (expiring end-2023)
4. Aid for additional costs due to exceptionally severe increases in natural gas and electricity prices

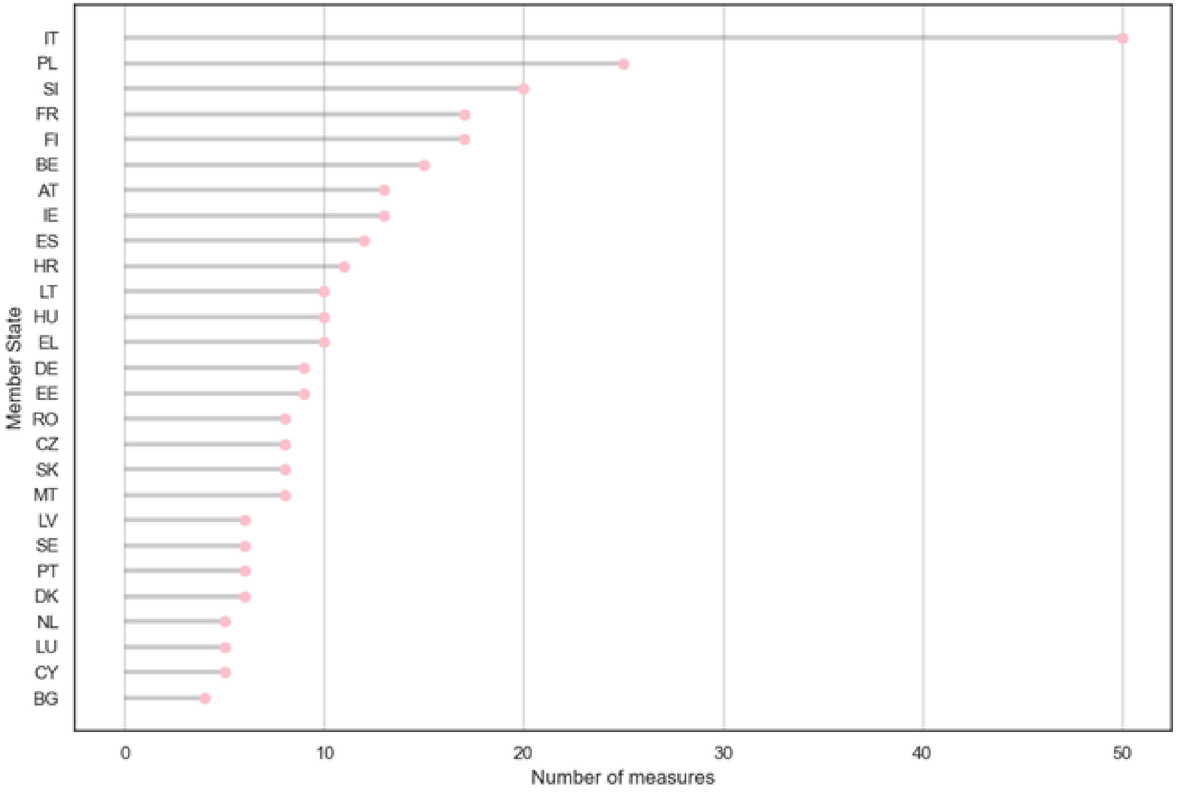
Prolonged until June 2024

5. **Aid for accelerating the rollout of renewable energy**
6. **Aid for decarbonisation for industrial production processes**
7. Aid for additional reduction of electricity consumption (expiring end-2023)
8. **Strategic investments for transition to net-zero**

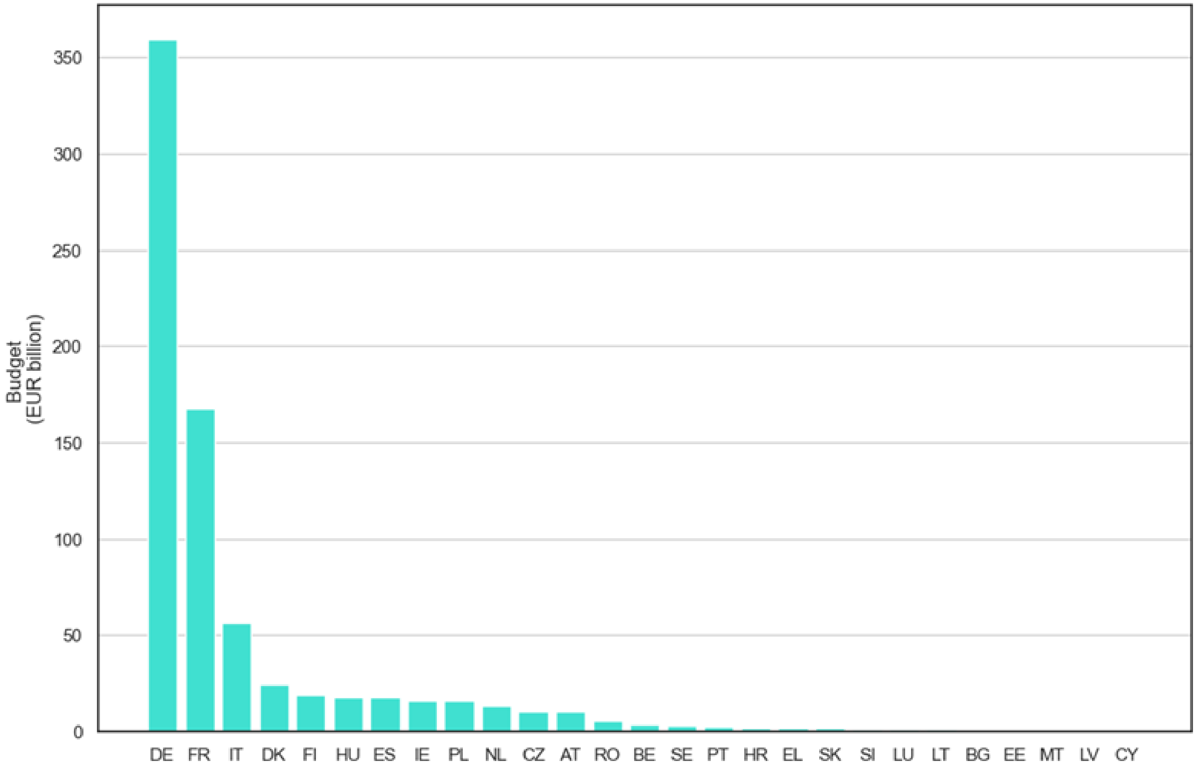
European Commission

TCTF: decisions and budget

Graph 1: Number of measures by Member State



Graph 2: Budget per Member State, absolute value



DG COMP's data as of 23.11.2023

European Commission

Simplification to accelerate RES roll-out

Section 2.5

Scope

Schemes covering one or more of the following technologies:

- Renewable energy including renewable hydrogen and renewable hydrogen-derived fuels but excluding electricity production from renewable hydrogen
- Electricity and thermal storage
- Storage of renewable hydrogen, biofuels, bioliquids, biogas and biomass fuels that obtains at least 75% of its content from a directly connected production facility, on an annual basis

Aid allocation and aid amount

Competitive bidding

- Investment aid: 100% of the total investment costs
- Operating aid: strike price of the two-way CfD set based on bids

Administratively (for non-mature technologies, including renewable hydrogen, and small projects)

- Investment aid: 45% of the total investment costs (+ bonuses for the size of the undertaking)
- Operating aid: strike price of the two-way CfD set by the regulatory authority to cover expected net costs

Implementation deadline

- 36 months after the date of granting for all technologies except offshore wind
- Flexibility in the system of penalties in case this deadline is not met

More flexibility to facilitate decarbonatisation

Section 2.6

Scope	**Schemes** covering investments in: • Energy efficiency in industry • Electrification of industrial processes • Switch to hydrogen and hydrogen-derived fuels in industrial processes If GHG emission reduction of min. 40% and energy consumption reduction of min. 20% compared to current situation
Aid allocation and aid amount	• **Method 1:** 40% of extra environmental costs; bonuses possible; with claw back • **Method 2:** Competitive bidding process • **Method 3:** Simplified methodology ➢ 30% of CAPEX for electrification and energy efficiency ➢ 60% of CAPEX for decarbonisation through hydrogen and hydrogen derivatives • Clearer rules on **cumulation with EU funds**
Other requirements	• Maximum aid amount up to EUR 200 million as an alternative to threshold of 10% of scheme budget • Limited increases in production capacity acceptable if resulting from technical necessity (<2%) • Longer implementation deadline (36 months) and flexibility in the system of penalties

European Commission

Strategic investments for clean technologies

Section 2.8

First level: schemes – main elements

✓ **Fact-based:** Only key sectors affected by IRA that are critical for the transition to net-zero and at risk of being diverted, namely:

- batteries,
- solar panels,
- wind turbines,
- heat-pumps,
- electrolysers,
- carbon capture usage and storage equipment

+ key components

+ related critical raw materials

✓ **Simple:** Basic option of flexible schemes with intensities and caps

✓ **Fair:** Modulation for assisted areas + Bonuses for tax credits, loans and guarantees and SMEs

Strategic investments for clean technologies

Section 2.8

Second level: ad hoc aid

AD-HOC AID POSSIBILITIES	LOCATION OF INVESTMENT	SAFEGUARDS		
Single-EEA country project	1 Member State Disadvantaged areas only	Non-disadvantaged areas **cannot receive matching aid** if only one Member State is involved	State-of-the-art production technology from an environmental emissions perspective	Prohibition to relocate investments within the single market
Multi-EEA country projects	At least 3 Member States a significant part of the capital investment takes place in at least two disadvantaged areas an important part of such significant investment should take place in an ‘a’ area	Aid possible also in non-disadvantaged areas, subject to **real ecosystem effects across the EU**		

Applicable aid limit is the lower of:

- Matching aid (amount available in 3rd country)
- Funding gap calculated as delta in NPV between EEA project and counterfactual

Targeted revision of the General Block Exemption Regulation

Overview and context

- On 23 June 2023, the Commission adopted a **revised GBER targeted to the green and digital transition**.

- Purpose of the revision is three-fold:

  i. Ensure ample possibility for Member States to **mobilize more aid for projects in line (a) with the Green Deal objectives (incl. Green Deal Industrial Plan) and (b) with the European Industrial and Digital Strategies**, in situations with limited risk of distorting competition. This will also cater for aid the net-zero economy.

  ii. **Alignthe GBER to the corresponding revised Guidelines** (basis for notifications): Regional Aid Guidelines; Climate, Environmental and Energy Aid Guidelines; Risk Finance Guidelines; Research, Development and Innovation Framework; Broadband Guidelines.

  iii. Update to keep apace with **market and technological developments**.

European Commission

Main changes

Widened scope of the GBER: for example to cover

- various types of “green” projects (e.g. carbon capture and storage/utilization (CCS/CCU), biodiversity, rehabilitation of natural habitats);
- the increased role of energy storage and green hydrogen;
- aid for ambitious energy efficient building renovation projects;
- aid contained in public interventions concerning the supply of electricity, gas or heat;
- aid in the form of tax reliefs from environmental taxes.

Increased notification thresholds and aid intensities:

- **significantly higher notification thresholds** for environmental aid including for energy (also for many other categories);
- **“green” bonus**, e.g. for energy performance in buildings;
- **higher aid intensities and thresholds for "IPCEI-like"** (i.e. multi-country, wide spill-overs) R&D projects (could cover over 50% of typical IPCEI projects).

Main changes

Simplifying and streamlining:

- clarifying and simplifying innovation cluster aid provisions;
- extending the possibility to use simplified costs options;

Horizontal changes:

- prolongation until the end of 2026;
- increase of thresholds (notification and max. aid amounts) for Sections/Articles not under specific review by 10%;
- decrease of transparency threshold for individual aid awards to EUR 100 000.

The changes **facilitate the Green Deal Industrial Plan** and help **enhance the competitiveness of Europe's net-zero industry** through several means, including faster access to funding.

The new GBER will play an important role for **the Recovery and Resilience Facility including the REPower EU** chapter.

Challenges ahead

Dealing with the Energy crisis and its consequences

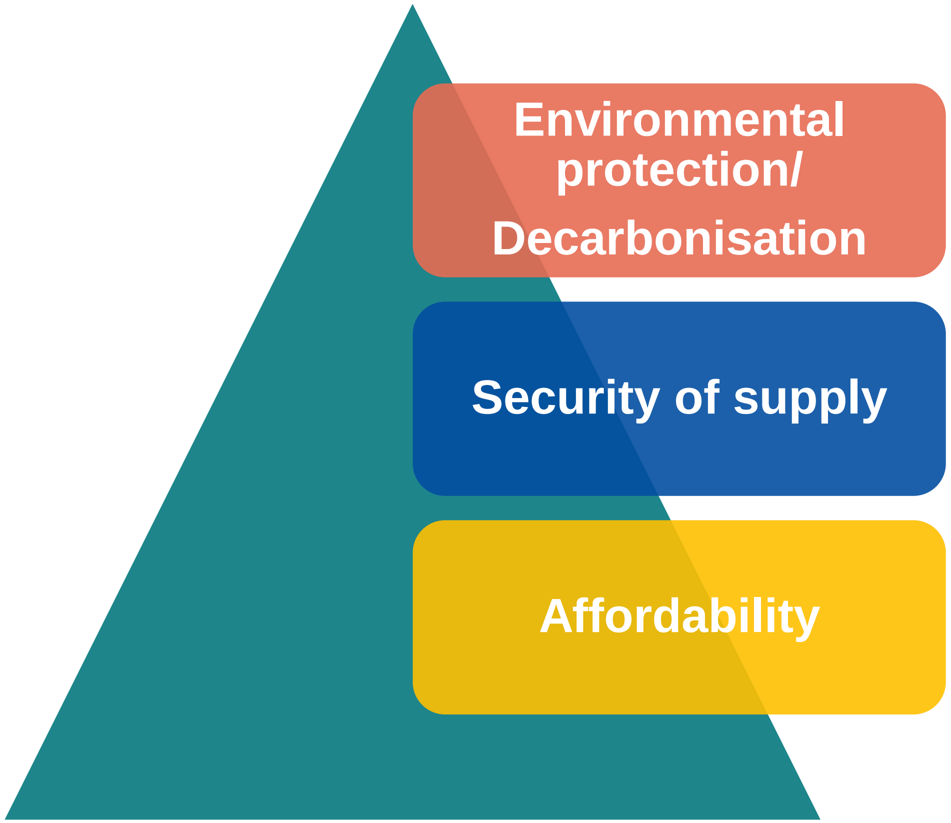
European Commission

Main goals and trade-offs

Reconciling the **balance** between the **three** overarching **objectives of energy policy** and the **evolution of the geopolitical environment**.

Challenges:

- Energy crisis and global competitiveness
- Increased financial costs of the energy transition (macroeconomy)
- Strategic autonomy (Russia, China)



EU’s short-term response to the energy crisis

- 23 March 2022 — Temporary Crisis (and Transition) Framework, amended in July 2022, October 2022 and March 2023 (TCF → TCTF). Partly phased out end of 2023, partly prolonged till Spring 2024, partly valid until 2025 (complementing CEEAG).
- 18 May 2022 — REPowerEU Plan, anticipation of the 2030 targets and promotion of diversification of supply to tackle the energy crisis.
- 30 September 2022 — Emergency intervention to reduce energy prices (including cap on market revenues, tax on profits in the oil and gas sector, demand reduction).
- 19 December 2022 — Market correction mechanism of gas to limit excessive gas prices.

EU's longer-term response

14 March 2023: Proposal on a reform of the **Electricity Market Design** (EMD)

- Maintain wholesale electricity prices based on marginal costs to provide efficient operating signals
- Develop long-term liquid markets and foster renewable energy in both the public and private sectors
  - Development of long-term bilateral contracts between producers and consumers of electricity from renewable sources (power purchase and sale agreements, "PPAs")
  - Support for new generation from renewable sources in the form of contracts for difference (CfDs)
- Improving the flexibility of the electricity system (allowing new support schemes for demand-side management and storage)
- 17 October 2023: the Council reached an agreement (general approach), namely that two-way CfD would be the mandatory model used when public funding is involved in long term contracts, with some exceptions.

European Commission

Other Commission’s initiatives

- 30 March 2023: provisional agreement (to reinforce the EU Renewable Energy Directive) to raise 2030 target to at least 42.5%, aiming for 45%, and increase from 16 to 60 gigawatts offshore wind capacity installed by 2030. Adopted by co-legislators on October 2023.

- 16 March 2023: proposal for a European Critical Raw Materials Act and for a Net Zero Industry Act

- 14 September 2023: Strategic Technologies for Europe Platform – STEP

- 24 October 2023: presentation of a European Wind Power Action Plan to maintain a healthy and competitive wind energy supply chain, with a clear and secure pipeline of projects, attracting the necessary financing and competing on a level playing field globally. It is accompanied by a Communication on delivering on the EU's offshore energy ambition, including wind power.

Conclusions

- CEEAG and GBER provide MS with an updated, flexible and future-proof framework for coordinated state support to reach the Green deal objectives. CEEAG implementation is picking up.
- CEEAG weathered the energy crisis and have been complemented by the revised GBER and temporary instruments (TCF/TCTF) to cater for the crisis and accelerate the energy transition.
- The reform of the Electricity Market Design and the other European initiatives aimed at strengthening Europe strategic autonomy and global competitiveness go hand-in-hand with a State aid control framework aimed at preserving a level playing field in the internal market and promoting growth on the basis of merits.

Thank you

The opinions expressed are purely those of the author and cannot under any circumstances be regarded as an expression of an official position of the European Commission.
The official data on the implementation of the TCF are contained in the report *The use of crisis State aid measures in response to the Russian invasion of Ukraine*.

European Commission