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## EU4ENERGY PHASE II

# Milestones in the history of EU energy policy and current policy initiatives

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# Agenda

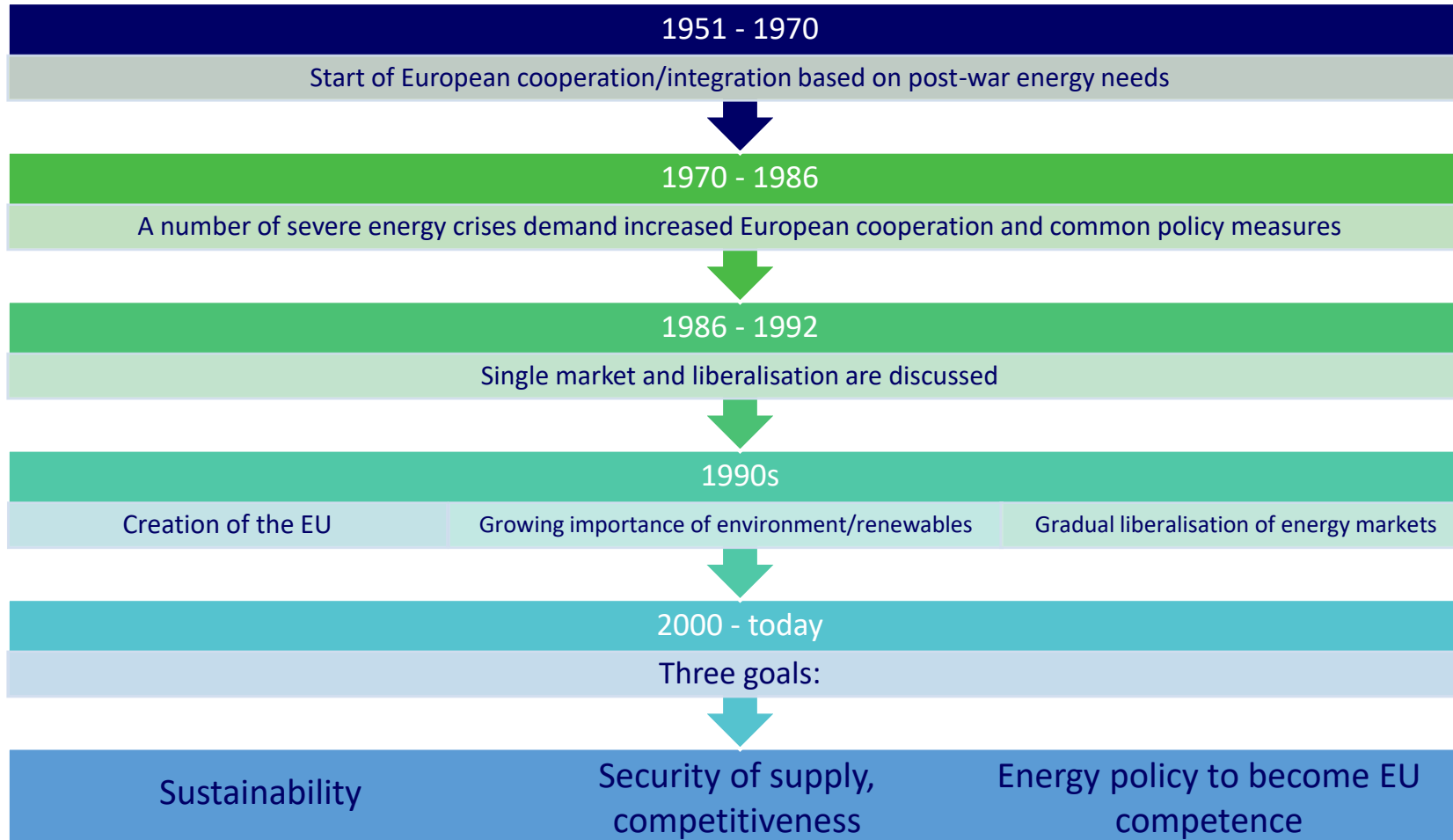
## Milestones in the history of EU energy policy

- The European coal and steel community
- Euratom and the European economic community
- Policy measures after oil shocks and Chernobyl disaster
- The Single European Act and the internal market
- From Maastricht to Nice
- EU energy policy in the 90s
- EU energy policy in the new century and the Lisbon Treaty
- Current policy initiatives (Energy Union, Green Deal, Clean Energy Package, Fit for 55, CEER 2022 - 2025 Strategy )



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# Overall timeline





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## Milestones in the history of EU energy policy

### ➤ The European coal and steel community

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# Background

EU goes back to the European Coal and Steel Community (ECSC) founded in the aftermath of WWII

Large amounts of steel were necessary for reconstruction.

Great amounts of coal were needed for steel production and the generation of electricity.



French Foreign Minister Robert Schuman's idea to link these two industries

Primary tasks at the time:

- Reconstruct the war-torn economy
- Ensure lasting peace on the continent: coal and steel were not only essential for reconstruction but also for warfare, a common market should prevent warfare



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# The ECSC

- The Treaty establishing the ECSC was signed in Paris in 1951 and entered into force in February 1953
- Brought France, Germany, Italy and the Benelux countries together in a Community
- Aim:
  - Allow for free movement of coal and steel
  - Equal and free access through the creation of a common market/customs union
- Creation of a High Authority: independent supervision body was established in order to exercise control and ensure market functioning
- The ECSC was established for a period of 50 years and, thus, expired in 2002





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# Background

- Beginning of the 1950s: share of coal in primary energy supply amounted to almost 90%
- Mid 1950s: European coal production increasingly faced difficulties:
  - cheaper coal from overseas
  - growing importance of oil



The need to think about a more coordinated energy policy arose.

- Idea of an Atomic Energy Community (Jean Monnet):

His idea was believed to enable the supply of cheap electricity in times of growing demand and lower dependence on oil imports.

- 1956: Suez Canal Crisis



More favourable climate towards an Atomic Energy Community given the fear of unreliable oil imports from the Middle East.





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# Euratom and the EEC

- The Treaty establishing the European Atomic Energy Community (Euratom) was signed in Rome in 1957 at the same time as the Treaty establishing the European Economic Community (EEC) – Treaty of Rome
- Both Treaties entered into force in 1958
- Euratom's ultimate goal is to establish a framework for **research on efficient use of atomic energy for peaceful purposes, the creation and implementation of common technical safety standards, investment incentives and a common supply policy for nuclear material**
- The Euratom Treaty is still in force today and forms part of the active treaties of the European Union





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# Four freedoms of the EU (1/2)

An important concern of the EU was the creation of an internal market. This is an on-going process, which contains the following four principles, known as the “four freedoms” of the EU:

- Free movement of capital
- Free movement of services
- Free movement of people
- Free movement of goods



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# Four freedoms of the EU (2/2)

- Free movement of people and free movement of goods (electricity, gas) were not applied to the energy market from the start but instead implemented gradually through different internal energy market directives.
- The goal was to transfer the advantage of the effects of an internal market to the energy markets.
- Important step: pan-European market coupling by 2014 (EU Commissioner Öttinger announced the completion of the Internal Energy Market (IEM) by end of 2014)



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# Background (1/2)

1967: Share of coal in primary energy supply decreased to a level of 35%

1969: Oil replaced coal as the most important energy source

Negative developments in the Middle East:

- Suez Canal Crisis, Six-Day War, Yom-Kippur War
- Europe became more aware of its fragile dependence on oil imports from the Middle East

Direct reaction to the crisis in the Middle East:

- EEC Member States adopted a Council Directive in 1968
- Obligation to maintain minimum stocks of crude oil and/or petroleum products for 90 days

General climate of insecurity at the time:

**The Commission was asked to come up with proposals on how to further develop European energy policy.**



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# Background (2/2)

Several Commission papers were issued in the following years hinting at the creation of a common energy market.



Even Member States recognised the need for a common energy market and common energy policy.



No real actions followed!

- Creation of **vertically integrated energy companies** in the member states.
- Diverging interests of ECSC and Euratom:
  - Additional obstacle to the establishment of a common energy policy
- 1973:
  - Great Britain, Ireland and Denmark joined the ECSC, Euratom and the EEC
  - Strategic enlargement step given the energy resources in the North Sea



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# First oil shock and aftermath (1/2)

- 1973: Egyptian troops entered Israeli territory
- Israel managed to defeat Egyptian troops
- Reaction to the engagement of the west: Arab oil producing states (OPEC) decided to significantly decrease oil production → **dramatic increase in oil prices – oil shock**
- Measures in European states (speed limits, car-free days) did not help prevent a widespread economic crisis
- Consequence: the US proposed the establishment of an OECD-based institution to confront OPEC
- The **International Energy Agency** (IEA) founded in 1975, which subsequently became the main focus for the coordination of national energy policies.





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# First oil shock and aftermath (2/2)

- In 1974 the EEC Council adopted a **new energy policy strategy** in which it emphasised the need for a **common EU energy policy**
- The Council agreed that this could only be achieved by setting up quantitative goals and adopted the **Council Resolution of 17 December 1974 concerning Community energy policy objectives for 1985**
- Objectives until 1985 were amongst others:
  - Reduction of energy imports from third countries to below 50%, if possible to 40%
  - 15% reduction of energy consumption
  - 9% reduction of oil consumption





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# Second oil shock and aftermath

1979

- Second oil shock
- Iranian Revolution, where protesters severely disrupted the Iranian oil sector and production was significantly curtailed

1980

- Start of the first Iran-Iraq war
- Brought the production of oil in Iran and Iraq to a severe decline

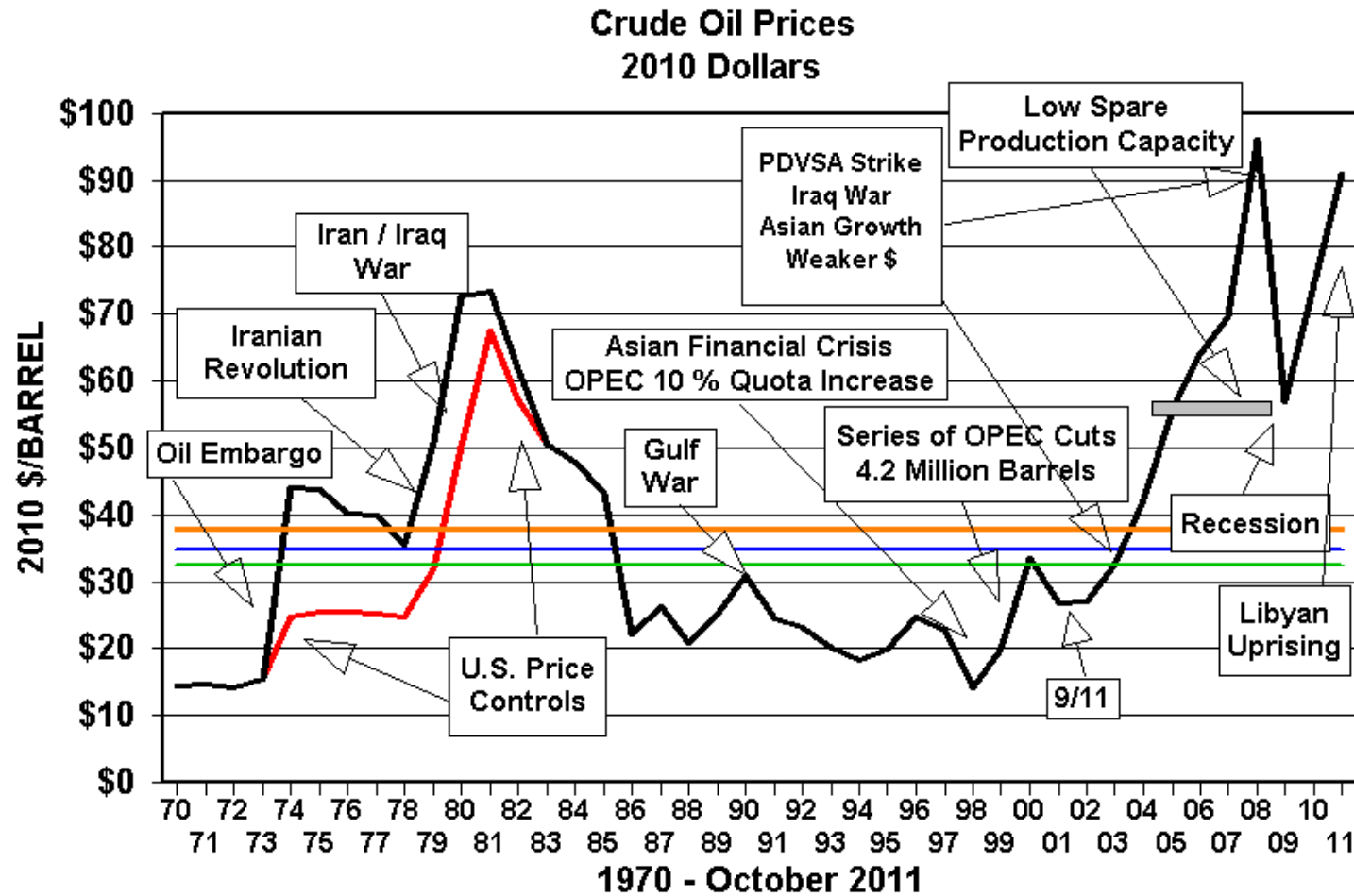
1980/81

- Price for imported oil was 164% higher than at the end of 1978
- Europe reacted with further strategies towards efficient energy use and security of supply.
- Practical results remained rather low.



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# Oil price development



— U.S. 1st Purchase Price ( Wellhead ) — World Price\*

— Avg U.S. \$34.77 — Avg World \$37.93 — Median World \$32.50

WTRG Economics ©1998-2011

www.wtrg.com  
(479) 293-4081



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# Chernobyl accident and policy reaction

- Explosion at the Chernobyl nuclear plant in 1986: large quantities of radioactive particles in the atmosphere spreading over much of Europe
- Various information provision obligations did not function properly in times of crisis!

## Consequences

1. Council Decision of 14 December 1987 on arrangements for the **early exchange of information in the event of a radiological emergency** was adopted.
2. Creation of the European Community Urgent Radiological Information Exchange (ECURIE): guarantee constant monitoring of radioactive levels of air, water and soil
3. More legislation on maximum radioactive levels in food and health and safety measures for the population in the event of an emergency followed.



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# Background

- Mid-1980s: European Community had 12 members:  
*FR, DE, IT, NL, BE, LU, GB, IE, DK, GR, ES, PT*
- Growing community: principles and treaties in place were not always practical and sufficient
- Directives and regulations adopted up to this point not sufficient
- Implementation of a common market became more difficult under the current circumstances, e.g.: requirement of unanimity
- The 1985 Commission white paper on the **completion of the internal market** called on some reform and pledged for a stronger internal market
- Result: **Single European Act** was adopted





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# Single European Act

...was signed in Luxembourg in 1986 and came into effect in 1987 under the Delors Commission

...set the European Community an objective of establishing a Single Market by 31 December 1992

...brought about a number of institutional changes in order to achieve this goal:

- Principle of unanimity in the Council was replaced by qualified majority voting in a large number of areas
- More power to the European Parliament in the process of law-making
- Comitology

Overall, the Single European Act was a major effort to push the European Community in a liberalising direction, forcing competition and a market oriented approach.



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# Single European Act and internal market

- No reference to energy policy, but general spirit towards an **internal market** also influenced energy policy!
- It incorporated a pillar on **environmental protection**
- Relevant energy legislative acts could be adopted on the basis of the internal market references and the environment pillar in the Single European Act
- In 1988 the Commission also tabled concrete measures for an **Internal Energy Market**, preparing the ground for liberalisation of energy through the principles of competition and market integration



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# Treaty of Maastricht

...officially established the European Union (EU) and was signed in February 1992 in Maastricht.

...entered into force in November 1993 under the Delors Commission.

...incorporates the **first ever explicit mention of energy** in primary law of the European Community.

...unfortunately did not contain a chapter dedicated to energy.

...introduced i.a. the co-decision procedure (= EU decisions must be taken jointly by the Parliament and the Council of the European Union)

- In 1995 Austria, Finland and Sweden joined the EU



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# Treaties of Amsterdam and Nice

## Treaty of Amsterdam

- signed in 1997
- entered into force in 1999

## Treaty of Nice

- signed in 2001
- entered into force in 2003



The Treaties primarily  
made the EU fit for  
major enlargement

- In 2004, 10 new countries joined the EU: Estonia, Lithuania, Latvia, Poland, Slovakia, Czech Republic, Slovenia, Hungary, Cyprus, Malta
- The EU therefore consisted of 25 member states until Romania and Bulgaria joined the EU in 2007 (EU-27)
- On 1 July 2013 Croatia became the 28<sup>th</sup> member state
- (UK left the EU on 31. December 2020) -> EU 27



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# Growing importance of environment and renewables

Before 1990

- Link between environmental protection and energy consumption became more apparent through various World Climate and Environment Conferences:
- **Greenhouse effect** dominated the agenda

1990

- Commission produced guidelines on energy and environment calling for measures to combat the greenhouse effect
- European Environment Agency was founded

1996/1997

- Commission tabled a green book and a white book on renewable energy calling for a market share of **renewable energy** of 12% until 2010

1997

- **Kyoto** Conference brought about more measures to achieve reduced CO2 emissions



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# Gradual market opening

1990s: Most of the national electricity and natural gas markets were still monopolised



EU institutions decided to **open these markets to competition gradually**

The EU decided to:

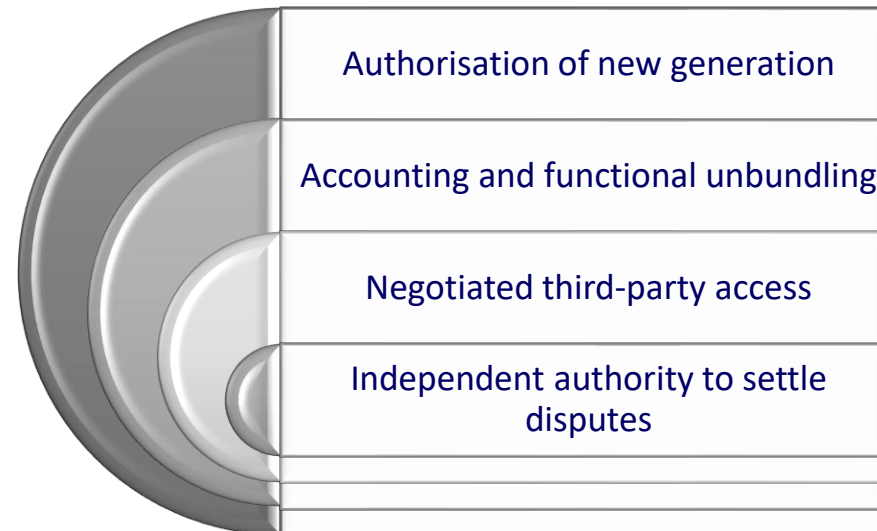
- distinguish clearly between competitive parts of the industry (e.g. supply to customers) and non-competitive parts (e.g. operation of the networks)
- oblige the operators of the non-competitive parts of the industry (e.g. the networks and other infrastructure) to allow third parties to have access to the infrastructure
- free up the supply side of the market (e.g. remove barriers preventing alternative suppliers from importing or producing energy)
- remove gradually all barriers to supplier switching
- introduce independent regulators to monitor the sector



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# First liberalisation package

- adopted in
  - 1996 (electricity)
  - 1998 (gas)
- to be transposed into member states' legal systems by
  - 1998 (electricity)
  - 2000 (gas)





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# Agenda

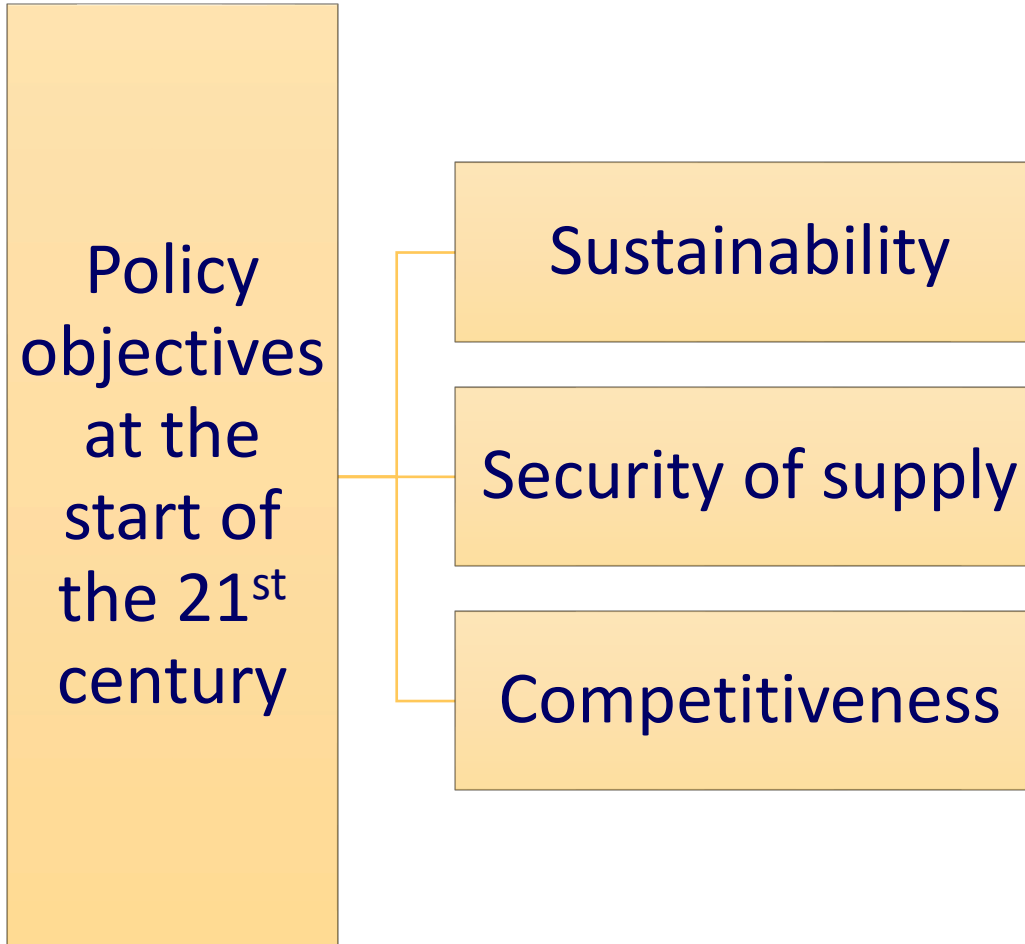
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# Policy objectives in the new century







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# Security of supply

- Increasing oil prices in 2000 prompted the Commission to table a green book on a strategy towards European energy security of supply.
- The green book forecasted that the **dependence on energy imports would grow** from 50% in 2000 to 70% in 2030.
- As a consequence, a number of laws were adopted with a view to achieve more energy savings, e.g.:
  - Directive on the promotion of the use of biofuels or other renewable fuels for transport
  - Directive on the energy performance of buildings
  - White book on transport (due to the high share of energy consumption and CO2 emissions in the transport sector)



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# Push for sustainability

Further measures taken by the Commission:

- **Long-term strategy for renewable energy** incl. the goal to raise the share of renewables to 20% until 2020
- Climate and Energy Package in 2009: **20-20-20 target**  
*20% reduction of green house gas emissions, 20% increase in renewable energy and 20% increase in energy efficiency until 2020*
- Increased awareness of EU's energy dependence because of supply disruptions during the winters of 2005/06 and 2008/09



Ambitious policies in the field of renewables can thus be seen as part of the EU strategy to cope with energy dependence.





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# European Commissioners for energy



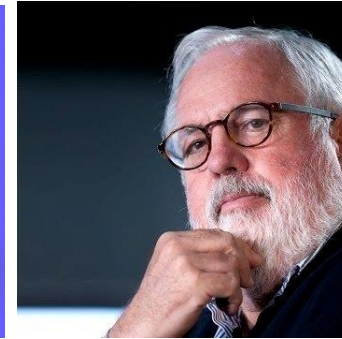
Loyola de Palacio  
1999 - 2004



Andris Piebalgs 2004  
2004 - 2010



Günther Oettinger  
2010 - 2014



Arias Cañete  
2014 - 2019



Maroš Šefčovič  
2014- 2019  
Vice President  
Energy Union



Kadri Simson  
Since 2019



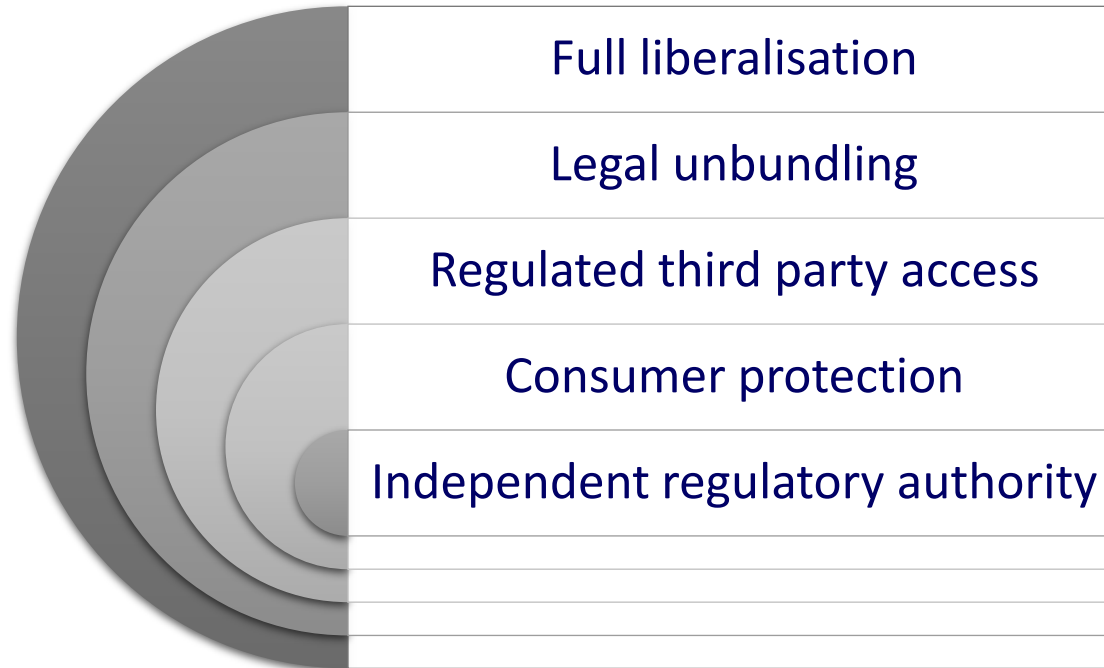
Frans Timmermans  
Since 2019  
Executive Vice President  
European Green Deal



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# The second liberalisation package

- adopted in 2003
- to be transposed into member states' legal systems by 2004 (some provisions by 2007)





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# Sector inquiry

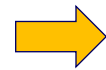
- Although significant progress had been made, **competition was slow to take off**, with markets remaining largely national and highly concentrated, with relatively little cross-border trade.
- The Commission therefore launched a **sector inquiry** in 2005 to identify the barriers preventing more competition in these markets.
- Based on the Second Package of 2003 and including the results of the sector inquiry, the Commission brought forward new legislative proposals (Third Energy Package) to strengthen competition in the electricity and gas markets.



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# Treaty of Lisbon (1/2)

- The Treaty of Lisbon was signed in December 2007 and entered into force in 2009 (after efforts to adopt an EU Constitution failed).
- First EU Treaty to incorporate a chapter on energy



## **Energy policy as an EU competence!**

- The policy objectives laid out in the Lisbon Treaty are:
  - ensure the functioning of the energy market
  - ensure security of energy supply in the Union
  - promote energy efficiency, energy conservation and the development of new and renewable forms of energy
  - promote the interconnection of energy networks
- Goals should be achieved by means of the 'ordinary legislative procedure' introduced by the Lisbon Treaty (co-decision of Council and Parliament).



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# Treaty of Lisbon (2/2)

The Lisbon Treaty defines energy as a **shared policy area** between the EU and Member States



The following areas are the sole competence of the member states and not the EU's:

- the right to determine the conditions for exploiting a state's energy resources
- the choice between different energy sources
- the general structure of a state's energy supply





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**Directives**

**Regulations**

Common rules for the  
internal market  
in natural gas

Common rules for the  
internal market  
in electricity

Conditions for access to the network  
for cross-border exchanges in electricity

Conditions for access to the natural gas  
transmission networks

Establishing an Agency for the  
Cooperation of Energy Regulators

**Entry  
into force  
3 March 2011**

### Aim of the 3<sup>rd</sup> Package?

- ▶ Making the energy market fully effective and creating a single EU gas and electricity market.
- ▶ This will help to keep prices as low as possible and increase standards of service and security of supply.

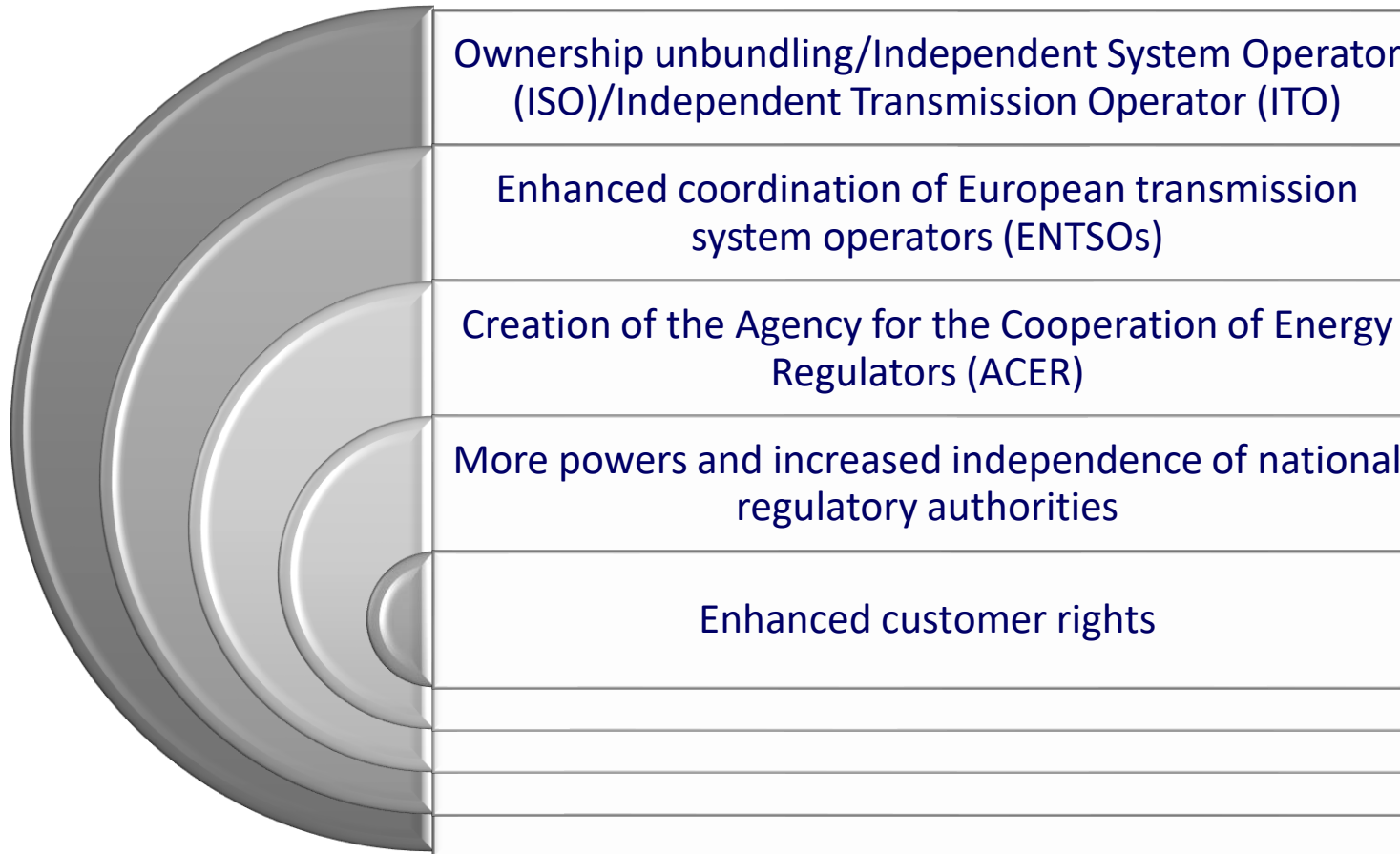




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# 3<sup>rd</sup> package

## Key topics





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# Rationale for Third Package

**The electricity and gas markets in Europe  
were still not sufficiently integrated**

DUE TO

Existing grid congestions

Discrimination and inefficient  
allocation of network capacities

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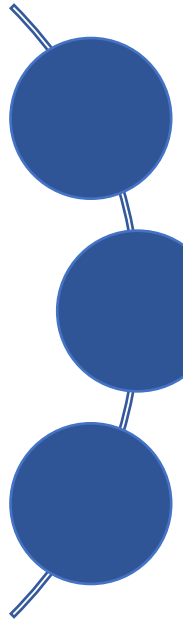
CAUSES:

- Insufficient cross-border coordination
- Insufficient unbundling



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# Core elements of 3rd package: Establishment of ACER



Agency for the Cooperation of Energy Regulators

Community body with legal personality; established under 3rd energy package (established in 2011)

Wholesale markets, monitoring, cross-border issues

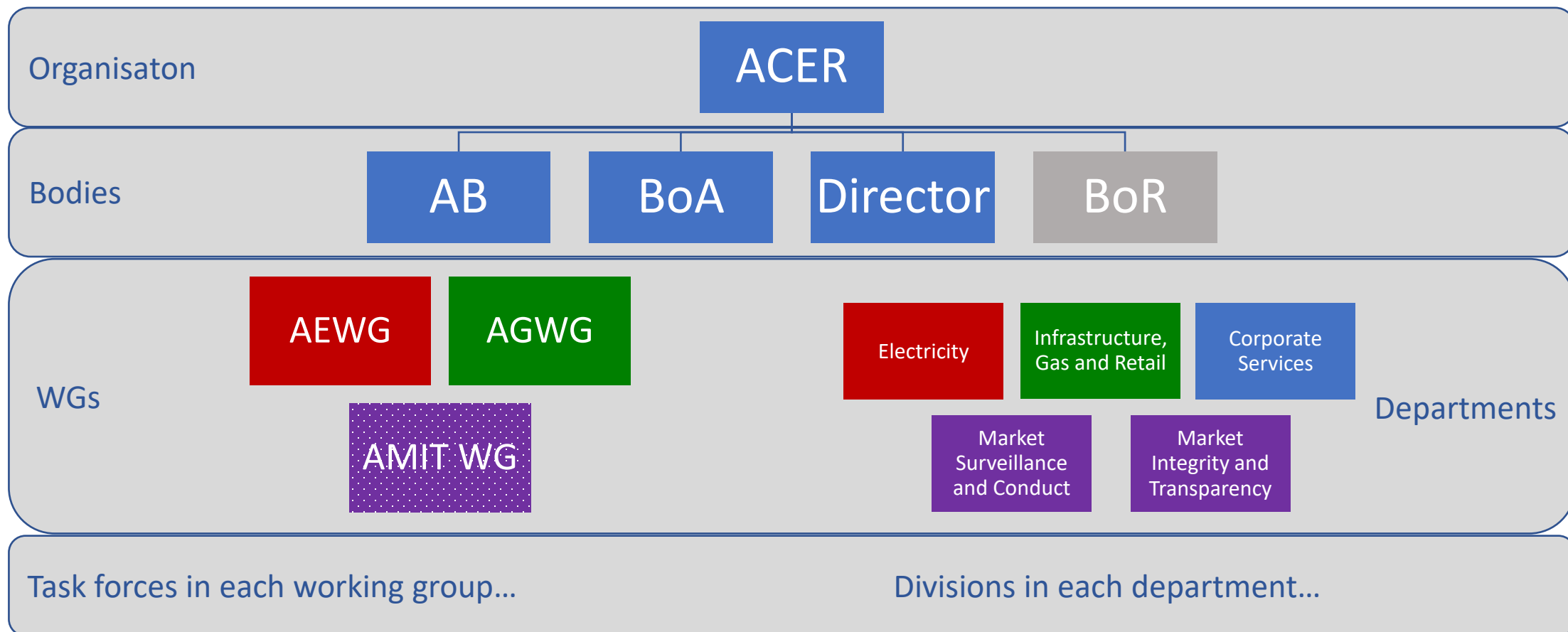
## Tasks

- Setup a framework for cross-border electricity and natural gas rules
- Provide opinions and recommendations to the EU Commission, Parliament and Council
- Oversight of ENTSOs
- Enhance the cooperation of NRAs and review of NRA decisions
- Tasks as regards terms and conditions for access to and operational security of cross-border infrastructure
- Exemption decisions
- REMIT
- Network planning
- And other tasks (e.g. monitoring)



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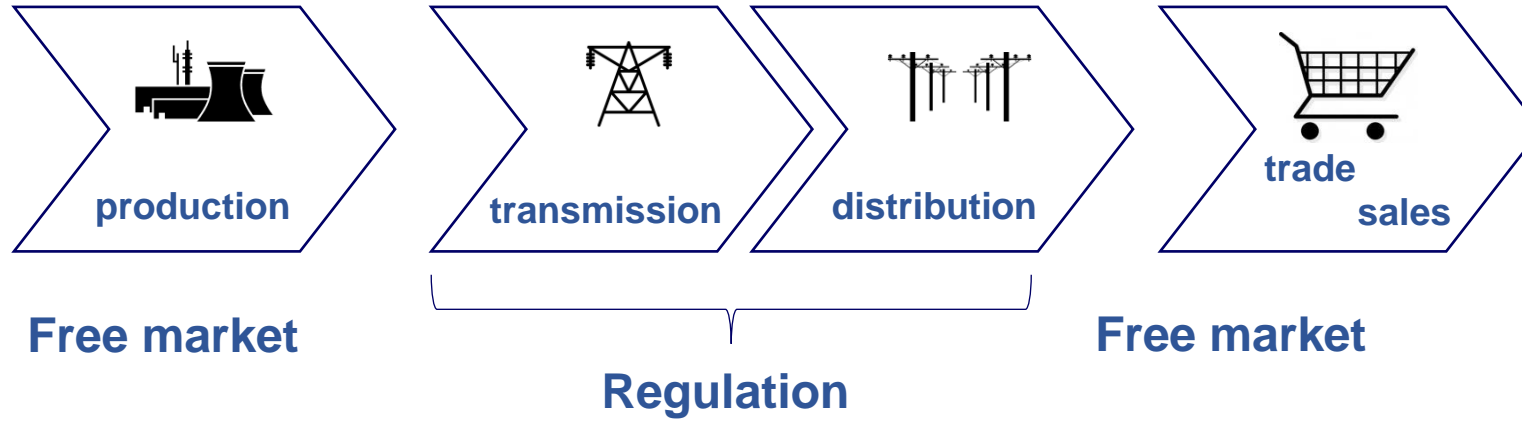
# ACER structure





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# Core elements of 3rd package: Unbundling



- Network operation is separated from generation, wholesale & retail and supply
- Objective: prevention of cross-subsidies, non-discrimination, enhancement of competition
- TSOs: 3 unbundling models; DSOs: legal, organisational, accounting
- Cross-border market design is based on the Third Package
- TSOs & DSOs provide non-discriminatory network access on the basis of tariffs and conditions approved by E-Control
- Interaction of market participants governed by market rules



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# 3<sup>rd</sup> package - Strengthening the independence of NRAs

**Paragraph n. 4 of Article 34 of the Electricity Directive and Article 38 of the Gas Directive indicates:**

*“Member States shall guarantee the independence of the regulatory authority and shall ensure that it exercises its powers impartially and transparently”*

*“NRA is legally distinct and functionally independent from any other public or private entity.”*

**Impartiality** - NRAs have to act and take decisions in a neutral way

## **Transparency**

- Stakeholder consultations, publication of NRA decisions, annual reporting on activities/ fulfilment of NRA duties

## **Independence**

- Important to prevent temptation to protect or support the ‘national champion’
- Prevents decisions being influenced by short-term political considerations



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# 3<sup>rd</sup> package – Network codes

## Electricity

- Grid connection
  - High Voltage Direct Current Connections
  - Requirements for Generators
  - Demand Connection Code
- Operations
  - System Operations
  - Emergency and Restoration
- Market
  - Capacity Allocation & Congestion Management
  - Electricity Balancing
  - Forward Capacity Allocation

## Gas

- Interoperability and Data Exchange Rules
- Gas Balancing
- Capacity Allocation Mechanisms
- Congestion Management Procedures Guidelines
- Harmonised Transmission Tariff Structures



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# Energy union



## Communication on Energy Union published in 2015

=key political priority for the present European Commission

**Objective:** reduction of Europe's reliance on fossil fuels by removing barriers to the flow of energy, in a fully integrated EU-wide energy system

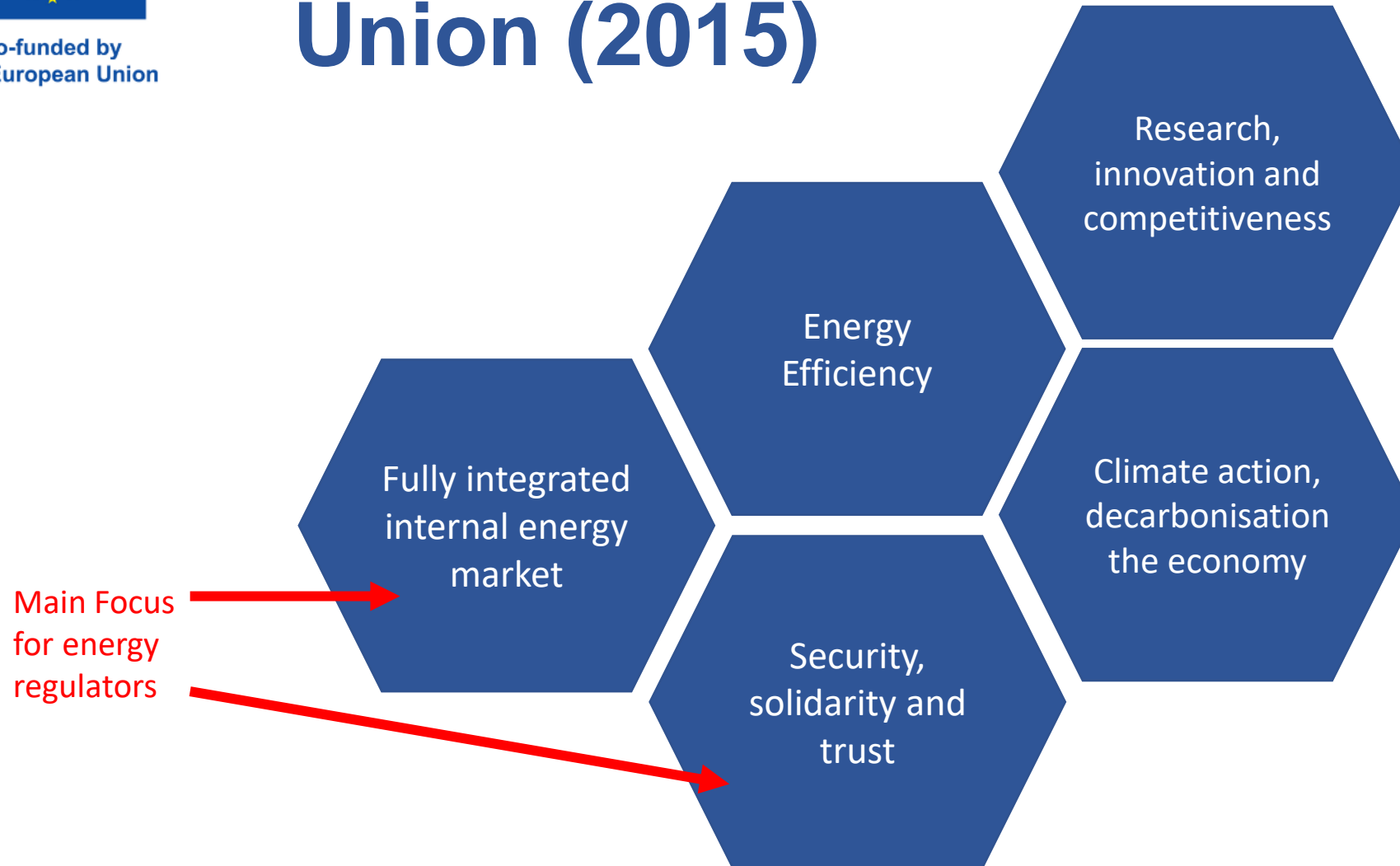
## Priorities of the Energy Union:

- Security of supply
- Sustainability and competitiveness



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# The 5 Dimensions of the Energy Union (2015)





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# Clean Energy for all Europeans - Package

- Eight legislative Acts

<https://ec.europa.eu/energy/en/topics/energy-strategy-and-energy-union/clean-energy-all-europeans>

- Most relevant Clean Energy Files for NRAs:

## Electricity Regulation (RECAST)

- Contains majority of new wholesale rules

## Electricity Directive (RECAST)

- Contains majority of new retail provisions

## ACER Regulation (RECAST)

- ACER tasks and procedures

## Regulation on risk preparedness

- Member States put in place tools to prevent, prepare for and manage electricity crisis situations



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# Clean Energy Package (CEP): Big Picture

## Retrofits EU wholesale markets

- Balance responsibility, scarcity pricing, priority dispatch restricted
- More system integration, common conditions for CRMs

## Elevates importance of distribution / local networks

- DSOs as neutral market facilitators of new services
- New EU DSO body (“ENTSO-light”) to facilitate better coordination with TSOs, linked in with ACER
- Empowered collective “Citizens Energy Communities”

## Enables more consumer and demand-side engagement

- Faster switching, better information, more choice
- Individual demand-side participation



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# What the CEP did not do

Drive radical institutional change: it's not the 3rd Package

- NRAs, ACER, ENTSOs and Network Codes exist broadly as we know them

Integrate national retail markets or deregulate retail prices

- About half of MSs have regulated retail prices to some extent

Go ideological on CRMs or fully resolve ~90% RES/market remuneration

- But, new CRMs allowed only if conditions are met, e.g. X-border component

Dictate national fuel mix or support scheme policy

- Where needed, CEER advocates market-based supports

Change wholesale-retail gas market rules

- mirroring is planned in the framework of the Fit-for-55 initiative



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# The European Green Deal (2019)







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# The New Fit for 55 Package

Fit for 55 aims to meet an ambitious target of a 55% reduction in greenhouse gas emissions by 2030, relative to 1990 levels. It consists of 13 legislative proposals (8 revisions of existing legislation and 5 new proposals).

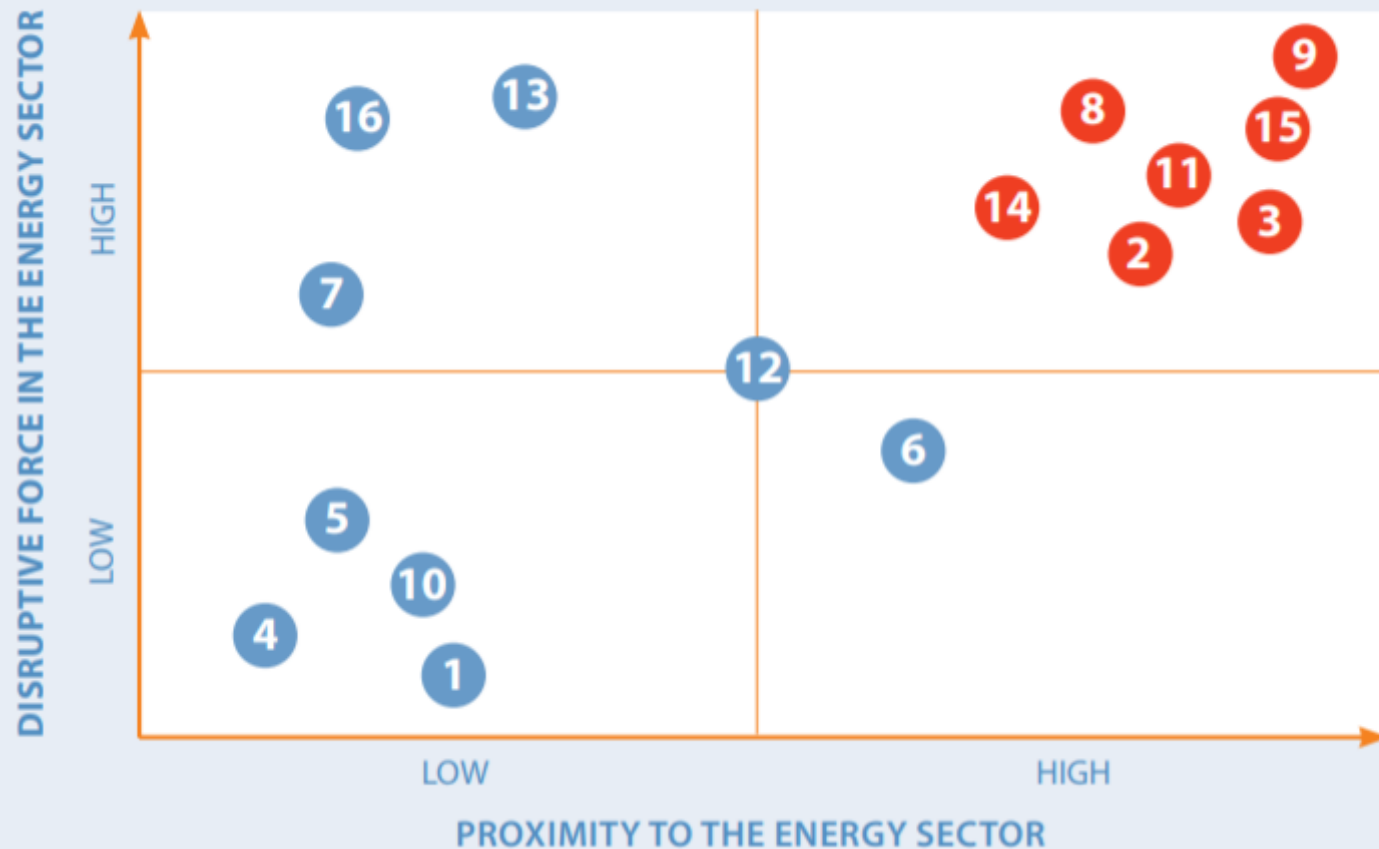






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# How megatrends impact energy regulators

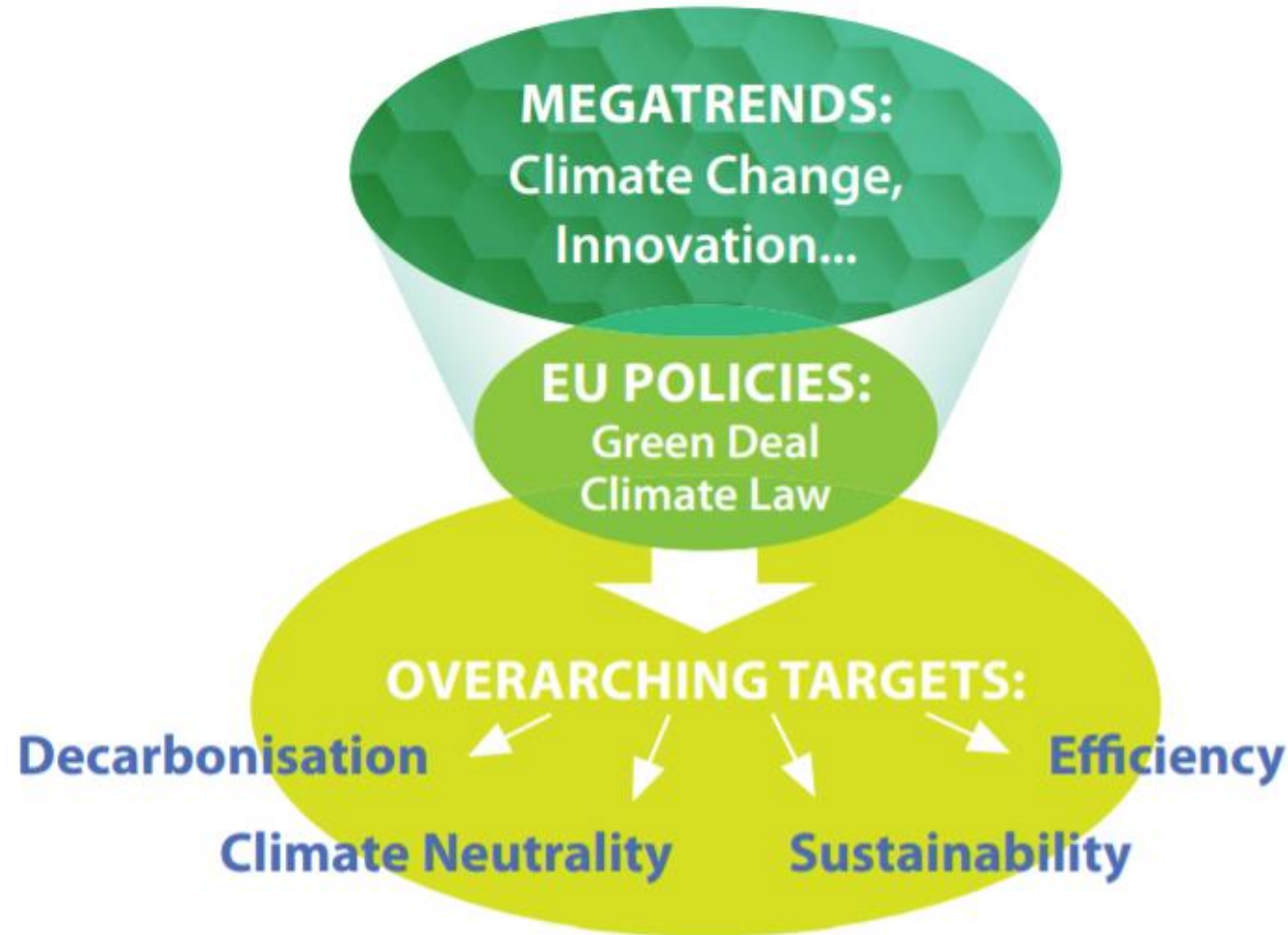


- 1 Work and companies in transition
- 2 Challenging population developments
- 3 Aggravation of the energy and resource situation
- 4 Gender roles in transition
- 5 Great health advances
- 6 Advancing globalisation
- 7 Progressive individualisation
- 8 Internet culture and digitalisation
- 9 Climate change and greening
- 10 Market and consumption in transition
- 11 Growing mobility and logistics needs
- 12 Political and economic upheavals
- 13 Intelligent products and infrastructures
- 14 Increasing global risk density
- 15 Increasing urbanisation
- 16 Knowledge society on the advance



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# CEER 2022-2025 Strategy Empowering Consumers for the Energy Transition





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# CEER's regulatory dimensions for the Energy Transition towards a carbon-neutral society and economy:

**WELL-  
FUNCTIONING  
MARKETS/IEM**

Flexibility

**CONSUMER-  
CENTRIC  
DYNAMIC  
REGULATION**

Vision 2030

**ENERGY  
SYSTEM  
INTEGRATION**

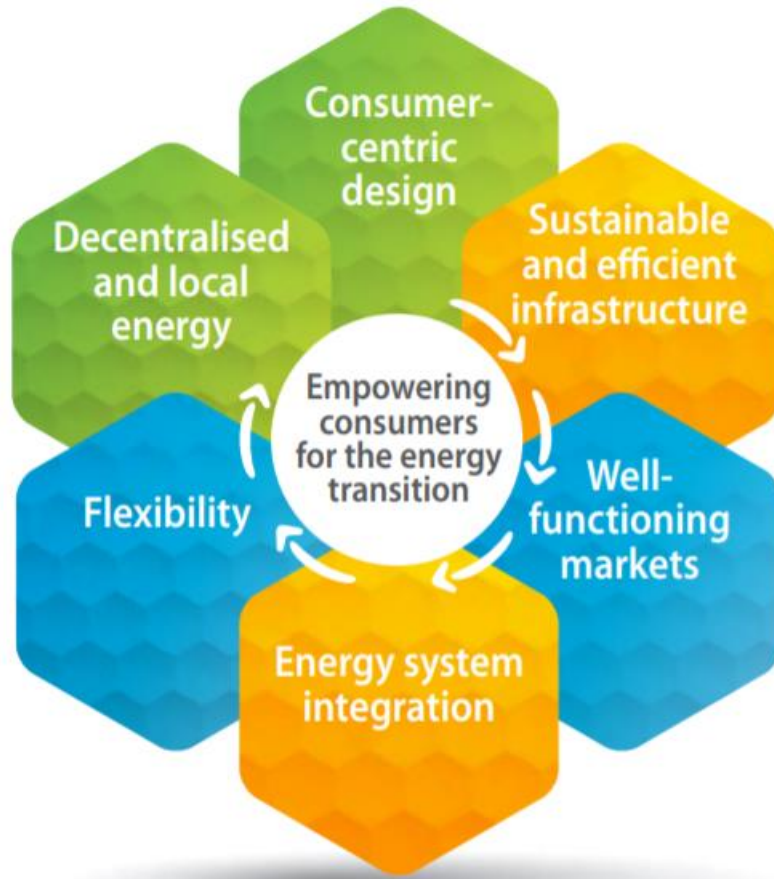
Sustainable  
infrastructure





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# How CEER aims to empower consumers for the energy transition



**Consumer-centric design**

- LET'S ASPIRE principles
- Consumer rights and protection
- Energy efficiency
- Consumer groups
- Energy poverty and vulnerability
- Data management

**Sustainable and efficient infrastructure**

- Technology neutrality
- Innovative and advanced solutions
- Sustainable finance
- Efficient grid management
- Integrated planning
- Investment certainty

**Well-functioning markets**

- Internal energy market
- Cross-border interconnections
- Resilience and cybersecurity
- Reliable and secure supply
- Future market evolution

**Energy system integration**

- Future energy mix
- Hydrogen networks
- New gases (e.g. H<sub>2</sub>)
- Resource adequacy
- Core market principles
- Whole system approach

**Flexibility**

- Flexibility procurement and demand-side response
- Long-term storage
- Innovation
- Digitalisation
- Aggregation
- RES integration

**Decentralised and local energy**

- Energy communities
- Self-consumption
- Demand-side response
- Peer-to-peer trading
- Distributed energy resources
- New business models

Coffee break!

