



EU Energy Policy In the framework of the Energy Union

**Tudor Constantinescu, PhD
Principal Adviser
European Commission – Energy**

Brussels, EIB/Jaspers, 15 May 2018

Climate and energy: where do we stand?

2020 targets

Impact of the financial crisis

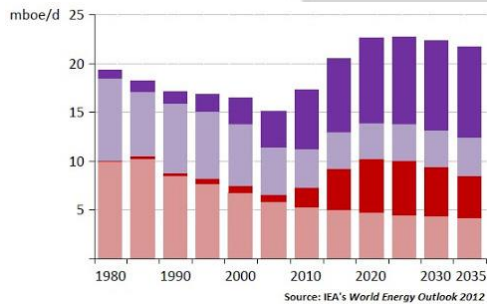
Fall in private investment, tight financing conditions

Renewable energy and storage saw rapid cost decreases

Technologies are gradually becoming competitive
But large scale integration is a challenge

Shale gas

US oil and gas production



Unconventional gas
Unconventional oil
Conventional gas
Conventional oil

COP21 -Paris

Ukraine

Rising demand -> rising prices

By 2030, world economy set to double and energy demand to rise by 1/3

Fukushima

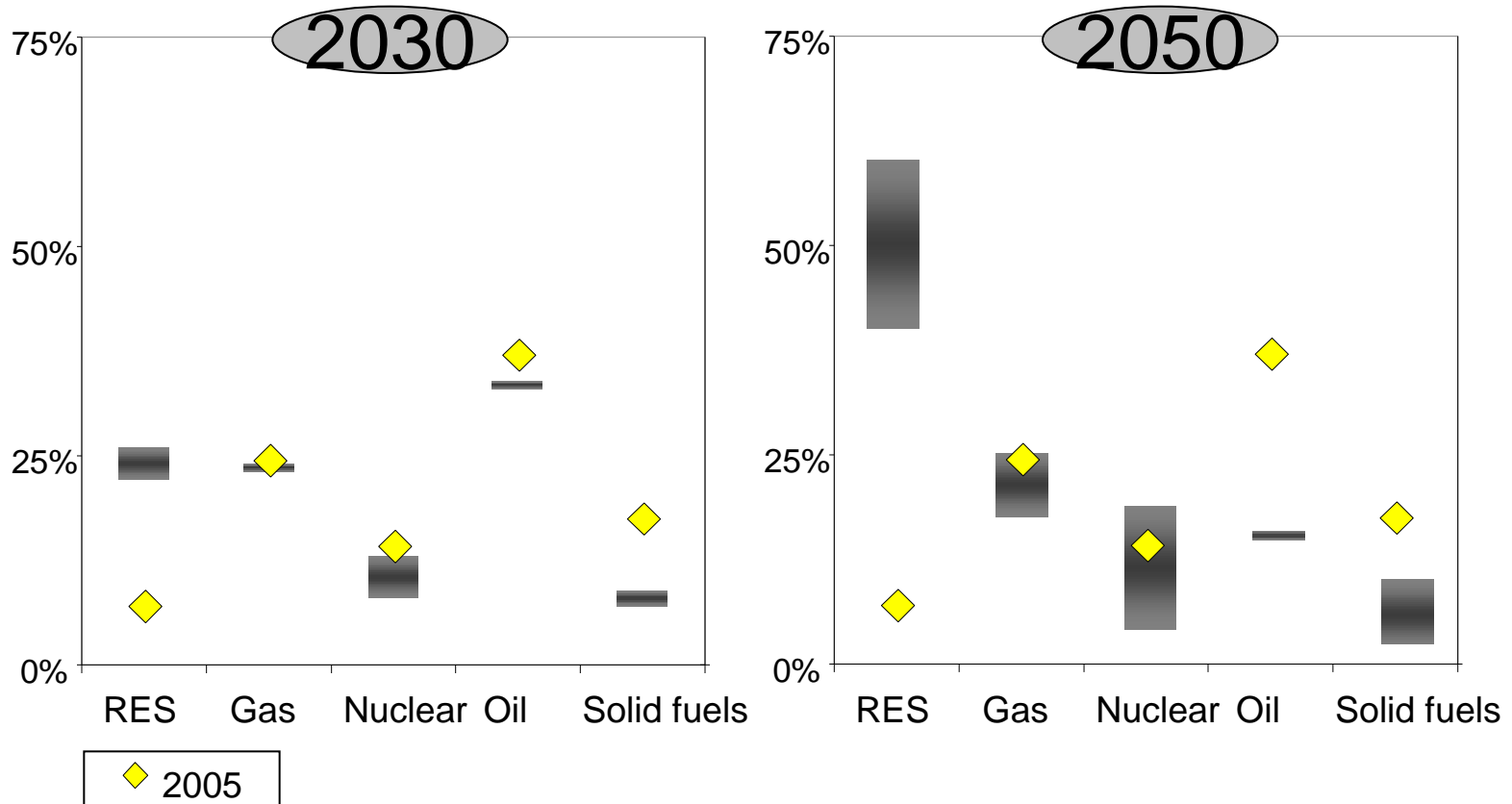


Some countries phase out nuclear power production

2030 targets

Energy Roadmap 2050

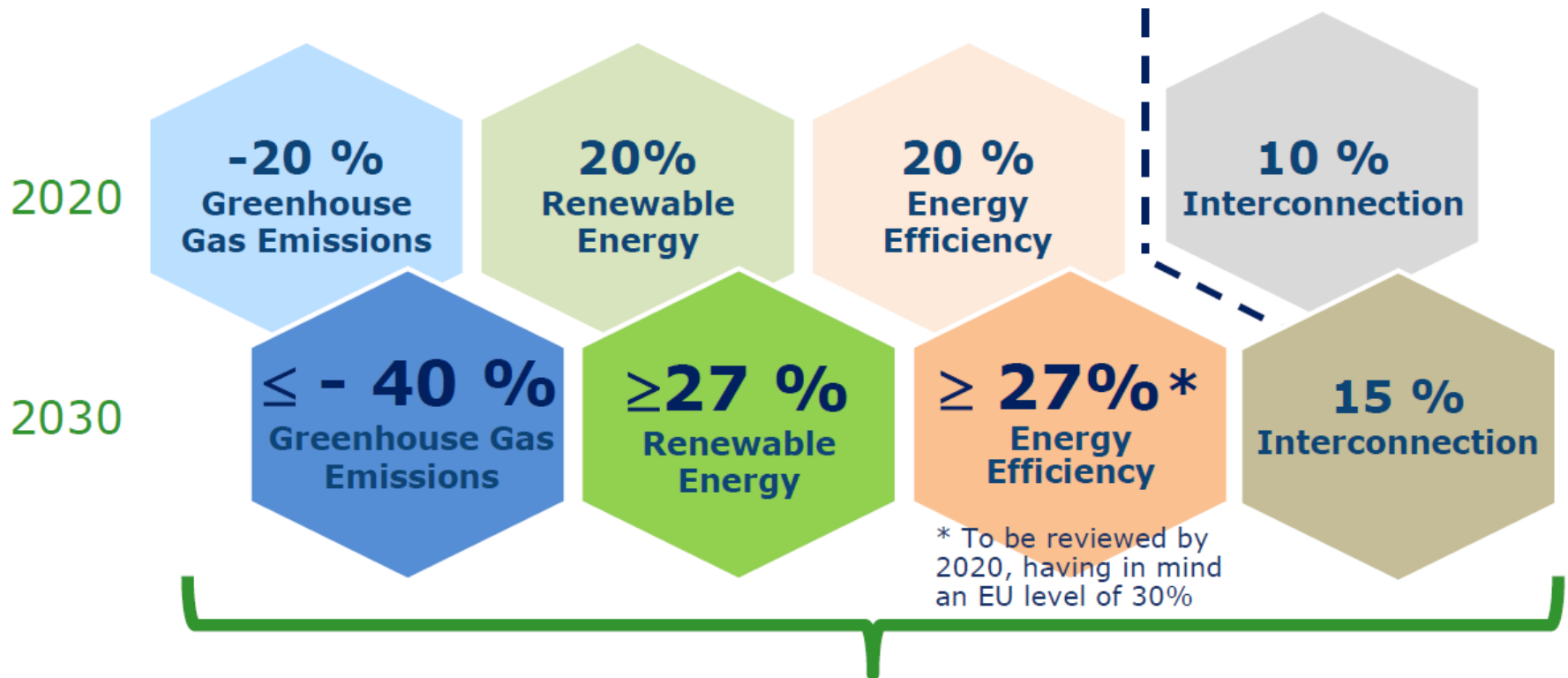
Fuel Ranges (primary energy consumption)





European
Commission

2030 framework for climate and energy policies



New governance system + indicators

ENERGY UNION:

WHERE WE ARE AND WHERE DO WE WANT TO GO?

CHALLENGES AND OPPORTUNITIES



Modernise our economy by bringing down greenhouse gas emissions while creating jobs and growth

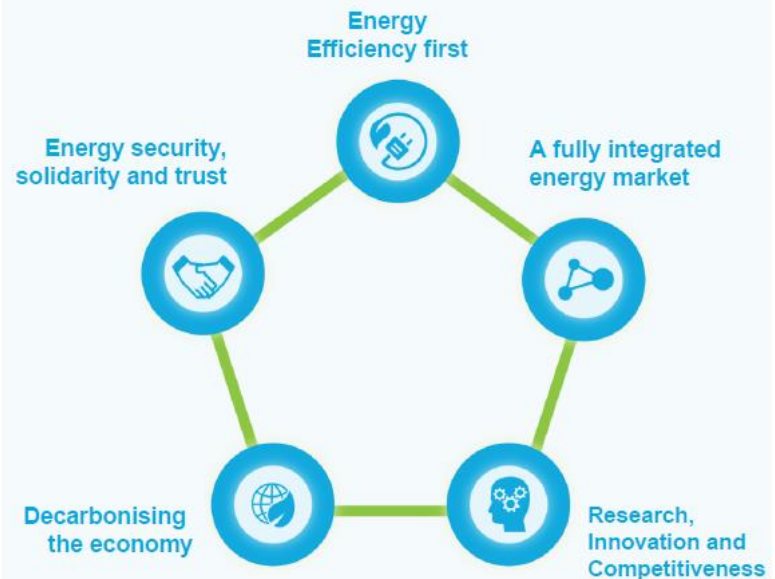


The EU as the world leader on renewable energy and placing energy efficiency first based on new technologies and industrial leadership



Ensure a socially fair transition where regions, cities and consumers play an active role

ENERGY UNION STRATEGY



DELIVERING ON SECURITY, SOLIDARITY AND TRUST



€5.35
billion

**Connecting
Europe
Facility**

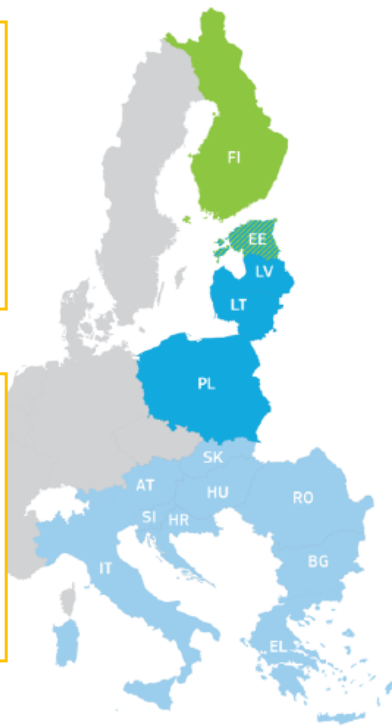
2014-2020

Earmarked to trans-European energy infrastructure



195

**European
projects of
common
interest ***



Balticconnector

(Gas pipeline between Estonia and Finland)

Operational by 2020

€ 5.4 million for studies

€ 187.5 million for construction works



Gas Interconnector Poland-Lithuania (GIPL)
Benefiting also Latvia and Estonia

Operational by 2021

€ 10 million for studies

€ 295 million for construction works



**Central and South-Eastern European Gas
Connectivity (CESEC)**

Beyond gas connectivity, also strengthening cooperation
on electricity, renewables and energy efficiency with
benefits for other Member States in the region

Operational by end 2019

€ 179.3 million for works

THE RIGHT REGULATORY FRAMEWORK

" In essence the new package is about tapping our green growth potential across the board"
Commissioner Arias Cañete (2016)



**Energy Union
Governance**



Energy Efficiency
(Energy Efficiency
Directive, European
Performance of
Buildings Directive)



Renewables
(Revised Renewable
Energy Directive)

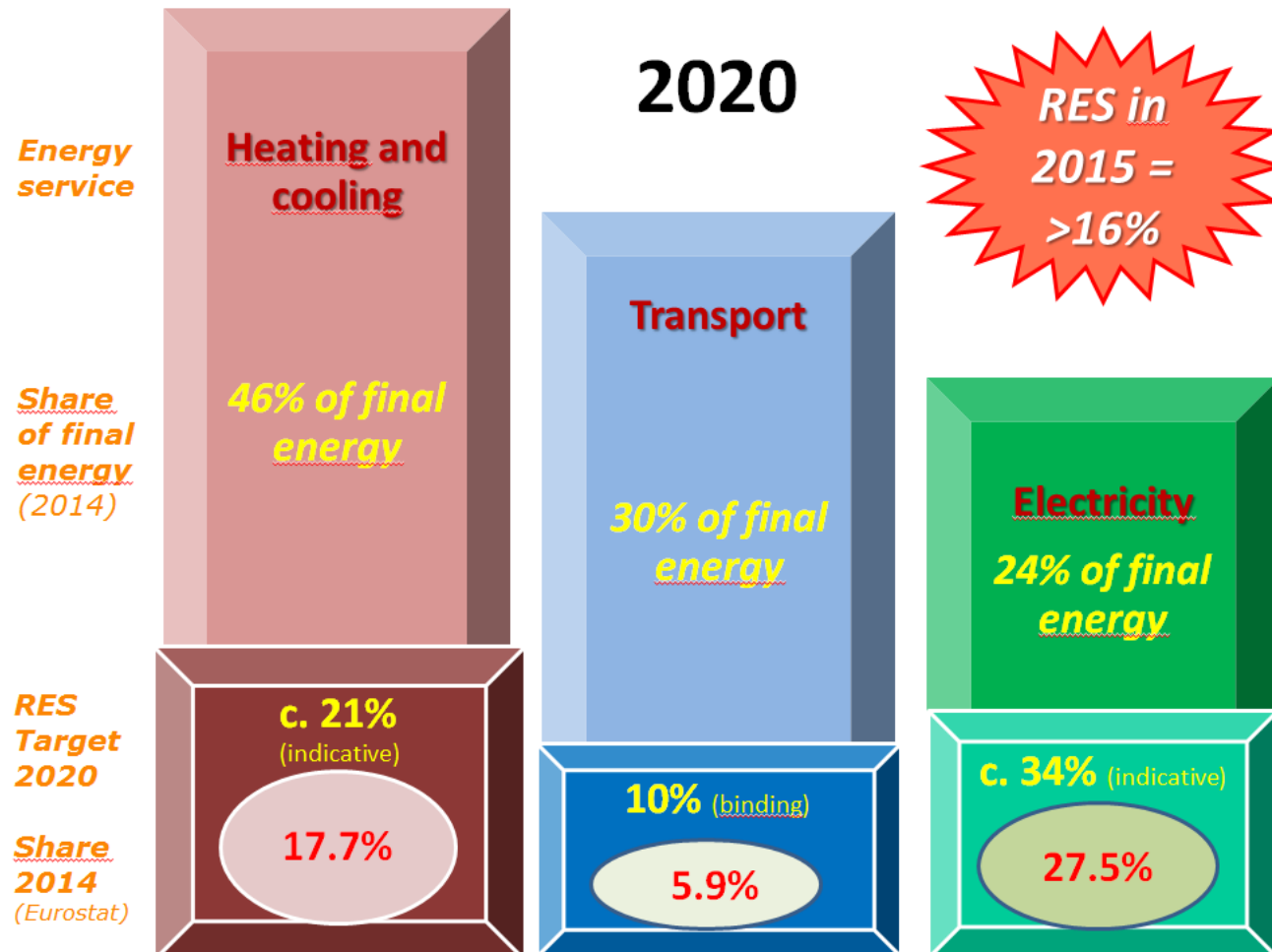


**New Electricity Market
Design**



**Energy prices
and costs
report**

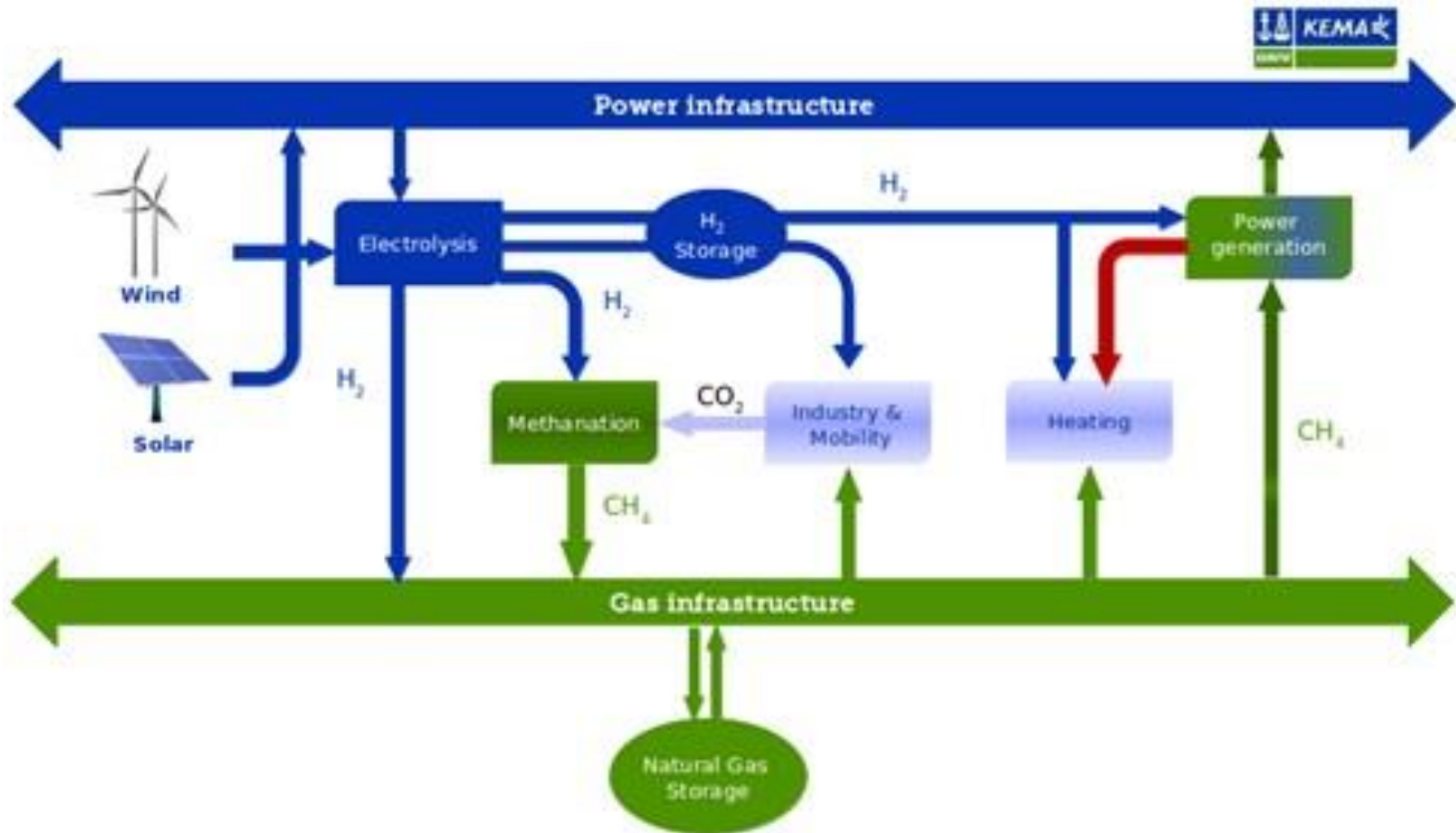
Renewables in the EU – progress per sector





European
Commission

Integrating the energy systems (P2G)



A market for renewables and renewables in the market

Making the market fit for RES

Transparency and non-discrimination (e.g. curtailment)

Flexibility (incl DSR, storage, review of conventional support)

Market rules compatible with RES (e.g. gate closure, bid size)

Improved short term markets (ID, BAL), bidding zones

Integrating RES into the market

More coord. approach to support schemes

RES providing system services

Exposure to market signals (dispatch rules, balancing responsibility)

Higher share of revenues from the market



NEW MEASURES RED II

Target achievement

- Establishment of a **EU binding renewable energy target** and the **collective obligation of Member States to achieve it**
- Use of the **2020 national targets as baseline** to build on the progress achieved with the current framework

Establishment of a EU mandatory target of at least 27 % RES in the final energy consumption by 2030	Recognition of renewable energy communities
Establishment of 2020 national targets as baseline	Improving consumer information by extending the Guarantees of Origin
Establishment of general principles to be followed by Member States when designing support schemes	Blending mandate to transport fuel suppliers
Introduction of one-stop-shops and a time limits for the RES permit granting process	Endeavour by MS to increase renewables in heating and cooling
Empowering consumers by enabling them to self-consume without undue restrictions as well as being remunerated for the electricity they feed into the grid	Strengthening of bioenergy sustainability criteria (including introduction of new criteria for forest biomass)



ENERGY EFFICIENCY FIRST

Energy Efficiency Directive

- To ensure that the objectives of the 2030 framework are met (review the target to a binding 30% EU level)
- To simplify parts of the directive to facilitate implementation at national level

Target 30% binding

Article 7, on energy efficiency obligations, has its 2020 sunset clause lifted

Simplification of Art. 7

Clarification of the rights of people living in multi-apartment buildings/people using district heating in relation to metering and billing

Encouragement of renewable energy



ENERGY EFFICIENCY FIRST

Energy Performance of Buildings Directive

- Creates a clear path towards a low and zero-emission building stock in the EU by 2050 underpinned by national roadmaps to decarbonise buildings.**
- Encourages the use of information and communication technology (ICT) and smart technologies to ensure buildings operate efficiently for example by introducing automation and control systems.**
- Supports the rollout of the infrastructure for e-mobility in all buildings (although to a lesser extent than in the Commission's proposal).**
- Introduces a "smart readiness indicator" which will measure the buildings' capacity to use new technologies and electronic systems to adapt to the needs of the consumer, optimise its operation and interact with the grid.**
- Integrates and substantially strengthens long term building renovation strategies.**
- Mobilises public and private financing and investment.**
- Helps combatting energy poverty and reducing the household energy bill by renovating older buildings.**



MARKET DESIGN INITIATIVE

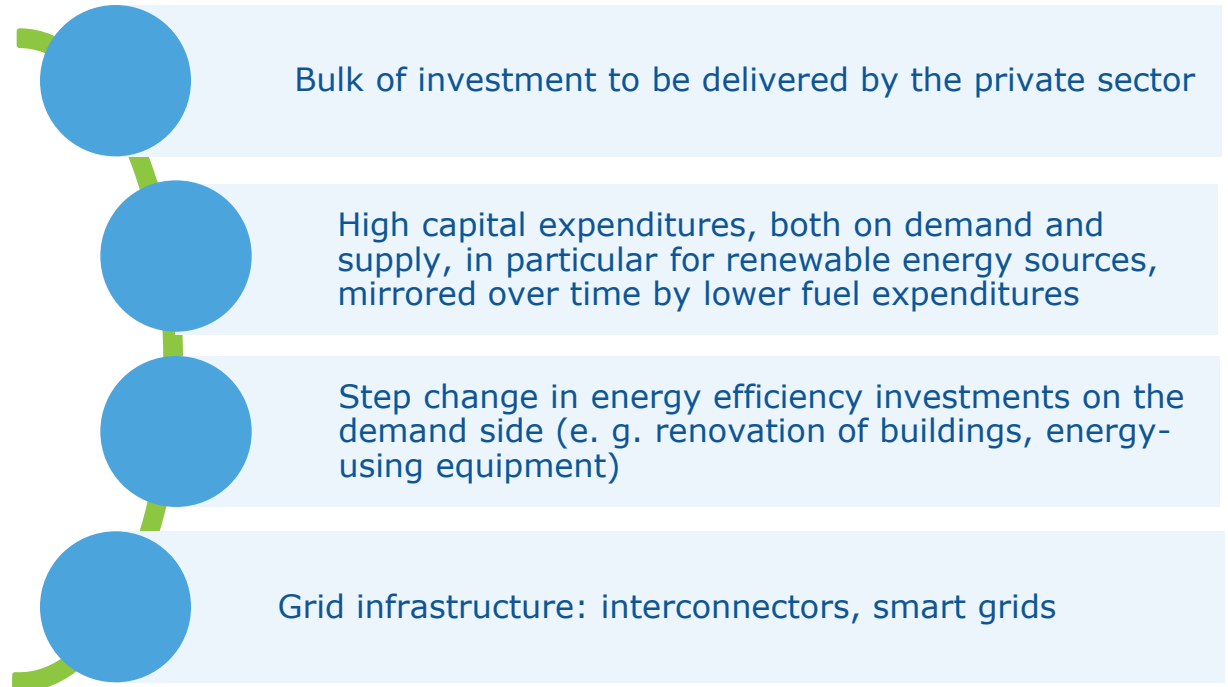
Regulation on market design and regional electricity markets, and coordination of capacities to ensure security of supply

<p>Provide clear price signals facilitating the continuing penetration of renewables and investment</p>	<p>Promote regional cooperation on energy policies and support schemes</p>
<p>Put consumers at the centre of the market, and of the energy transition</p>	<p>Provide a truly European dimension to security of supply</p>

INVESTEMENT NEEDS



**extra €177 billion per year
needed from 2021
to meet
2030
climate and energy targets**





Thank You for Your Attention!

tudor.constantinescu@ec.europa.eu

http://ec.europa.eu/energy/index_en.htm

More Information

For info or further questions on this seminar and the activities of the JASPERS Networking Platform, please contact the JASPERS Networking and Competence Centre at the following email:

jaspersnetwork@eib.org

JASPERS Networking Platform:

www.jaspersnetwork.org

JASPERS Website:

jaspers.eib.org

