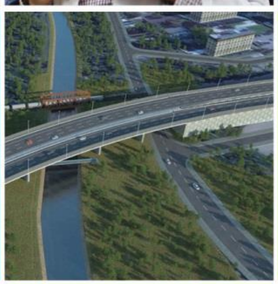
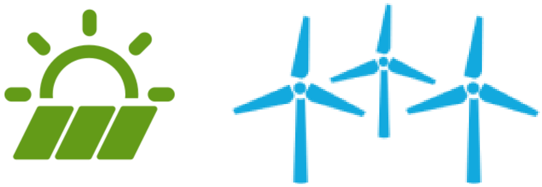


CLEAN ENERGY FOR ALL EUROPEANS

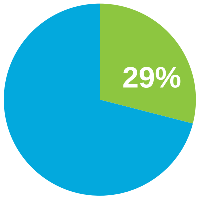
New Electricity Market Design
Wholesale markets

CONTEXT

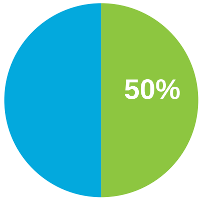
MORE POWER COMING FROM RENEWABLES



2014

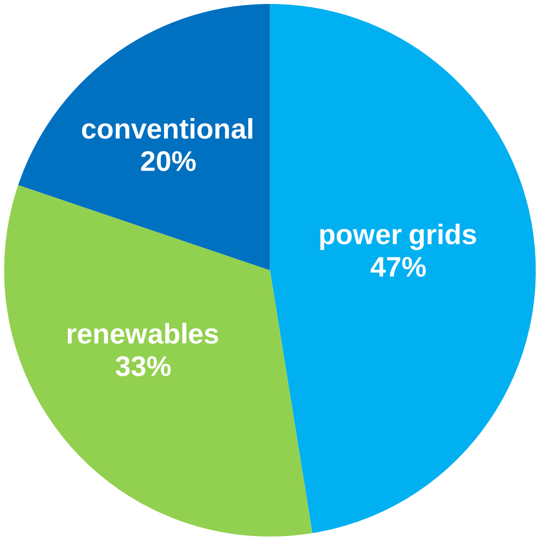


2030



Today up to **90%** of variable renewable electricity is connected to distribution grids

INVESTMENT NEEDS FOR POWER: €75 bn PER YEAR FOR 2021-2030



WHY DO WE NEED THIS PACKAGE?

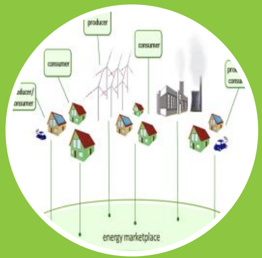
THE ENERGY SYSTEM OF TOMORROW WILL LOOK DIFFERENTLY

2030

50% of electricity to come from renewables

2050

Electricity completely carbon free



Today

Increasingly decentralized power generation

2021-2030

Investment needs 75 bn/Year (47 % network)

Technological and political developments require an overhaul of the market rules

WHAT?

Boost wholesale market **flexibility** and provide **clear price signals** to facilitate the continuing penetration of renewable energies and ensure investments

Enable **active consumer participation** and ensure that **consumers are protected and benefit** from progress in energy technologies

Promote **regional cooperation** and provide a true **European dimension to security of supply**

WHERE?

Electricity Regulation (RECAST)

- Contains majority of new wholesale rules

Electricity Directive (RECAST)

- Contains majority of new retail provisions

ACER Regulation (RECAST)

- ACER tasks and procedure

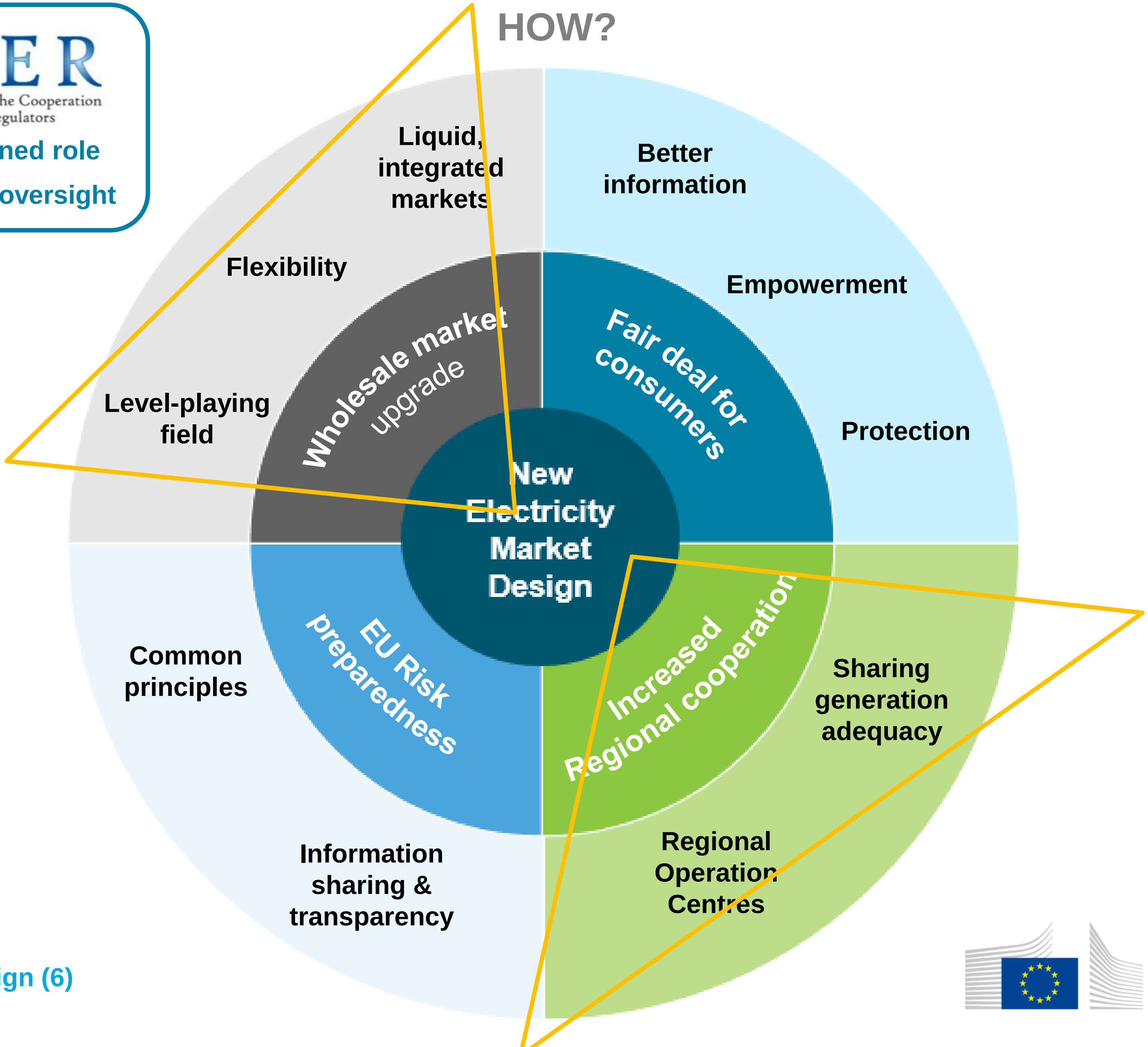
Regulation on Risk preparedness (NEW)

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

ACER
Agency for the Cooperation of Energy Regulators

Stenghthened role

Regulatory oversight



European Commission

WHOLESALE MARKET UPGRADE
Evolution, not revolution

Competitive energy markets are at the heart of a competitive economy

Enhancing system flexibility:

INTEGRATION OF RENEWABLES

MARKET-DRIVEN INVESTMENTS

Strengthened short-term markets

Increase **cross-border trading opportunities** over shorter timeframes (intraday and balancing markets)

Reward flexibility for generation, demand-response and storage

Allow **prices to show real value** of electricity in terms of time and location (scarcity pricing)

Market principles from Network Codes/Guidelines to The Electricity Regulation

Level-playing field among sources

Rules on **priority access** and **dispatch**

Curtailment rules

Remuneration on equal terms on market principles

Extended **balancing** responsibilities

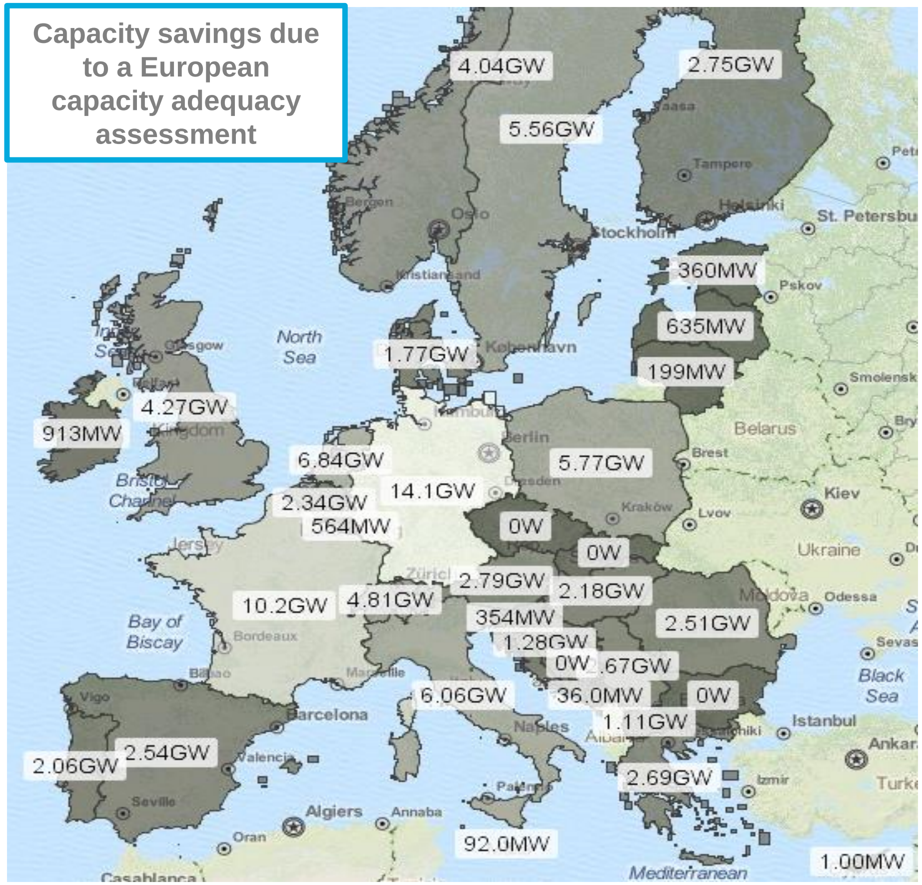
Non-discriminatory charges for **distributed generation**

No discrimination of cross-border trade

Do not push **congestion** to the border

Commission decision on **bidding zones**

STEPPING UP REGIONAL COOPERATION



- Development of a **European adequacy assessment ➔mandatory** use for CMs
- **Common capacity mechanisms principles** in line with the Sector Inquiry to ensure least-distortive design **➔550 gr CO2/kWh** threshold
- **Regional Operation Centres (ROCs)** ➔building on existing RSCs, additional tasks (e.g. sizing of reserve capacity, CL participation), some decision-making power

European Commission

REGIONAL OPERATION CENTRES

Extend Functions

- Need for enhanced cooperation not disputed
- Still potential benefits from looking beyond national borders

Geog. Scope

- TSOs to prepare proposal
- All functions to be performed by each ROC

Decision Making

- TSOs to develop decision-making process
- Decisions binding unless risk to the system
- Any TSO can request a review of decisions

Oversight

- Oversight given to the NRAs (observers on the board)
- Oversight also to ACER

Many more details …

Network Codes & Guidelines

- Delegated acts
- New empowerments (e.g. non-frequency anciliary services, distribution tariff structures)

Use of congestion revenues

- No longer to reduce national tariffs

Imbalance settlement period

- 15 minutes as of 2025, no derogation foreseen

TSO/DSO ownership of anciliary services (Directive)

- In principle excluded (competing with Generation)
- Derogation with NRA approval after failed tender

AN AGENCY UP TO THE TASK

ACER
Agency for the Cooperation of Energy Regulators

*A **coordination hub** for tighter European and regional cooperation*
*Main engine behind the effective **implementation of market rules***
*Critical **market surveillance** functions both in wholesale and retail*

Regional and cross-border decisions

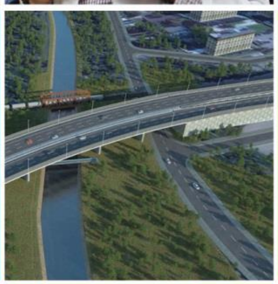
- Setting the configuration of Regional Operation Centres and monitoring of regional performance
- Coordinator role towards National Regulators to enhance interoperability
- Apporoval of methodologies for cross-border trade and generation adequacy
- Approval of methodology for the identification of electricity crisis scenarios

Wholesale markets performance

- Monitoring of market efficiency: ‘flexibility barriers’, price caps; bidding zone decisions, locational price signals, etc.
- Follow through the implementation of existing and new system and market operation codes
- Surveillance of Member States performance against security of electricity supply indicators

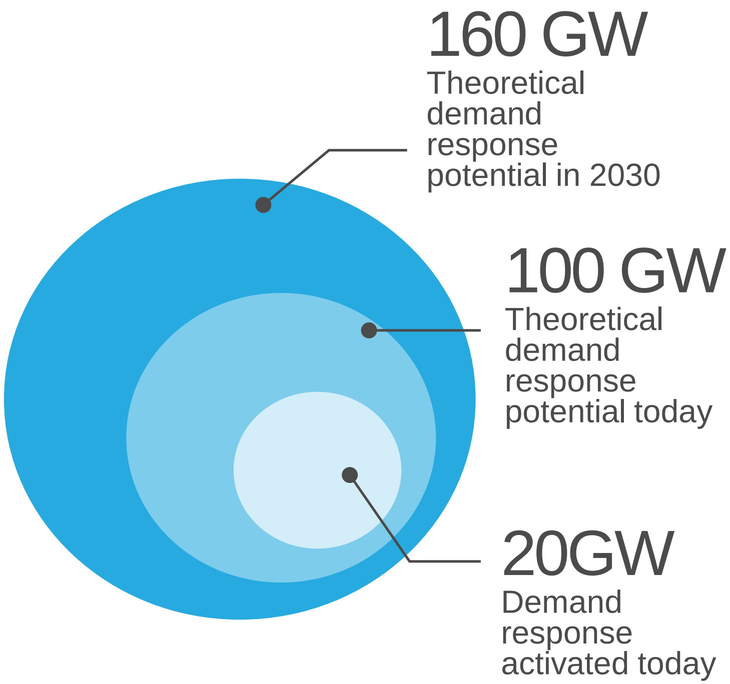
DSO-related tasks

- Formal place for DSO to be represented at EU-level: establishment of EU DSO for electricity
- Ensure DSOs and TSOs cooperation



Thank you!

BACKGROUND – UNLOCKING THE UNTAPPED DEMAND-RESPONSE POTENTIAL



- 16 Member States maintain some form of energy price regulation for households.
- In most Member States demand response is limited due to market entry barriers towards new service providers, such as independent aggregators (which aggregate individual flexibility).
- Unlike transmission system operators, distribution system operators cannot manage their network in a flexible manner to reduce costs for the consumer.

WAY FORWARD

- **Phase-out regulated prices**, only duly justified exemptions allowed.
- Ensure **fair market access for independent aggregators** and other new service providers.
- Allow **flexible management of distribution networks** through curtailment of renewables and demand response solutions.
- Set clear principles for DSOs to ensure neutrality.

Competition within the retail energy market is key for unlocking efficient consumer behaviour and keeping the cost of the energy transition at check.