



# HydroCen

NORWEGIAN RESEARCH CENTRE FOR HYDROPOWER TECHNOLOGY

Market design workshop 2023-06-07

RepowerEU, status on new European market design





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# Response to the energy price crisis and the war in Ukraine



Strasbourg, 8.3.2022  
COM(2022) 108 final

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN  
PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN  
ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE  
REGIONS**

**REPowerEU: Joint European Action for more affordable, secure and sustainable energy**

## Objective

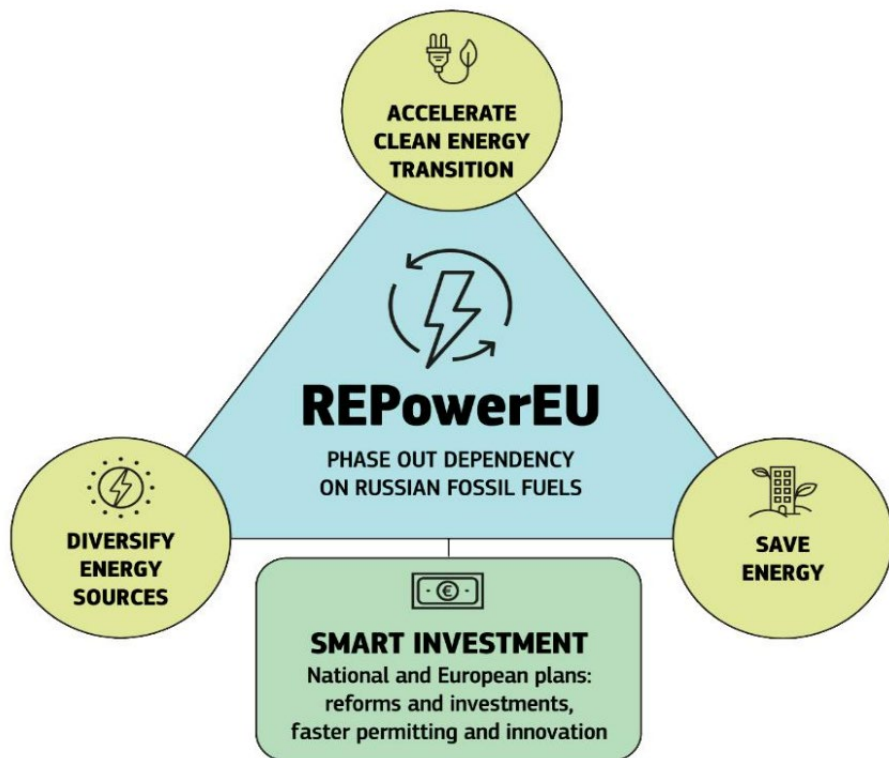
- Urgent actions on prices
  - Keep retail prices in check
- Security of supply
  - Refilling gas storage for next winter
- Cut dependency on Russian gas and coal
  - Define actions to ramp up the production of green energy
  - diversify supplies
  - reduce demand, focusing primarily on gas, which significantly influences the electricity market

Source: European Commission



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# ...next step is to plan the actions.



Source: European Commission



EUROPEAN COMMISSION

Brussels, 18.5.2022

COM(2022) 230 final

COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT, THE EUROPEAN COUNCIL, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL COMMITTEE AND THE COMMITTEE OF THE REGIONS

**REPowerEU Plan**

{SWD(2022) 230 final}

Introduction

Russia's unprovoked and unjustified military aggression against Ukraine, has massively disrupted the world's energy system. It has caused hardship as a result of high energy prices and it has heightened energy security concerns, bringing to the fore the EU's over-dependence on gas, oil and coal imports from Russia. High amounts paid for Russia's fossil fuels are helping Russia sustain its war against Ukraine.

Source: European Commission



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# Realising the Green Deal, REPowerEU, NZIA

Electricity Market  
Design Reform  
14.3 2023

Market regulation part of a bigger picture

Net zero industry  
act  
16.3 2023

Critical Raw Materials  
act  
16.3 2023

Hydrogen Bank  
16.3 2023

Renewable Energy  
Directive  
30.3 2023

Energy Efficiency  
Directive  
June 2023?

Gas package  
June+ 2023?

Energy performance  
of buildings  
June+ 2023?

# Responses to the proposal in February – what can we learn?



Commissariat à l'énergie atomique et aux énergies alternatives  
Atomic Energy and Alternative Energies Commission

## Response to the European consultation Electricity market reform project

Issue date : February 2023

### Summary

The wholesale market is a good tool for short-term optimisation of the electricity system and should be preserved. However, the wholesale market does not provide the long-term visibility necessary to encourage investment in low-carbon electricity production assets, and it is not representative of the average cost of electricity production, exposing consumers to dangerous price hikes. It is these last two shortcomings that the reform project must address.

To do this, several tools can and should be used in parallel, but not with the same priority: PPA, complementary remuneration (CfD), and forward markets. These tools differ mainly in the risk-bearing entity between production cost and market price.

Even if they are currently undergoing strong development, we question the capacity of APPs based on intermittent renewable energies to present a sustainable interest for consumers. Indeed, with the expected strong development of these energies, the buyers of APPs will find themselves little protected (and less and less) from market fluctuations, and may be penalised in periods of low prices.

## Electricity market design - Norwegian comments

We refer to the invitation from the EU Commission to respond to the consultation on the future EU/EEA electricity market design of 23<sup>rd</sup> January. We thank you for the opportunity to address these important issues.

Norway support an evaluation of the electricity market design and the mission to identify where there is need for improvements. We share deep concerns about the repercussions of the energy prices for households and industry in Europe.



# Electricity Market Design Reform, dated 14.3 2023



The market stays

The market principle paid-as-cleared stays as today

Increased surveillance and reporting (REMIT)



# .... improve the Union's electricity market design

## Main objectives of the regulation

- ▶ insufficient tools to protect consumers, including businesses, against high short-term prices.
- ▶ the excessive influence of fossil fuel prices on electricity prices and the failure for low-cost renewables and low carbon energy to be better reflected in electricity bills-
- ▶ the impact of extreme price volatility and regulatory interventions on investment
- ▶ the lack of sufficient non-fossil flexibility (such as storage or demand response) that could reduce dependence on gas-fired generation.
- ▶ the limited choice of supplier contract types.
- ▶ the difficulties to directly access renewable energy through energy sharing
- ▶ the need for robust monitoring of the energy market to better protect against market abuse.





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Technology for a better society





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# Gas infrastructure & hydrogen corridors

- Northern Seas H2 corridor
- New offshore LNG terminals
- Expected increase in coal use
- OBS: H2 corridor from northern Sweden over Balkan to Europe.



Source: European Commission



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# Smart Investment

- €225 billion is available in loans under the RRF (Recover and Resilience Facility)
- Adding another €20 billion from selling CO2 ETS allowances
- €100 billion from MFF (Multiannual Financial Framework) is assigned for investing in renewable energy, hydrogen and infrastructure.
- €10 billion needed to strengthen the gas infrastructure and fully compensate for Russian gas supported by CEF (Connecting Europe Facility)
- Common fund for supporting small business and vulnerable households in the transition







# Quick changes the new norm?



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Norway support an evaluation of the electricity market design and the mission to identify where there is need for improvements. We share deep concerns about the repercussions of the energy prices for households and industry in Europe.

Example:

Hearing deadline for new power market regulation 14/2 2023

Proposal draft from the commission staff 14/3 2023

New regulation autumn 2023?



# Questions

- Missing information and what you would like to know more about?
  - Ex importance of energy island in the north sea?
  - Ex other FIT for 55 packages that is agreed and their EEA-relevance?
- How to build value chain for blue H2?
- With shipping in the ETS system what will it take to make CCS on ships be economic sustainable?
- How to build value chain for green/blue shipping?
  - Market potential?