

*XXI. District heating conference and exhibition*

# Impact of Fit for 55 on District Heating Sector

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## REPower EU Plan

### Published on May 18<sup>th</sup> proposes:

- increase the target in the Energy Efficiency Directive to 13 %
- set up an EU Energy Platform for the voluntary common purchase of gas, LNG and hydrogen
- increase the target in the Renewable Energy Directive to 45%
- target of over 320 GW of solar photovoltaic newly installed by 2025, European Solar Rooftop Initiative
- deploy hydrogen infrastructure for producing, importing and transporting 20 million tonnes of hydrogen by 2030
- boost sustainable biomethane production to 35 bcm by 2030
- accelerate permitting procedures for renewable energy projects and related infrastructure

## REPower EU Plan

Member States can accelerate the deployment and integration of large-scale heat pumps, geothermal and solar thermal energy in a cost-effective way by **developing and modernising district heating systems** which can replace fossil fuels in individual heating;

**Revised Recovery Resilience Facility proposal close to EUR 300 billion** (225 bn loans+ up to 72 bn grants)

- funding from the auctioning of allowances of the ETS

**Exceptional European Council on 30.-31. May 2022**

## Gas infrastructure projects

- temporary rented floating storage regasification unit (FSRU) in either Estonia or Finland
- second LNG terminal in Poland, in Gdansk
- deodorisation unit enabling gas flows between France and Germany (Spain and France odourise gas in the transmission system)
- additional FSRU in Eemshaven (NL) and Wilhelmshaven (DE)
- additional LNG terminal in Brunsbüttel (DE)
- gas infrastructure reinforcements to increase export capacity from Belgium to Germany
- expansion of LNG terminal in Krk + enhancement of Croatian transmission grid towards Slovenia and Hungary
- infrastructure investments in the Italian transmission grid (Adriatica Line and Mattagiola – Massafra pipeline)
- expansion of Interconnector Greece - Bulgaria

## Com. Delegated Regulation (EU) 2021/2139 (published 9.12.2021)

Economic activities contributing substantially to climate change mitigation:

4.11. Storage of thermal energy

4.15. District heating/cooling distribution (condition efficient district heating)

4.16. Installation and operation of el. heat pumps (refrigerant GWP, ecodesign)

4.17. Cogeneration of heat/cool and power from solar energy

4.18. Cogeneration of heat/cool and power from geoth. energy

4.19. Cogen. of heat/cool and power from ren. non-fossil gaseous and liquid fuels

4.20. Cogeneration of heat/cool and power from bioenergy

4.21. Production of heat/cool from solar thermal heating

4.22. Production of heat/cool from geothermal energy

4.23. Production of heat/cool from renewable non-fossil gaseous and liquid fuels

4.24. Production of heat/cool from bioenergy

4.25. Production of heat/cool using waste heat

\*The life-cycle GHG emissions are lower than 100 g CO<sub>2</sub>e/kWh

## Complementary delegated regulation (from 9.3. 2022)

### Transitional activity

#### 4.30. High-efficiency co-generation of heat/cool and power from fossil gaseous fuels

1.the life-cycle GHG emissions < 100 g CO<sub>2</sub>e per 1 kWh of energy output or

2.facilities for which the construction permit is granted by 31 December 2030 comply with all of the following:

- primary energy savings of at least 10%
- direct GHG emissions of the activity < 270 g CO<sub>2</sub>e/kWh of the output energy
- the power and/or heat/cool to be replaced cannot be generated from RES
- the activity replaces an existing high emitting generation activity
- the newly installed capacity does not exceed the capacity of the replaced facility
- switch to full use of renewable gaseous fuels takes place by 31 December 2035,
- reduction in emissions of at least 55% GHG per kWh of output energy;
- Member State has committed to phase-out the use of energy generation from coal

## Complementary delegated regulation (from 9.3. 2022)

### 4.31. Production of heat/cool from fossil gaseous fuels in an efficient district heating and cooling system

1. the life-cycle GHG emissions < 100 g CO<sub>2</sub>e per 1 kWh of energy output or  
2. facilities for which the construction permit is granted by 31 December 2030 comply with all of the following:

- efficient district heating and cooling system as defined in Directive 2012/27/EU
- direct GHG emissions of the activity < 270 g CO<sub>2</sub>e/kWh of the output energy
- the power and/or heat/cool to be replaced cannot be generated from RES
- the activity replaces an existing high emitting generation activity
- the newly installed capacity does not exceed the capacity of the replaced facility
- switch to full use of renewable gaseous fuels takes place by 31 December 2035,
- reduction in emissions of at least 55% GHG per kWh of output energy;
- Member State has committed to phase-out the use of energy generation from coal

## Complementary delegated regulation (from 9.3. 2022)

4 month scrutiny period

Can be refused:

in the Council by at least 20 Member states representing 65 %  
of EU inhabitants

in the parliament by at least 353 MEPs

Vote in a plenary session of the European parliament - July



## Key Fit for 55 legislation with impact on District Heating

- Revision of ETS directive
- Revision of Renewable energy directive RED
- Revision of Energy efficiency directive EED
- Revision of Energy performance in buildings directive EPBD
- Revision of Industrial emissions directive IED

## Revision of ETS directive

### European parliament

#### **Vote in ENVI Committee on 17. May:**

- municipal waste incineration plants to be included in ETS from 1 January 2026
- operators in sectors eligible for free allocation shall establish a decarbonization plan for each installation by July 1 2025
- Bonus/malus system for free allocation (based on benchmark values)
- Innovation fund = Climate investment fund, increased resources
- MSR thresholds reduced 833-1096 mil. allowances to 700 – 921
- by 31 December 2025, the Commission shall assess inclusion of installations with a total rated thermal input below 20 MW in ETS

## Revision of ETS directive

- free allocation to DH maintained (Article 10b paragraph 4)
- excessive price fluctuation (art. 29a) – concrete measures
- only entities with compliance obligations may hold allowances

## ETS2

- commercial use 2025, private res. buildings 1.1.2029,
- price cap of 50 Euro until 1 January 2030
- regulated entities shall not pass on more than 50% of the costs related to the surrender of allowances for fuels released for consumption to the final consumer + penalty into the Social Climate Fund for noncompliance

## Revision of ETS directive

### Modernization fund

- additional quantity of allowances reduced from 2,5 to 2 %
- only for Member States that have adopted legally binding targets for achieving climate neutrality by 2050 as well as measures for the phase out of all fossil fuels
- 100 % of the financial resources for priority projects
- accordance with the “do no significant harm” criteria as set out in the Article 17 of the Regulation (EU) 2020/852 (taxonomy)

### Vote in plenary 9 July

## Revision of ETS directive

### Council:

First revised text – no significant changes

General approach in June?

## Renewable energy directive (RED)

### Main issue

Sustainability criteria for biomass + cascading principle

### European parliament:

#### **Vote in ENVI committee 16. – 17.5.**

renewable energy target increased to 45 %

‘primary woody biomass’

- all biomass from forest including forest residues with exception of fire prevention and pest prevention and control
- not counted in renewable energy targets and not eligible for financial support

‘secondary woody biomass’ = residues from forest-based industry

#### **Vote in ITRE committee 13.7.**

#### **Vote in plenary – after summer break**

## Renewable energy directive (RED)

### Council:

Third revised text – without significant changes

General approach in June?

## Energy efficiency directive EED

### **Main issues**

Definitions of efficient district heating

Definition of high efficiency combined heat and power CHP

### **European parliament:**

**Vote in ENVI committee 28.4.**

**Vote in ITRE committee 13.7.**

**Vote in plenary – after summer break**

### **Council:**

Third revised text – some positive changes in definition of efficient district heating

General approach in June?



## Energy performance of buildings directive (EPBD)

### Main issues

Zero emission building – from 2030 all new buildings

- no onsite carbon emissions from fossil fuels
- energy needs in new or renovated building covered from on site RE, RE from energy community, **RE and waste heat from efficient district heating**

Minimum norms for energy efficiency (to be achieved 2027-33)

Financial incentives for fossil fuel boilers prohibited from 1.1.2027

### European parliament:

**Vote in ITRE committee 26.10.**

**Vote in plenary – December**

### Council:

First revised text – no significant changes

## Industrial emissions directive (IED) 5. April 2022

### Main issues

- Emission limits as stringent as possible in the range of BAT conclusions
- More stringent regimes of exceptions from BAT
- Compulsory environmental management system (benchmarking etc.)
- Other parameters such as energy efficiency in BAT conclusions become binding
- Unified approach to validation of continual measurement of emissions

### European parliament:

Not discussed yet

### Council:

First meeting (presentation of proposal) in May

## Fuel mix of district heating in the Czech republic (TJ)

