

# **Renewable Energy Directive** *Heating and Cooling issues*

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## Article 15a

#### Mainstreaming renewable energy in buildings

- (1) <u>Indicative share of renewable energy</u>: renewable energy produced on-site or nearby as well as renewable energy taken from the grid in final energy consumption in their building sector in 2030 that is consistent with an indicative target of at least a 49 % share of energy from renewable sources in the building sector in the Union's final energy consumption in buildings in 2030.
- (2) Member States <u>may count waste heat and cold</u> towards the indicative national share.
- (3) Member States <u>shall introduce appropriate measures in their national</u> <u>regulations and building codes and, where applicable, in their support</u> <u>schemes, to increase the share of electricity and heating and cooling</u> <u>from renewable sources</u> produced on-site or nearby as well as renewable energy taken from the grid in the building stock.
- (4) <u>Public buildings</u> must fulfil an exemplary role as regards the share of renewable energy used.
- (6) Member States shall promote the use of renewable heating and cooling systems and equipment.





# Article 20

#### Access to and operation of the grids

(3) Subject to the assessment included in their integrated national energy and climate plans [...] <u>Member States shall, where relevant, take the necessary steps with a view to developing efficient district heating and cooling infrastructure to promote heating and cooling from renewable sources, such as solar thermal energy, solar photovoltaic energy, renewable electricity driven heat pumps using ambient energy and geothermal energy, other geothermal energy technology, biomass, biogas, bioliquids and waste heat and cold, where possible in combination with thermal energy storage, demand-response systems and power to heat installations.</u>





## Article 22a

#### Mainstreaming renewable energy in industry

(1) <u>Indicative increase of at least 1,6 percentage points as an annual average calculated for the periods 2021 to 2025 and 2026 to 2030</u>.
Member States may count waste heat and cold.

Policies and measures shall endeavour to create conducive market condition for the availability of economically viable and technically feasible renewable energy alternatives.

Member States shall ensure that the contribution of renewable fuels of non-biological origin used for final energy and non-energy purposes shall be at least 42 % of the hydrogen used for final energy and non-energy purposes in industry by 2030.





### Article 23

#### Mainstreaming renewable energy in heating and cooling

- (1) Each Member State shall increase the share of renewable energy in that sector by at least 0,8 percentage points as an annual average calculated for the period 2021 to 2025 and by at least 1,1 percentage points as an annual average calculated for the period 2026 to 2030. Member States may count waste heat and cold, and renewable electricity as well.
- (1b) Member States shall carry out an <u>assessment of their potential of energy from renewable sources and of the use of waste heat and cold in the heating and cooling sector including, where appropriate, an analysis of areas suitable for their deployment at low ecological risk and of the potential for small-scale household projects</u>
- (4) <u>Measures to achieve the target</u>.





### **Article 24** *District heating and cooling*

- (1) <u>Member States shall ensure that information on the energy</u> performance and the share of renewable energy in their district heating and cooling systems is provided to final consumers.
- (2) (3) Right to disconnect regarding energy performance of alternatives.
- (4) <u>Member States shall endeavour to increase the share of energy from</u> <u>renewable sources</u> and from waste heat and cold in district heating and cooling by an indicative 2,2 percentage points as an annual average calculated for the period 2021 to 2030.
- (8) Member States shall establish a framework under which electricity distribution system operators will assess, at least every four years, in cooperation with the operators of district heating and cooling systems in their respective areas, the potential for district heating and cooling systems to provide balancing and other system services, including demand response and thermal storage of excess electricity from renewable sources, and whether the use of the identified potential would be more resource- and cost-efficient than alternative solutions..





# Thank you

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