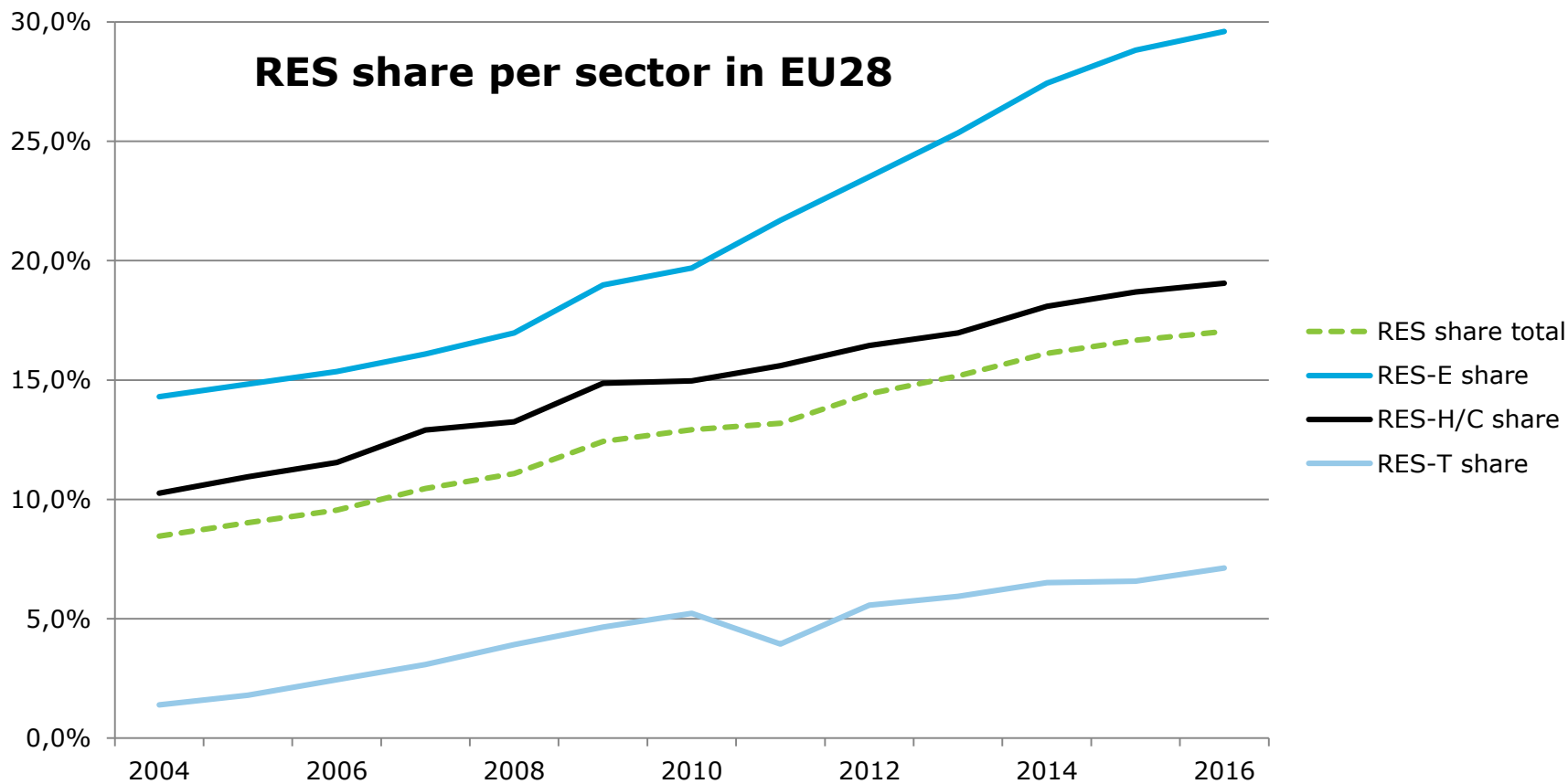# RES Heating and Cooling in the Clean Energy Package and the draft NECPs

EUFORES IPM
Michaela Holl, European Commission, unit on Renewables/CCS

## STATE OF PLAY - PROGRESS BY SECTORS

RES share per sector in EU28

Legend:
- RES share total
- RES-E share
- RES-H/C share
- RES-T share

Source: EUROSTAT Shares 2016

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1 Heating and cooling in the Clean Energy Package

ADDRESSING THE UNTAPPED POTENTIAL OF HEATING & COOLING

➢ Target to **increase** renewables in heating and cooling by **1.3 percent point per year** (2020-2030):
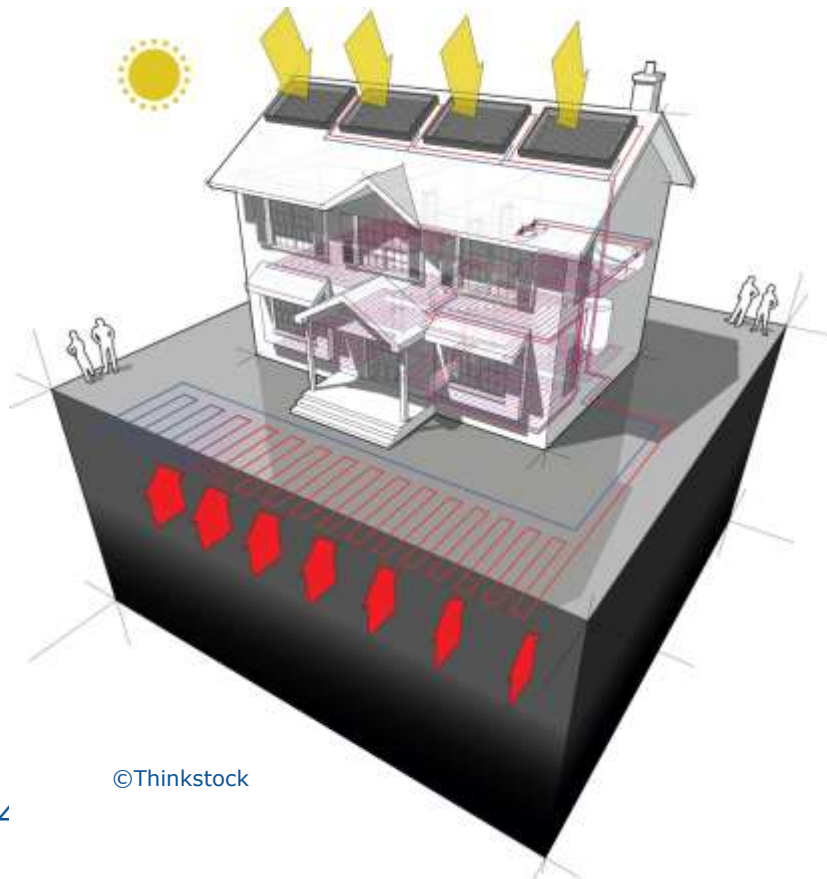
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➢ **Flexibilities**: high RES MS, high natural gas or cooling shares, dispersed settlement structures, 40% allowance for waste heat/cold

➢ **Illustrative** list of **measures** leaving flexibility for Member States and accessibility

District heating and cooling
- **1 ppt increase** in renewables and waste heat/cold
- **Third Party Access** for suppliers of renewables and waste heat/cold
- **Right to disconnect** from inefficient networks for consumers
- **Right to be informed** for consumers on renewables share and energy performance

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DISTRICT HEATING & COOLING

<u>Spelled out for the first time in EU rules</u>

- **1 ppt increase** in renewables and waste heat/cold
- **Third Party Access** for suppliers of renewables and waste heat/cold
- **Right to disconnect** from inefficient networks for consumers
- **Right to be informed** for consumers on renewables share and energy performance

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A REINFORCED SUSTAINABILITY FRAMEWORK FOR BIOENERGY

✓ Sustainability criteria extended to all bioenergy uses:

- New: biomass for heat and power: 80% of EU use of bioenergy
- Improved criteria for biofuels

✓ Waste hierarchy: No support for energy from incineration of organic waste unless separate collection

✓ Synergy with circular economy agenda

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ENVIRONMENTAL RISKS ADDRESSED FOR FARMING AND FOREST BIOMASS

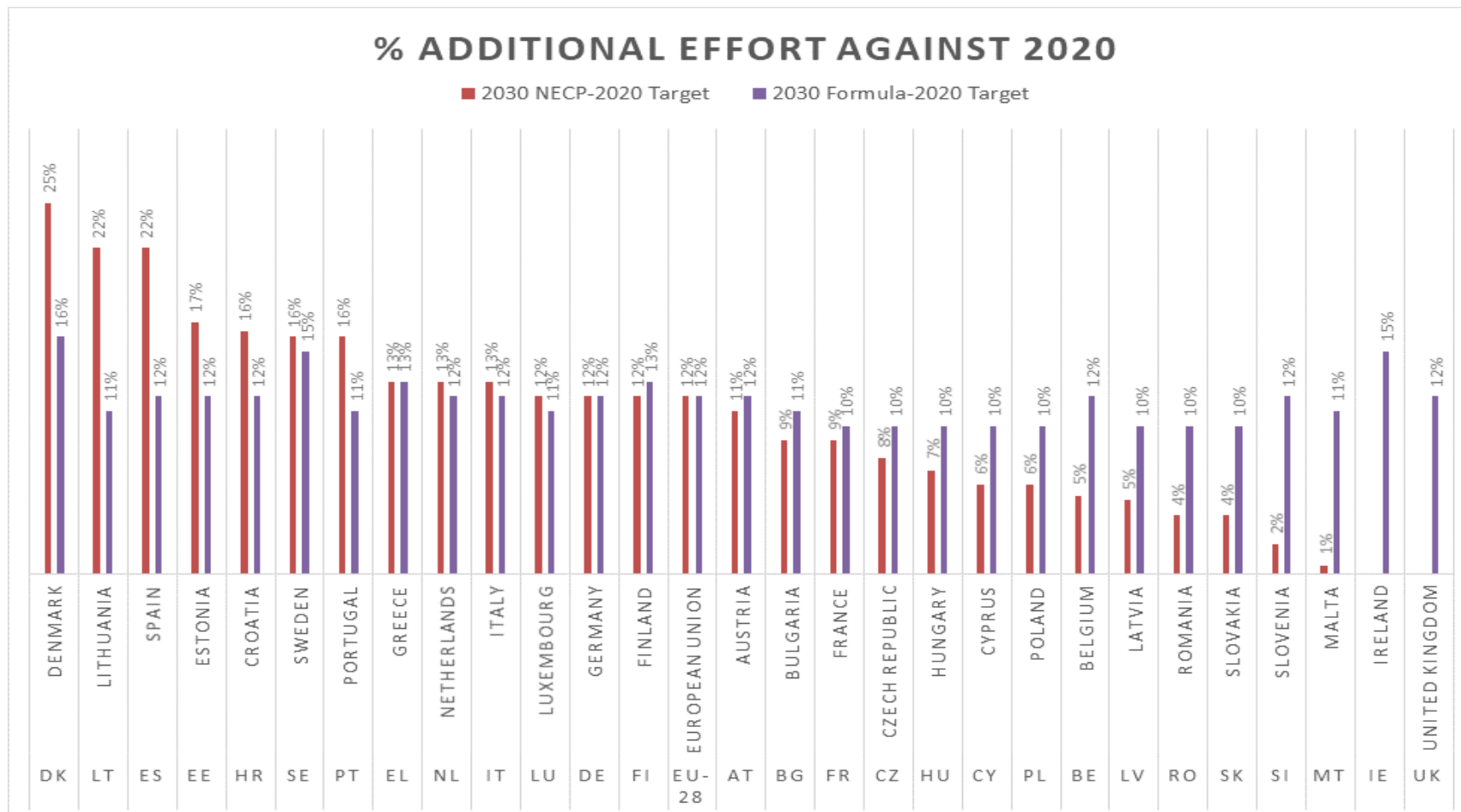- ✓ For agriculture, improved criteria for sustainable production

- ✓ For forests, risk-based approach

- ✓ Better supervision of certification

- ✓ GHG requirement for new biofuel and biomass CHP plants

- ✓ Energy efficiency requirements for bioelectricity (CHP, BAT, 36% or CCS)

- ✓ EU harmonisation for biofuels but not for biomass fuels

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2 The national energy and climate plans (NECPs)

MS pledges in their draft NECPS

% ADDITIONAL EFFORT AGAINST 2020

■ 2030 NECP-2020 Target   ■ 2030 Formula-2020 Target

Country	DK	LT	ES	EE	HR	SE	PT	EL	NL	IT	LU	DE	FI	EU-28	AT	BG	FR	CZ	HU	CY	PL	BE	LV	RO	SK	SI	MT	IE	UK
2030 NECP-2020 Target	25%	22%	22%	17%	16%	16%	16%	13%	13%	13%	12%	12%	12%	12%	11%	9%	9%	8%	7%	6%	6%	5%	5%	4%	4%	2%	1%		
2030 Formula-2020 Target	16%	11%	12%	12%	12%	15%	11%	13%	12%	12%	11%	12%	13%	12%	12%	11%	10%	10%	10%	10%	10%	12%	10%	10%	10%	12%	11%	15%	12%

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THE PROCESS TOWARDS FINAL NATIONAL ENERGY AND CLIMATE PLANS

Draft Plans (Dec '18)

Commission: Assessment of draft NECPs (18 June '19)

Final Plans (Dec'19)

Member States' long term strategy (Jan '20)

1st year covered by final plan

2018

Commission assessment and country recommendations

2019 **ITERATIVE AND POLITICAL PROCESS WITH MEMBER STATES**

2019

2020

2021

Continued public consultation, including at local and regional levels

Multi-level dialogue

Regional cooperation (continuing also during the phase of implementing national plans)

Technical exchanges with the Commission (Technical Working Group, bilateral meetings, ect.)

Discussion in the Council

3

RES Heating and cooling in the draft NECPs

REPORTING OBLIGATIONS ON RES H&C IN THE NECPS

- **2020 projected renewables share as a baseline for the 2021-2030** and **expected shares to increase renewables in H&C and district heating 2030**.

- The **renewable energy consumption (in ktoe) for**

    Renewable energy from heat pumps
    Geothermal installations
    Biomass and waste installations
    Solar thermal installations
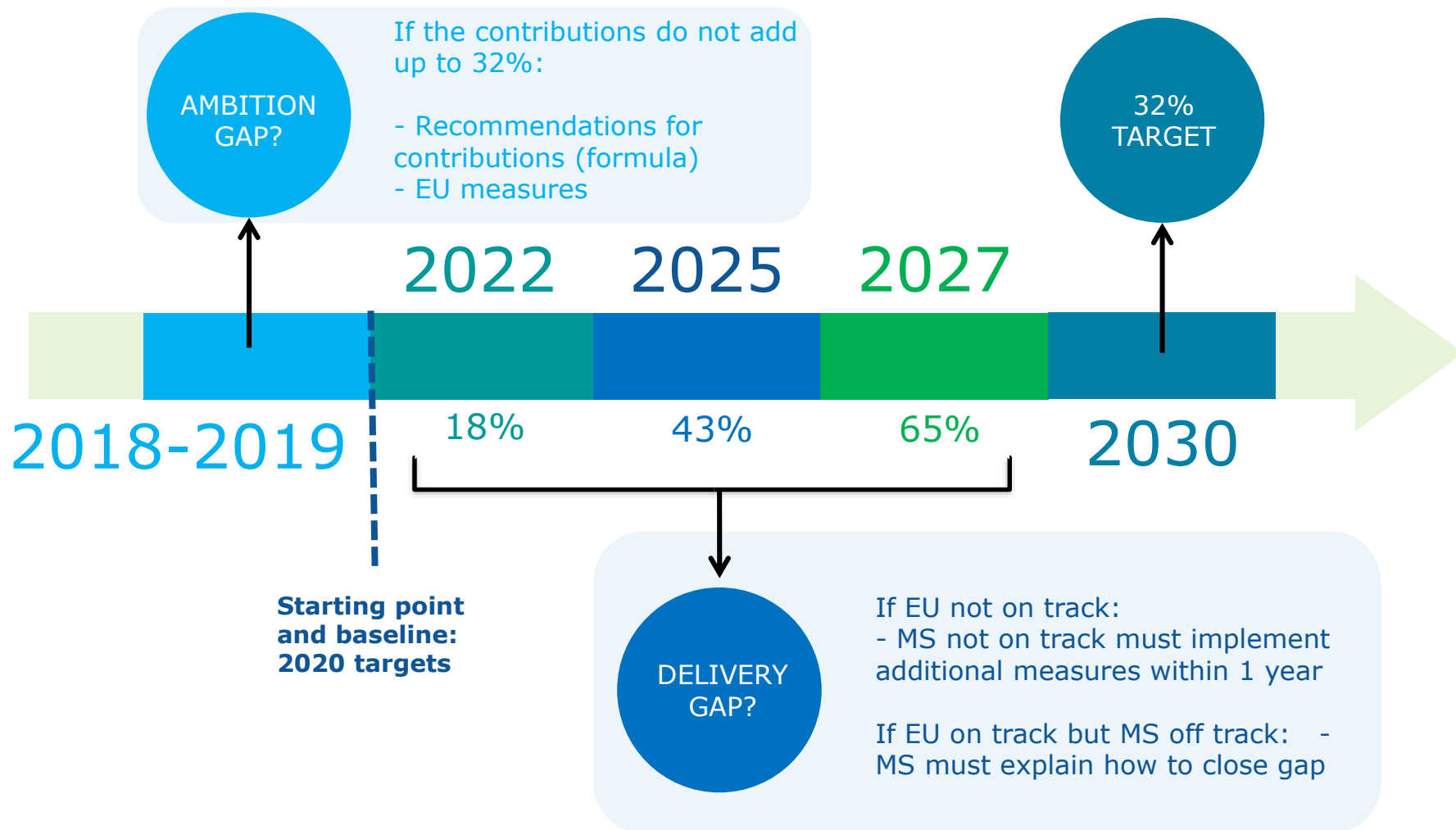
Examples of policies and measures could be:
•physical incorporation of renewables, direct or indirect mitigation, fiscal and financial measures etc…
•Assessment of the necessity to build new infrastructure for district heating and cooling produced from renewable energy sources

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4

Outlook: European Green Deal and next EU budget

Back up

ENSURING THE TARGET IS ACHIEVED

AMBITION GAP?

If the contributions do not add up to 32%:

- Recommendations for contributions (formula)
- EU measures

32% TARGET

2022   2025   2027

2018-2019

18%   43%   65%

2030

Starting point and baseline: 2020 targets

DELIVERY GAP?

If EU not on track:
- MS not on track must implement additional measures within 1 year

If EU on track but MS off track: - MS must explain how to close gap

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THE RATIONALE FOR SECTOR INTEGRATION AND COUPLING (I)

<u>Sector integration</u> refers to linking the electricity sector with other hard-to-decarbonise sectors such as heating and cooling, transport, industry and agriculture

Sector integration can be achieved through:

➢ Linking sectors directly e.g. electrification of heating and cooling or production of biogas from agriculture residues

➢ Linking sectors indirectly, through the conversion into other energy carriers e.g. conversion of renewable electricity into hydrogen or synthetic gas/fuel

<u>Sector coupling</u> refers to linking the electricity and gas sectors

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THE RATIONALE FOR SECTOR INTEGRATION AND COUPLING (II)

Rationale for sector integration

Sector integration is crucial for RES

- Reaping the vast cost-competitive renewable electricity potential.
- Decarbonising sectors more difficult to decarbonize.

RES are crucial for sector integration

- If the electricity is not carbon-free to start with, we are not decarbonising anything!

GHG-neutral economy by 2050 & Need for a cost-effective energy transition

The Clean Energy Package as the foundation

Heating and Cooling

- Indicative target 1.3 pp a year
- Inclusion of waste heat
- Regulatory principles on district heating and cooling and increased rights for consumers

Transport

- 14 % target incl biofuels, electrification and RFNBO (e.g. renewable H2)
- 3.5% sub-target advanced biofuels and biogas

With an electricity market fit for renewables

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