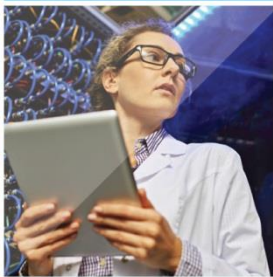




European
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RES Heating & Cooling Obligation

17 October 2017

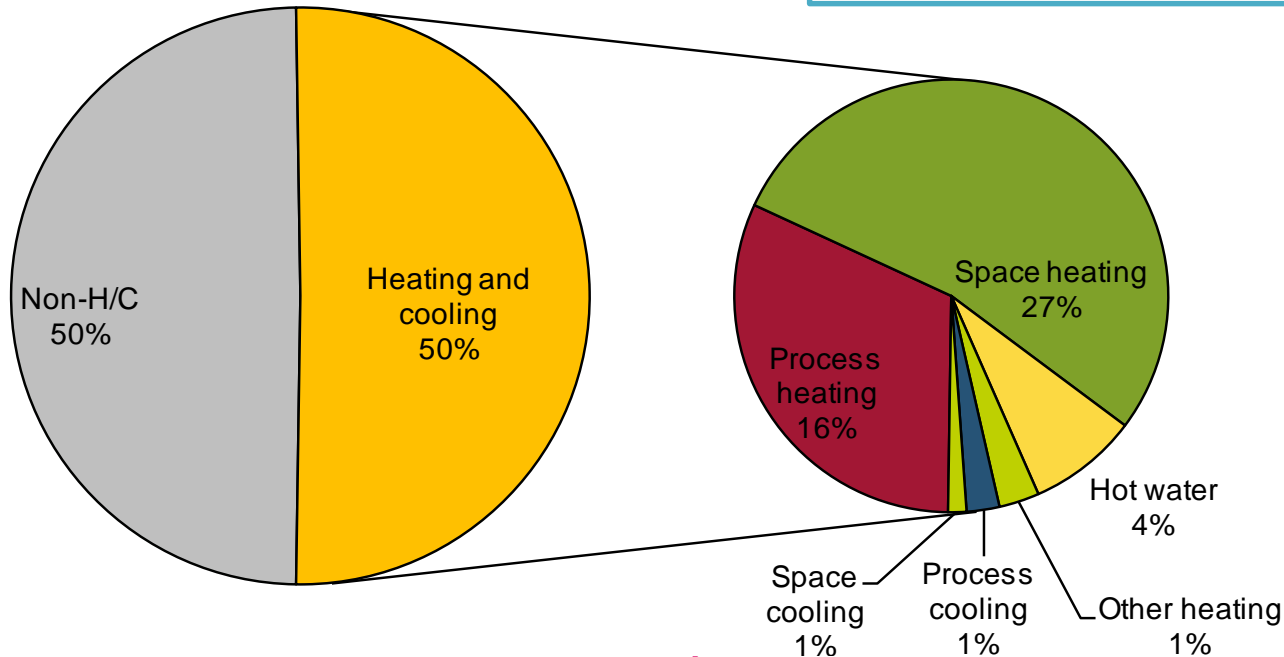
Eva Hoos
European Commission – DG ENERGY



Total final energy in 2015 (EU28)

Total final energy 2015: ~12,600 TWh

H&C about 50% of FED
High importance space and process heating



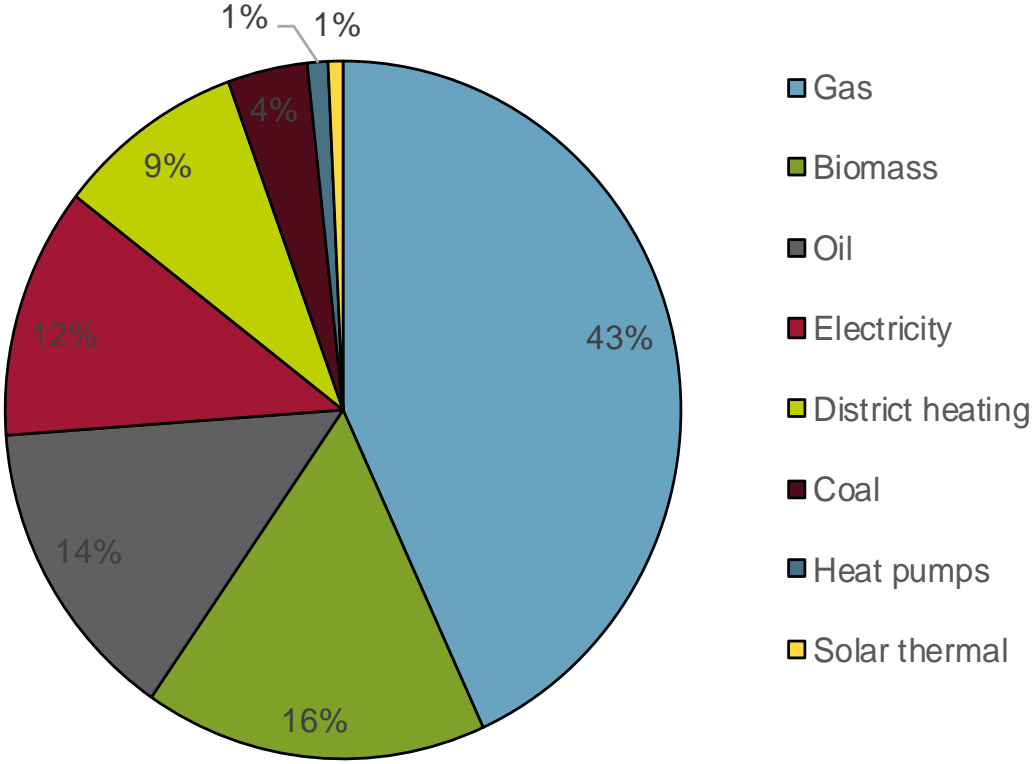
CLEAN ENERGY
FOR ALL EUROPEANS



SUSTAINABLE ENERGY WEEK

An initiative of the  European Commission

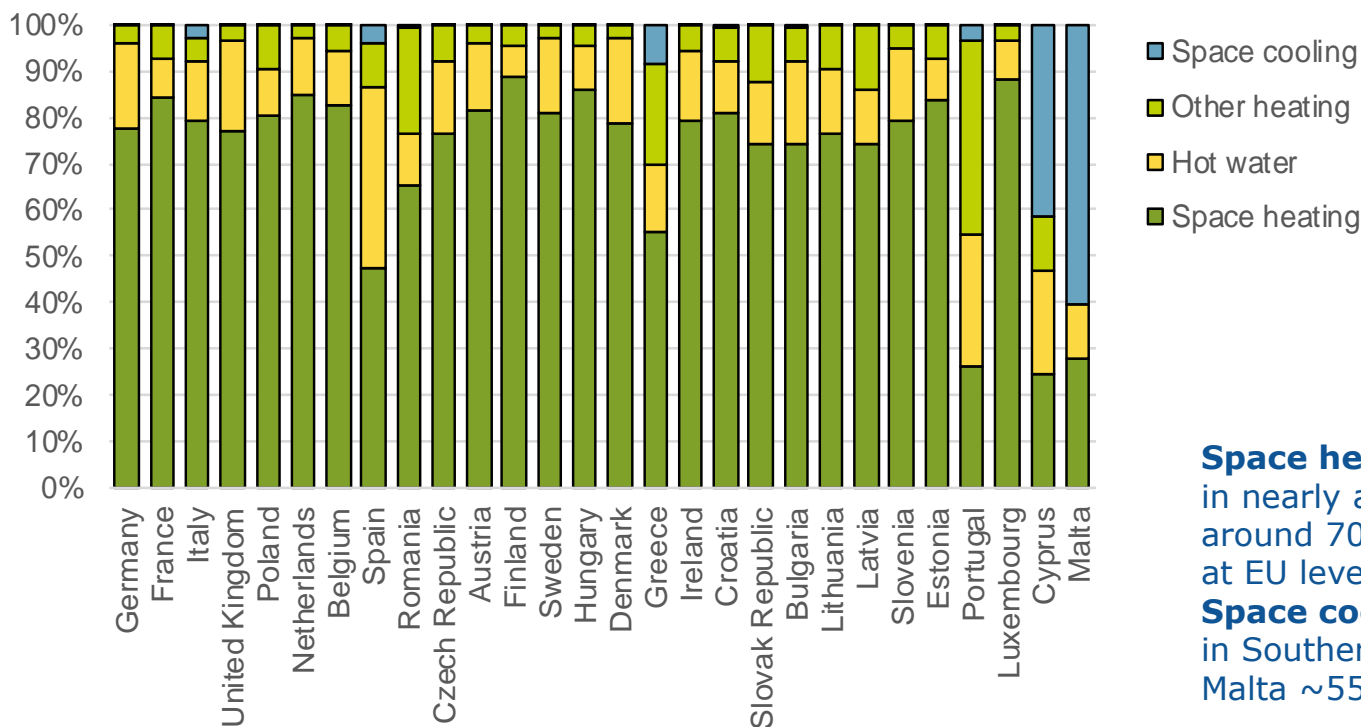
Energy carriers in residential heating and cooling (2015)



Source: H2020, Heat Roadmap Europe Project, (Fraunhofer, 2016.)

Energy Carriers	TWh	Percentage
Biomass	462.5	16.4
Coal	107.5	3.8
District heating (76% non-RES)	253.9	9
Electricity	328.3	11.6
Natural gas	1217.7	43.2
Heat pumps	27.8	1
Solar thermal	20.1	0.7
Oil	401.4	14.3
Total	2819.2	100

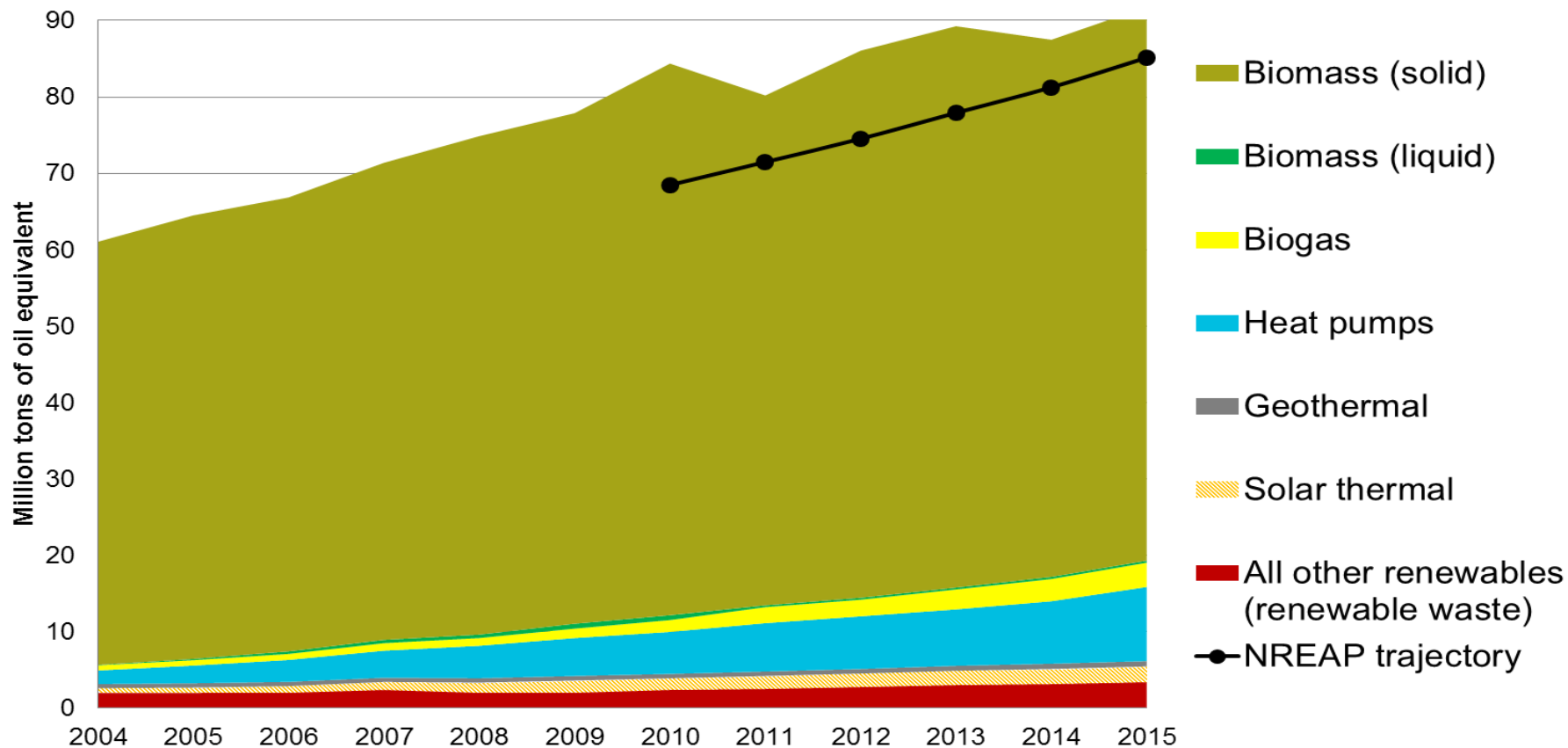
Residential sector: H&C final energy use by end-use in 2015:



Space heating is dominant in nearly all countries with around 70% of total energy use at EU level;
Space cooling has high shares in Southern EU: e.g. Malta ~55%, Cyprus ~40%

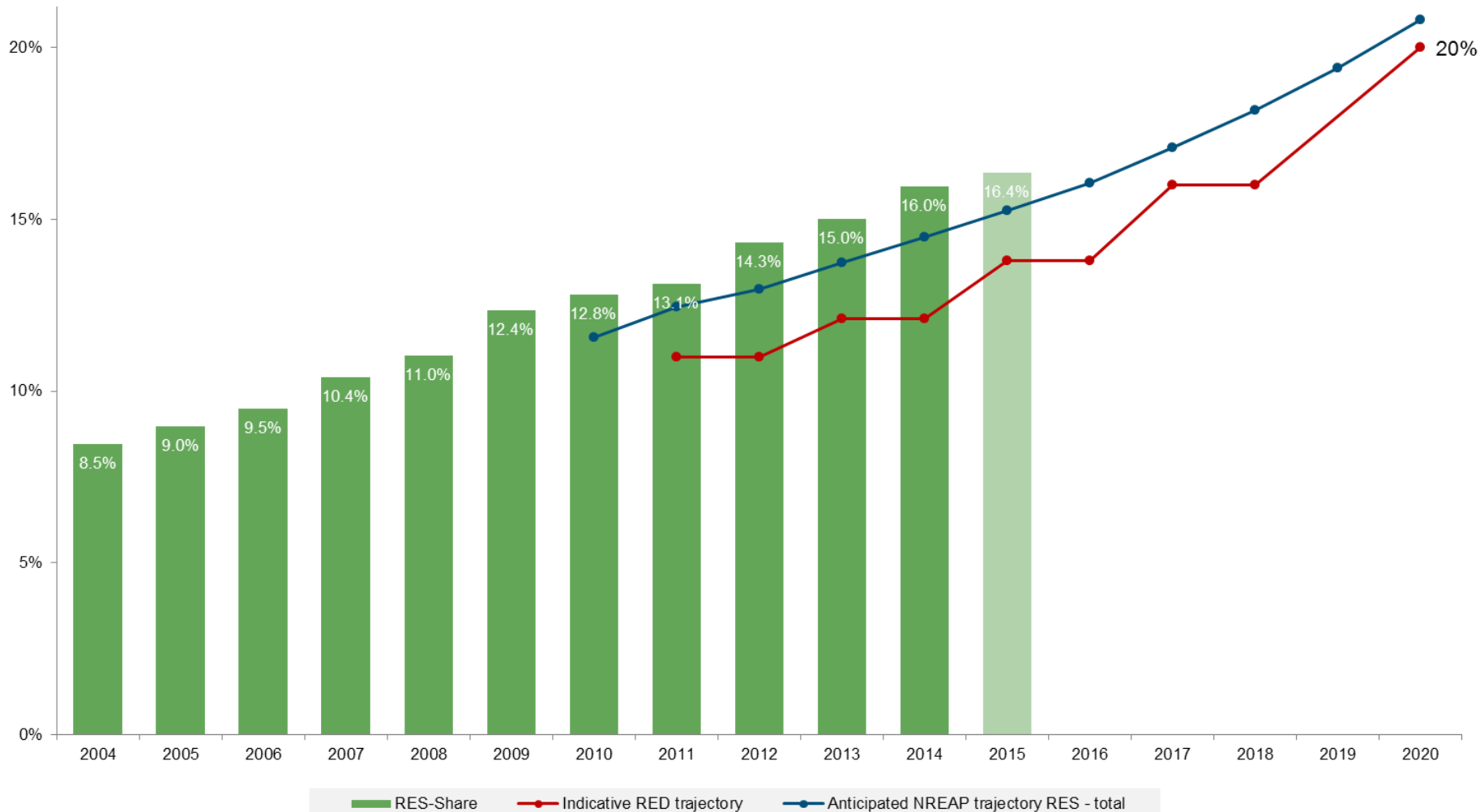
Source: H2020, Heat Roadmap Europe Project, (Fraunhofer, 2016.)

Progress on RES-H&C – EU level



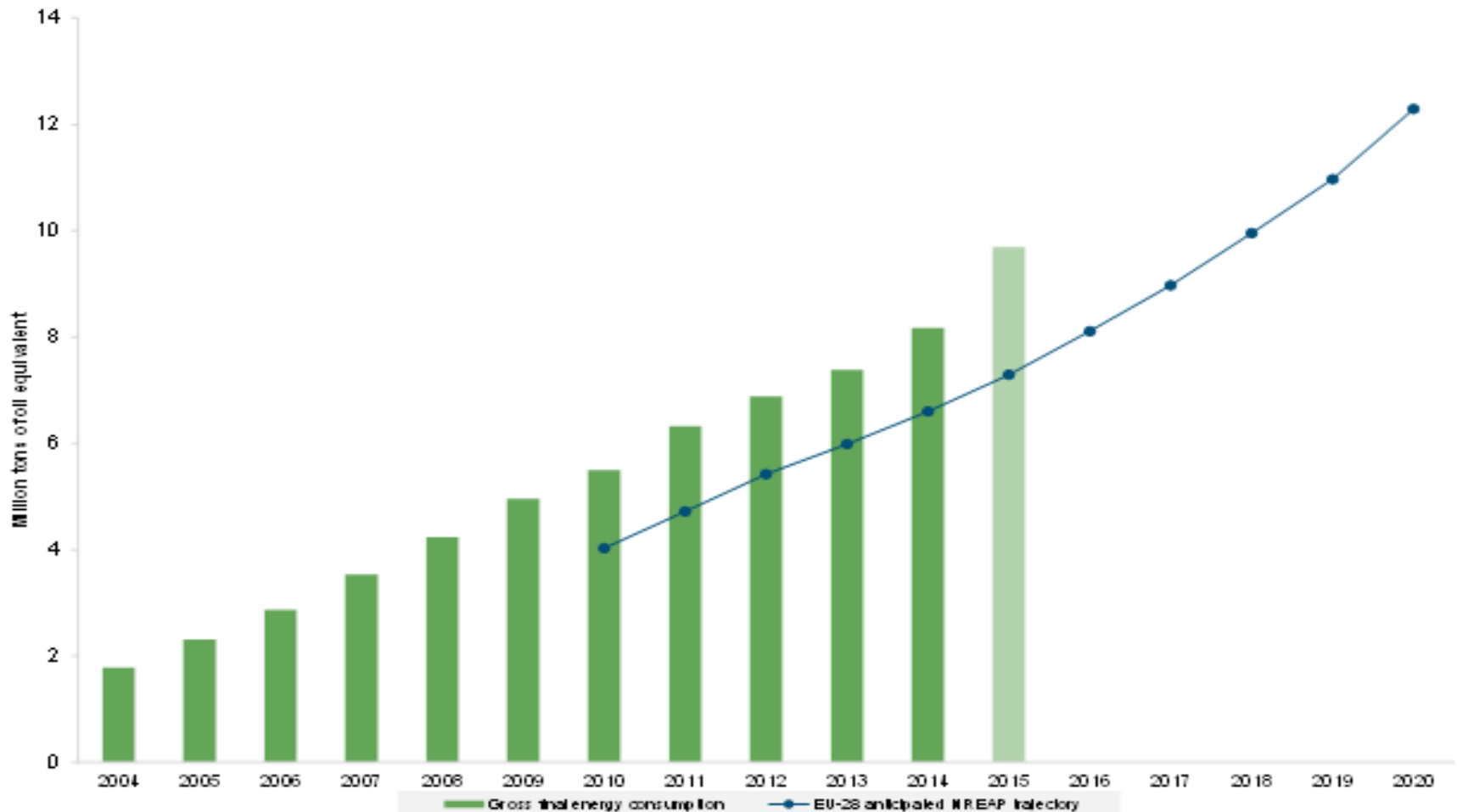
EU-28 renewable heating and cooling production by source
 source: EUROSTAT, Öko-Institut

PROGRESS TOWARDS THE 20% RES TARGET BY 2020



Renewable energy shares in the EU vs. Renewable Energy Directive (RED) and National Renewable Energy Action Plan (NREAP) trajectories (based on EUROSTAT, Öko-Institut)

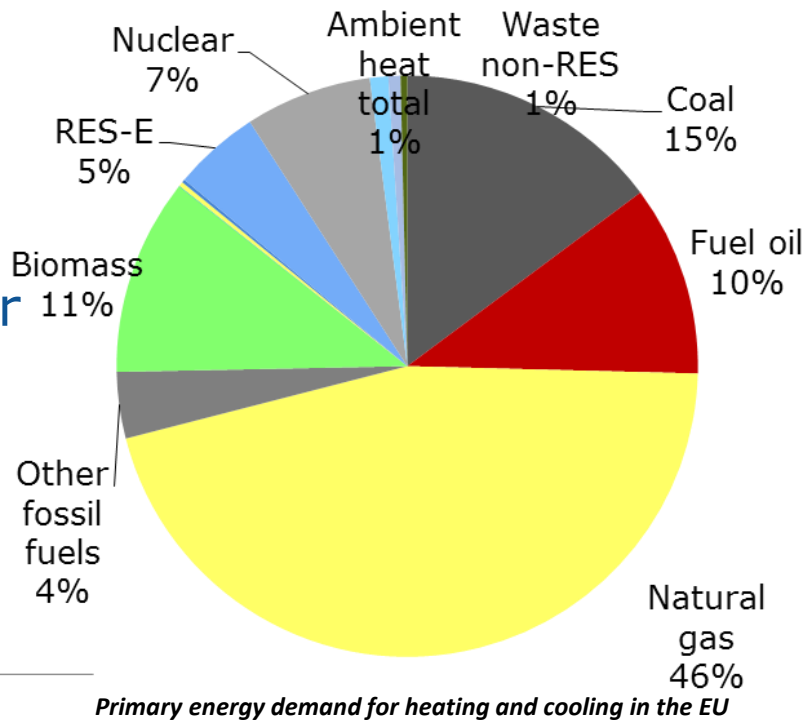
EU-28 renewable gross final energy consumption from heat pumps vs. planned trajectory in heating & cooling



RES-H&C – What Is At Stake?

Why act at EU-level ?

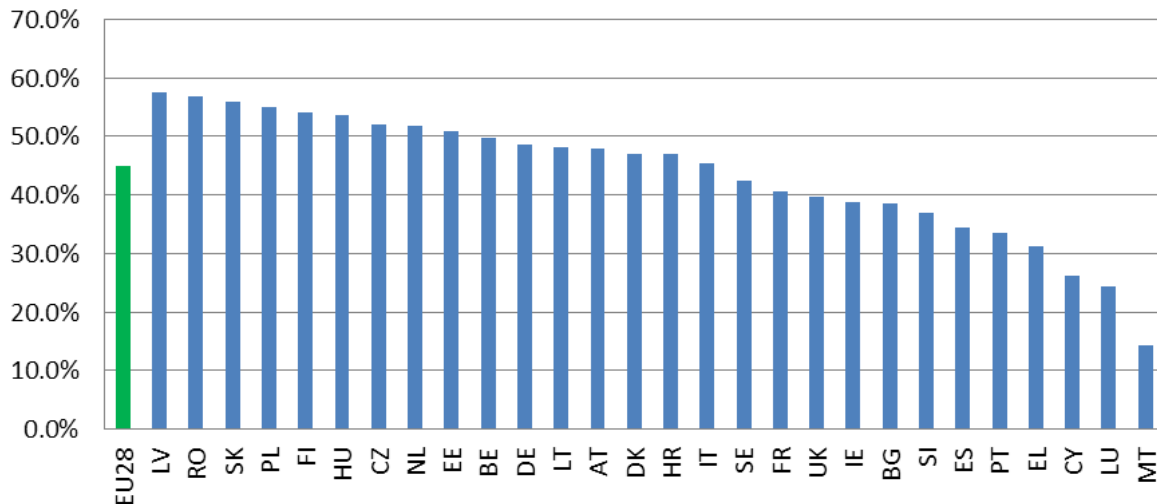
- 18% RES today => 27% in 2030
- 68% of the EU's gas imports
- Increased cost burden on other sectors, if no action



Primary energy demand for heating and cooling in the EU

Essential sector

Share of heating and cooling in Gross Final Energy Consumption



ADDRESSING THE UNTAPPED POTENTIAL OF HEATING & COOLING

WHAT

Endeavour by Member States to increase the share of renewable energy in heating and cooling supply, by 1 percentage point per year until 2030.

Consumer information on district systems' energy performance and renewable shares

Access rights to local district heating and cooling systems for producers of renewables heating and cooling and waste energy from industry

WHY

High untapped potential: a major contribution of the sector is crucial for a cost-optimal target achievement

Strategic sector for energy security: 75 % European homes are heated (or cooled) with fossil fuels & 68% of the EU's gas import

Risk of **missing the target** in the absence of action

Need to provide **visibility and certainty to investors**

HOW

Proportionality and flexibility for Member States when implementing the options
Limited administrative burden (particularly when combined with Energy Efficiency measures)

New framework for renewable heating & cooling

Renewables in the HC sector (**new Article 23**)

- A yearly 1ppt increase in renewables shall be endeavoured and respective measures and policies to be put in place

The heating and cooling sector should contribute to the EU renewable energy target in proportion to its size

District heating & cooling (**new Article 24**)

- Access of renewable (and waste energy) suppliers to the system
- Consumers right to switch to renewable suppliers
- Consumer rights to disconnect for their own renewable supply
- Information on energy performance and renewable heat to consumers

Administrative procedures (**revised Article 15**)

- RES-HC/DHC in planning & buildings
- Minimum levels of RES in buildings

Key messages

- The share of renewables in heating and cooling (H+C) should reach 27% by 2030 to ensure the cost-effective delivery of the EU at least 27% renewable energy target.
- The low-hanging fruits potential is exhausted.
- Renewable H+C is the cheapest measure hindered by lack of targeted policies.
- Investment in renewable H+C remained limited, both private and public.
- Regulatory framework, support schemes are not sufficiently developed.
- The low costs of renewable H+C signal considerable underinvestment and the presence of unused potentials.
- Existing measures outside the Renewables Directive will not be enough.
- The 1 pp increase requirement can lock-in the needed gradual growth and deliver the cost-effective 27% renewable share in heating and cooling.
- The 1 ppt renewables' increase measure lowers the costs for renewables' deployment in H+C by two thirds and ensures Member States put in place targeted measures.
- Long-term reduction of consumer and public expenditures in H+C, import reduction, other economic, social benefits through targeted investment.
- Not acting would mean missing the present replacement cycle for old H+C equipment. Postponing investment beyond 2030 will be too late.



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THANK YOU!

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