



# Emission Regulation in Austria/Styria

Abteilung 15

FAEW Energietechnik und Klimaschutz

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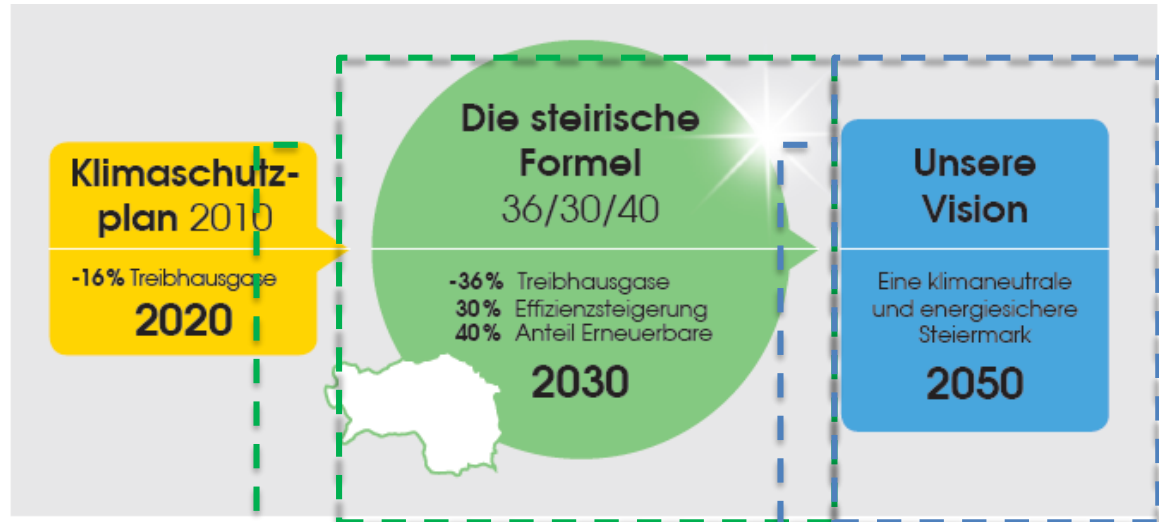


Das Land  
Steiermark

# Agenda

- climate and energy strategy of Styria
- energy balance of Styria
- district heating and local heating of Styria
- biomass heating plants of Styria
- legal framework conditions for emissions EU
- legal framework conditions for emissions of Styria
- database for heating systems (combustion systems)

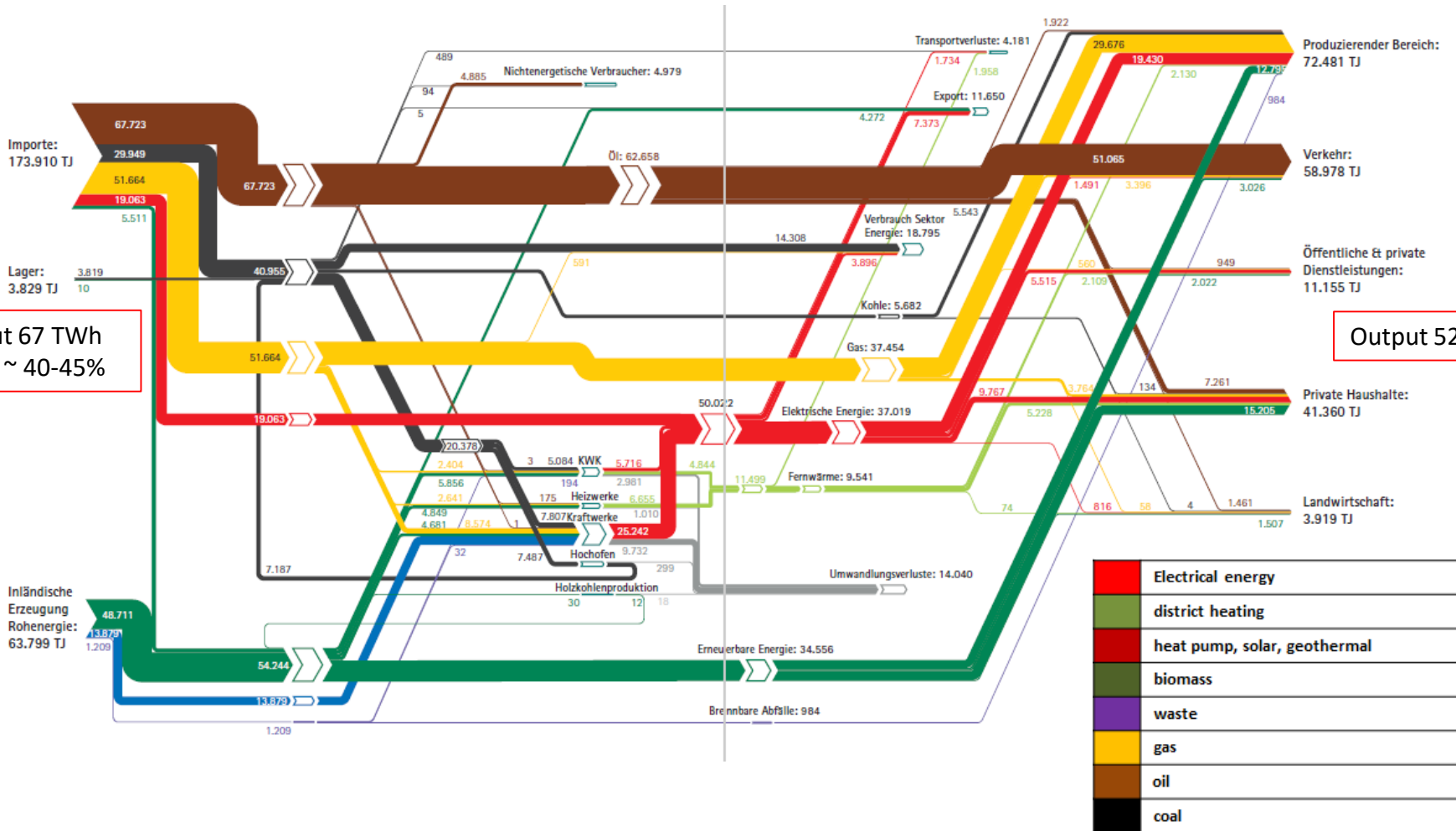
# climate and energy strategy styria 2030



-36% greenhouse gases  
30% energy efficiency  
40% renewable energy

new goal →  
climate neutrality 2040

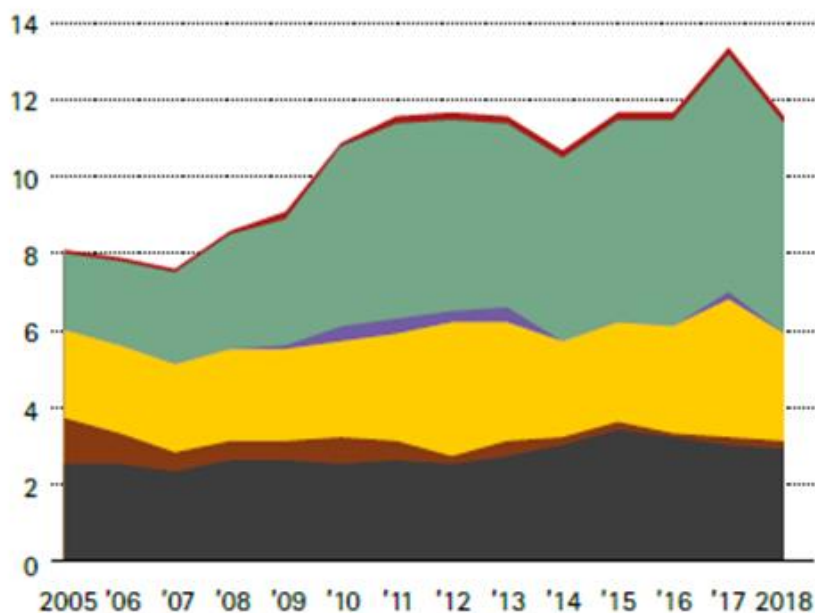
# energy balance of Styria



Input 67 TWh  
ern. ~ 40-45%

Output 52 TWh

# district heating and local heating in Styria



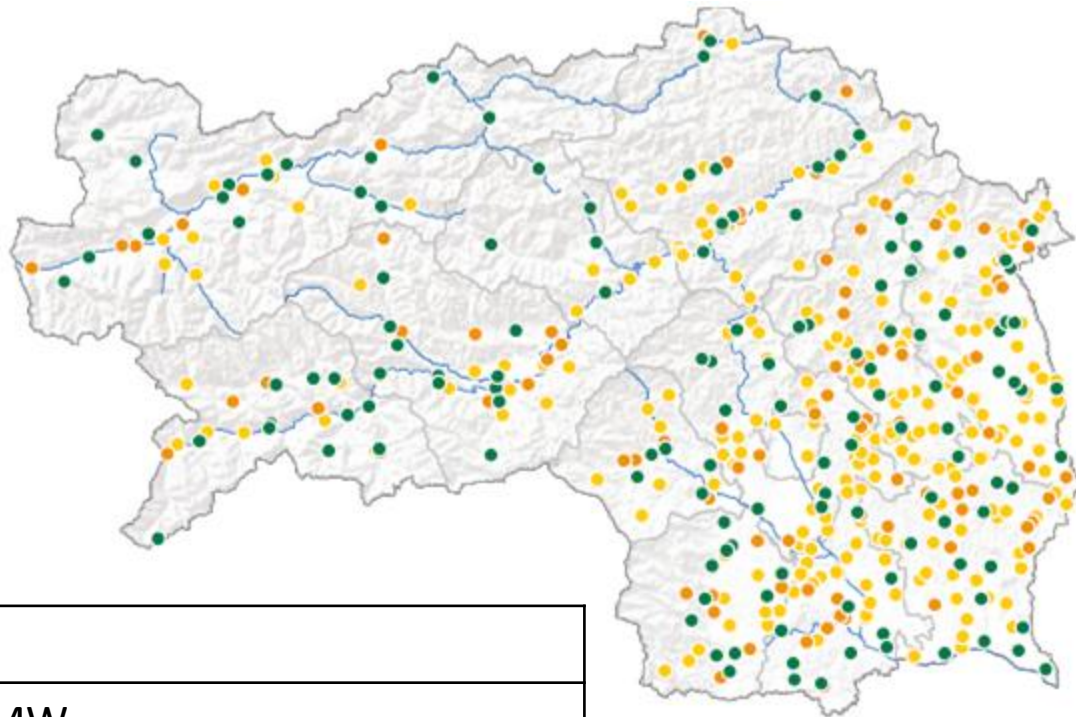
	p. a. 2005– 2018	2017– 2018	2018 in PJ
Umgeb.wärme*	+1,9%	-2,3%	0,2
Biomasse	+8,0%	-10,9%	5,5
Brennb. Abfälle	+14,2%	-99,1%	0,002
Erdgas	+1,4%	-22,8%	2,8
Öl	-14,5%	-5,6%	0,2
Kohle	+1,2%	-3,9%	2,9
<b>GESAMT</b>	<b>+2,7%</b>	<b>-13,7%</b>	<b>11,5</b>




\* Solarwärme, Wärmepumpen, Geothermie

	heat pump, solar, geothermal
	biomass
	waste
	gas
	oil
	coal

final energy consumption  
 ½ kwk plants  
 ½ heating plants  
 district heating for Graz ~ 40%

# biomass heating plants in Styria



	> 1MW
	0,5 to 1 MW
	< 0,5 MW

# legal framework conditions for emissions EU

## **DIRECTIVE 2010/75/EU - industrial emissions directive (IED)**

- IPPC-facilities
- waste incineration plants
- large combustion plants  $\geq 50$  MW
- .....

## **DIRECTIVE (EU) 2015/2193 - limitation of emissions of certain pollutants into the air from medium combustion plants (MCP)**

- combustion plants from 1 to  $<50$  MW

## **DIRECTIVE 2009/125/EC - establishing a framework for the setting of ecodesign requirements for energy-related products**

- COMMISSION REGULATION (EU) 2015/1185 for solid fuel local space heaters
- COMMISSION REGULATION (EU) 2015/1189 for solid fuel boilers
- COMMISSION REGULATION (EU) No 813/2013 for space heaters and combination heaters
- COMMISSION REGULATION (EU) No 814/2013 for water heaters and hot water storage tanks
- COMMISSION REGULATION (EU) 2015/1188 for local space heaters

# legal framework conditions for emissions Styria

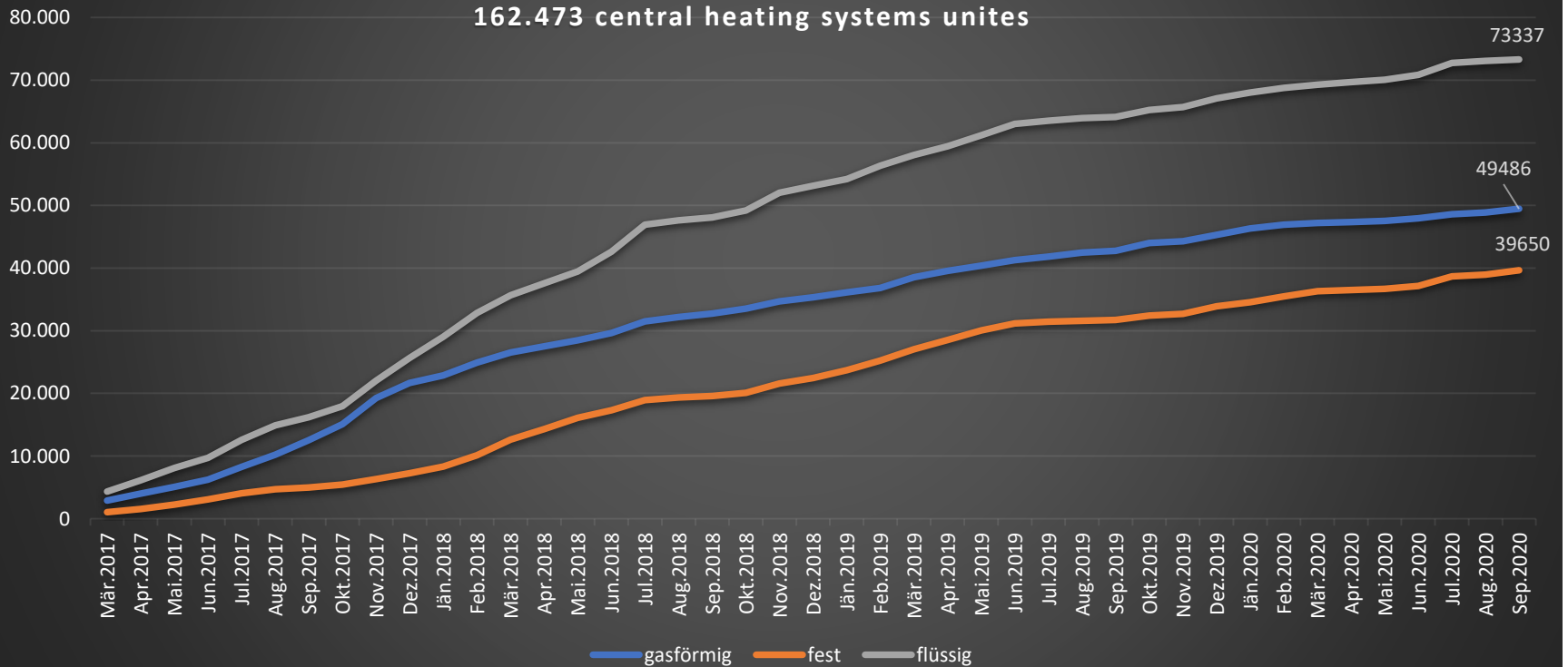
- Austria: the federal and state governments have their own legislation - federal principle
- commercial facilities
  - Gewerbeordnung
  - Emissionsschutzgesetz für Kesselanlagen (IED)  $\geq 50$  MW
  - Feuerungsanlagen-Verordnung 2019 (MCP) 0,1 - < 50 MW
    - 1997 Feuerungsanlagen-Verordnung – FAV (from 50 kW)
- private facilities (heating and / or hot water facilities)
  - StFanIG 2016 (MCP / ecodesign requirements) - law
  - StFanIVO – regulation to the law
    - 2001 Steiermärkisches Feuerungsanlagengesetz – FAnIG
    - 1995 Steiermärkische Baugesetz (building law)



# database for combustion systems

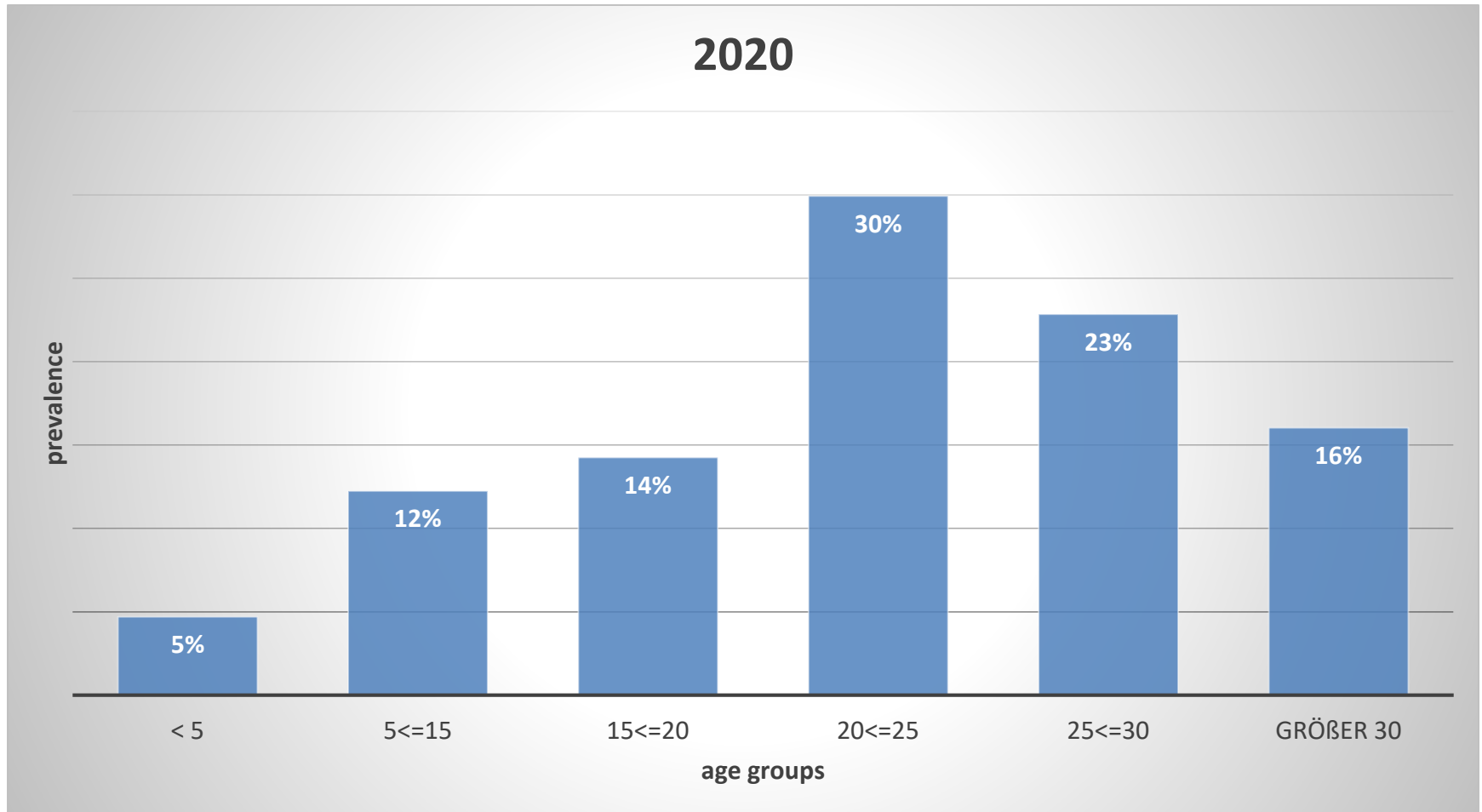
## Type of fuel

162.473 central heating systems unites



gas
solid
liquid

# database for combustion systems – oil heaters



**thank you for your attention**

stay healthy



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