

4DH and the European Energy Transition: A Match Made in Brussels?

27.09.16

EUROHEAT & POWER



*Where the hell is Aalborg University
anyway?*

Paul Voss, 2013



COMPETITIVENESS

SUPPLY

CLIMATE



The EU's 2020 Framework

20%

INCREASE IN
RENEWABLE
ENERGY SOURCES

20%

DECREASE IN CO₂
EMISSIONS



20%

DECREASE IN THE CONSUMPTION
OF PRIMARY ENERGY

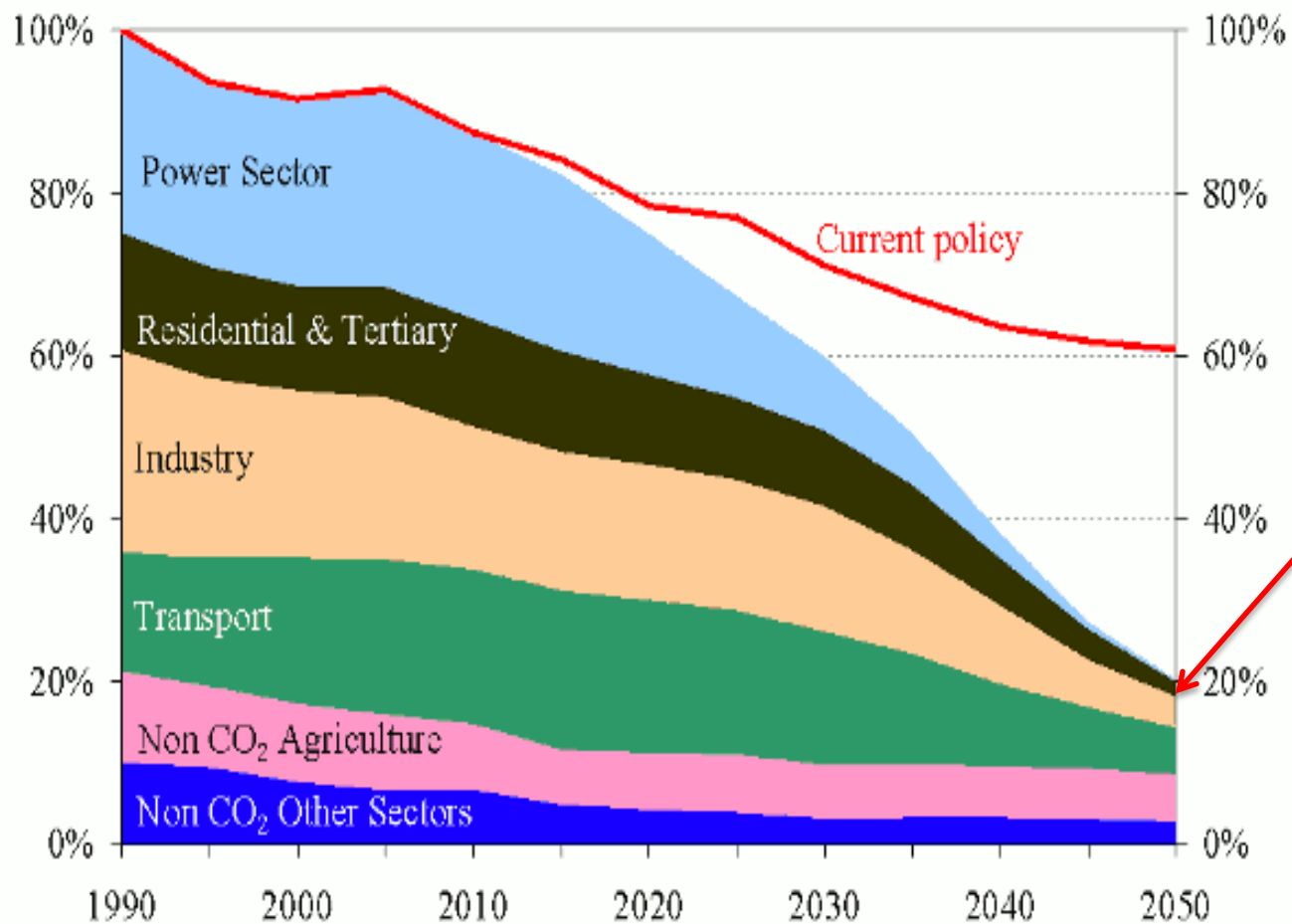


2030

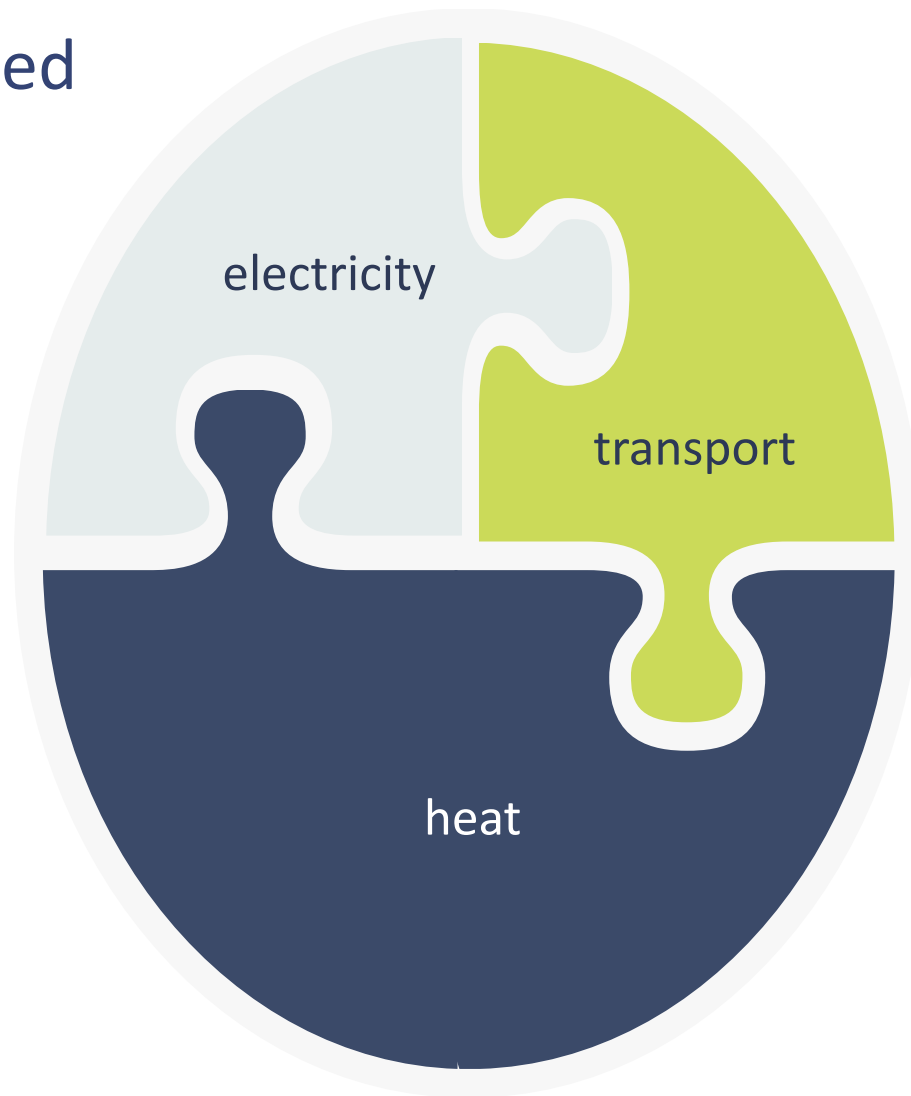
FRAMEWORKfor**CLIMATE&ENERGY**
#EU2030



Horizon 2050: CO² Free Europe?



Why do we need
this energy
anyway?



What's wrong with business as usual?

X 100 million across the EU!



But...

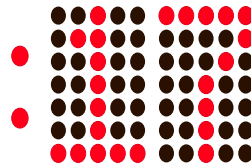
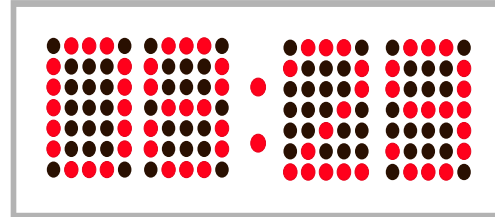
- Focus on renewable electricity + very little political focus on the heating and cooling sector at EU level
- Belief that Heat requirements will disappear due to “Zero” energy buildings
- DHC often ends up being seen as a “transition” infrastructure

Conclusion: We need to do a better job of telling our story

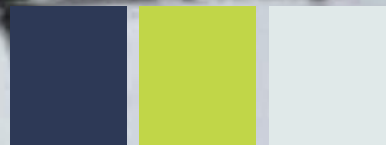
EU Heating and Cooling Policy

- ‘Electrification’ of everything, everywhere
- Just stop needing heat...
- Phase out district heating?

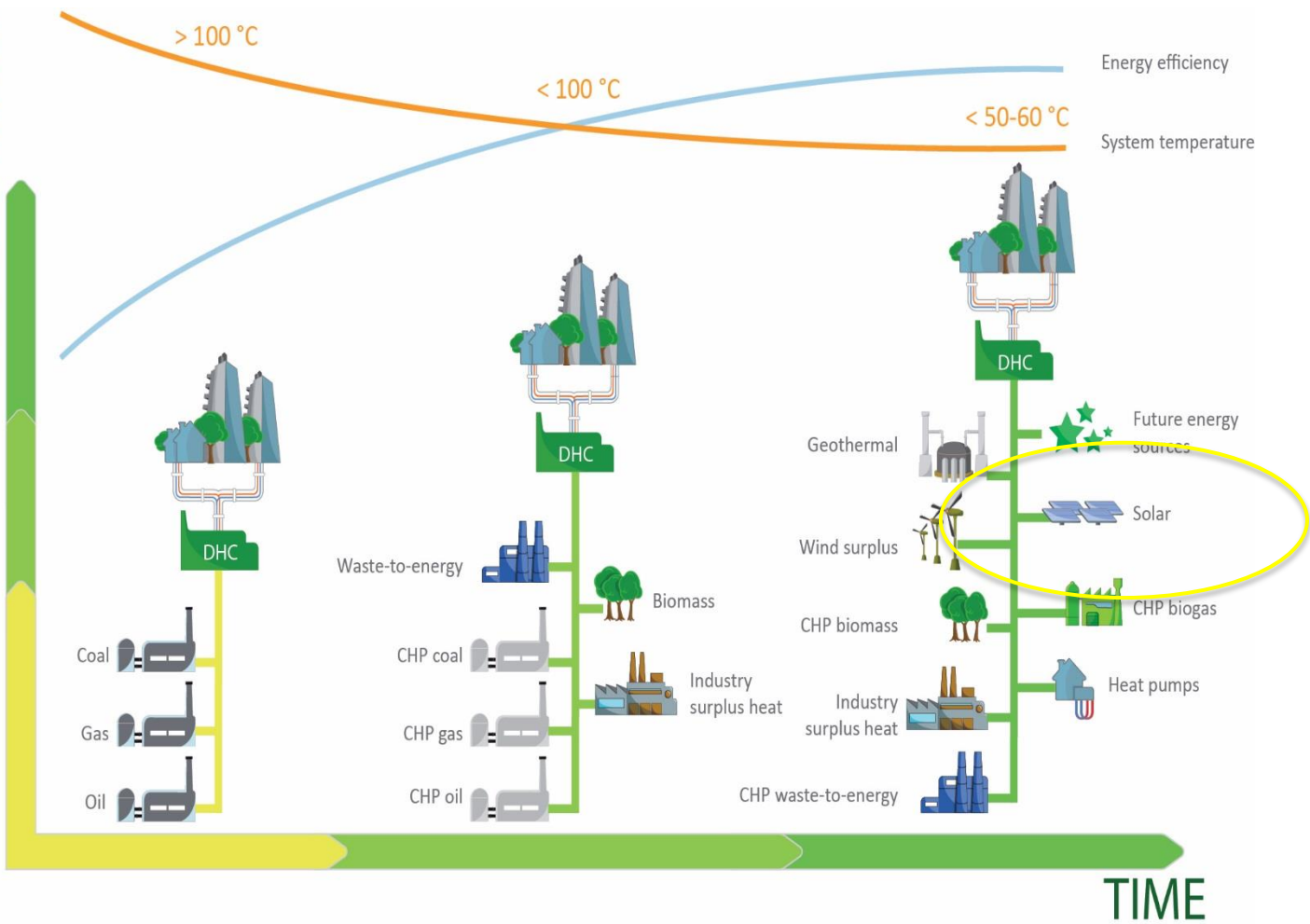


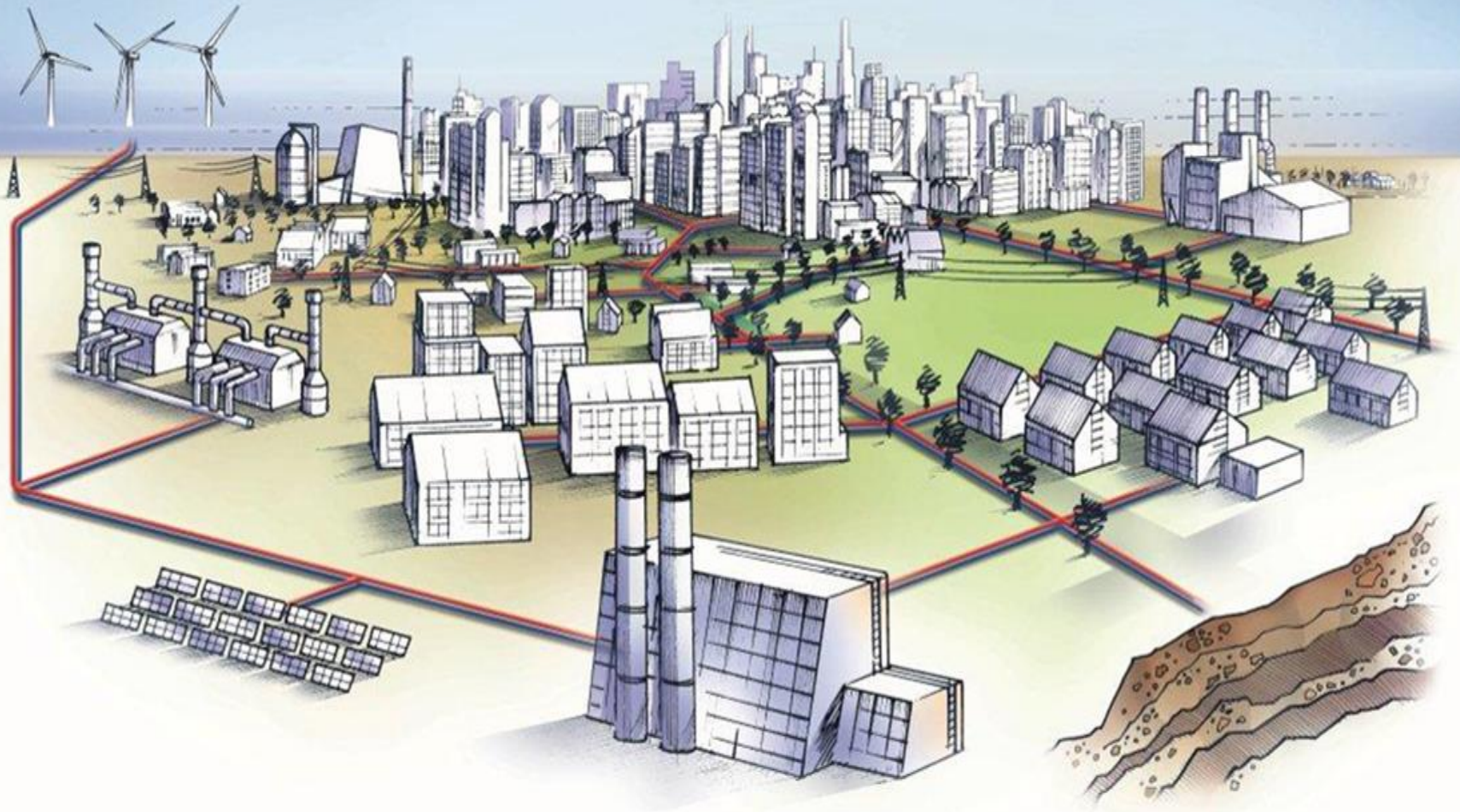






DEVELOPMENT







MONTH DAY YEAR AM HOUR MIN
OCT 21 2015 P. 04 29
DESTINATION TIME

MONTH DAY YEAR AM HOUR MIN
MAY 30 2013 PM 12 41
PRESENT TIME

MONTH DAY YEAR AM HOUR MIN
OCT 26 1985 PM 01 20
TIME DEPARTED

LAST TIME DEPARTED





**HEATING
AND COOLING**
**IN THE EUROPEAN
ENERGY TRANSITION**

BRUSSELS, 26-27 FEBRUARY 2015



Europe Commission
Commission européenne

PRIORITY

Energy Union and Climate

Making energy more secure, affordable and sustainable

or owners being particularly slow. Community funds and EIB-financing can make a huge difference. Attracting investments at the scale needed remains, however, a challenge, especially at the local level, mainly due to lack of awareness and expertise in small-scale financing. (add something on district heating)



The [state of the Energy Union](#) shows progress made since the Energy Union Framework Strategy was adopted to bring about the transition to a low-carbon, secure and competitive economy

Brussels, 16.2.2016
COM(2016) 51 final

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

An EU Strategy on Heating and Cooling

{SWD(2016) 24 final}



The EU's Heating and Cooling Strategy



Heating and cooling will remain the biggest demand in 2050



Current reliance on 'obsolete fossil-fuel boilers' is unsustainable



A shift to reliance on RES and surplus heat is possible and necessary



District heating will have a vital role to play in supply green heat and enabling integration of energy system! 27 references to HRE, 26 to STRATEGO! 1 serious compliment for Aalborg University!

Why a Strategy for Heating and Cooling? (II)

- Poorly known, neglected, fragmented sector, without a comprehensive overview and strategic approach so far.
- Largely inefficient: 75% of EU building stock is inefficient.



New areas

- Cooling.
- District heating and district cooling.
- CHP as central to increase generation efficiency, linking heating and cooling with electricity (flexibility), deploy renewables and alternative fuels, self-generation.
- Thermal storage (buildings, heat networks).
- Smart buildings (demand response, storage, self-consumption).
- Waste heat and waste cold.
- Integrated heat planning & mapping (building renovation and energy savings and the deployment of sustainable supply and of energy infrastructure are coordinated).



H2020 Energy Efficiency calls

Topic	Activity	Budget (€)
EE-03-2016	Standardised installation packages integrating EE and RES H/C	4,000,000
EE-04-2016	New heating and cooling solutions using low grade sources of thermal energy	4,000,000
EE-05-2016	Models and tools for H/C mapping and planning	3,000,000
EE-01-2017	Waste heat recovery in urban areas	4,000,000
EE-02-2017	Improving efficiency of DH schemes	2,000,000
EE-04-2016-2017	Low temperature DH for high energy performance buildings	4,000,000
EE-09-2016-2017	Engaging and activating public authorities	2,000,000
EE-17-2016-2017	Valorisation of waste heat in industrial systems	5,000,000
EE-22-2016-2017	PDA on Retrofitting of existing DHC	1,500,000
	Total	29,500,000



Final Thoughts



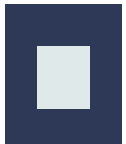
Heat and district heating are finally on the EU agenda



This would not have been possible with you. Born in Brussels but conceived in Aalborg



We still have a long way to go!



We'll do it together. I'm counting on it!

THANK YOU



WWW.EUROHEAT.ORG