



Heat Decarbonisation: A crucial component of the Energy Transition

Lessons for EU's Smart Sector Integration
Strategy to achieve the long-term climate
goals

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Drivers and windows of opportunities for heat decarbonisation

Drivers:

- 2050 climate neutrality objective EU and Germany
- European Green Deal and Air pollution

Windows of opportunities:

- Implementation of existing EU legislation, e.g. nearly zero energy buildings (31st December 2020, EPBD)
- NECPs (June 2020, evaluation by EC) and LTRSs
- **Renovation wave:** timing to be maintained as key element of any post-COVID recovery plan (non-legislative, Q3 2020/ autumn)
- **Smart Sector Integration Strategy** (non-legislative, June 2020, could be delayed to October)



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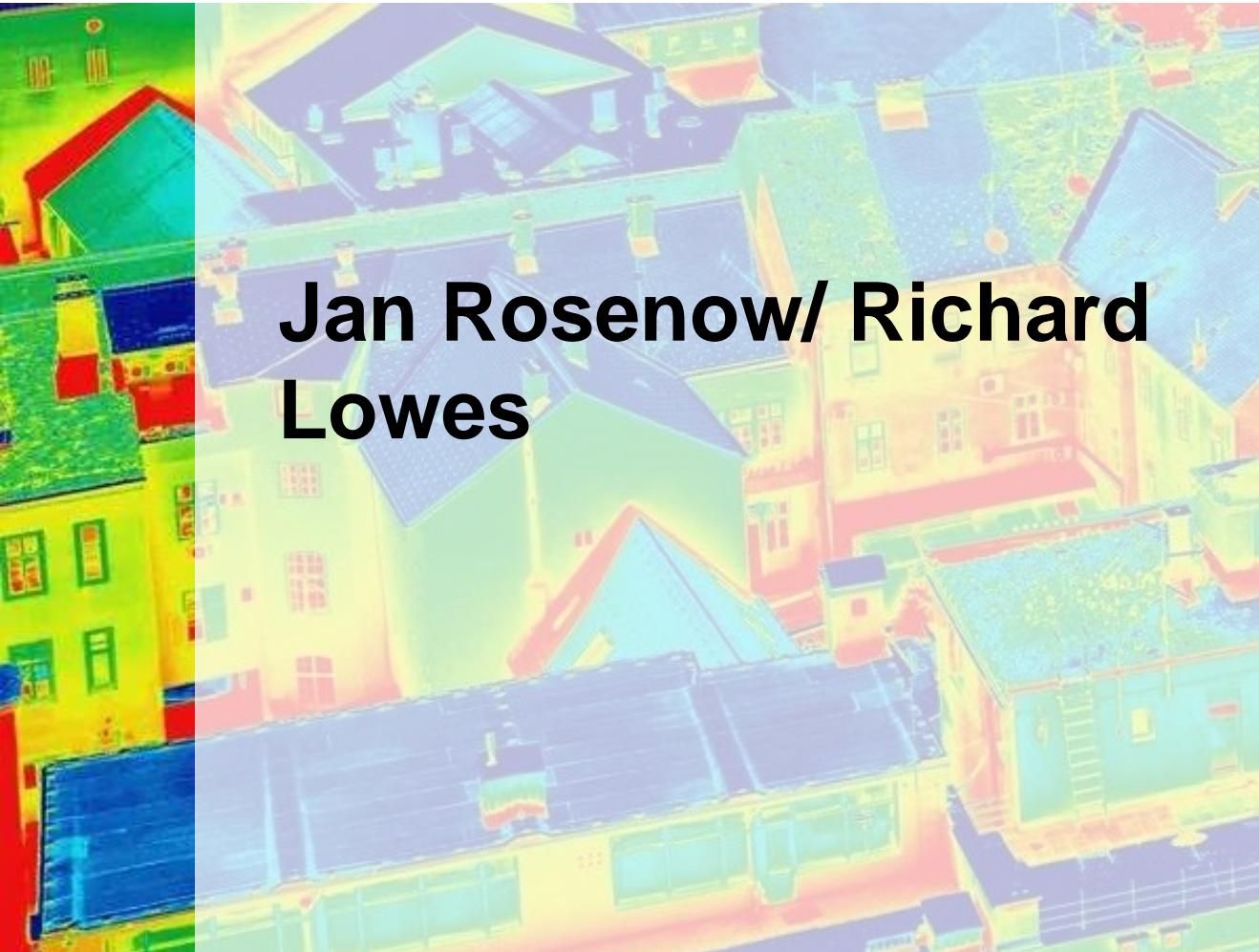
Outline

1. **Introduction and setting the scene (Alexandra Langenheld)**
2. **Heating without the hot air: Principles for smart heat electrification (Jan Rosenow/
Richard Lowes)**
3. **Poll: How do you expect the future role of PtX in the building sector?**
4. **Building sector Efficiency: A crucial Component of the Energy Transition (Peter
Mellwig/ Alexandra Langenheld)**
5. **Questions and answers (all)**

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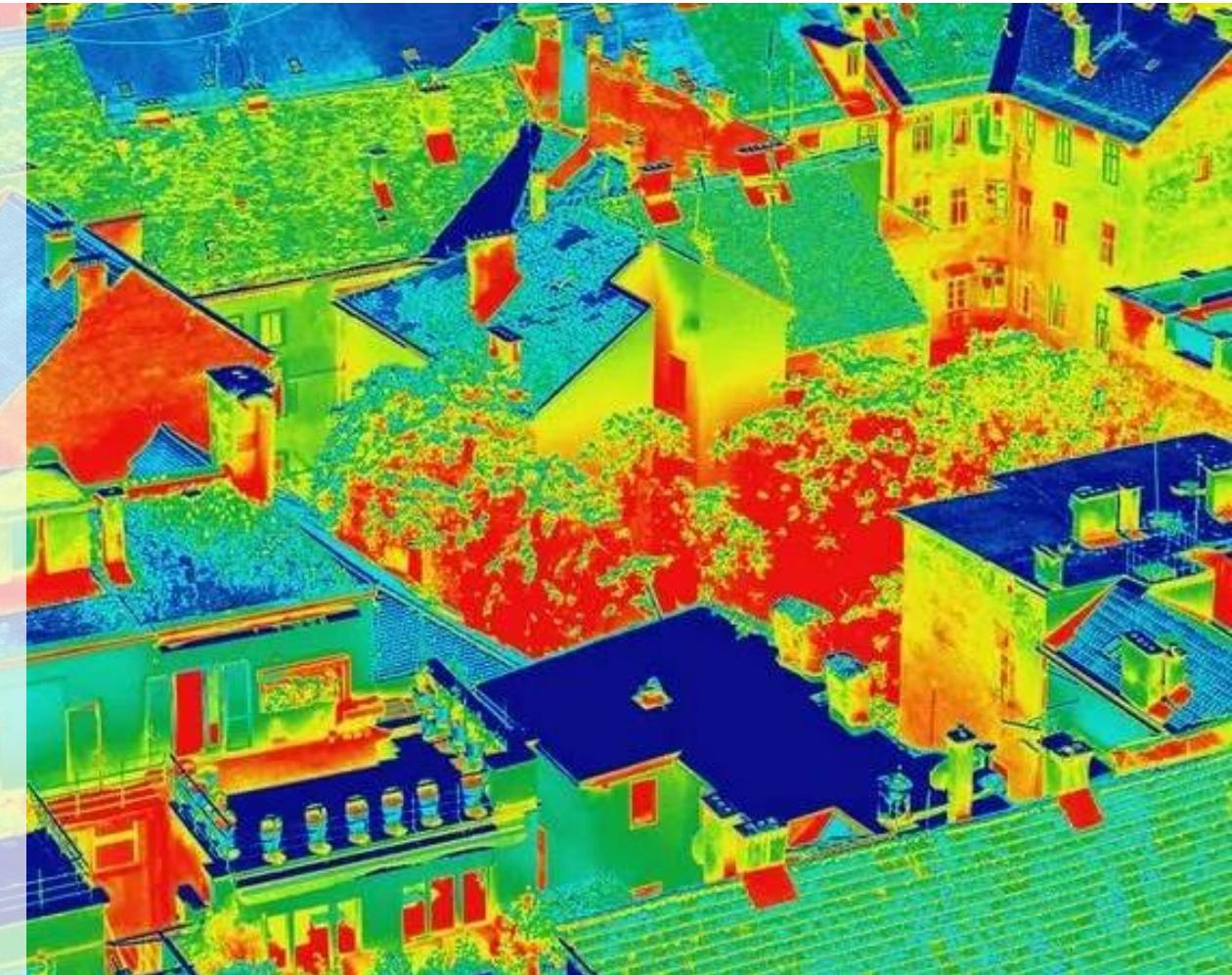


Jan Rosenow/ Richard
Lowes



Poll:
How do you expect the future role of PtX in the building sector?

1. Basic energy source in 2050
2. Essential part of energy supply
3. Minor part of energy supply
4. Only for single application
5. There will be no PtX in 2050



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Peter Mellwig/
Alexandra Langenheld



Building Efficiency is Key for the Achievement of long-term Climate Goals



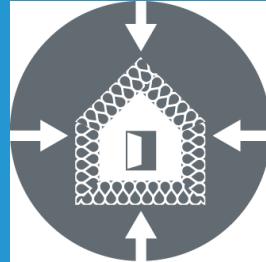
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The future is either "all electric" or „all gas“.

Technology neutrality allows for less insulation.

PtX enables use of existing technologies and infrastructure.

Today's incentives and requirements for buildings are sufficient.



Key findings at a glance

„Technology-either/ or“ will not result in target achievement:

Pursuing all options with determination and planning, in order to move towards target course.

Efficient buildings as entrance ticket for technological openness:

They preserve RES potential and flexibility; without insulation, no meaningful use of RES-technologies.

PtX expected to be more expensive and to retain import dependency:

PtX a supplement in the building sector, but no substitute for insulation; urgently required in other sectors.

“Roadmap Building Efficiency 2030“ required:

Align incentives and requirements with targets; make best possible use of refurbishment occasions; implement flanking measures.

Further publications by Agora Energiewende

15 Eckpunkte für das Klimaschutzgesetz	Building sector Efficiency: A crucial Component of the Energy Transition	European Energy Transition 2030: The Big Picture	The Future Cost of Electricity-Based Synthetic Fuels	Heat Transition 2030
				
<u>> Full study (DE)</u>	<u>> full study (EN)</u>	<u>> full study</u>	<u>> full study</u> <u>> PtG/PtL calculator</u>	<u>> summary (EN)</u> <u>> full study (DE)</u>
	<u>> slide deck (DE)</u>	<u>> slide deck</u>	<u>> slide deck</u> <u>> webinar</u>	<u>> slide deck</u>



Thank you for your attention!

Questions or Comments? Feel free to contact us:

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