



# 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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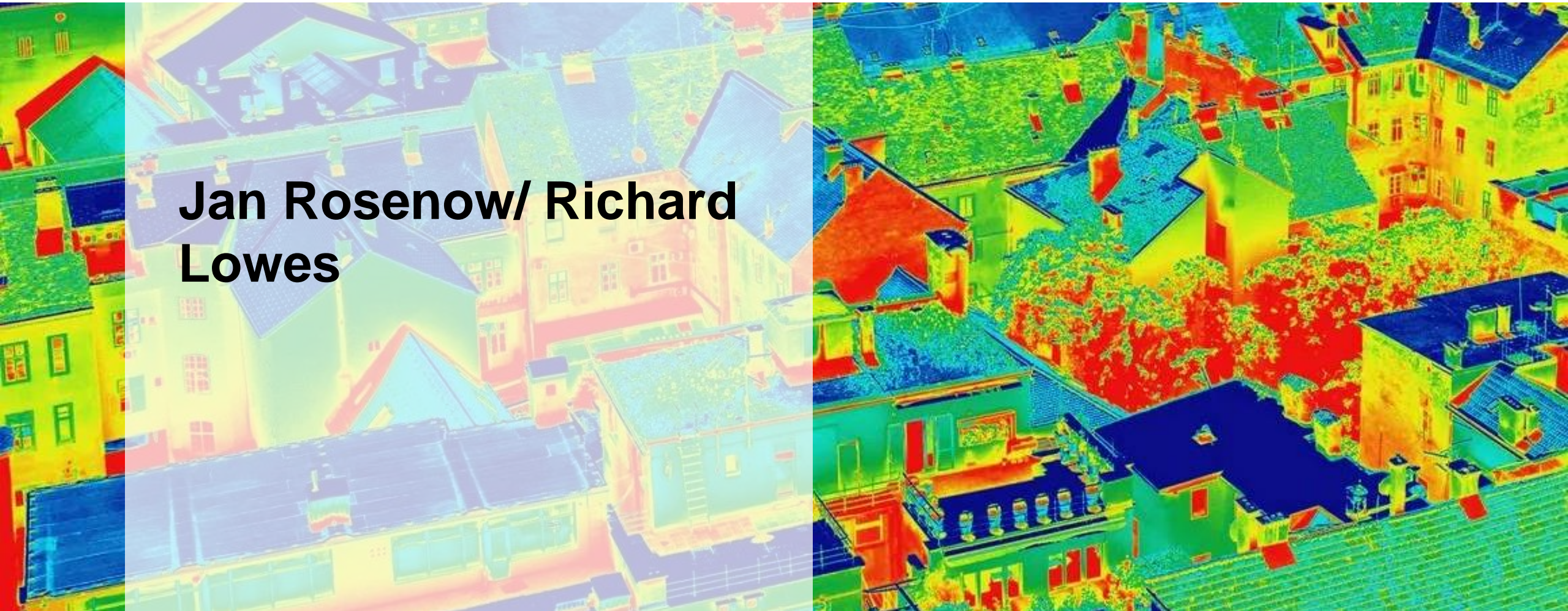
## Outline

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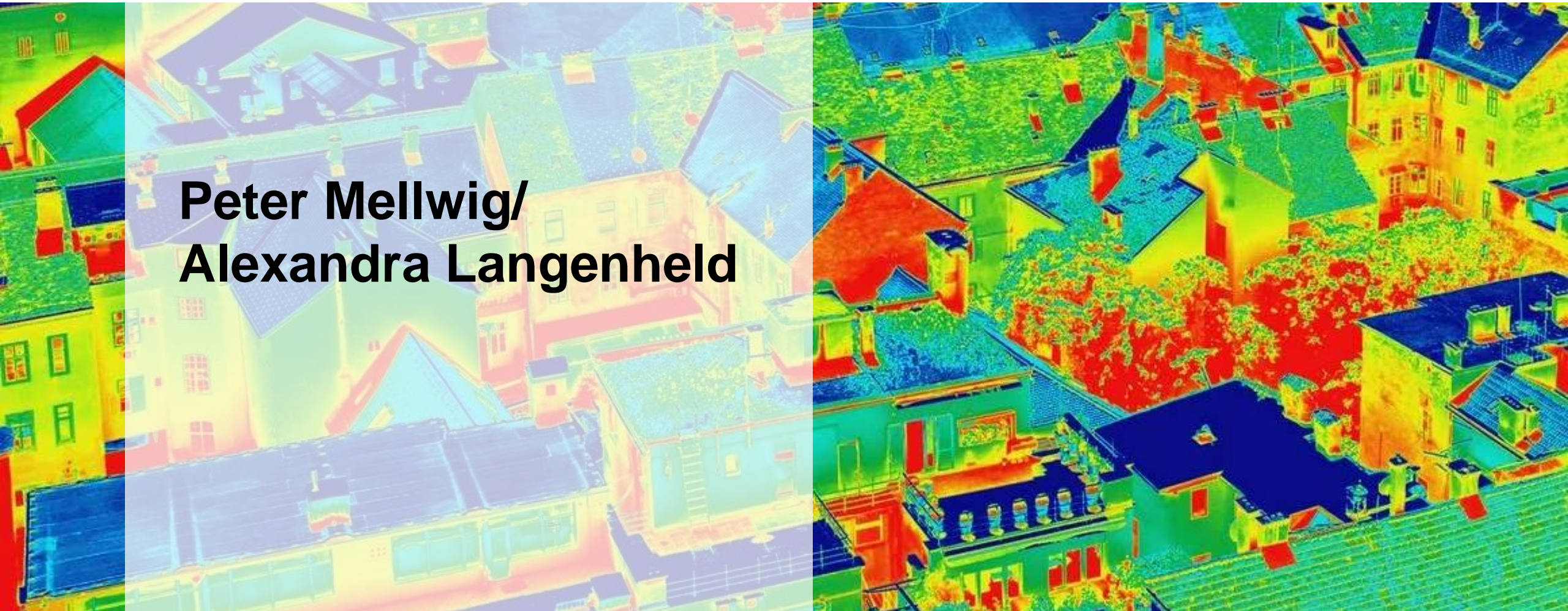
**Poll:**  
**How do you expect the future role of PtX in the building sector?**

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



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

*Technology neutrality allows for less insulation.*

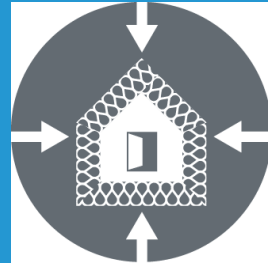
*PtX enables use of existing technologies and infrastructure.*

*Today's incentives and requirements for buildings are sufficient.*



**„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
				
<p>&gt; <u>Full study (DE)</u></p>	<p>&gt; <u>full study (EN)</u></p>	<p>&gt; <u>full study</u></p>	<p>&gt; <u>full study</u> &gt; <u>PtG/PtL calculator</u></p>	<p>&gt; <u>summary (EN)</u> &gt; <u>full study (DE)</u></p>
	<p>&gt; <u>slide deck (DE)</u></p>	<p>&gt; <u>slide deck</u></p>	<p>&gt; <u>slide deck</u> &gt; <u>webinar</u></p>	<p>&gt; <u>slide deck</u></p>



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An aerial view of a city with a color overlay, likely representing energy efficiency or environmental data. The colors range from blue (low energy consumption) to red (high energy consumption). The text "Thank you for your attention!" is overlaid in large, bold, black font.

# Thank you for your attention!

Questions or Comments? Feel free to contact us:


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Agora Energiewende is a joint initiative of the Mercator Foundation and the European Climate Foundation.

An aerial view of a city with a color overlay, similar to the one on the left, showing energy efficiency data. The colors range from blue to red. The text "Agora Energiewende is a joint initiative of the Mercator Foundation and the European Climate Foundation." is overlaid in black font.