

# SHAPEing Net Zero

## 2<sup>nd</sup> Sustainability Multidisciplinary Meetup

A British Academy Early Career Researcher Network event

Tuesday 16th April 2024 University of West of England | Bristol

# Session 3: The community

Co-design | Behaviour change | Digital future

# Lidia Badarnah & Jill Zhao

Placeholder

Presented by

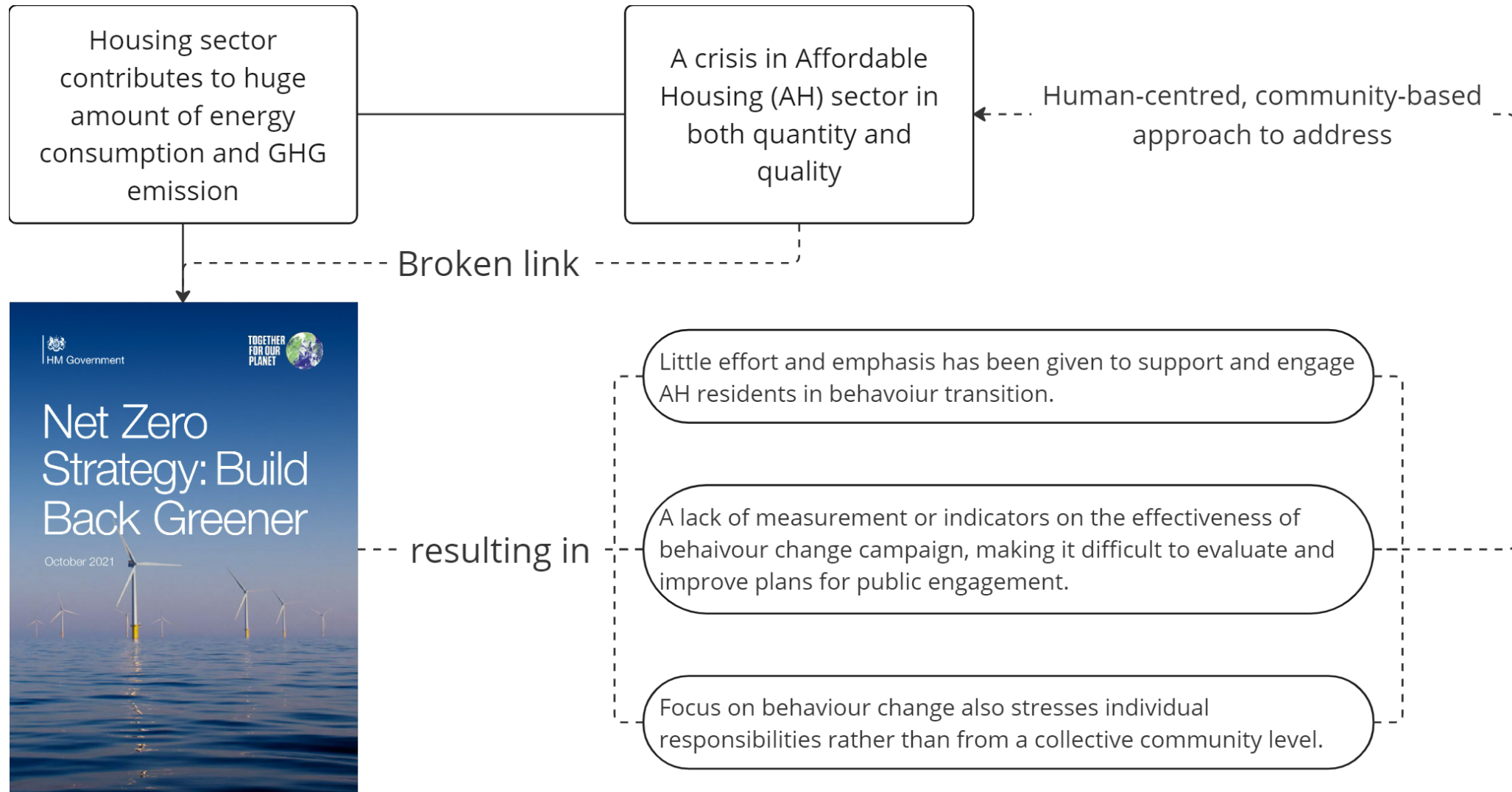
Jill Zhao, Senior  
Lecturer in  
Architecture

Lidia Badarnah,  
Senior Lecturer  
in Architecture

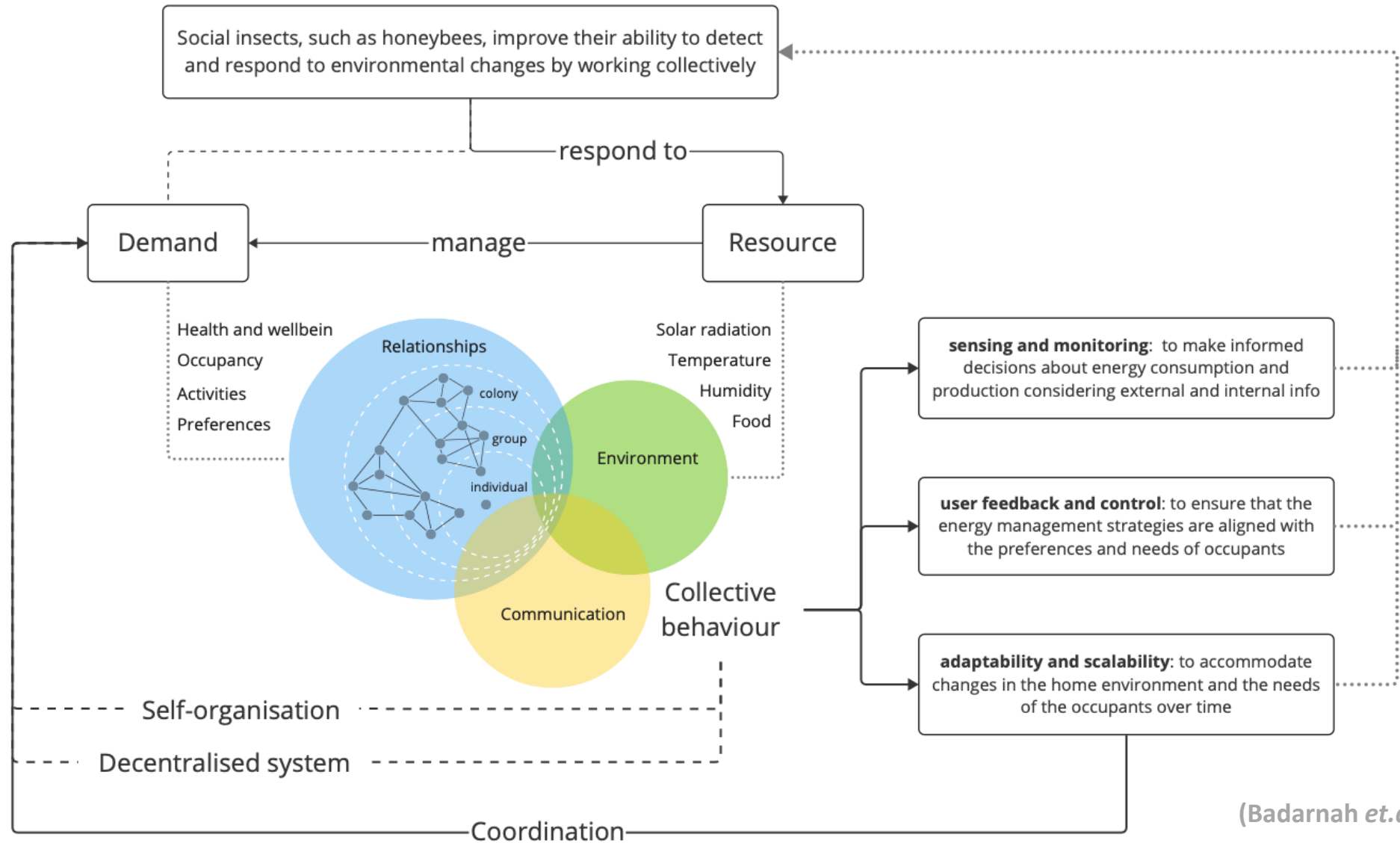
16/04/2024

# Hive mind for Net Zero: towards a social engagement model for collective home energy behaviour change

# A human-centred Net Zero approach

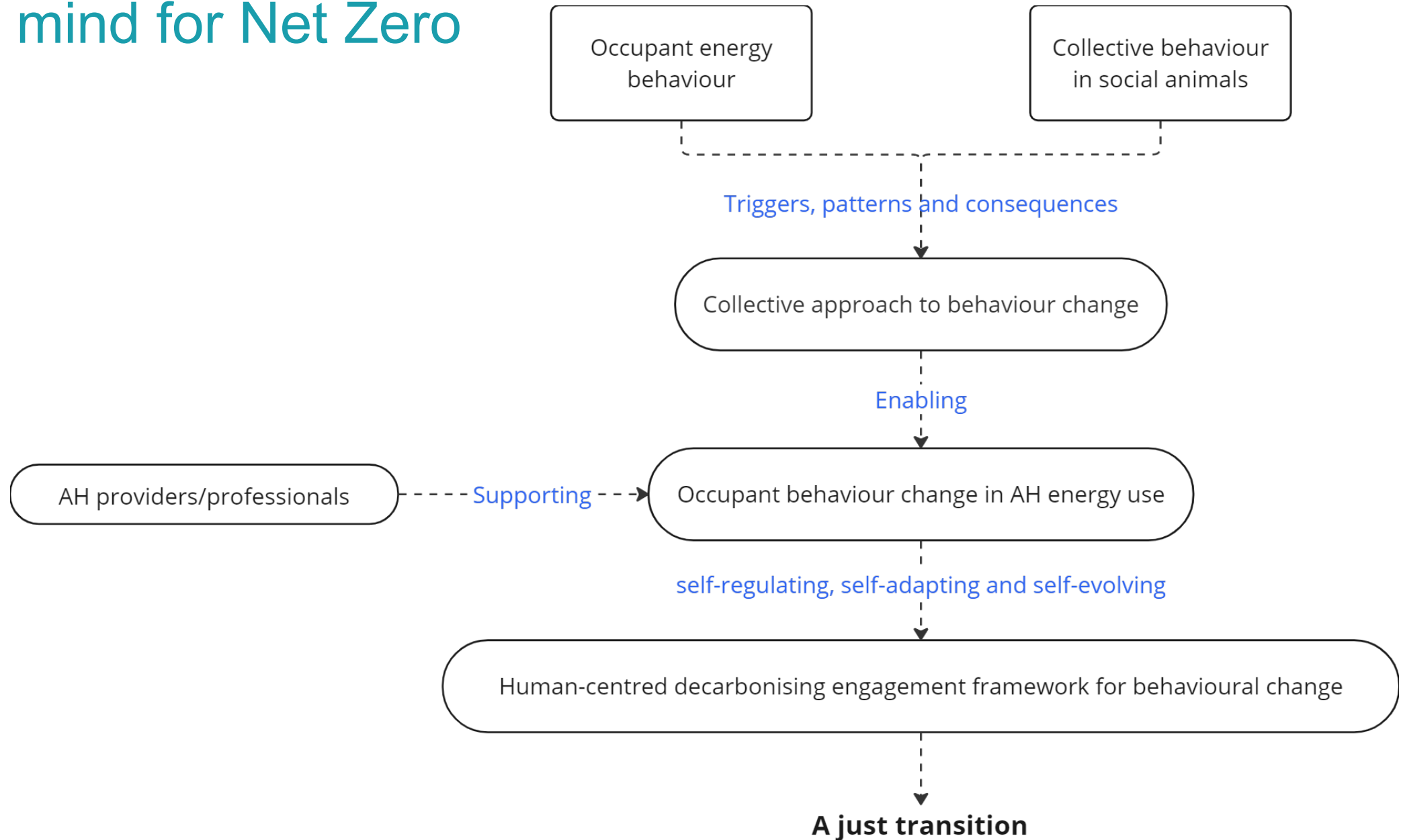


# Collective behaviour in honeybees



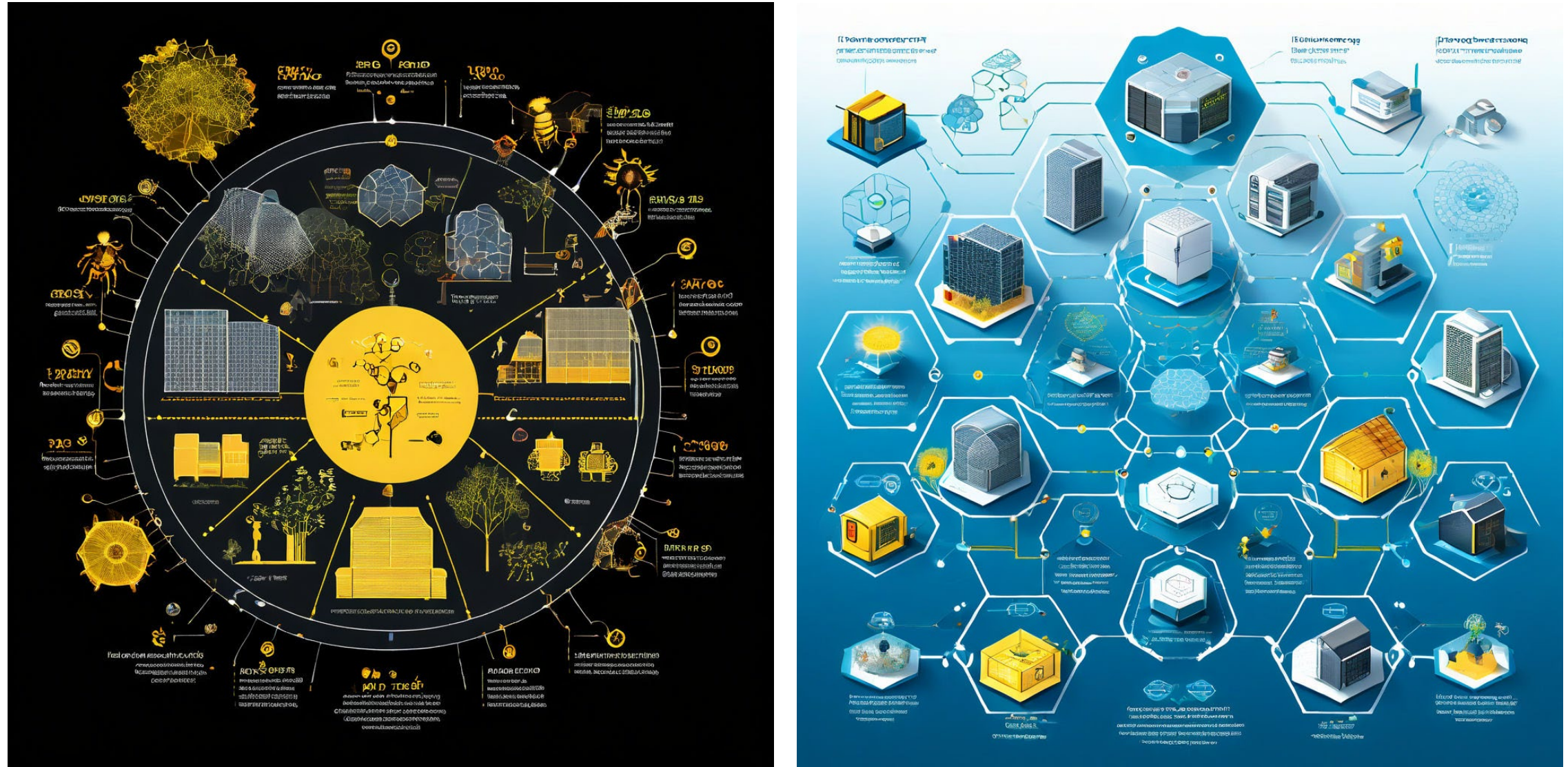
(Badarnah *et.al.*, 2023)

# Hive mind for Net Zero





Thank you!



An AI generated vision of human centred home energy management inspired by honeybee collective behaviour (source: <https://playground.com>)

**Zhao, J.** (2023), 'Implementing net zero affordable housing — towards a human-centred approach', *Journal of the British Academy*, 11(s4): 9–34.

**Badarnah, L., Barakat, M., & Oliveira, S.** (2023), 'Inspiration from animal's collective behavior for home energy demand management', *Journal of Physics: Conf. Ser.* **2600** 022013; IOP Publishing.



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