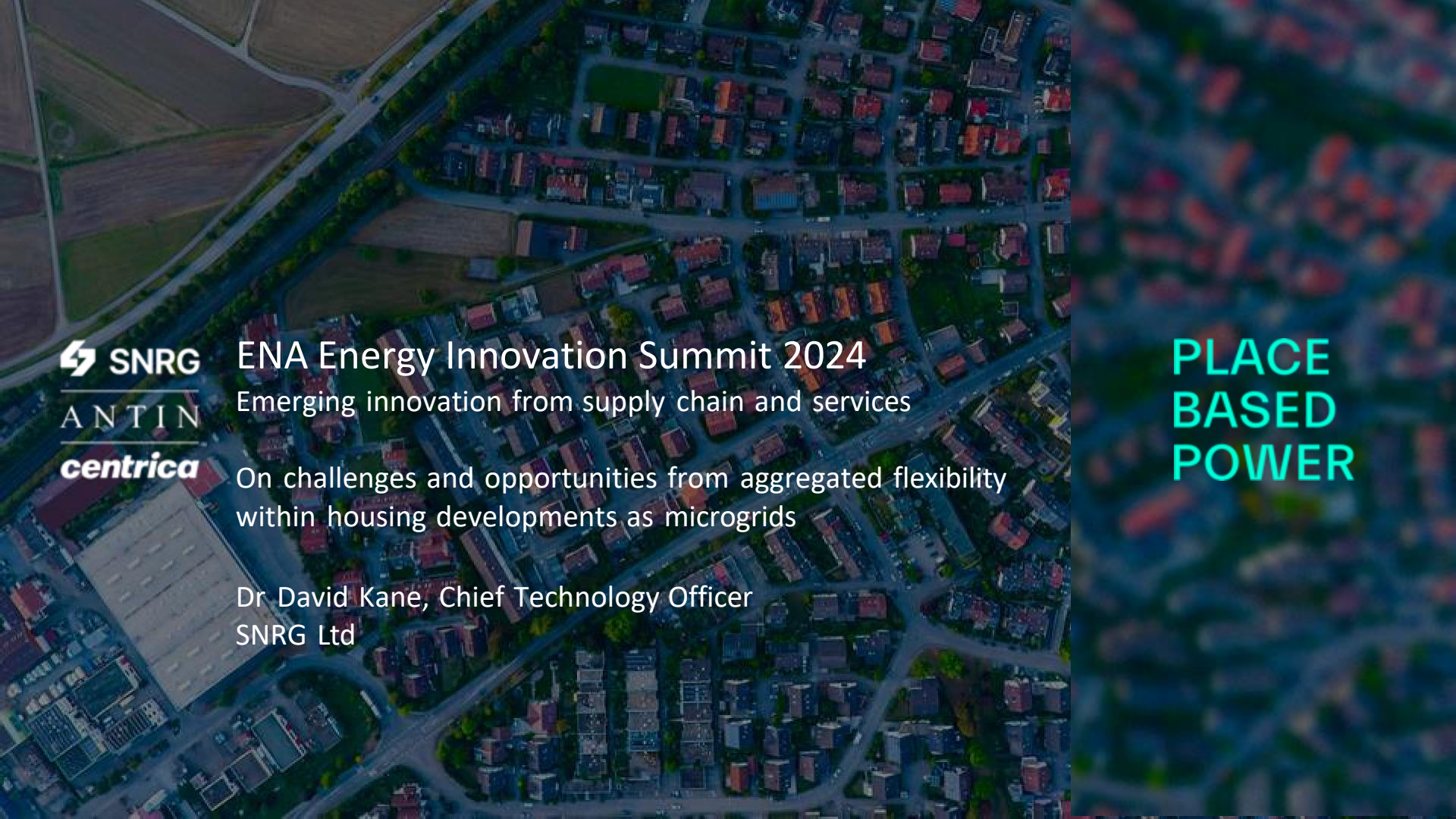


SNRG
ANTIN
centrica

ENA Energy Innovation Summit 2024

Emerging innovation from supply chain and services

On challenges and opportunities from aggregated flexibility within housing developments as microgrids

Dr David Kane, Chief Technology Officer
SNRG Ltd

PLACE
BASED
POWER

About Us

Our Backers:

centrica | ANTIN

Our Mission:

To fund, build and operate place-based, renewable energy systems that accelerate the all-electric, net-zero transition.

We operate in:

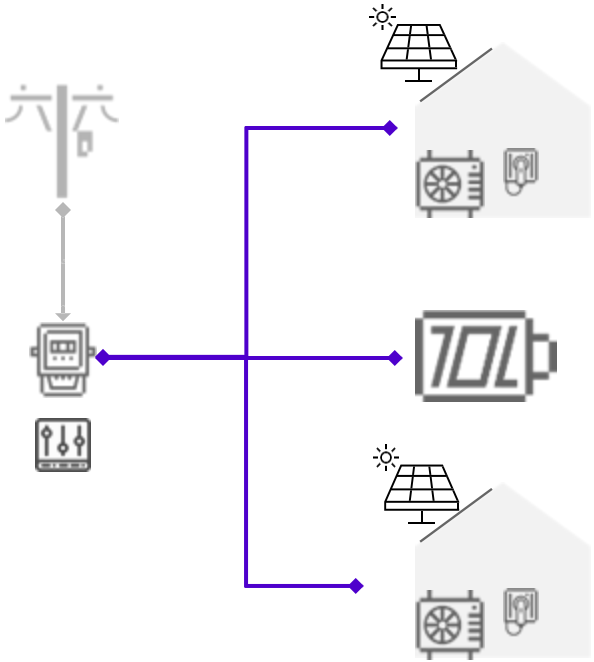
Residential
Industrial
Commercial

New build and retrofit sub-sectors

The move from dual fuel homes to all electric sustainable homes increases costs and harms development viability

Microgrids are a solution to this issue

Microgrids in a nutshell



- Single grid connection
- Private Wire Network [PWN] to houses, apartments, and other loads
- NERS-compliant design and install by ICP
- Shared renewables and electrical storage
- Driveway, remote-allocated, communal and public EV charging
- G100-compliant Customer Limitation Scheme for distributed flexible assets
- Optimise demand to reduce costs
- Applicable to Industrial/Commercial, and mixed-used developments

Microgrids can support the transition to net zero in a fair, efficient and affordable manner

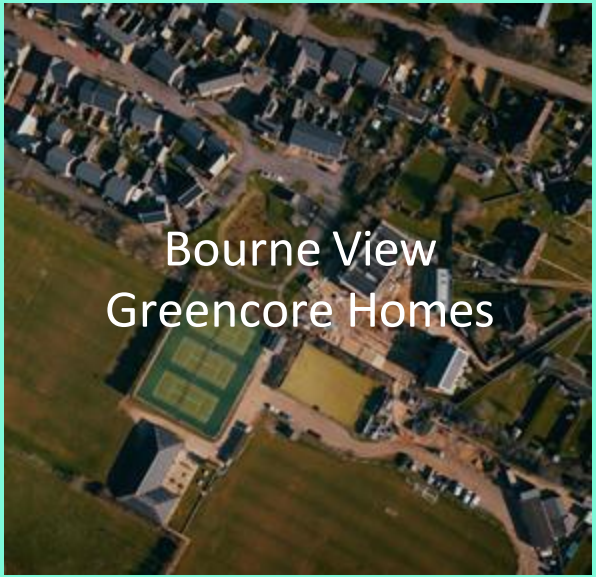
	Generation	Demand	Capacity
Users	• **Sharing generation & storage** on all home types • Funded assets, making net zero energy affordable	• Optimised demand to avoid peak costs and self-consume renewables • Demand reduction for heating systems • Access to EV Charging without CPO premiums	• Maximise development in areas of limited grid capacity • Compatible with Heat Networks • Unlock value from **Flexible (Constrained) Connections** and **Flexibility Services**
Networks	• Access to real-time data and forecasts • Ongoing maintenance & compliance of generation assets by funder	• Access to real-time data and forecasts • **Synthetic diversity** to manage import capacity with dense deployments of Heat Pumps & EV Charging	• Compatible with **Flexible (Constrained) Connections** • Efficient allocation of export capacity

Commercial in Confidence. Property of SNRG Ltd.

How can collaboration overcome challanges to maximise the opportunities from Microgrids?

- Increased **visibility of Flexible (Constrained) connections**
- Ease of access to **Capacity ramping arrangements**
- **Aligning ADMD assumptions** for low-carbon Heat technologies to applied control systems
- Continuing updates on **ADMD assumptions** for EVCPs, especially those outside dwellings
- Recognising the **value of distributed G100 schemes**, especially for demand
- Supporting **phased deployment** of small-scale generation & storage under G99
- Supporting G98-scale assets where the **G99 Type B threshold** if reached
- Sharing data – real-time and historic – to improve assumptions and network operations

Where are community SmartGrids happening?



Thank you.

For more information, visit:
www.oursnrg.com

Or email:
David.Kane@oursnrg.com

Commercial in Confidence. Property of SNRG Ltd.