

MICROGRID KNOWLEDGE™

2023 CONFERENCE

LIGHTS ON!

May 16-17, 2023 | Anaheim, CA

OWNED &
PRODUCED BY:



PRESENTED BY:

MICROGRID
KNOWLEDGE™

Snap the QR code below to activate Sli.do
for the Q&A portion of this session and
Select Ballroom BCD



Microgrid and DER Markets, Planning and Forecasts



Moderator:
Nishant Sharma
CellCube Inc.



Todd Jackson
PowerSecure Inc.



Julieta Giraldez
Kevala



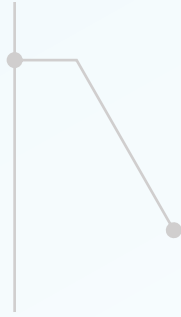
Elham Akhavan
Wood Mackenzie

Navigating the changing landscape of microgrids: applications, technologies, and the role of utilities

Elham Akhavan, Senior Research Analyst
Grid Edge | Wood Mackenzie Power & Renewables

Grid Edge Service

DERs



Energy Markets



def. Grid Edge. The distributed technologies leveraged by customers and utilities to decarbonize the grid and unlock new value streams while maintaining and enhancing reliability.

Electrification



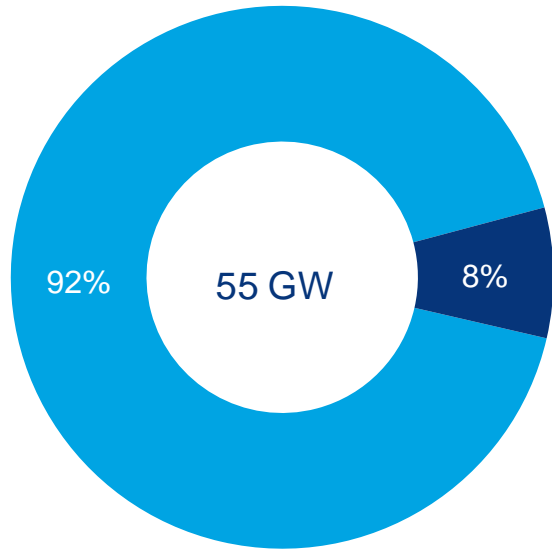
Grid
modernization



3700 projects represent a small but growing slice of the DER ecosystem

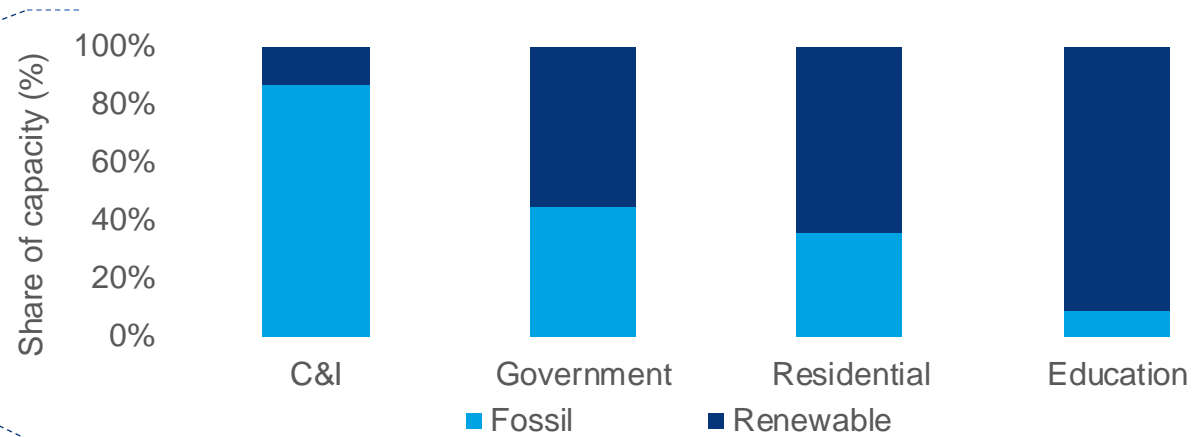
Residential and education sectors lead renewable capacity adoption

Cumulative commercial solar, storage and fossil fuel generation installed (2017 – 2023E)



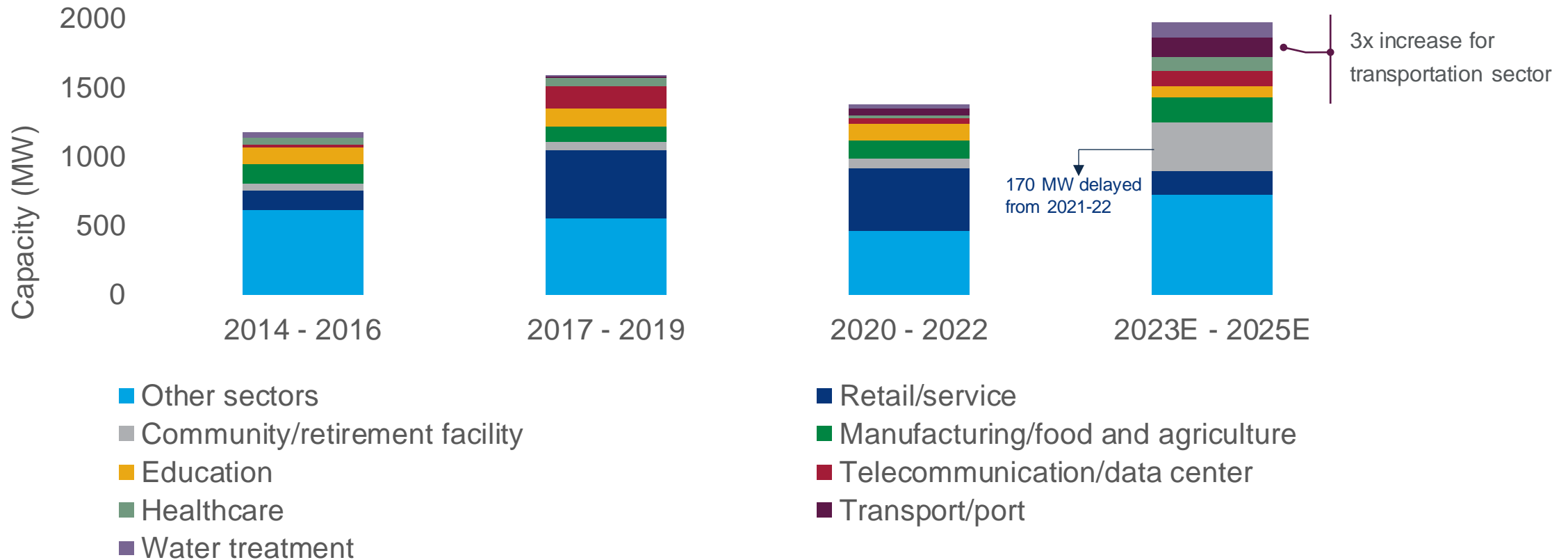
- Capacity not within microgrid
- Capacity within microgrid

Share of renewable vs fossil generation by end-use segment (2017 – 2023E)



Residential communities are displacing the retail sector as the growth engine of microgrids

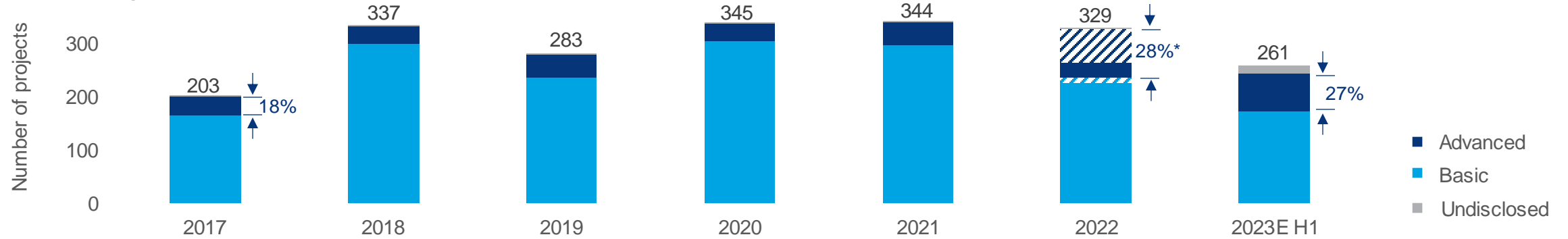
Capacity deployed by end-user segments



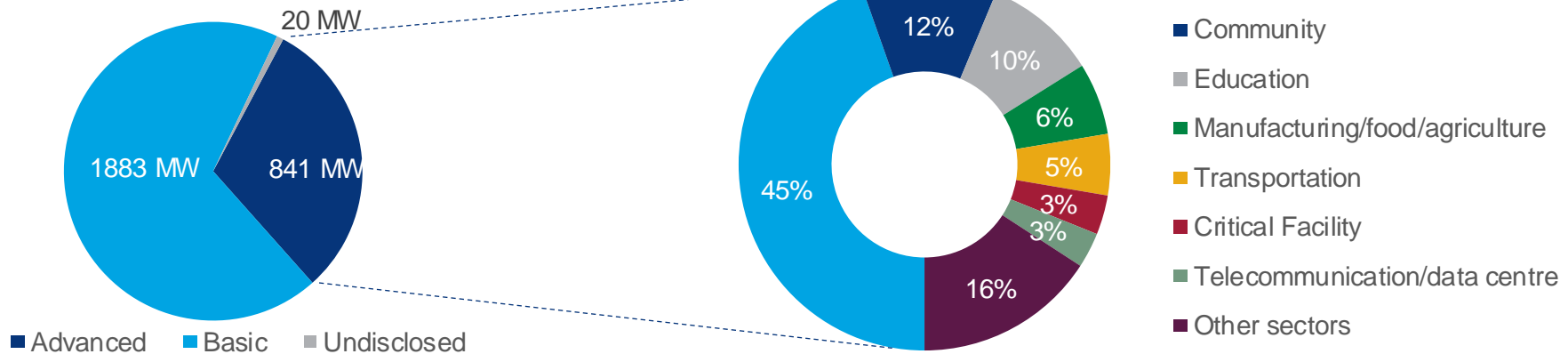
From military to transportation sectors, the application of advanced microgrids is growing

Daily operation in grid-parallel mode offers additional value streams

Annual microgrid projects completed



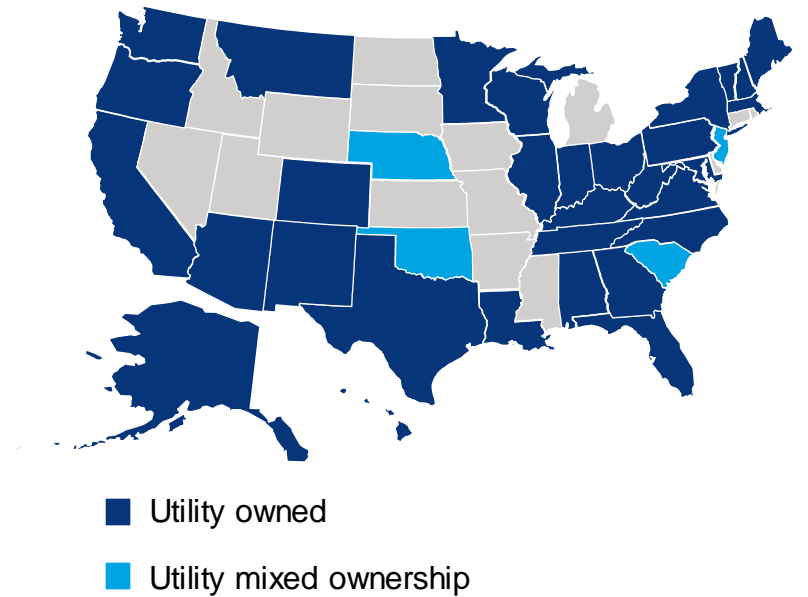
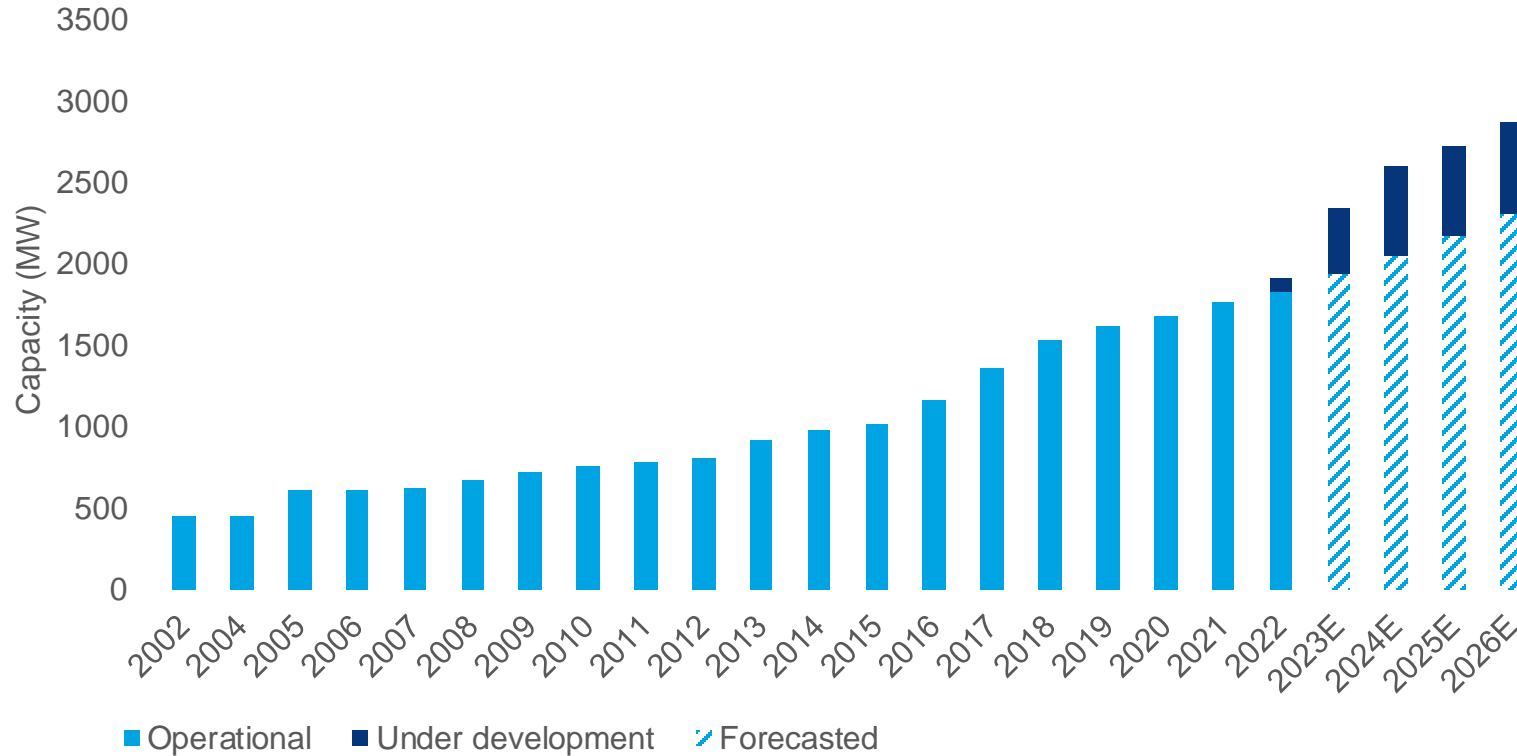
Cumulative capacity installed (2017 – 2023E H1)



* Wood Mackenzie is currently evaluating the status of the 64 advanced and nine basic microgrid projects and cannot confirm whether they have become operational or are still under construction.

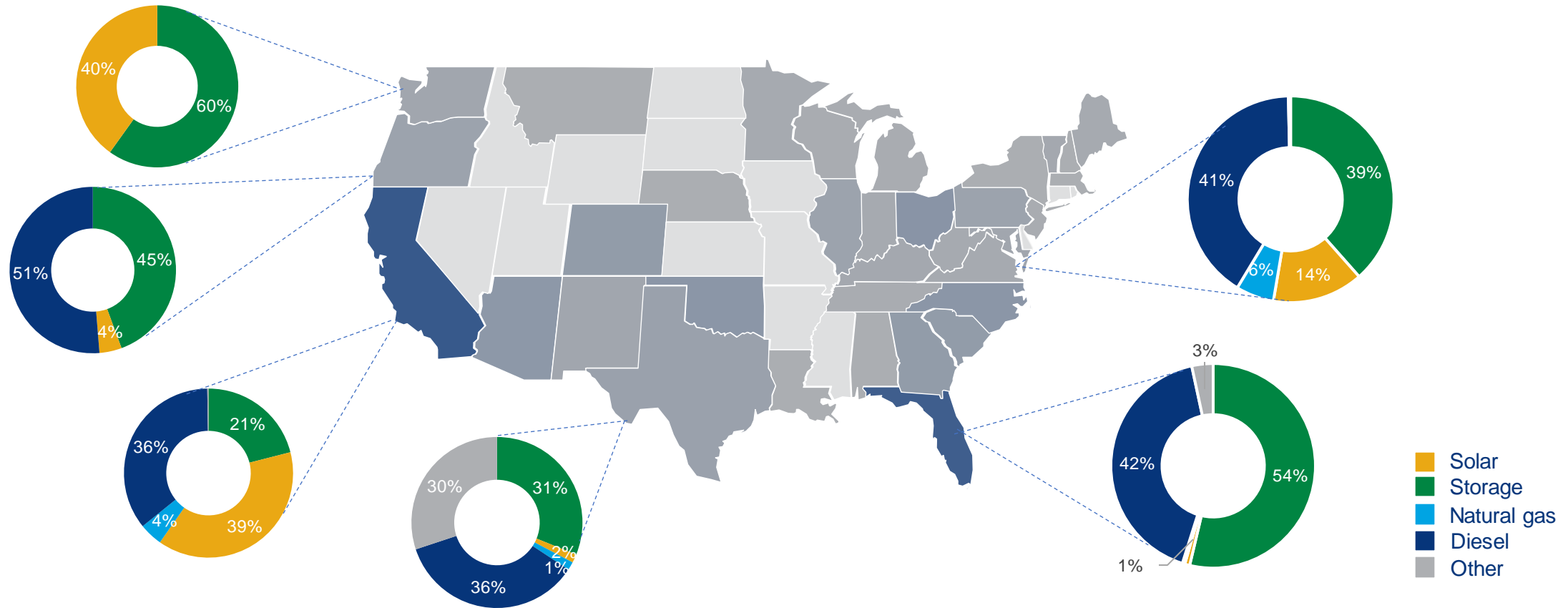
More than 30 states in the US host utility-owned microgrids

Cumulative utility microgrid capacity



Share of storage in utility microgrids will double by 2026

For the majority of states, utilities are opting primarily for FTM storage microgrids than solar



Author information

Elham Akhavan, Senior Research Analyst
Grid Edge | Wood Mackenzie Power & Renewables
elham.akhavan@woodmac.com