

# The Future of Grids, Buildings & Industry

Advanced Energy Group/Chicago Advanced Energy  
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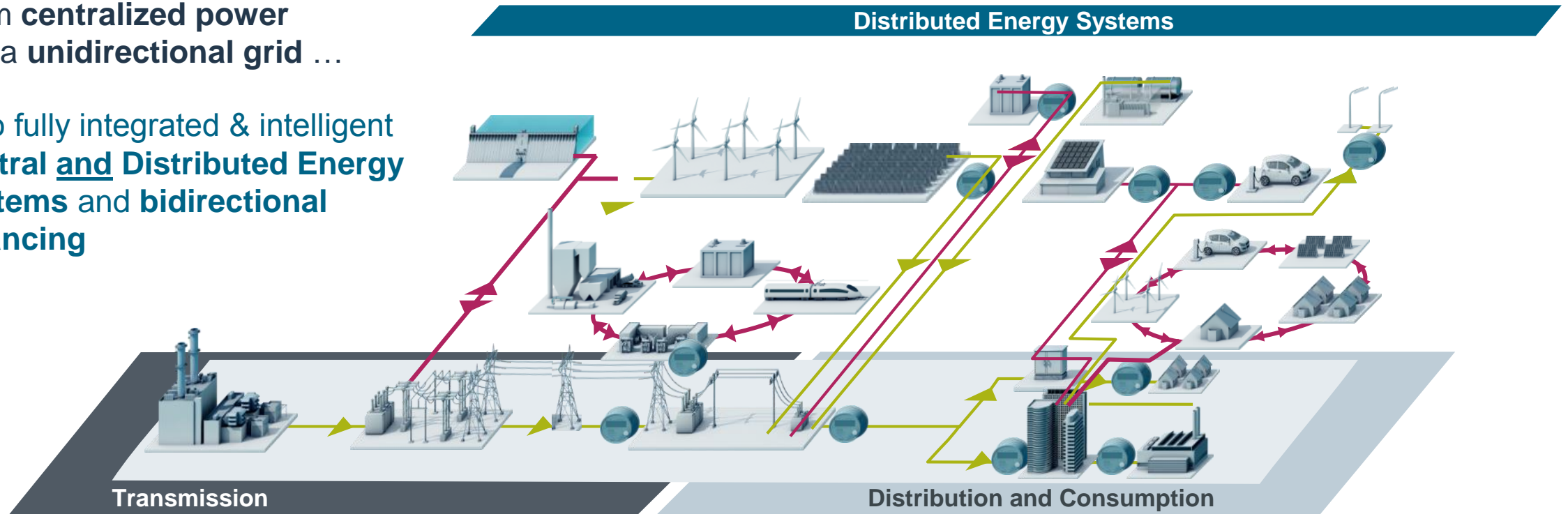
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# Transformation of the U.S. Electric System is Underway

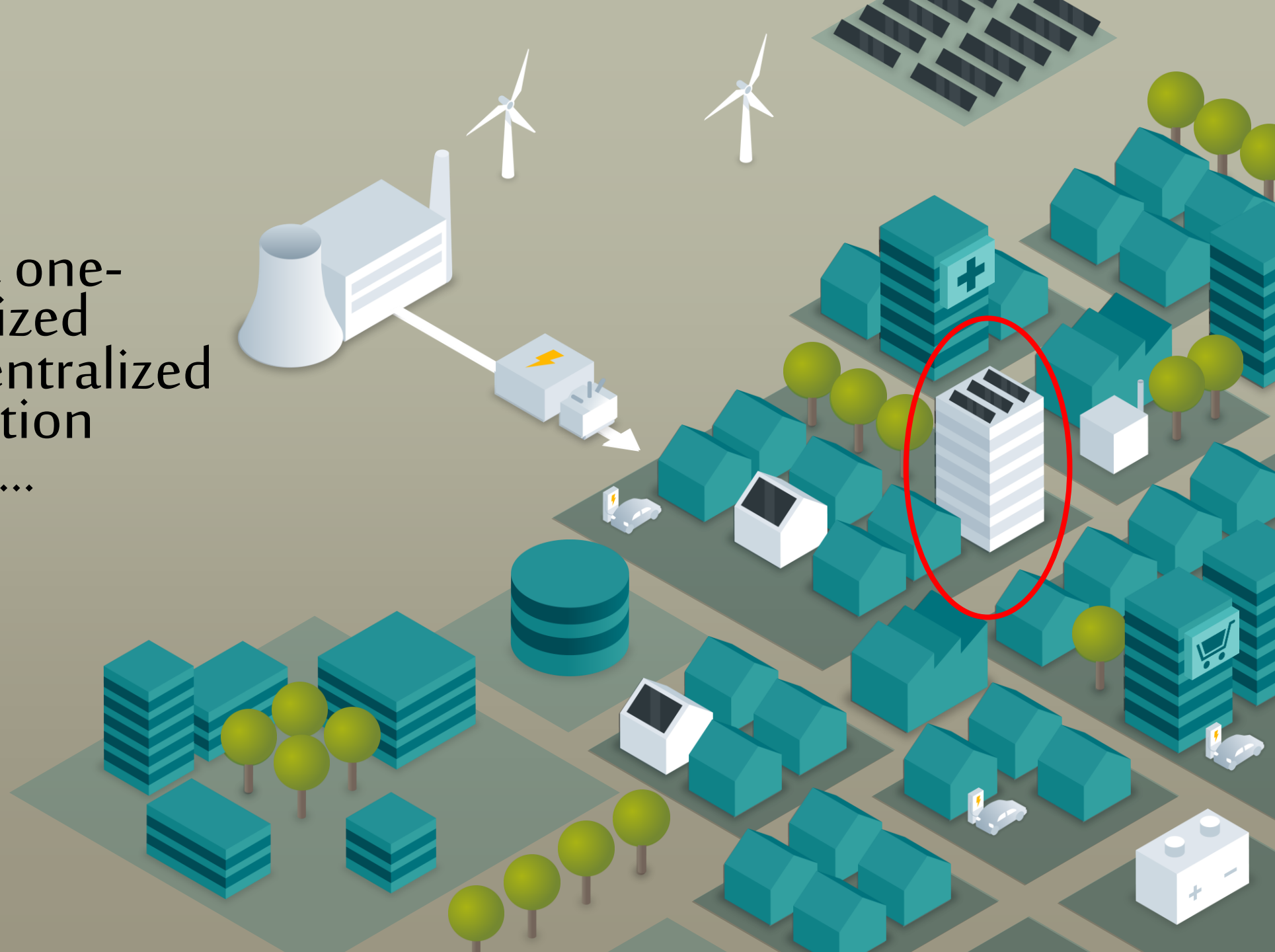


From **centralized power**  
and a **unidirectional grid** ...

... to fully integrated & intelligent  
**Central and Distributed Energy  
Systems** and **bidirectional  
balancing**



From a single, one-  
...to decentralized  
directional, centralized  
power generation  
power source...



# Prosumers

From passive standard  
building consumers to  
generating energy  
own energy

Internet of Things (IoT)

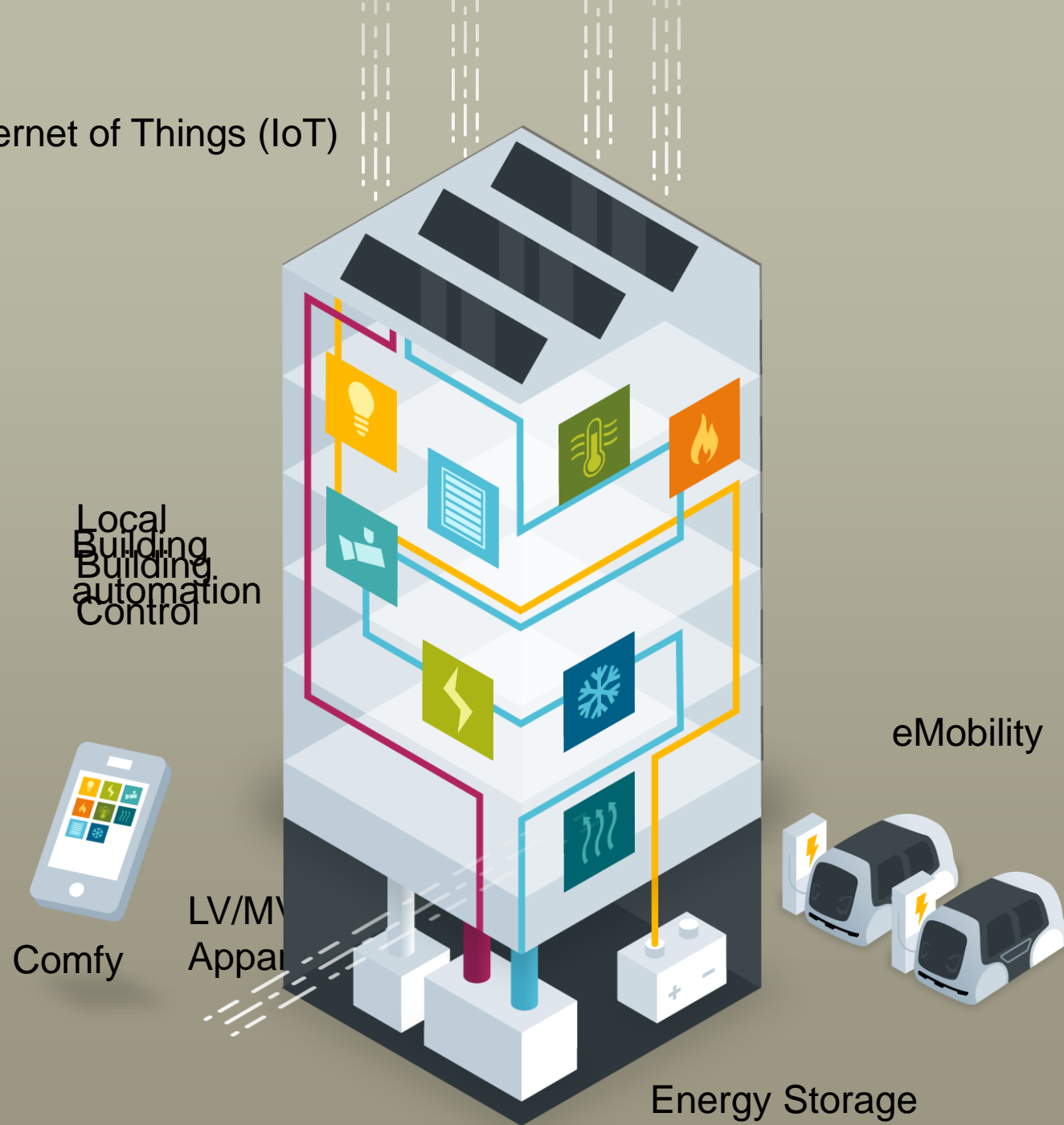
Local  
Building  
Automation  
Control

Comfy

LV/MV  
Appar

eMobility

Energy Storage



*The Future is:*

Smart power +

Smart grids +

Smart buildings



# Problem Statement

**A critical problem related to Smart Buildings & Grid Modernization that needs a collaborative, near - term solution is disparate system architectures and related standards hinder common, easily integrated solutions that bridge before- and behind-the-meter needs of Prosumerism.**