

Enabling High Performing Modern Utilities Using Turnkey Virtual Power Plants (VPP) and Grid Edge Solutions

Speaker : *Vish Ganti*
VP of Products, AutoGrid

AutoGrid: The Leader in **Energy Internet** Applications



50+

Global Energy Customers



6,000 MW+

Distributed Resources Contracted



\$135 Million+

Venture Funding

Company Facts

- Mission: To Accelerate access to Sustainable Energy
- Founded in 2011 at Stanford University, 100+ employees
- Key Strategic Investors & Customers

nationalgrid

CLP

INNOGY VENTURES

TOTAL

ENERGY IMPACT PARTNERS

Orsted

e-on

Shell

ENVISION

ClearSky[®]
POWER & TECHNOLOGY FUND

TENASKA[®]

Awards

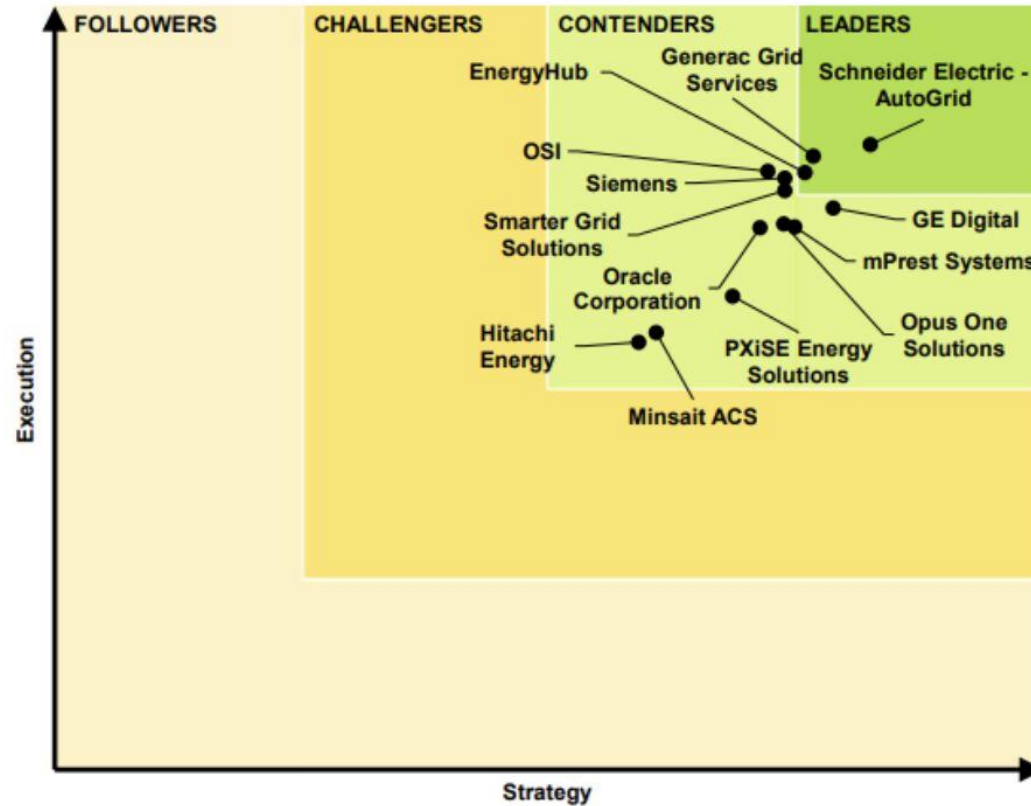


Technology Pioneer 2015



AutoGrid is both **Ranked #1** in VPPs and DERMS

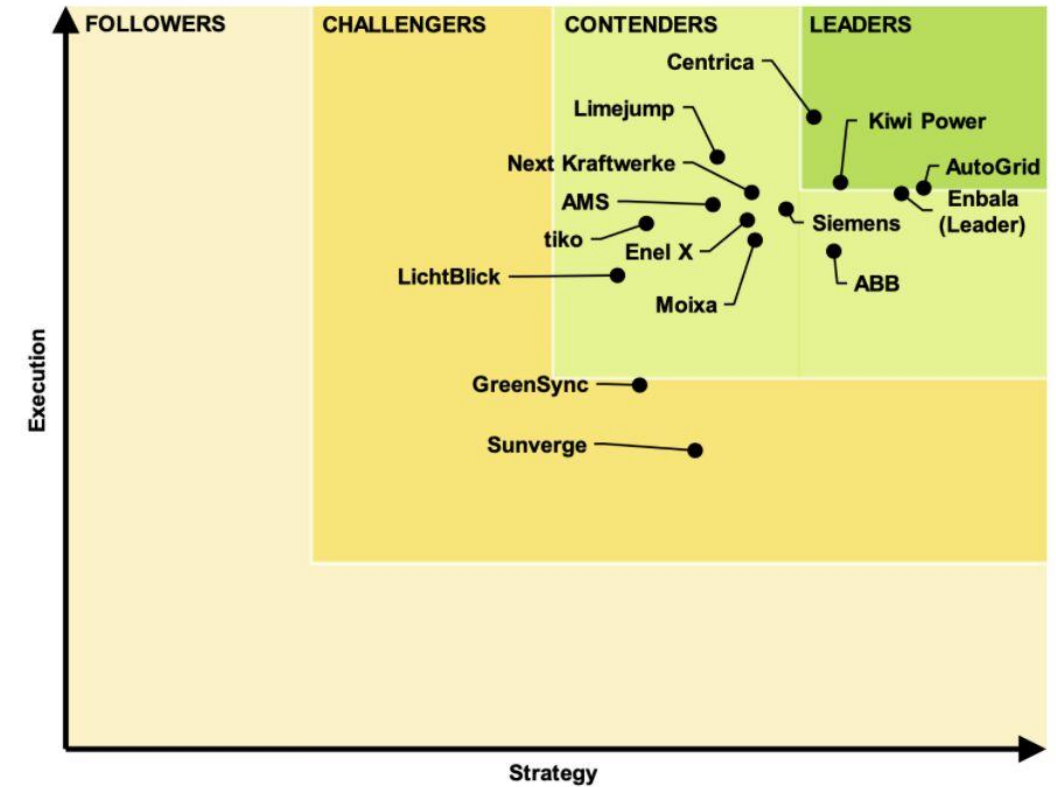
Chart 1-1. The Guidehouse Insights Leaderboard Grid



(Source: Guidehouse Insights)

DERMS

Chart 1-1. The Guidehouse Insights Leaderboard Grid

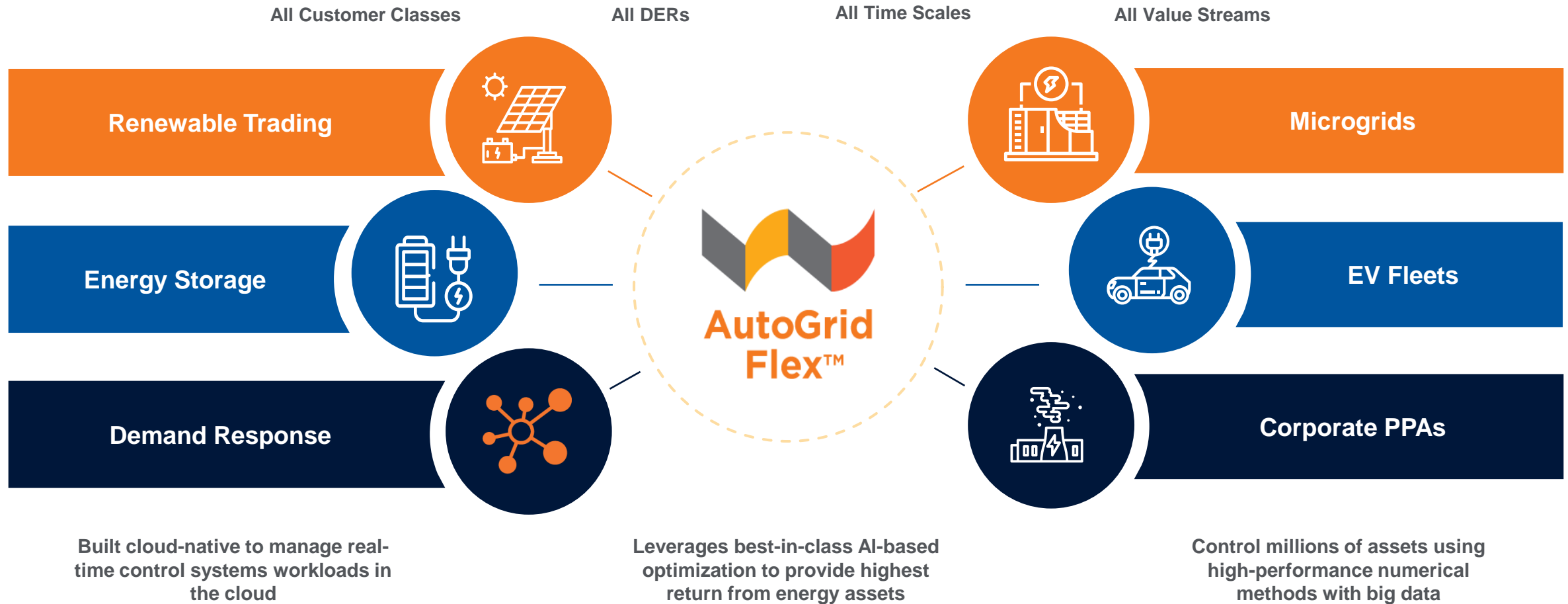


(Source: Guidehouse Insights)

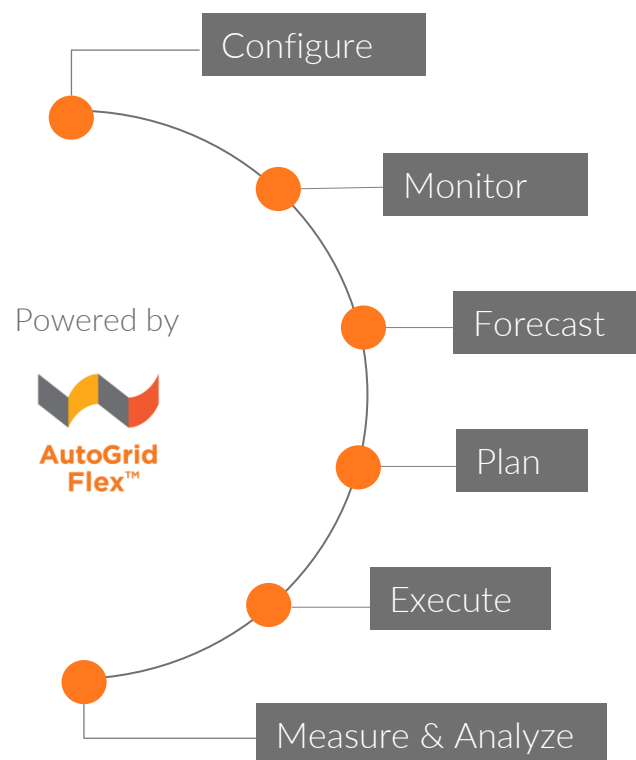
VPP

AutoGrid is the Brain of New Energy Networks

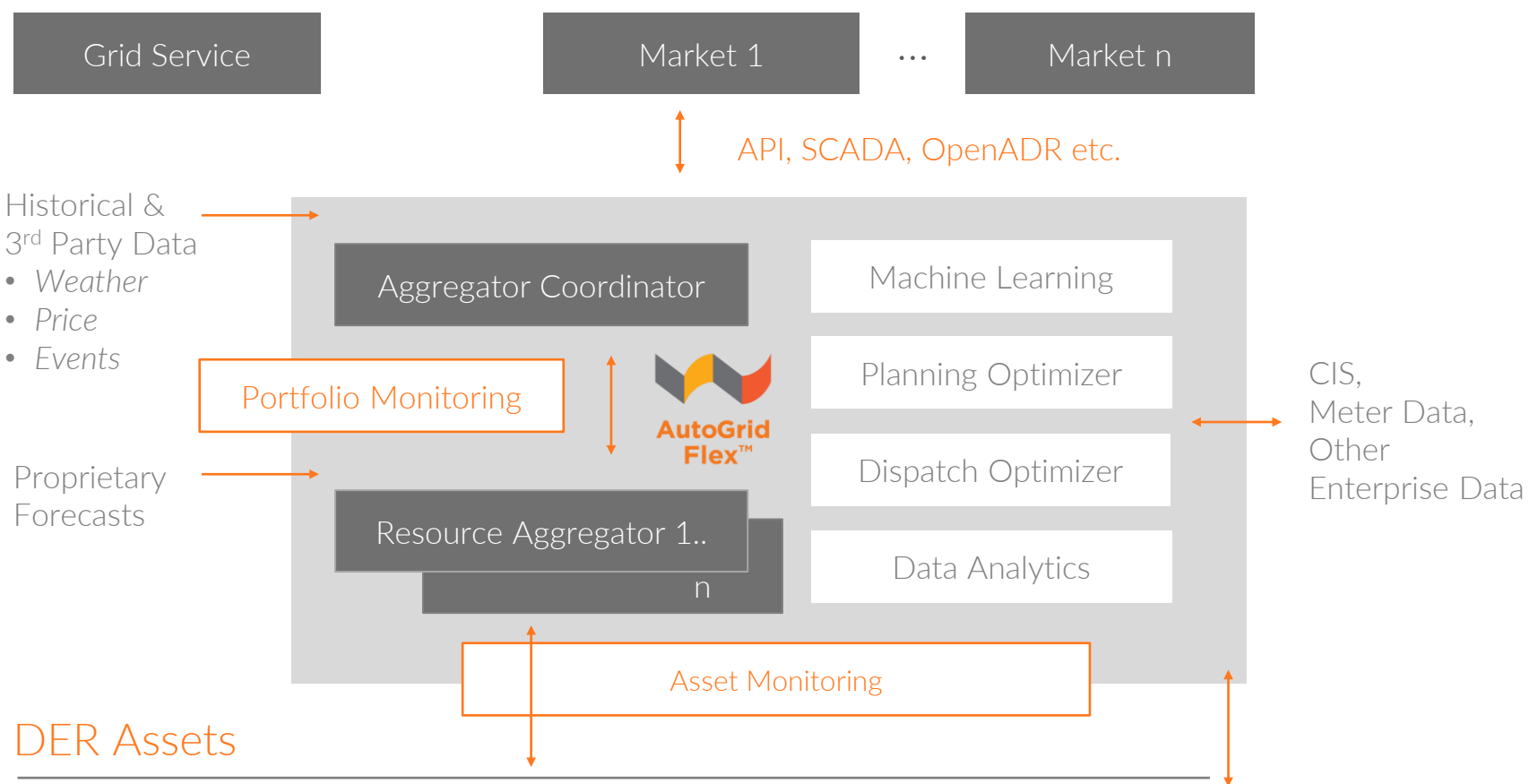
AutoGrid enables New Energy providers to manage and optimize renewable and distributed energy resources (“DERs”) in real-time, and at scale



Flex Solution Architecture



Market Plays



DER Assets



API, SCADA, OpenADR,
Other Comm. Protocols

3rd Party Aggregators

Comprehensive Flexibility Management capabilities across ALL dimensions

All Asset Types

Thermostats, Storage, CHP, solar, wind, EVSEs, building controls

All Sectors

Residential, C&I, Utility Scale

All Value Streams

Wholesale Markets, T&D, Customer-sided

All Markets

Capacity, Energy, Ancillary Services

Customer Benefits

Peak Reduction

Cost Reduction

Hedging

Customer Satisfaction

Bill Savings



Turnkey VPPs: One Stop Shop Marketplace for DER Management

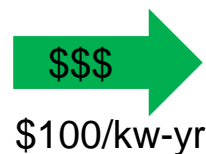
Buyers of Grid Services

Suppliers of Energy



Wholesale
Markets

Utilities



Uberization of Energy



Hardware
OEMs

EV
Networks

Installers &
Developers

Load
Partners

solaredge

ENPHASE



-chargepoint+

greenlots

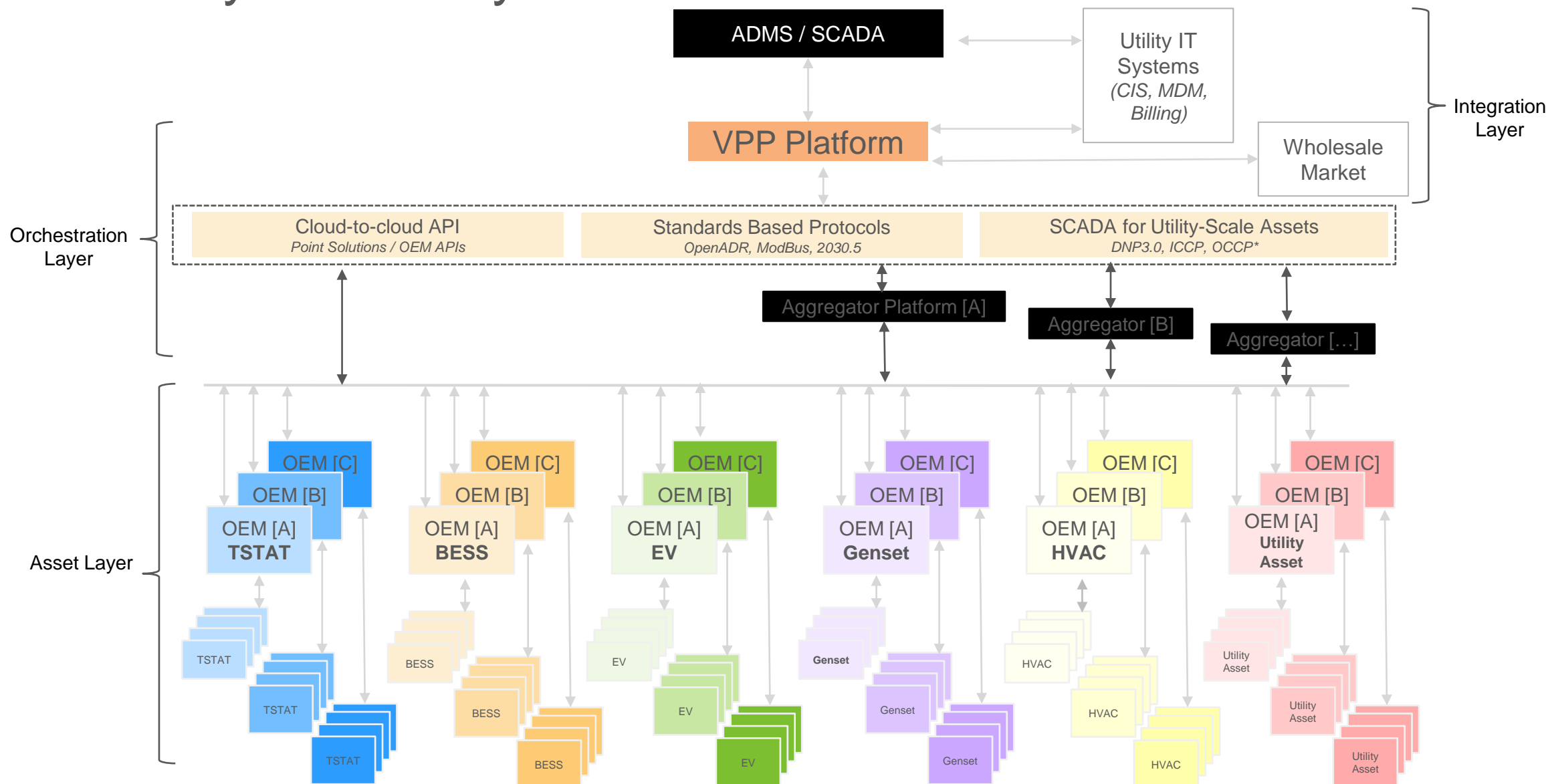
SUNRUN

Schneider
Electric

swell

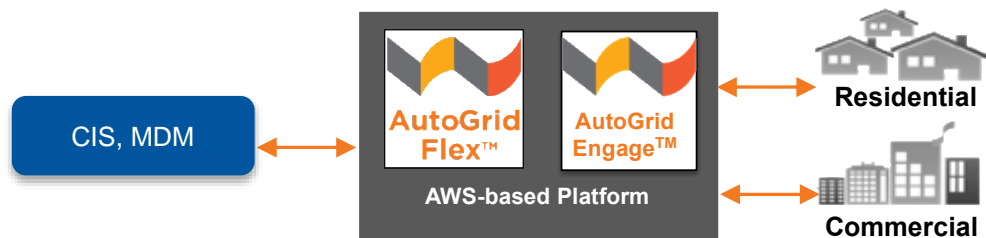


VPP - System of Systems Orchestration

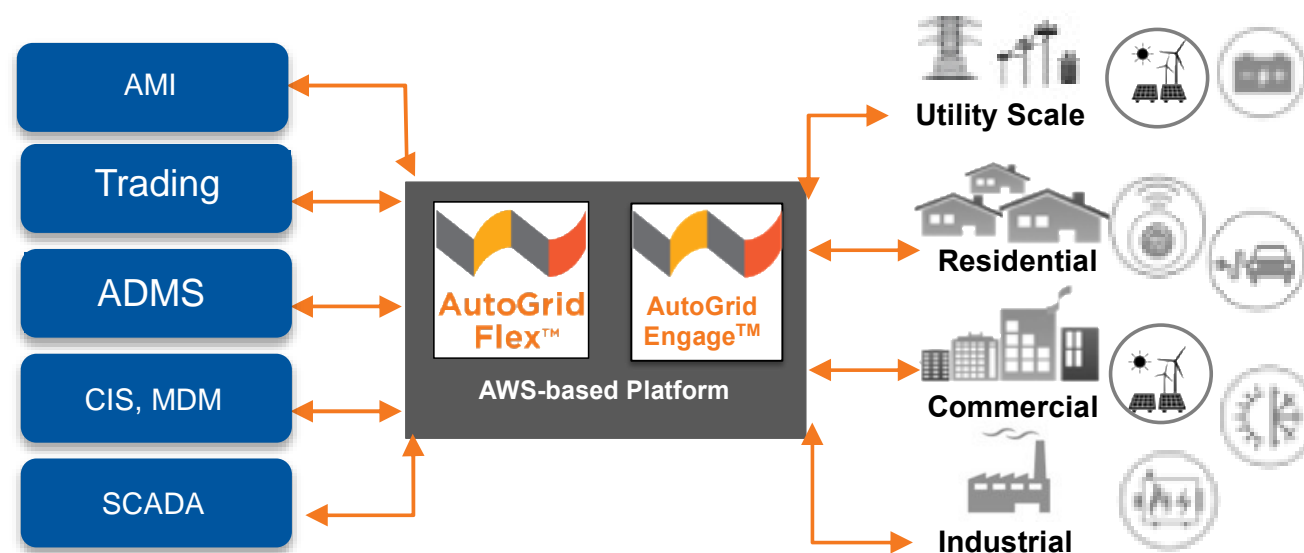


Challenges in INDIA

Pilot Deployment



Production Deployment at Scale



Closing Remarks

- Define the Grid Edge in the Indian Context
- What devices are we likely to find in the Indian context
- Customers own their data. Rules around Data Sharing and Privacy
- Common market & policy drivers
- Interoperability, extensibility and security

VPPs are one of the fastest and cheapest way to decarbonize our energy supply chain.

Activate the Power of Collective Human Action!

THANK YOU!!



<https://www.auto-grid.com/>



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