Smart Grid Maturity Model

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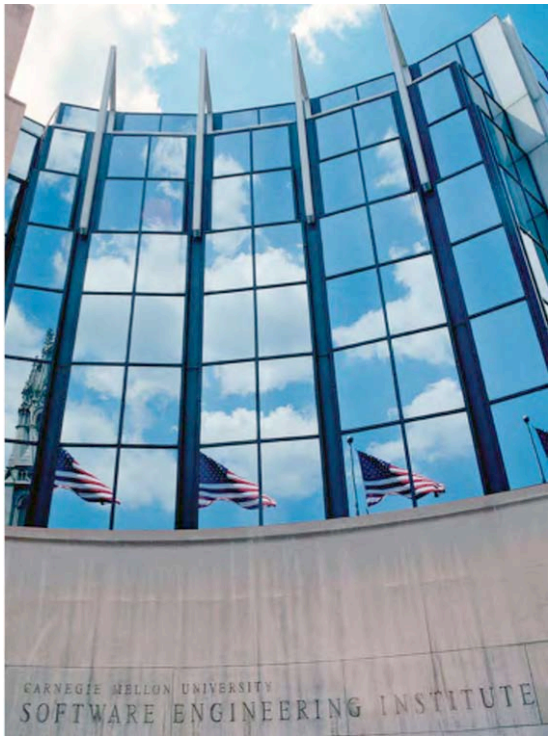

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The Smart Grid Maturity Model

A management tool

that provides a

common language and framework

for defining key elements of

smart grid transformation

and helping utilities develop a

programmatic approach

and track their progress

Stewardship on Behalf of the SGMM Community

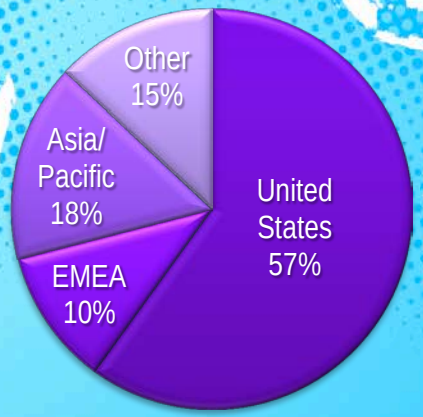
- Provide **governance** working with multiple stakeholders
- Enable **widespread availability**, adoption, and use of the model for the benefit of the community
- **Evolve the model** based on stakeholder needs, market developments, user feedback, and interactions with domain experts
- Develop **transition** mechanisms—education, training, awareness, research collaboration—to support the model
- Grow the SGMM **community** of users worldwide

A Growing Global Community

USA	70
Canada	10
India	10
Australia	5
Brazil	4
China	3
Mexico	3
Netherlands	2

Belgium	1
Denmark	1
France	1
Ecuador	1
Hong Kong	1
Ireland	1
Israel	1
Japan	1

Malaysia	1
Philippines	1
Poland	1
Russia	1
Spain	1
Sweden	1
Switzerland	1
UK	1



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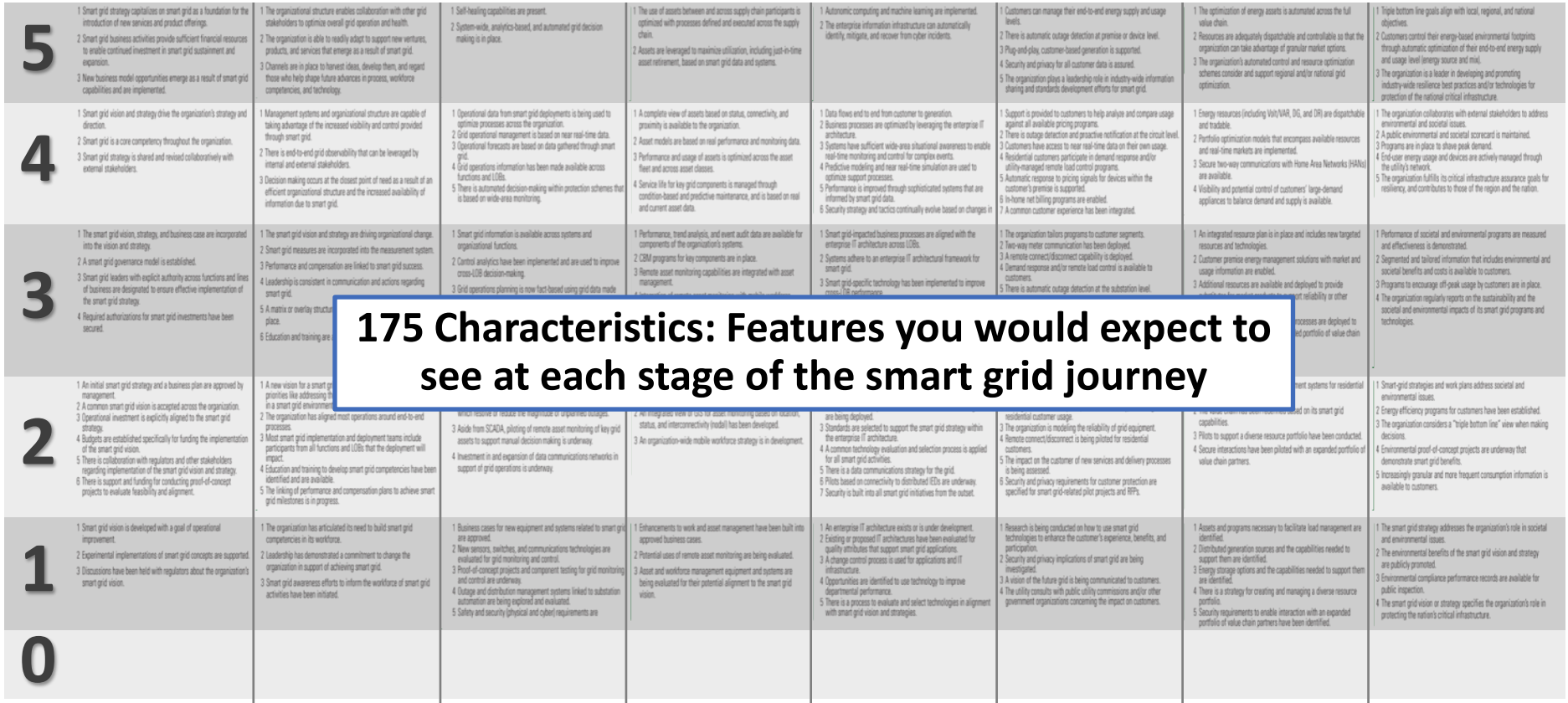
SGMM at a glance

6 Maturity Levels: Defined sets of characteristics and outcomes



175 Characteristics: Features you would expect to see at each stage of the smart grid journey

SMR	OS	GO	WAM	TECH	CUST	VCI	SE
Strategy, Management, & Regulatory	Organization & Structure	Grid Operations	Work & Asset Management	Technology	Customer	Value Chain Integration	Societal & Environmental

8 Domains: Logical groupings of smart grid related characteristics

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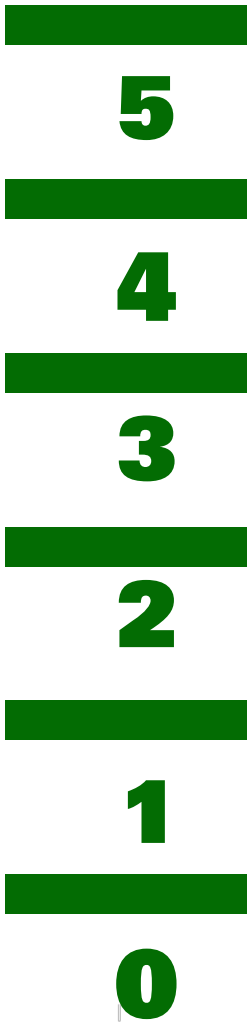
SGMM Levels



Breaking new ground; industry-leading innovation

Optimizing smart grid to benefit entire organization; may reach beyond organization; increased automation

Integrating smart grid deployments across the organization, realizing measurably improved performance

Investing based on clear strategy, implementing first projects to enable smart grid (may be compartmentalized)

Taking the first steps, exploring options, conducting experiments, developing smart grid vision

Default level (status quo)

SGMM Domains

SMR — Strategy, Mgmt & Regulatory

Vision, planning, governance, stakeholder collaboration

OS — Organization and Structure

Culture, structure, training, communications, knowledge mgmt

GO — Grid Operations

Reliability, efficiency, security, safety, observability, control

WAM — Work & Asset Management

Asset monitoring, tracking & maintenance, mobile workforce

TECH — Technology

IT architecture, standards, infrastructure, integration, tools

CUST — Customer

Pricing, customer participation & experience, advanced services

VCI — Value Chain Integration

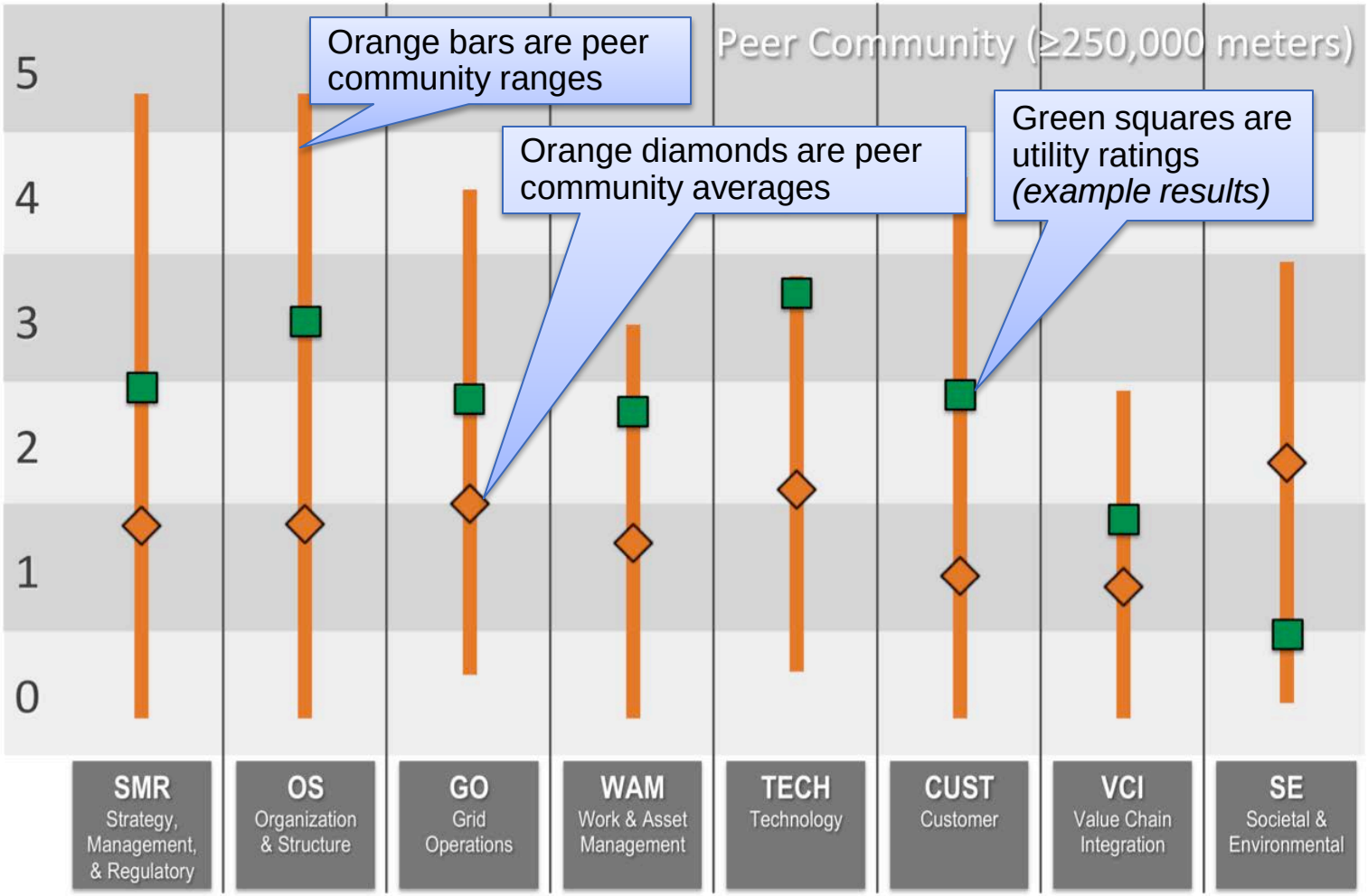
Demand & supply management, leveraging market opportunities

SE — Societal & Environmental

Responsibility, sustainability, critical infrastructure, efficiency

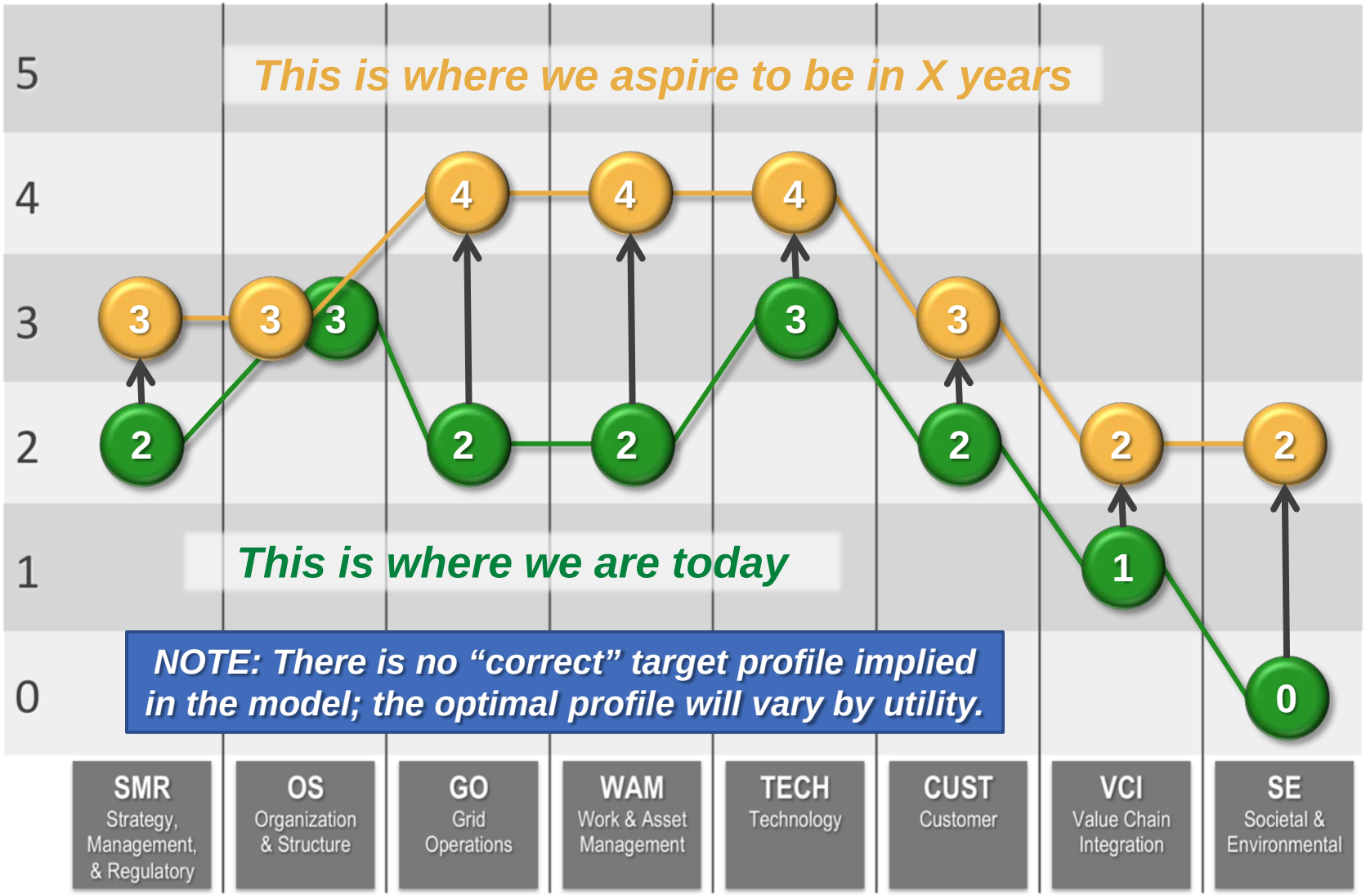
Compass Results: peer community comparison

example results



Navigation Results: consensus aspirations

example results



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Customer Domain: Sample Characteristics

5.1 Customers can manage their end-to-end energy supply and usage level.

4.5 The utility supports the capability for automatic response to pricing signals for major energy consuming devices within the customer premises.

3.6 Residential customers have on-demand access to daily usage data.

2.5 The organization is assessing the impact on the customer of new services and delivery processes.

1.3 A vision of the future grid is being communicated to customers (e.g., by explaining smart grid benefits and describing potential use case scenarios).

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