



Smart Grid Index

Achieving the Smart Grid

Benchmarking Results
2024



Key Findings

Utilities

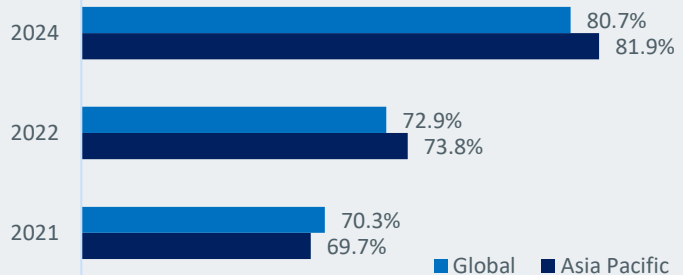
attained significant growth across dimensions



Strong growth in Renewables & EV initiatives



Asia Pacific progresses in AMI Deployment



7 DIMENSIONS OF A SMART GRID

SMART GRID INDEX

Measures the smartness of electricity grids globally, in seven key dimensions. The benchmarking also identifies best practices to build smarter grids that deliver better value to customers.

01. MONITORING & CONTROL

. SCADA
. DMS / ADMS

02. DATA ANALYTICS

. Smart Meter Coverage
. Data Analytics Application

03. SUPPLY RELIABILITY

. SAIDI
. SAIFI

04. DER INTEGRATION

. Management of DER Integration
. Grid Scale Energy Storage

05. GREEN ENERGY

. Renewable Energy Penetration
. EV Facilitation

06. SECURITY

. IT Cyber Security
. OT Cyber Security

07. CUSTOMER EMPOWERMENT & SATISFACTION

. Real-time data to Customers
. Customer Satisfaction Feedback

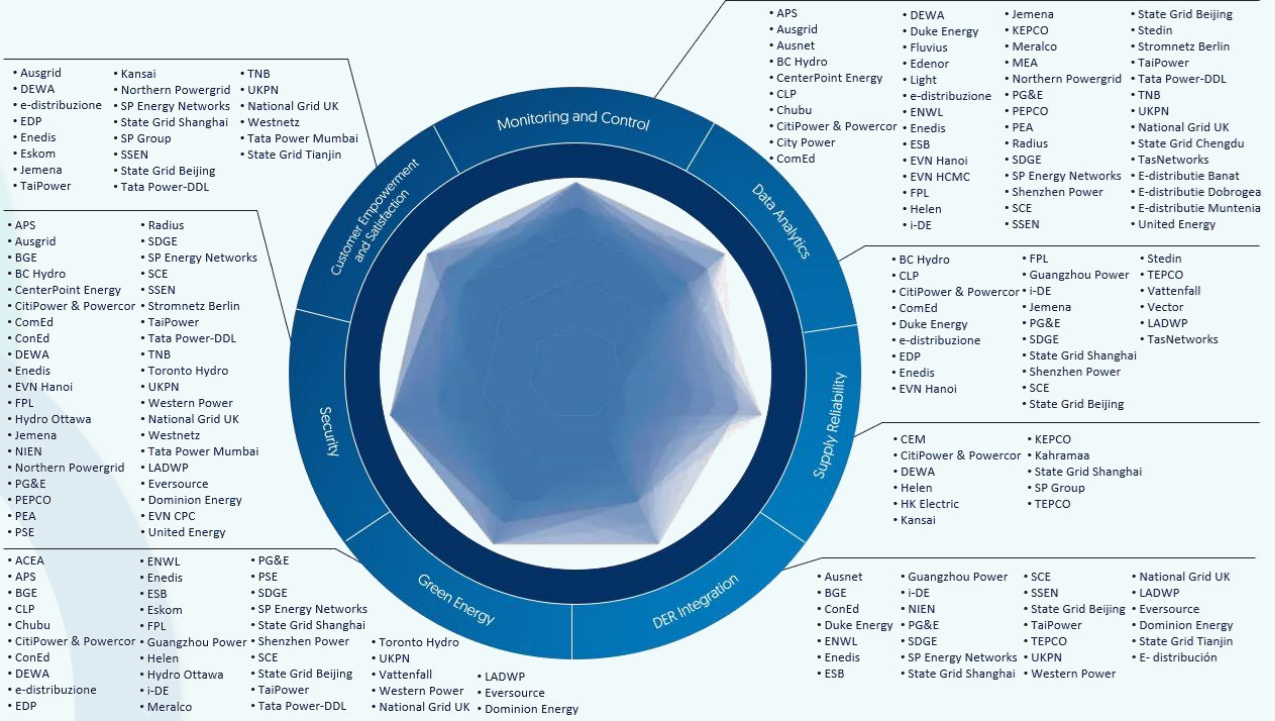
Benchmarking Results 2024

Utilities	Country/Market	Score %	Best Practices	Utilities	Country/Market	Score %	Best Practices
Enedis	FRA	98.2		Eversource	USA	75.0	
TaiPower	TWN	96.4		State Grid Tianjin	CHN	75.0	
UKPN	GBR	96.4		CenterPoint Energy	USA	73.2	
CitiPower & Powercor	AUS	94.6		EDP	PRT	73.2	
DEWA	ARE	94.6		EVN Hanoi	VNM	73.2	
State Grid Shanghai	CHN	94.6		KEPCO	KOR	73.2	
ConEd	USA	92.9		MEA	THA	73.2	
SP Energy Networks	GBR	92.9		PSE	USA	73.2	
State Grid Beijing	CHN	92.9		Fluvius	BEL	71.4	
WPD	GBR	92.9		Kahramaa	QAT	71.4	
Guangzhou Power	CHN	91.1		State Grid			
Shenzhen Power	CHN	91.1		Chongqing	CHN	71.4	
ENWL	GBR	89.3		TasNetworks	AUS	71.4	
Northern Powergrid	GBR	89.3		EVN CPC	VNM	69.6	
SDGE	USA	89.3		HK Electric	HKG	69.6	
TEPCO	JPN	89.3		Meralco	PHL	69.6	
ComEd	USA	87.5		NIEN	GBR	69.6	
SSEN	GBR	87.5		PLN	IDN	69.6	
Stedin	NLD	87.5		PEA	THA	69.6	
Duke Energy	USA	85.7		State Grid Sichuan	CHN	69.6	
FPL	USA	85.7		State Grid Hubei	CHN	69.6	
SCE	USA	85.7		Vattenfall	SWE	69.6	
BGE	USA	83.9		CEM	MAC	67.9	
CLP	HKG	83.9		E-distribución	ESP	67.9	
Chubu	JPN	83.9		ESB	IRL	67.9	
e-distribuzione	ITA	83.9		Helen	FIN	67.9	
i-DE	ESP	83.9		Sarawak Energy	MYS	67.9	
Jemena	AUS	83.9		State Grid Nanjing	CHN	67.9	
LADWP	USA	83.9		ACEA	ITA	66.1	
PG&E	USA	83.9		Stromnetz Berlin	DEU	66.1	
PEPCO	USA	83.9		Wiener Netze	AUT	66.1	
Tata power-DDL	IND	83.9		State Grid			
United Energy	AUS	83.9		Changsha	CHN	60.7	
APS	USA	82.1		Vector	NZL	60.7	
Ausgrid	AUS	82.1		Enel Dist Sao Paulo	BRA	58.9	
Ausnet	AUS	82.1		Eskom	ZAF	58.9	
Radius	DNK	82.1		Elektro Gorenjska	SVN	55.4	
SP Group	SGP	82.1		E-distributie Banat	ROM	51.8	
BC Hydro	CAN	80.4		Enel Dist Chile	CHL	50.0	
Dominion Energy	USA	80.4		Light	BRA	50.0	
EVN HCMC	VNM	80.4		Edenor	ARG	48.2	
Hydro Ottawa	CAN	80.4		E-distributie			
TNB	MYS	80.4		Dobrogea	ROM	44.6	
Western Power	AUS	80.4		E-distributie			
Westnetz	DEU	80.4		Muntenia	ROM	44.6	
Kansai	JPN	76.8		City Power	ZAF	39.3	
Liander	NLD	76.8		Edesur	ARG	37.5	
Tata power Ltd	IND	76.8					
Toronto Hydro	CAN	76.8					

DISCLAIMER:

We have arrived at the findings, opinions and conclusion set out in this paper based on application of our methodology to materials and information we believe to be accurate and reliable, and which are made available in the public domain at the time we carried out the relevant research and study. Despite our best efforts, the materials and information may include inaccuracies and errors. The findings, opinions and conclusion will be construed solely as statements of opinion on the matters addressed in this paper including the degree of grid smartness ratings and shall not in any way represent authoritative assessment or judgment on any such matters. You assume the sole risk of making use of and/or relying on the findings, opinions and conclusion made available in this paper. To the extent permitted by law, we disclaim liability to any person or entity for all and any liability, direct and indirect, special, consequential, incidental losses and damages whatsoever arising from or in connection with your access to or use of the findings, opinions and conclusions in this paper.

Best Practices by Dimensions



Smart Grid Progress 2022-2024

