Energy for the Smart Cities Ecosystem
Scott Graybeal
Senior Vice President, Energy
Broad Portfolio in the Smart City Ecosystem

- Advanced Metering Infrastructure
- Smart Solar Energy
- Energy Storage
- Smart Lighting
- Electric Vehicle Infrastructure
Smart Energy Facts

$333B was invested in clean energy infrastructure worldwide in 2017

Lithium-ion batteries have dropped 80% in price since 2010

Public EV charging points increased 10x worldwide since 2011

31 GWs of global solar under O&M contracts that can be digitized

Source: Bloomberg New Energy Finance Data 2018
Technology and Market Convergence Drives Innovation

- HMI and Controls
- IoT and Cloud Infrastructure
- Enclosures
- Data Analytics
- Mechanical and Thermal
- Power Conversion
Convergence in Smart and Connected Energy

Smart Lighting

- High-Bay Troffer
- Street Lighting
- Smart Retail

- HMI and Controls
- IoT and Cloud Infrastructure
- Enclosures
- Data Analytics
- Mechanical and Thermal
- Power Conversion
Convergence in Smart and Connected Energy

Electric Vehicle Infrastructure

Illumination Concept

Charger

Functional, Aesthetic Enclosures

HMI and Controls

IoT and Cloud Infrastructure

Enclosures

Data Analytics

Mechanical and Thermal

Power Conversion
Convergence in Smart and Connected Energy

Energy Storage

Integrated Systems (NX Drive™)

Digital O&M

Secure Data Pipeline

HMI and Controls

IoT and Cloud Infrastructure

Enclosures

Data Analytics

Mechanical and Thermal

Power Conversion
Convergence in Smart and Connected Energy

PV Trackers

- Smart and Connected Trackers
- Advanced Electro-Mechanicals (NX Horizon™)
- Smart Panels and Sensors

HMI and Controls
IoT and Cloud Infrastructure
Enclosures
Data Analytics
Mechanical and Thermal
Power Conversion
Broad and Global Energy Business

Well Positioned for the Future

Addressing Needs of Smart Cities