BOLD AMBITION

Maximizing US infrastructure investments to transform and modernize energy management

Guillaume Le Gouic Senior Vice President, US Power Systems Schneider Electric



Schneider Electric in US: 17,400+ employees strong in the US

In 2021

\$2.7B

Schneider Electric spend for the US Business.

\$6.6M

US charitable giving SE Employees, SE financial and product donations In 2021-2022

US Investment

2021 - \$40M reshoring of manufacturing in Nebraska and Kentucky Plants.

2022 - New 160,000 sq ft plant in El Paso, TX

Sustainability – Ranked #4 Most Sustainable Corporation by Corporate Knights Global 100 for 2022 Sustainability – Lexington, KY facility among First in the World to be Named a Sustainability Lighthouse by World Economic Forum People - Ranked 20th in the World's Top 100 for Gender Equality



Life is On: Touching lives everyday

小 1 M+ buildings



of the world's hospitals

O Sout of 5 of the top hotel chains **50%**

of the world's data centers

腧 Top4

hyper-scale cloud providers

2 1

largest city metro in 14 countries ≈ 10 of the work

鸟 40k

対 10

of the world's largest airports

of the world's top

water & wastewater

installations in 150 countries

electric utilities



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Historical Opportunity to Accelerate Infrastructure

Legislative Acts Passed 2021-2022 American Rescue Plan Infrastructure Investment and Jobs Act

In negotiation **Build Back Better Act**





Infrastructure Investment and Jobs Act (IIJA) Highlights

Broadband 65 54 65 46 Funding in billions \$

Electrifying transportation and critical infrastructure



Grid modernization and resilience



Sustainability and Climate

Electric and Digital is the recipe for a more sustainable and resilient world

Electric

Makes energy Green

Digital Builds a Smart future

Electricity is the most efficient energy and the best vector of decarbonization



Digital makes the invisible visible, eliminating waste and driving efficiency



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Over the last 250 years, the world has gone through four technology-driven revolutions



Electricity

Mechanization

Industry 1.0



Mass production



Automation



Life Is On



1750 The rise of technology

Electricity 1.0

Domestication

of electricity

and Technology exists

Why Digital? What can Digital do that Analog doesn't do?

Digital

Deployed sensors collect data and communicate to machine learning software that produces real time data analytics to ensure the most efficient, resilient and sustainable infrastructure available today.

Digitization

Delivers planned, predictive, preventive and personal (4 Ps) outcomes that enable tracking and remotely monitoring critical infrastructure operations in our communities.

Predicting failures before they occur and deploying real-time fixes protect our investments and optimizes the work of our people.

Electricity 4.0: Powering the New Electric World

We connect the dots between everything, everywhere



Homes of the Future

- Sustainable
- Resilient
- Hyper-efficient
- More personal

Buildings of the Future

- Sustainable
- Resilient
- Hyper-efficient
- People-centric

Data Centers of the Future

- Sustainable
- Resilient
- Hyper-efficient
- Adaptive

Industries of the Future

- Sustainable
- Efficient & Resilient
- People-centric
- Next Generation

Infrastructure of the Future

- Sustainable
- Resilient
- Efficient
- People-centric



Grids of the Future

- Sustainable
- Resilient
- Efficient
- Flexible

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Supply / demand



Considerations today that affect tomorrow

Future Proofing

How do I anticipate demand for electricity to change in the next 10 years, 15 years, or 20 years?

Will current legislative guidance and budget rules facilitate **digital v. analog** projects?

Digitization

Have I leveraged the technological solutions available to me today to ensure my investments create more "digitized infrastructure"?

Is this project maximizing the community's goals for sustainability in a measurable way?

Resiliency

How can I direct state energy offices and regulatory commissions to create a more resilient and modernized power grid?

Does the project incorporate **technology** and software solutions that enable us to predict failures before they occur?

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What are the Solutions to build more digital infrastructure

Shift the Focus - Most State and Local procurement laws are focused on lowest Capital Expenditure (CAPEX). The sensor and communication elements of a digitized system cost more up front, digital rarely is lowest cost choice when looking at CAPEX. Here are two solutions that are consistent with lowest costs for taxpayers for infrastructure.

- 1. Pass a law or budget provision that requires all new infrastructure to be digitized or digitally transformed. (We have a paper in the back with two definitions of digital for your consideration.)
- 2. Change your state's procurement process from "lowest cost" to "lowest lifecycle cost." This considers cradle-tograve costs that include the operating expense (OPEX) over the lifetime of that infrastructure as well as decommissioning.

Three Policy Changes to Unleash a Resilient, Modernized Grid:

- 1. Any money spent for electric grid modernization should focus on distribution utilities that are digitizing circuits between distribution substations and customers.
- 2. Direct regulated and public utilities to develop technology-neutral retail rate signals to work organized Distributed Energy Resources (DERs).
- 3. Direct the PUC to adopt performance-based regulations for distribution utilities to earn a return.

Thank You – Any Questions?







117 mutual connections: Tarunjeet Sarao, David Gordon, and 115 others

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