Welcome to the AEC’s First Session on “Technology to Market”

Advanced Energy Conference - 2018
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Our Challenge

The Energy Tri-Lemma

Provide customers with Affordable, Reliable, and Sustainable energy in the future.

- Modernize our infrastructure to meet 21st century demands.
- Put customers in charge.
- Connect our customers to renewable energy solutions.
The energy markets are changing
Fast

Traditional Energy Market - supply driven

- Nuclear power station
- Hydro-electric power
- Coal/gas fired power station
- Gas production

- Large centralised generation
- Small range of conventional technologies
- Static infrastructure

- Coal/gas fired power station
- Energy volume drives energy company revenue

- Gas production
- Energy flows to users

- Industrial and commercial

- Price and reliability are main determinants of customer choice

Today’s Evolving Market - customer driven

- Customers focus on economic and environmental value, using a wider range of products and services

- Energy flows to users, and surplus from distributed generation flows back to grid

- Smart network technology rolled out

- Technology choice proliferates

- CO2 emission reduction and wider energy services drives energy company revenue

- Large scale CHP and biomass
- CO2 transport and storage

- Natural Gas
- Hydrogen
- CO2
- Biogas
- Heat

- Onshore and offshore wind

- Hydro-electric power
- Nuclear power station
- CCS plant (coal/gas)

- $\text{CO}_2$ transport and storage
- Efficient Boilers
- Smart metering
- Storage

- Domestic
- Industrial and commercial

- Intermittency management
From “STEM” or “STEAM” Education to the Innovative Businesses of Tomorrow

- NYSERDA Poof-of-Concept Centers
- Incubators
- Clean Tech Open NE
- Greentown Labs (MA)
- AERTC
Today’s speakers are just some of the success stories of NY’s vibrant energy startup eco-system.

Jon Garrity, TagUp
Dr. Shailesh Upreti, C4V
Angelo D’Anzi, StorEn
Dr. Gabriel Rodriguez-Calero, Ecolectro
Emilia Silletta, Battery Fingerprint