

# ATUL MAHAJAN Oshawa Power and Utilities Corporation

# UTILITY TRANSFORMATION AND THE ROLE OF JAPANESE TECHNOLOGIES FACILITATED BY NEDO, JAPAN

OSHAWA POWER AND UTILITIES CORPORATION

### Who are we...not just a Utility





Distributes electricity safely and reliably

**OSHAWA** 

POWER AND UTILITIES CORPORATION

OSHAWA
PUC ENERGY SERVICES
INC.



Develops and operates economical and environmentally sustainable energy generation assets

OSHAWA
PUC SERVICES INC.



Provider of telecom services

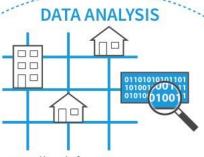
Oshawa Solar



Supplier of green generation

# **Utility** – 1.0





- · Feedback from smart meters
- · Disagregate and analyze data

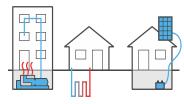
#### **ENERGY EFFICIENCY**



Use data to develop targeted energy efficiency programming

Utility 2.0

### DISTRIBUTED ENERGY RESOURCES



- On-site generation microgrids
- Self-sufficient energy security

#### UTILITY 2.0



 Utility transforms and enhances reliability

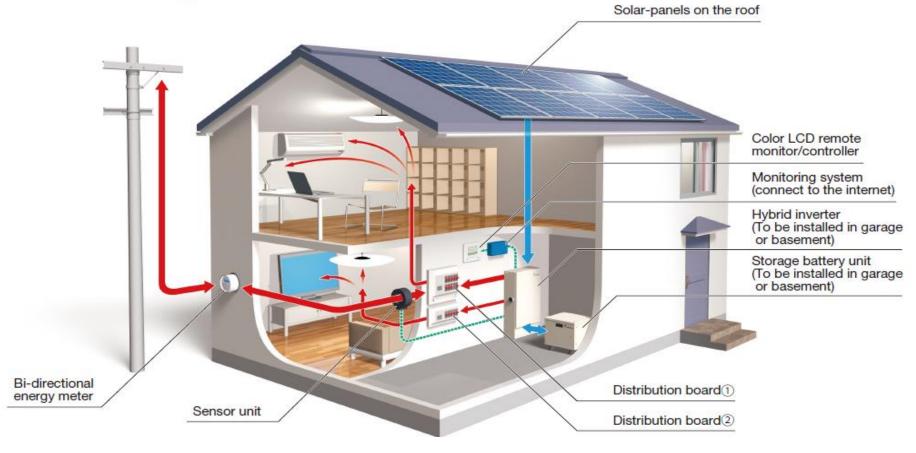
### Data Driven Customer Engagement/ Energy Efficiency

- Energy Management App
  - Real-time access to consumption data
  - Comparative analytics
  - Tailored tips
  - Warnings/prompts
- Reduction in energy consumption



# Data Driven Residential Solar + Storage installations

### Installation Diagram



## **SURVIVE**

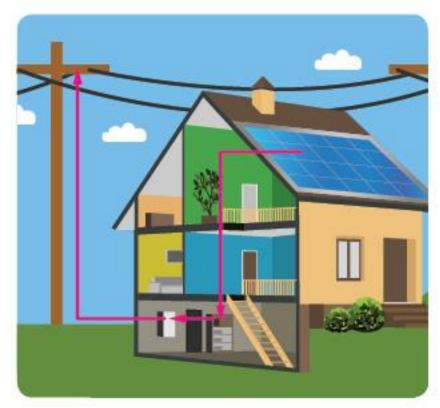


### **THRIVE**



Do we only invest in poles, wires and substations?





Go beyond

invest at customer premises

solar + storage.

Grid in – backup out.

Grid out – backup in.

### What has Japan done for us...

### Oshawa and OPUC Partner with Japanese Energy Organization for Innovative Solar Energy Project



The Japanese Consul General (far right) was on hand for the signing of a Memorandum of Understanding that will bring a solar energy storage pilot project to Oshawa. The MOU was signed by Mayor John Henry and officials from Oshawa PUC and NEDO.

The Japanese Consul General visited Oshawa on July 17 to celebrate a partnership between the City of Oshawa, New Energy and Industrial Development Organization of Japan (NEDO) and Oshawa PUC Energy Services (OPUC) that will bring a solar energy storage pilot project to approximately 30 homes in Oshawa.

Representatives from the City, including members of City Council, NEDO and OPUC

attended the official signing of the Memorandum of Understanding (MOU) that formalizes the cooperative relationship for this new innovative solar energy storage and management system.

View Oshawa Power Solar Storage video at https://www.youtube.com/watch?v=7NMVbbsmuLE

Panasonio

# **Thank You**