

A nighttime cityscape with glowing network lines connecting various points across the skyline, symbolizing a resilient energy system.

## Advanced Software for Optimized Energy Systems

### The Energy for More Resilient Cities

Session 1D – System Performance & Energy Savings

**Advisian**

**Worley**  
energy | chemicals | resources

Powered by  **XENDEE**

[www.advisian.com](http://www.advisian.com)

25 June 2019

**Introducing a new open  
platform for decision  
support, system design, and  
project delivery**



# A Little Background: NY REV

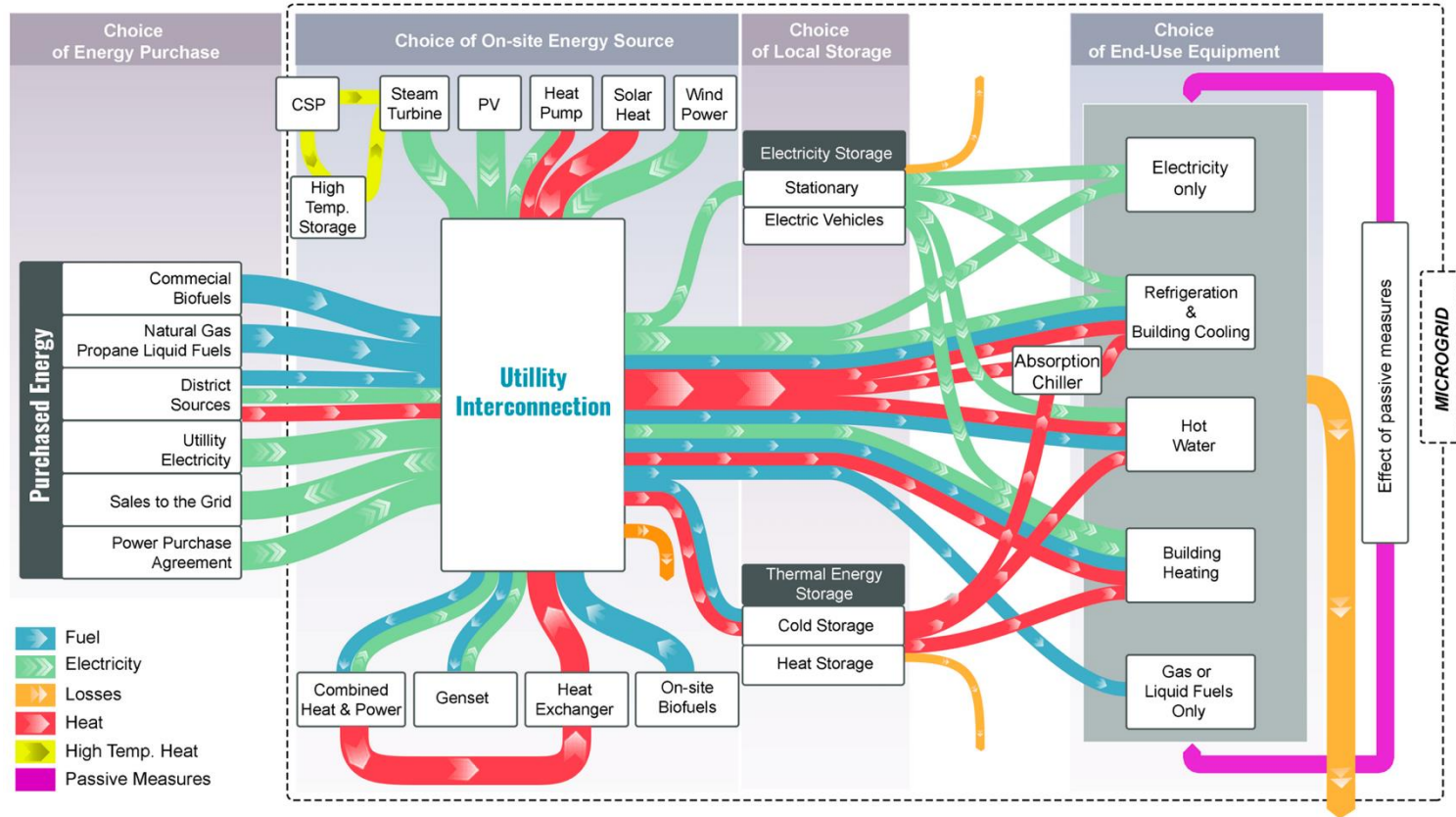
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## Reforming the Energy Vision

BUILDING A CLEAN, MORE RESILIENT, AND AFFORDABLE ENERGY SYSTEM FOR ALL NEW YORKERS.

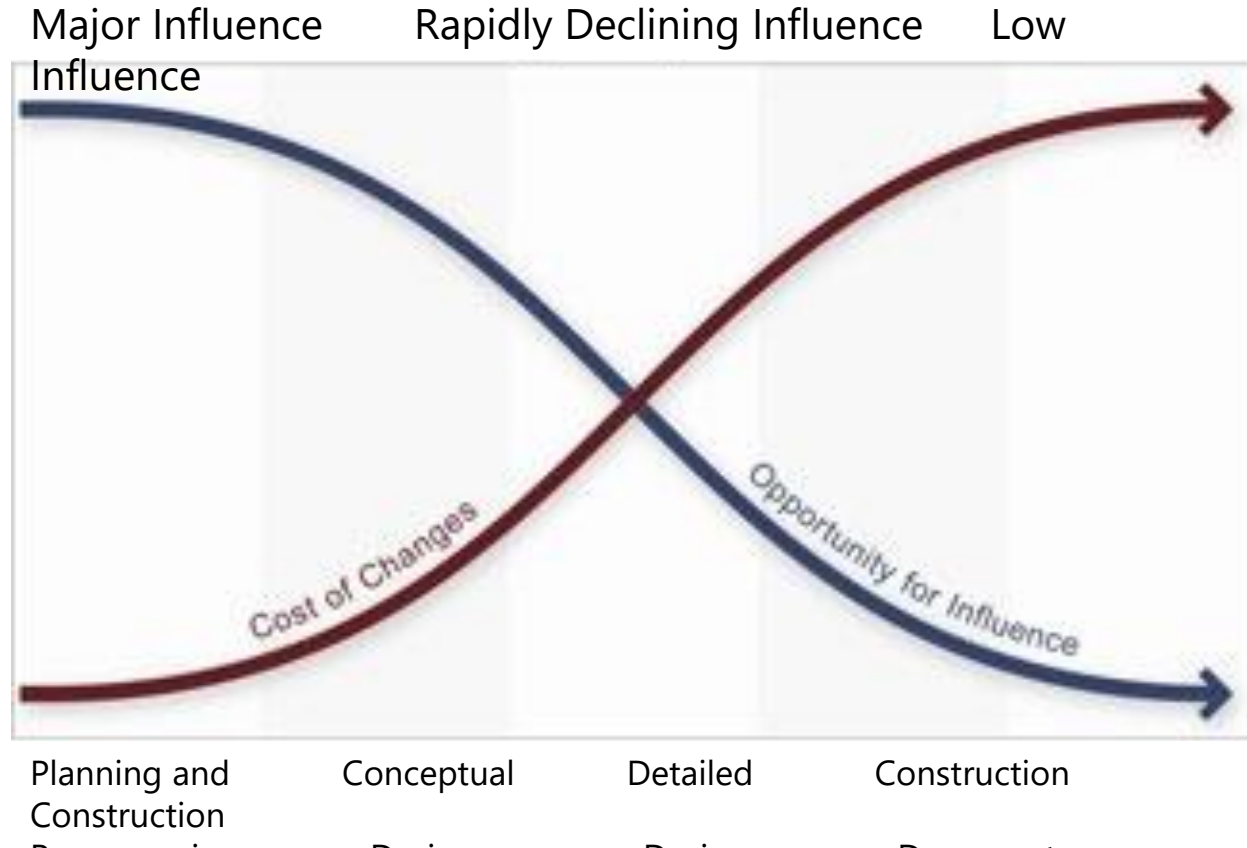
# The Quest: Solve Complexity + Connect Participants



# The Opportunity: Savings from Value Engineering

The greatest opportunity for cost savings, and for influencing the outcome, is in the planning stage

The greater the savings, the more resilient energy infrastructure will be built, sooner

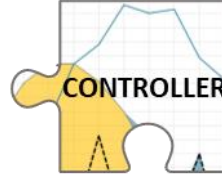




# Step 1. Automated Design Optimization for Engineers

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Building Loads



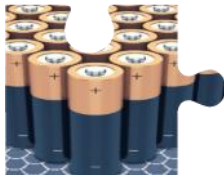
Electric Cars

Solar PV Power



Microgrid Controller

Battery Storage



Utility Distribution System

Wind Power

Diesel/Gas Generators



## Smart Energy Project Wizard

1

### Global Settings

Enter a name and location address for your project.

2

### Project Options

Choose settings and data options for your project.

3

### Technology Options

Select distributed energy technologies to include.

4

### Confirm Settings

Review settings and create the project.

### Project Information

Project Name

DoD Base Demo

Project Team

Advisian / Xendee Team

Project Location

238 California Avenue, Fort Hunter Liggett, CA 93928

Latitude: 36.008682

Longitude: -121.236927

Locate  
Current Address



Next Step  
Project Options



## Step 2. Equipment Specifications & Procurement

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Once the design process had been automated, the next step was to make up-to-date equipment pricing and specifications instantly available to the platform

This is being accomplished through integration with Requis, and partnerships with OEMs



MAY 9, 2019

MARKETPLACE, PROCUREMENT

**Changing the face and pace of  
procurement**





# Step 3. End Users + Finance

Which benefit of microgrid & DER is the most important to you?



Energy Cost Reduction

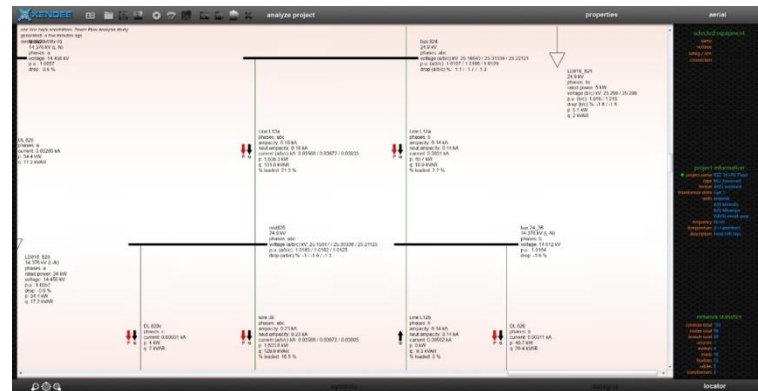


Carbon Reduction



Both Cost and Carbon Reduction

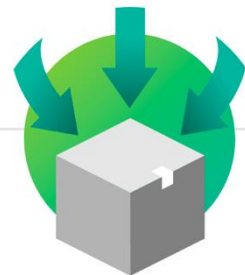
Energy end users input their Load Data & Constraints



Technical/Engineering View  
for Project Delivery Companies

Capital Investors

Find Bankable  
Projects, Provide  
Financing

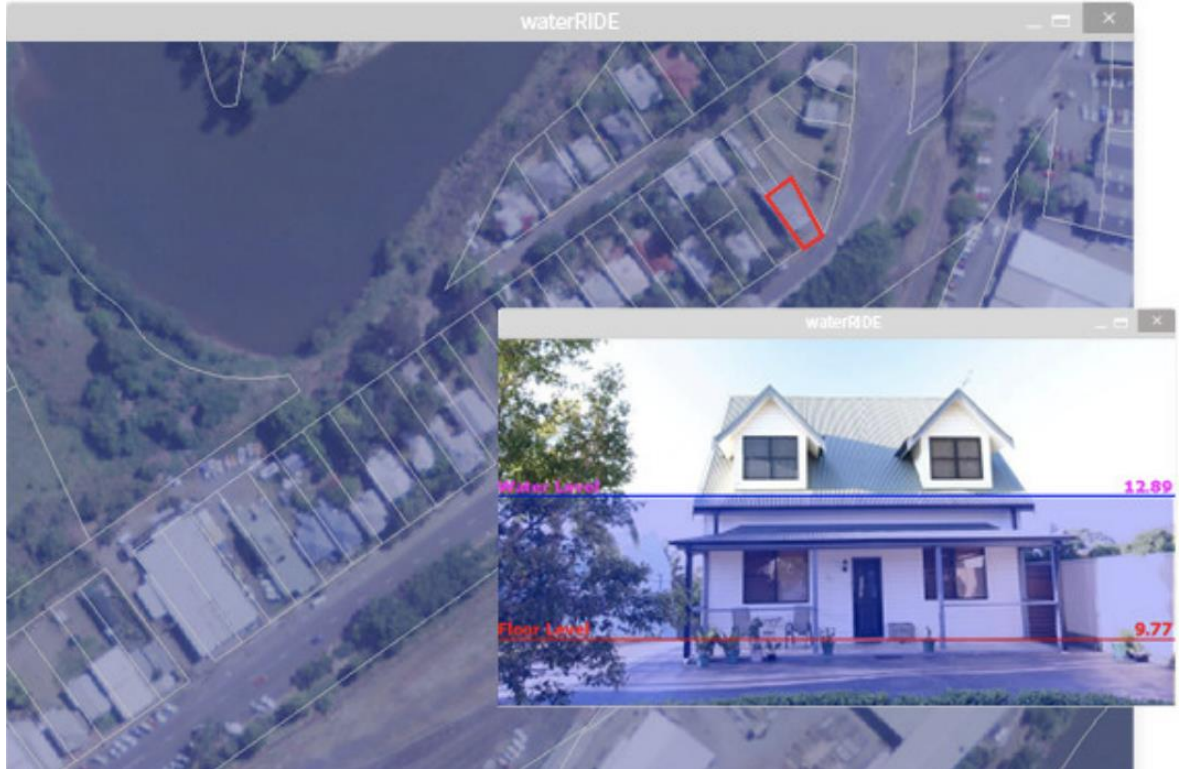
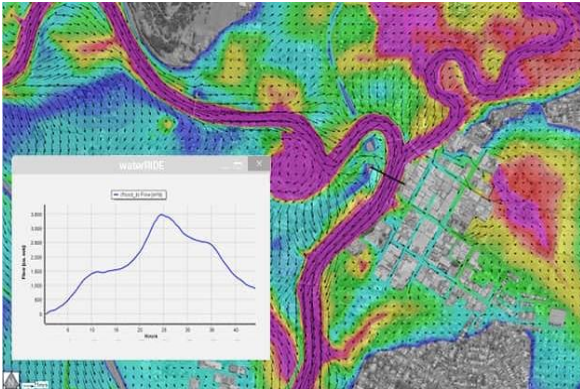


BUY

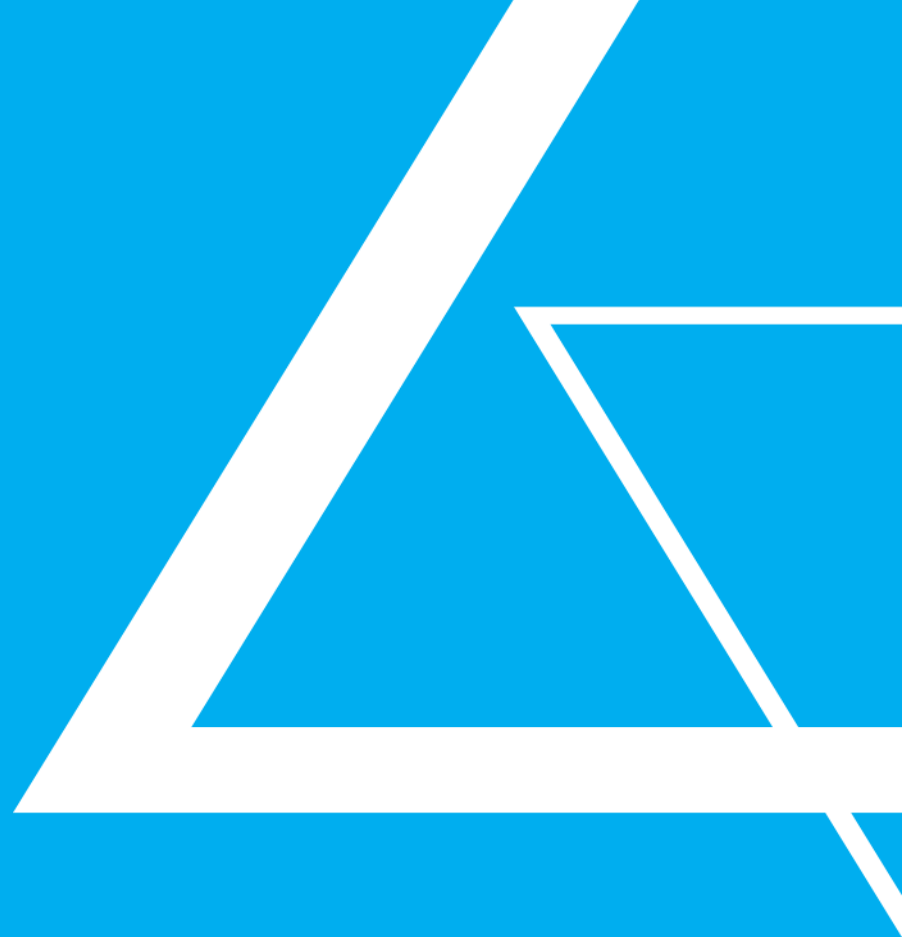
 **Requis**

OEMs post  
their  
Equipment  
Data & Costs

# Future Development: Dynamic Flood Modeling

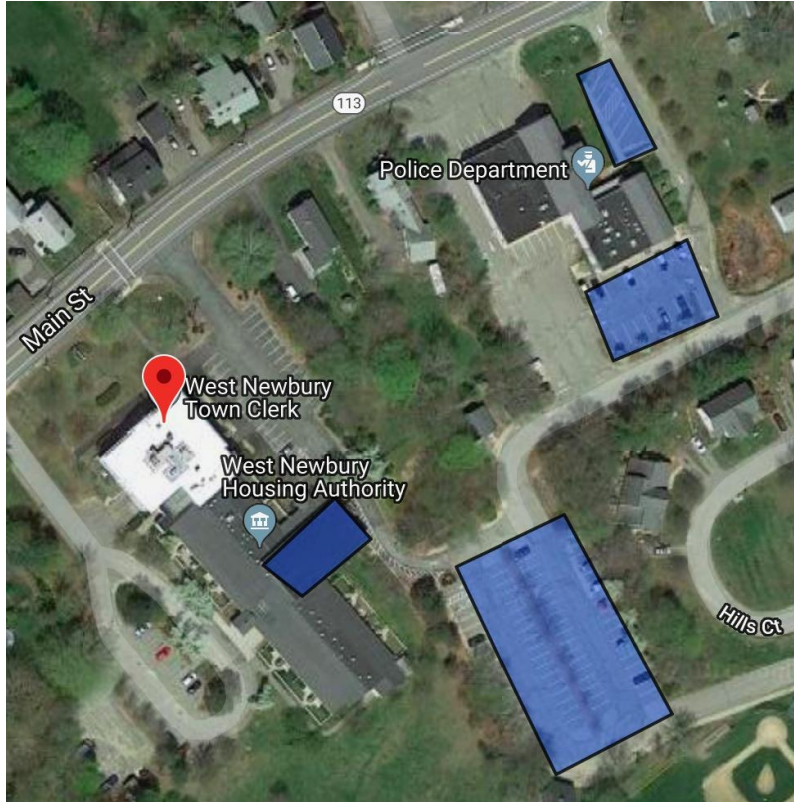


**Examples**



# Examples

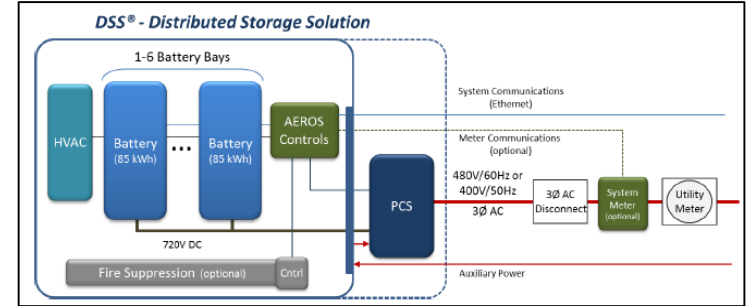
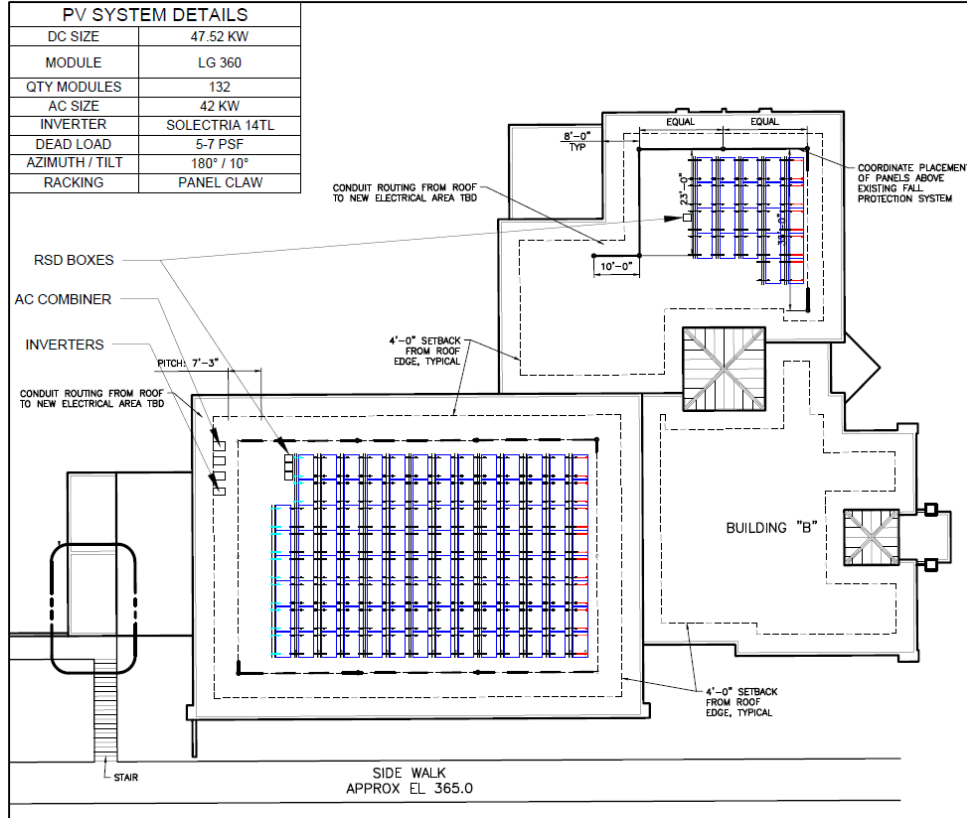
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## Municipal Campus Resiliency Microgrid

- 3-week islanding capability
- Police, fire, town office, senior citizen housing, and emergency shelter
- Parking lot canopy solar
- Rooftop solar
- Diesel generator
- Battery Energy Storage System (BESS)

# Examples



## Miller Community Center Resiliency Microgrid

- 16-hour islanding capability
- Community Center / Shelter
- Rooftop solar
- Battery Energy Storage System



# Examples

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## Battery Energy Storage System (BESS)

- 500kW x 1,000kWh
- 35% cost reduction
- Benefits: Resilience, demand charge savings, learnings for the utility

## **What will our legacy be?**

Energy infrastructure is at risk  
and the transition is not  
happening fast enough

Fit-to-purpose software can  
greatly accelerate  
deployment of DES to  
improve resilience

**Resilient cities start with us connecting better together**



# Contacts

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