Non-Traditional CHP Markets Are Growing

- Large CHP potential in light manufacturing, commercial, institutional, government and military applications
- Markets utilize smaller systems (< 10MW)
- Markets have limited CHP experience
- Users have limited technical resources
- History of issues with system performance and with CHP sales and service support
- Many perceived risks by both users and suppliers

Non-traditional markets represent 35% of the capacity and 70% of the projects installed since 2008.

Source: DOE CHP Installation Database [U.S. installations as of Oct 31, 2019]
Challenges

- CHP viewed as a discretionary purchase
- Lack of user awareness / understanding
- Under-developed sales and service infrastructure
- Every installation is considered unique
- High soft costs
- End-user responsibility
NYSERDA’s CHP Program Evolution

CHP Demonstration Program
Goal: Diversity -- Broad Portfolio for Learning via Trailblazing Examples

CHP Performance Program
Goal: Further acquisition of grid load relief

Packaged CHP Catalog Program
Goal: Market Transformation via Standardization & Maturity

2000 2006 2012
DOE eCatalog Builds on NYSERDA’s Packaged CHP Program

• Realign the way CHP deals are transacted in the marketplace to:
  — Achieve genuine cost reductions
  — Increase consumer confidence

• Facilitate customer acquisition to reduce marketing / soft costs and early-stage project development

• Facilitate replicable project designs to reduce design errors, associated performance losses, and re-work expenses

• Reduce uncertainty for consumers and suppliers
Specific Objectives of NYSERDA’s CHP Program

• Educate the market on the benefits of CHP
• Prime the pump to grow market to scale
• Attract focus of world-class solution providers
• Coach customers to have mature expectations
• Groom a cadre of competent solution providers to be able to deliver
• Help the market learn how to reduce costs and capture alternative sources of market-based compensation (displacing need for subsidies)
• Provide consumer protection to ensure high-quality installations
NYSERDA’s Packaged CHP Catalog Program

NYSERDA Packaged CHP Catalog - Reduce perceived risk of installing and operating CHP by offering comparable standardization of CHP systems and field service agreements.

- Independent endorsement based on in-depth analytical review
- Single-point-responsibility as the basis for customer-vendor relationship
- Comparison shopping to promote competition and expand offerings

v1: 8 Vendors & 36 systems
v2: 10 Vendors & 64 systems
v3: 13 Vendors & 141 systems
v4: 22 Vendors & 219 systems
V5: 26 Vendors & 253 systems
NYSERDA CHP Program Successes

- Commoditization of offerings and expansion of options
- Project cost reductions and time compression
- Increased program uptake
- Less dependent on subsidies (incentives ramping down over time)
DOE Packaged CHP eCatalog

• **Reduce Risks for end-users and vendors** through a combination of a national web-based catalog (*eCatalog*) of DOE-recognized packaged systems and suppliers, and state/utility partners with CHP market engagement programs

• End-users and design engineers search for applicable CHP system characteristics, and get connected to packagers, installers and CHP engagement programs

• Allows users to compare technology options on a common basis
Unique Verified System Level Performance Data
DOE Packaged CHP Accelerator

**Better Buildings Accelerators** demonstrate, catalyze and validate innovative approaches to increase investment in efficient energy technologies.

- A venue to populate and launch the Packaged CHP eCatalog – success requires state/utility market engagement programs to promote CHP deployment, publicize the eCatalog, and provide technical and market assistance

- **CHP Supplier Partners** – CHP system packagers and solution providers participating in the national *eCatalog* of packaged CHP systems

- **CHP Engagement Partners** – Utilities, federal agencies, states, cities or other market entities committed to promoting packaged CHP (via the *eCatalog*)
State and Utility CHP Programs are Growing

- State with utility CHP incentive program
- State with CHP deployment program
Questions

https://chp.ecatalog.lbl.gov/
https://betterbuildingsinitiative.energy.gov/accelerators/packaged-chp

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