

Commercial Food Service Natural Market Baseline Report and Recommendation 10/19/2020



Agenda

- Introduction of CFS Baseline
- Baseline Results
- Recommendation

CFS Baseline Report

Background and Timeline

- May 2019 - Frontier Energy was contracted to develop a CFS baseline
 - Nicor Gas and ComEd co-funded the report
- May 2020 - Final report delivered
- July 2020 - Resource Innovations developed a market transformation recommendation based off the results, pilot results, and in consultation with funding utilities

Report Structure and Approach

- Market characterization and segmentation
- Technical assessment and groupings, trends and regulatory framework
- Baseline model development
- Model review and adjustment
- Summary of results

Major Foodservice Equipment Categories Assessed

- Fryers
- Ovens
- Steamers
- Refrigerators and Freezers
- Ice Makers
- Pre-rinse Spray Valves
- Broilers
- Demand Control Kitchen Ventilation
- Dishwashers
- Griddles
- Hot Food Holding Cabinets

Energy-Efficient Market Penetration (2018)

Appliance Type	Estimated EE Adopter Category	Estimated Totals Sales Population for N. IL	EE Market Penetration
Fryers	Early Adopter	3,724	29%
Convection Ovens	Early Majority	3,300	60%
Underfired Broilers	Early Adopter	450	<1%
Steamers – Connectionless	Early Majority	450	50%
Steamers – Steam Generator	Early Adopter		
Ventilation/Exhaust	Early Adopter (DCKV systems)	1,200	<20% (DCKV Systems)
Refrigerators & Freezers	Late Majority	32,559	51%
Ice Makers	Late Majority	9,500	36%
Pre-Rinse Spray Valves (PRSVs)	Late Majority	1,600	90%

Energy-Efficient Forecasted Market Penetration

Appliance Type	2018 Estimated EE Market Penetration	10-Year Market Penetration (2028)	20-Year Market Penetration (2038)
Fryers	29%	37%	43%
Convection Ovens	60%	65%	70%
High Efficiency Underfired Broilers	<1%	Relatively new technology; no ENERGY STAR category yet, low natural market uptake	
Steamers – Connectionless	50%	85%	96%
Steamers – Steam Generator			
Demand Controlled Kitchen Ventilation (DCKV) Systems	<20%	No ENERGY STAR category; Recognized for an ENERGY STAR Emerging Technology Award in 2015-16, low natural market uptake	
Refrigerators & Freezers	51%	97%	99%
Ice Makers	36%	95%	99%
Pre-Rinse Spray Valves (PRSVs)	90%	2019 DOE mandatory federal standard superseded voluntary specifications	

Recommendation

CFS – MT Recommendation

- Not recommending CFS as a MT program for northern IL, rather continue with the upstream offering
 - Northern IL is not large enough to effect market change
 - Would need a long-term, national approach and intervention to obtain market savings

MT Recommendation Rationale

Market share

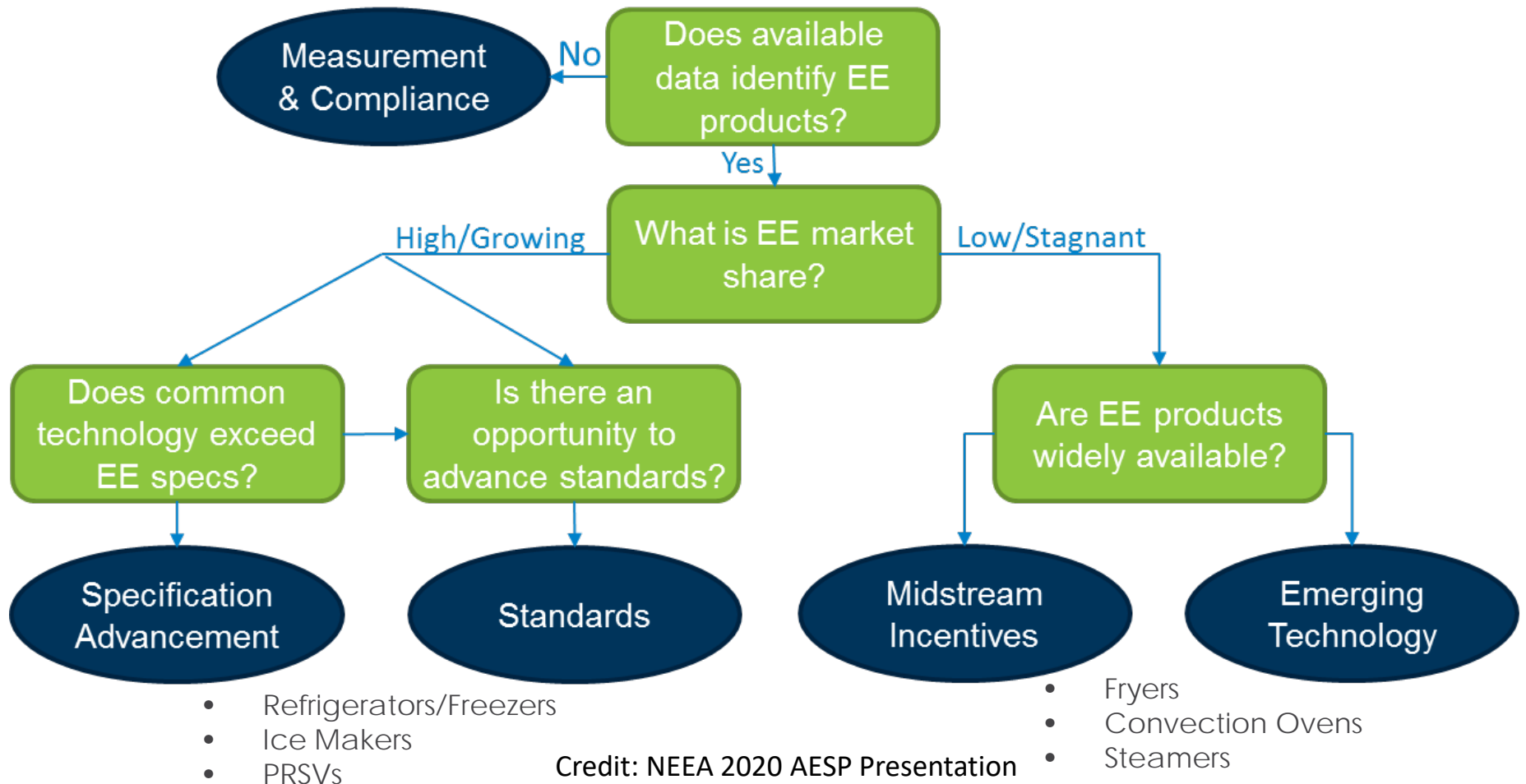
- Northern IL market share (~4.5% total equipment sales) not large enough to grab attention of key market actors (manufacturers, ENERGY STAR, national chains) to drive true market shifts across multiple measure categories
 - Would require investment to design and implement a larger regional/national approach and recruitment of additional utilities
 - Long term commitment necessary to get largest distributors on board

Alternative MT Design: CFS version of RPP

- Need for long-term investment and coordination
 - Development of national program
 - Additional utility recruitment to grow market share
 - Engagement with national distributors to gain access to data
 - Engagement with manufacturers
 - Engagement with ENERGY STAR, codes and standards organizations
- Opportunity to claim market savings across multiple measure categories
 - Significant savings would not be in the near term

RPP MT Approach

- Underfired Broilers
- DCKV



Credit: NEEA 2020 AESP Presentation

MT Recommendation

- Not recommending CFS as a MT program for northern IL
 - Minimum value in developing a MT overlay for the existing FER pilot design
 - No opportunity to claim market savings, could just drive additional participation through midstream channel

Thank You