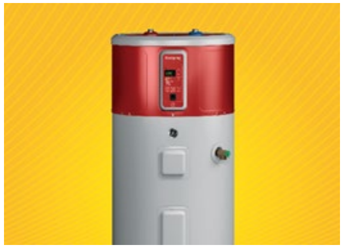
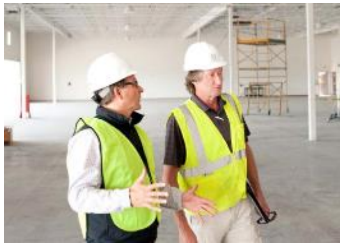
2017

2017 Operations Plan

Natural Gas Plan

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Key Indicators
Progress to Business Plan

Natural Gas Market Transformation Business Plan

Key Principles of Operation:

- No promotion of fuel switching
- No cross subsidies between gas and electric
- Implement gas efforts without diminishing existing electric market transformation work

Key Objectives:

- Build experience working in natural gas markets
- Identify and resolve integration issues
- Drive towards a fully integrated approach to market transformation for the long term.

Major progress & accomplishments in 2016

- Completed **Gas Heat Pump Water Heater** field trial and component refinement research and design
- Built test units, conducted controlled field test and prototype testing for Stone Mountain Technologies **Combi System**
- Conducted lab testing and identified strategy for **Efficient Dryers**
- Launched field study for **Rooftop HVAC** product and conducted research to understand product opportunity
- Identified two potential market transformation opportunities for **Hearth Products**; launched and leveraged market research to increase understanding of energy savings opportunities

Major progress & accomplishments in 2016

- Crafted draft version of portfolio selection criteria
- Leveraged existing NEEA Initiative Lifecycle Process to advance Efficient Dryers and Rooftop HVAC products
- Leveraged cost-sharing opportunities with electric programs to diminish research costs
- Deepened engagement and identified possible partnership opportunities with other efficiency organizations and natural gas utilities
- Increased national awareness of NW approach to Natural Gas market transformation

2017 Operations Plan Summary

2017 Portfolio Key Focus Areas

Business Unit:

- Complete Mid-Cycle Assessment
- Establish cost-effectiveness methodology for market transformation programs
- Approach new organizations for funding

Products:

- Build traction on commercialization for gas heat pump water heaters
- Build relationships with manufacturers to support rooftop units and understand utility needs to support future programs

Scanning Opportunities

2017 Priorities:

- Evaluate low capacity furnace technology
- Evaluate ICE (Internal Combustion Engine) technology for both residential & commercial water heating applications
- Scan for additional combination space and water heat technologies

Challenges and Risks	Impact	Contingencies & Mitigation
• Varying funder interest in scanning activities • Limited to US market presence	• Limited pipeline – may impact next business cycle • Stakeholder perception	• Leverage stakeholder relations • Transparency in scanning efforts

Gas Water Heaters

2017 Priorities:

- Manufacturer engagement
- Create gas product specification
- Rally the gas industry to support this product

Challenges and Risks	Impact	Contingencies & Mitigation
• GE leaving the market • Limited investment from Natural Gas Community	• Largest manufacturers are uninterested • Proof of concept work needed with alternate technologies	• Accelerate product development with new innovators • Create value proposition • Deepen industry partnerships

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Rooftop Units

2017 Priorities:

- Pass Initiative Start milestone
- Execute strategic partnership engagement plan
- Understand market channel barriers to inform strategy test plan

Challenges and Risks	Impact	Contingencies & Mitigation
• No verified value proposition	• Poor market uptake / acceptance • Team cannot solidify MT strategy	• Complete pilot to understand savings and product costs • Understand condensate legalities • Develop supply chain relationships

Combination Space and Water Heating (Combi) Systems

2017 Priorities:

- Increase manufacturer engagement to support activities to drive for commercialized product
- Complete Stone Mountain Technologies (SMTI) field study
- Evaluate product value proposition
- Scan for additional technologies

Challenges and Risks	Impact	Contingencies & Mitigation
• Tough value proposition • New construction program needed (dual fuel)	• May not be cost-effective or too specialized • Slow market uptake	• Accelerate product development with a new innovator • Create approach for dual fuel programs

Efficient Dryers

2017 Priority:

– Participate in federal test procedure and specification rulemakings

Challenges and Risks	Impact	Contingencies & Mitigation
• Small market share	• Small savings • Small impact with supply chain	• Continue to reach out to other partners
• Lab tests suggest less than ideal consumer experience with qualified products	• NEEA (and utilities) do not want to put their name behind Energy Star brand	• Engage with Energy Star • Influence federal test procedure rulemaking, CEE specification, Energy Star Most Efficient specification • Engage manufacturers to influence product development

Hearth Products

2017 Priorities:

- Complete market characterization and use findings to inform regional strategy
- Finalize low capacity product testing and, if appropriate, support prototype development

Challenges and Risks	Impact	Contingencies & Mitigation
• Funder expectations around this product category differ	• Inefficient use of resources	• Set and continue to maintain clear work plan • Continue high funder engagement

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Codes & Standards

2017 Priorities:

- Commercial (OR) & Residential (WA) code development
- Energy Star Advancements
- Residential water heater standard

Challenges and Risks	Impact	Contingencies & Mitigation
• Predictability • Natural Gas funders competing interests in codes	• Increased staff resources • Stakeholders lose confidence	• Communication strategy • Increase EE partnerships

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Financial Progress to Business Plan

Natural Gas Budget to Business Plan

	2017 Budget ($M)	2015 - 2016 Estimated Expenses ($M)	Total 2015 - 2017 Estimated Expenses	2015 - 2017 Expenses To Date ($M)	5 Year Budget ($M)
Salary/Benefits	0.91	0.91	1.82	40%	$ 4.60
General & Admin	0.71	0.72	1.43	45%	$ 3.17
Heat Pump Water Heaters	0.88	0.34	1.22	28%	$ 4.42
Combined Space-Water Heating	0.36	0.25	0.61	29%	$ 2.08
Hearth Products	0.17	0.14	0.31	27%	$ 1.16
Rooftop HVAC	0.30	0.69	0.99	76%	$ 1.31
Dryers	0.03	0.07	0.10	29%	$ 0.34
Scanning	0.10	0.36	0.46	61%	$ 0.75
Codes & Standards and Other Research	0.29	0.00	0.29	58%	$ 0.50
Total	**$ 3.75**	**$ 3.48**	**$ 7.23**	**39%**	**$ 18.33**

Thank You

TOGETHER We Are Transforming the Northwest