Location, Location, Efficiency!

2016 Building Technologies Office Peer Review

U.S. DEPARTMENT OF ENERGY | Energy Efficiency & Renewable Energy

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Project Summary

Timeline:

Start date: August 1, 2015

Planned end date: July 31, 2018

Key Milestones

1. Evaluate partner's CRM tool for compatibility; June 30, 2016
2. Program website launched; September 30, 2016
3. 50 buildings analyzed using DOE tools; December 31, 2016

Budget:

Total Project $ to Date:

- DOE: $29,663
- Cost Share: $26,724

Total Project $:

- DOE: $750,000
- Cost Share: $750,000

Key Partners:

Franklin Energy	MATC
Staples Energy	M-WERC
Office of Energy Innovation	MKE Business Improvement Districts
USGBC-WI	Transwestern
BOMA-WI	Focus on Energy

Project Outcome:

The project focus is to make it easier and more compelling for building owners and property managers to develop and implement energy efficiency projects. Key outcomes include providing resources to this audience to guide them through the process of project development and increasing awareness of educational opportunities that will help building operators better understand their facilities.

Purpose and Objectives

Problem Statement:

This project addresses the following challenges, barriers, and knowledge gaps:

- Perception that investing in efficiency is too expensive or complicated
- Uncertainty of value of and ability to recoup energy efficiency investment
- Underinvestment in energy efficiency projects due to competition for tenants through lower rents
- Insufficient training or experience in the building services workforce

Target Market and Audience:

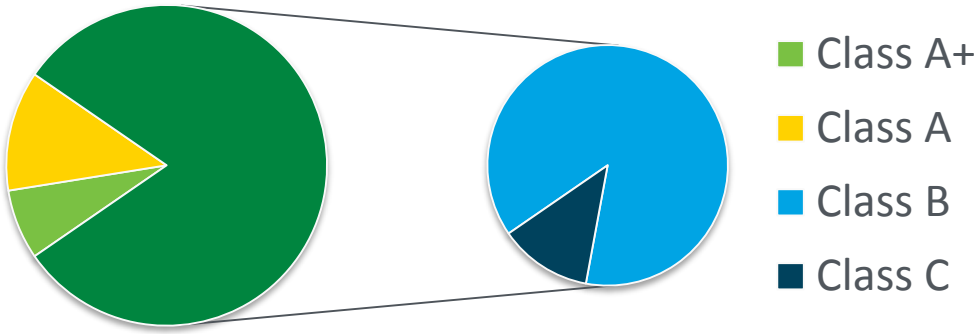
The primary market for the project is Class B & C commercial buildings. The secondary markets are K-12 schools and small commercial buildings (<100kW).

The intended audience is building owners and managers.

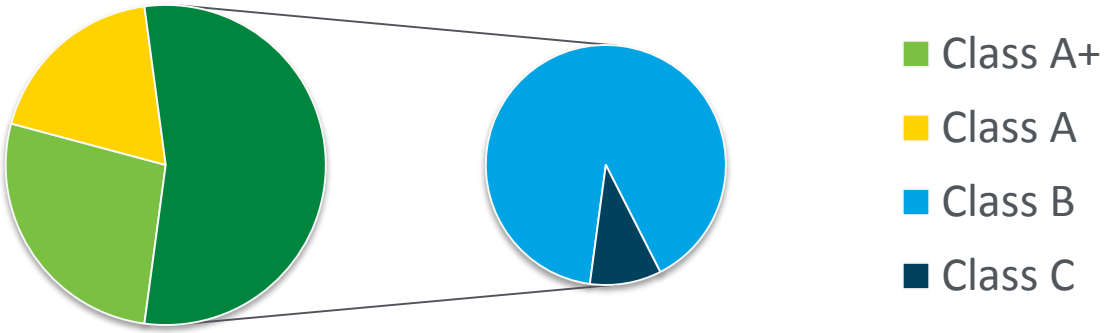
Size of the Market

The Downtown Milwaukee Business Improvement District (BID) accounts for >43% of the office market in the Milwaukee area.

Building Classes in Downtown Milwaukee



Rentable Square Footage in Downtown Milwaukee



Potential Impact

Streamlined Customer Experience

- Bundle energy assessment, benchmarking, & PACE financing with customer choice of operational changes, standard retrofit, or deep retrofit

Workforce Development

- Promote RPP through approved program contractors
- Provide internship opportunities to current & recent students of local technical colleges

Operations Support

- Support on-going savings by identifying operational changes, retro-commissioning, & training opportunities for building operators

Technology Transfer

- Transfer the latest building efficiency technologies developed through M-WERC to the contractor community
- Promote Milwaukee as an energy efficiency exporter

Marketing & Awards

- Reward participating buildings
- Demonstrate how energy efficiency leads to increased profitability

Impact

- Impact 200+ buildings through assessment & recommendations phase
- Increase footprint of the Better Buildings Challenge to 10 million sq. ft. of private space
- Integrate existing DOE tools throughout Wisconsin's building efficiency delivery system
- Increase data transparency by assisting customers in benchmarking using Portfolio Manager
- Train next generation of building efficiency workers with state of the art technology and tools

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Project Measurement

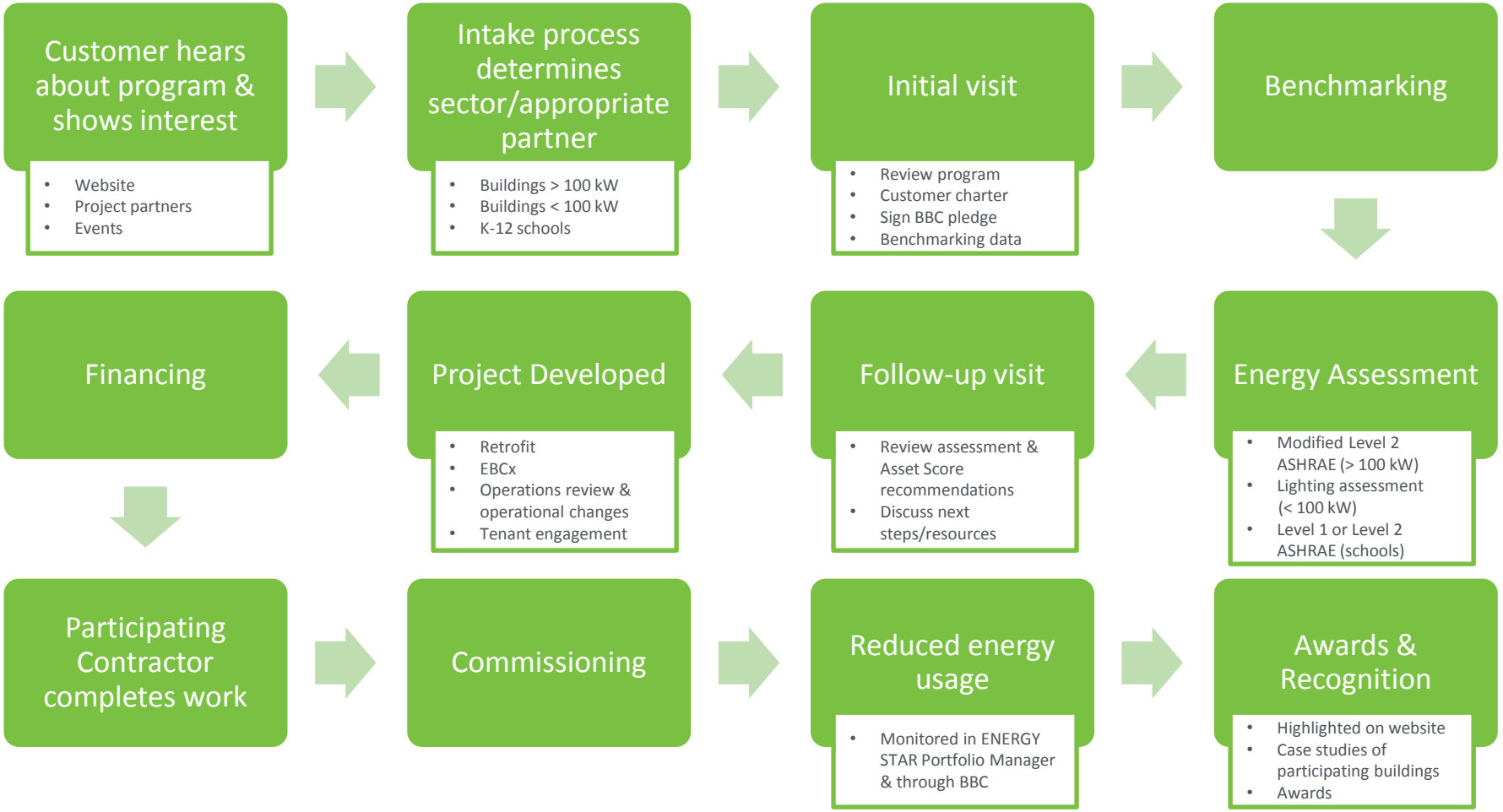
- **Near-term outcomes:**
  - Number of buildings touched/equipped with solutions to guide projects
  - Energy and cost savings of recommended measures
  - Increased awareness and usage of existing resources
- **Intermediate outcomes:**
  - Number of projects completed in participating buildings
  - More transparent energy performance data
- **Long-term outcomes:**
  - Increased occupancy rates and profitability in participating buildings
  - Continued increase in participation in and use of existing resources

Approach

Approach:

- Streamlined customer experience
  - Bundle energy assessments, benchmarking, financing, operational changes, and retrofits into comprehensive package
- Catalyze deployment channels
  - Integrate existing DOE tools (Asset Score, Interior Lighting Campaign, SEED) throughout building efficiency delivery system
  - Transfer latest building efficiency technologies to the contractor community
- Share best practices and recognize success
  - Marketing will include stories demonstrating increased profitability
  - Awards will recognize participating buildings for successes
- Increase access to building data
  - Assist customers in benchmarking using ENERGY STAR Portfolio Manager
  - Increase footprint of the Better Buildings Challenge
- Improve building workforce
  - Train the next generation of building efficiency workers
  - Offer continuing education to current building efficiency workers through workshops, seminars, and courses

Approach (continued)



Key Issues & Distinctive Characteristics

Key Issues:

As a new project, the key issues currently being addressed are around the development of partner contracts and spreading the word about the program, which will fully launch at the end of May. The significance of these issues is that they will be key in keeping the project on schedule and reaching the targeted number of impacted buildings in the first year.

Distinctive Characteristics:

- Brings together many of Wisconsin's energy efficiency leaders to develop a comprehensive approach to the development and implementation of energy efficiency projects in the commercial sector
- Tackles all major aspects of project development and implementation, including technology and workforce
- Integrates existing resources (PACE financing, statewide incentives, DOE tools) into a new framework to make customer navigation of the process easier

Progress and Accomplishments

Progress Against Milestones:

- Evaluate partner's CRM tool for compatibility; June 30, 2016
  - CRM tool entering test stage – determination on compatibility will be made within the month
- Program website launched; September 30, 2016
  - Request for pricing out to local companies for development of website
- 50 buildings analyzed using DOE tools; December 31, 2016
  - 6 pilot buildings identified and started in the customer process

Market Impact:

- *Efforts to ensure or accelerate impact:*
  - Regularly scheduled networking/educational events
  - Marketing through project partners

- *Measured impacts:*
  - As a new project, we do not have any measured impacts to date, although we currently have 6 pilot buildings scheduled to go through the program

Awards/Recognition: None to date

Lessons Learned: Not applicable to date

Project Integration and Collaboration

Project Integration:

- Leverage existing resources/incentives to maximize impact
  - Focus on Energy incentive programs
  - State MEETAP program for schools
  - Utilize/modify existing courses and educational opportunities
  - Modify and use existing tools to aid in deploying technologies

- Provide programming to collaborate with buildings and other relevant stakeholders and to receive buy-in and feedback from relevant sectors

- Involve stakeholders in promotion and communication of the program

Partners, Subcontractors, and Collaborators

Franklin Energy — Customer management; Business implementer

Staples Energy (innovative savings solutions) — Small business implementer

Wisconsin SEO State Energy Office — School implementer

U.S. Green Building Council Wisconsin — Marketing; Event development; Awards

m-worc Mid-West Energy Research Consortium — Technology integration

MATC — Workforce development

Transwestern Sustainability Services — Tenant engagement; Commissioning

Milwaukee Downtown — Marketing; Promotion; Awards

focus on energy (Partnering with Wisconsin utilities) — Integrate technologies into incentive program

BOMA Wisconsin — Workforce development; marketing

eco Environmental Collaboration Office; ecoCITY of MILWAUKEE — Program administrator

Communications:

To date, this work has not been presented at any workshops, seminars, or other forums, outside of introduction to the appropriate audience.

Next Steps and Future Plans

Next Steps:

- Finish executing vendor contracts
- Test customer management process with pilot buildings
- Adapt process based on pilot building feedback
- Develop and implement marketing campaign
- Identify vendor to develop program website

Future Plans:

- Explore how to better connect students trained in new technologies with job opportunities in energy efficient buildings
- Expand the event offerings to be sector focused (i.e., school-focused sessions)
- Determine how best to show all of the benefits buildings receive, beyond energy and cost savings (i.e., tenant satisfaction, marketing/promotion, etc.)

REFERENCE SLIDES

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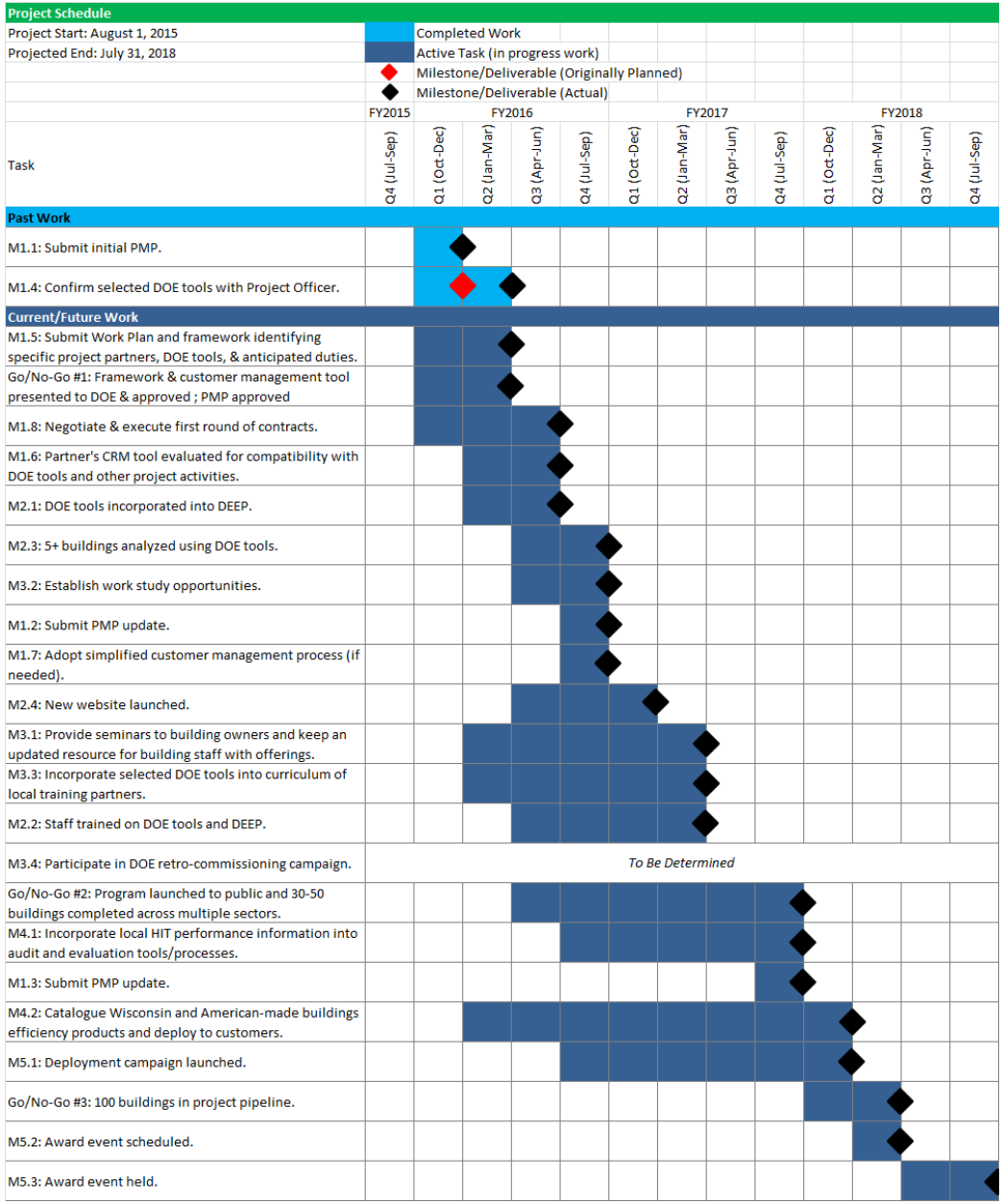
Project Budget

Project Budget: $1,500,000
Variances: To date, there have not been any variances in the budget, although we expect some changes to be upcoming with the execution of partner contracts.
Cost to Date: 0.85%
Additional Funding: None

Budget History					
August 1, 2015 – FY 2015 (past)		FY 2016 (current)		FY 2017 – July 31, 2018 (planned)	
DOE	Cost-share	DOE	Cost-share	DOE	Cost-share
$0	$0	$282,043.46	$284,343.13	$467,956.54	$465,656.87

Project Plan and Schedule



Note on M1.4 missed date:

Had verbally confirmed tools with Project Officer, got confirmation in writing later after working through some issues with one of the tools