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W E B I N A R S E R I E S

ASSESSING KEY DELIVERY PRACTICES FOR
LARGE C&I PROGRAM SUCCESS

June 24, 2020

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LARGE C&I PROGRAM SUCCESS

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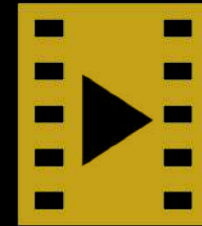
HOUSEKEEPING



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PROGRAM OVERVIEW



Efficiency Maine Trust (EMT) Commercial and Industrial (C&I) Custom Program

Targets Site-Specific Efficiency Projects Requiring Tailored Engineering Analysis

Incentivizes a Diverse Set of Facility Process Improvements & Technologies

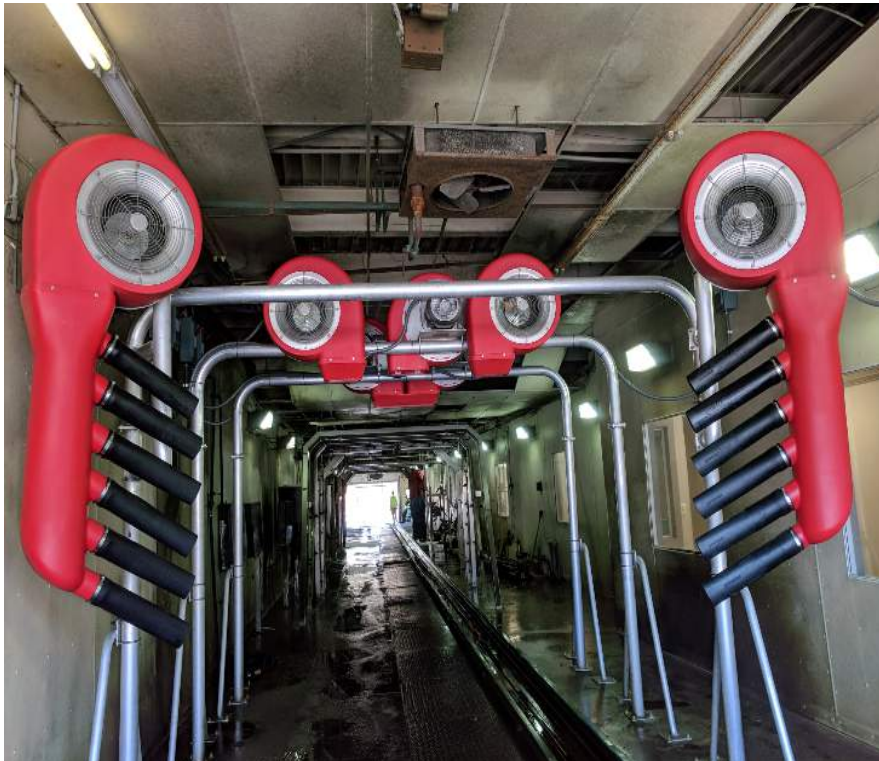
FY2019 Annual Savings (Lifetime Costs):

- 5,351,446 kWh (\$0.042/kWh)
- 94,256 MMBtu (\$2.16/MMBtu)

PROGRAM ADMINISTRATOR:



PROGRAM OVERVIEW CONTINUED



Incentive Pathways:

- Electric, Thermal, Distributed Generation

Incentive Structure:

- 50% (Retrofit) / 75% (Lost-Opportunity)
- \$0.28/kWh / \$25.00/MMBtu
- Or Amount to Achieve a 1-Year Payback

Minimum Project Cost, Incentive, and TRC Benefit-Cost Ratio Requirements

**Provides Technical Support Via Scoping
Audits and Technical Assistance Studies**

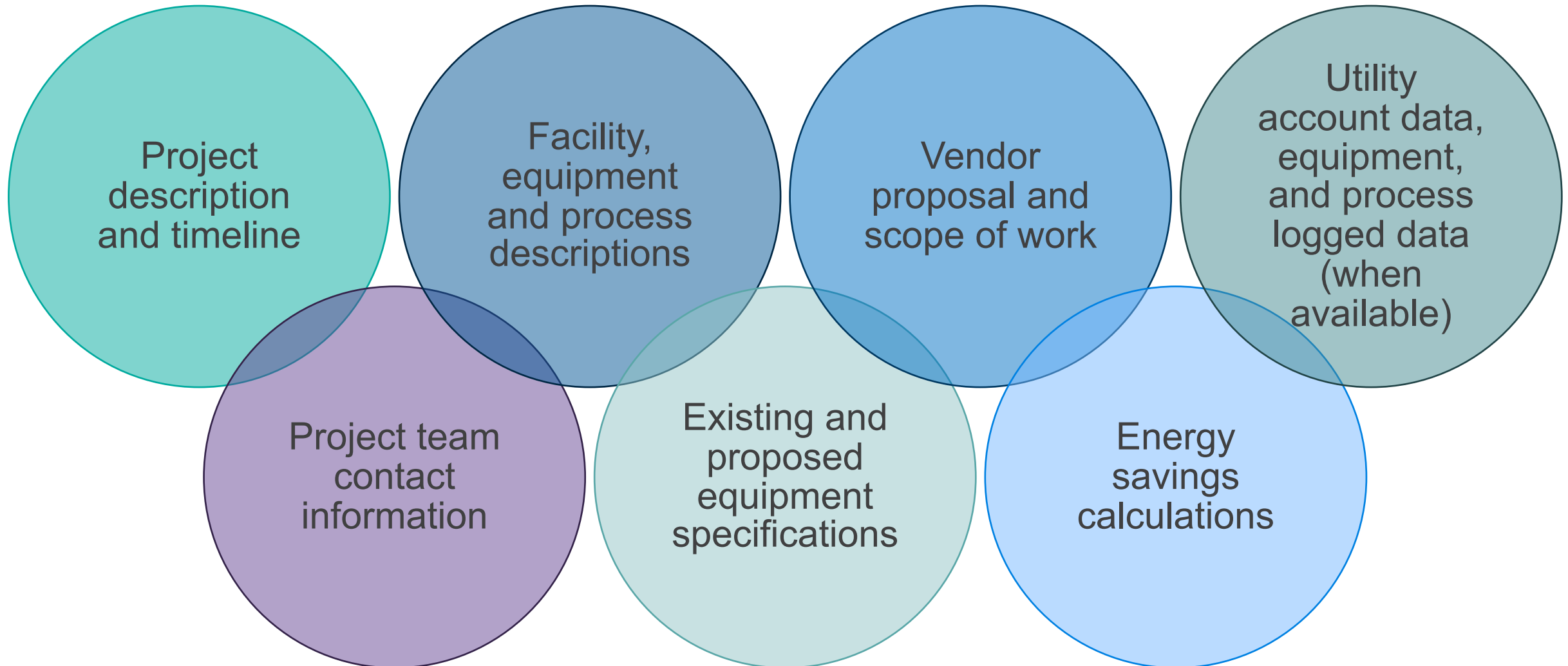
EFFECTIVELY DELIVERING EFFICIENCY

- A long history of program delivery
- Diverse experience: technologies and facilities
- High impact evaluation realization rates

ERS ROLE: PROGRAM DELIVERY TEAM

- Project development and outreach
- Program participant guidance
- Technical assistance and scoping audits
- Project technical analysis
- Project final inspection
- Incentive invoicing
- Project pipeline tracking
- Project database closeout

MANAGING A COMPLEX PROCESS

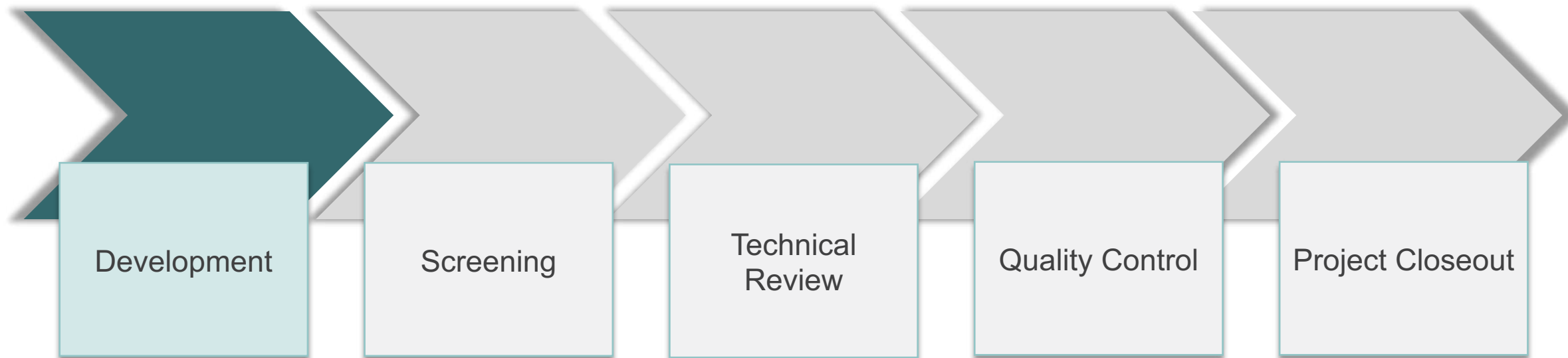


ERS PROGRAM DELIVERY PROCESS



- Emphasis on early engagement and reengagement
- Projects reviewed on a rolling basis
- Incentives aimed to overcome capital expenditure barriers

DEVELOPMENT



Key Activities

- Engage or reengage early
- Communicate program requirements
- Establish project timeline
- Request information

Challenges

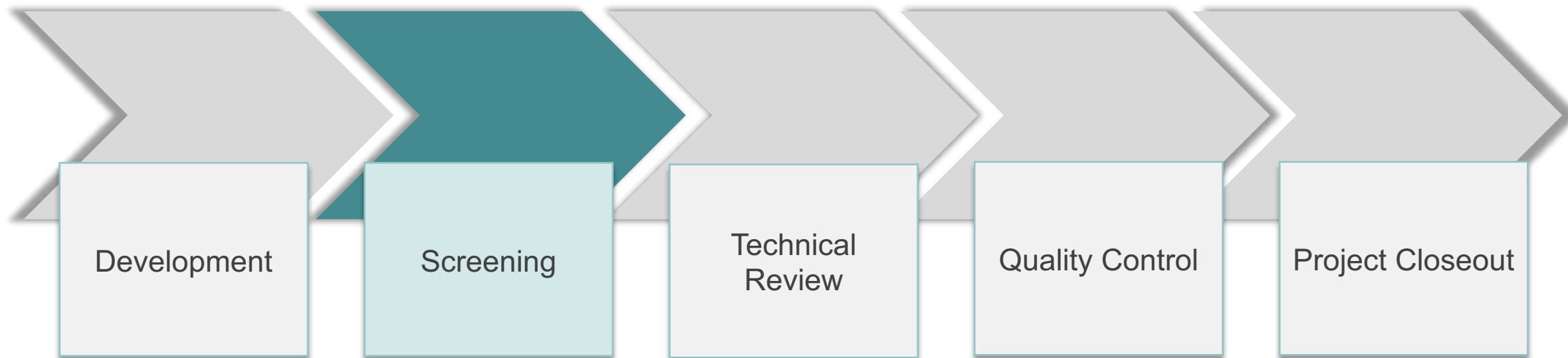
- Clear project direction or timeline
- Lack of project stakeholders
- Facility capital planning cycles



DEVELOPING PROJECTS TO REDUCE SUPERMARKET REFRIGERATION LOADS

- 1 Many locations, many opportunities
- 2 Stakeholder engagement challenges
- 3 Streamlining information exchange
- 4 Prioritizing conservation measures
- 5 Leveraging an applicant's facility portfolio

SCREENING



Key Activities

- Identify undocumented assumptions
- Establish cost-effectiveness potential
- Communicate qualification potential
- Identify the need for scoping audit or technical assistance

Challenges

- Identifying free-ridership
- Validating project feasibility
- Project failing to qualify



SCREENING MEASURES FOR AN ASSISTED LIVING FACILITY

1

Starting with a scoping audit

2

Identifying potential measures

3

Estimating project costs and energy impacts

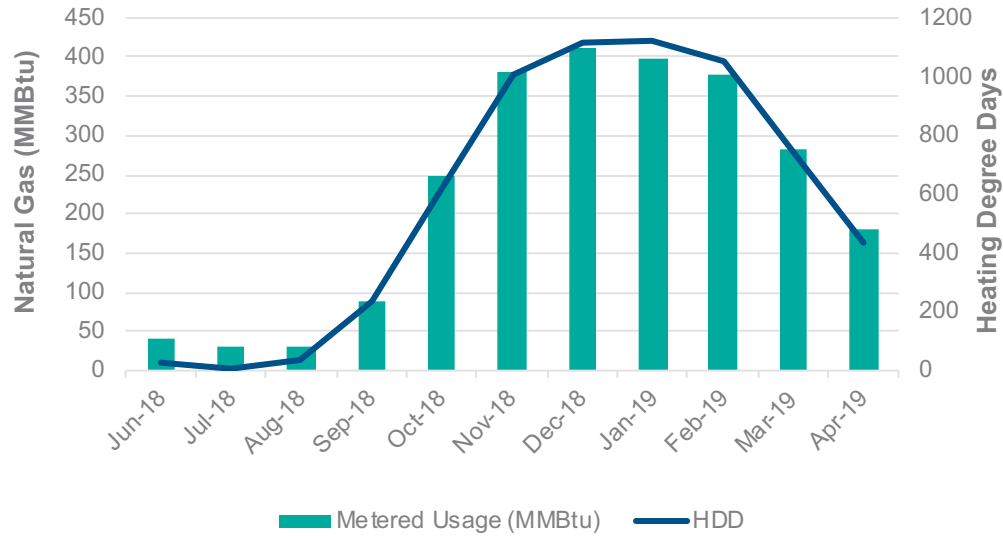
4

Understanding project feasibility

5

Program requirements screening

Natural Gas Usage vs. Heating Degree Days



ASSISTED LIVING FACILITY ENERGY RECOVERY VENTILATION

1

Surveyed facility and analyzed utility data

2

Estimated project costs and savings

3

Identified a high-impact, feasible project

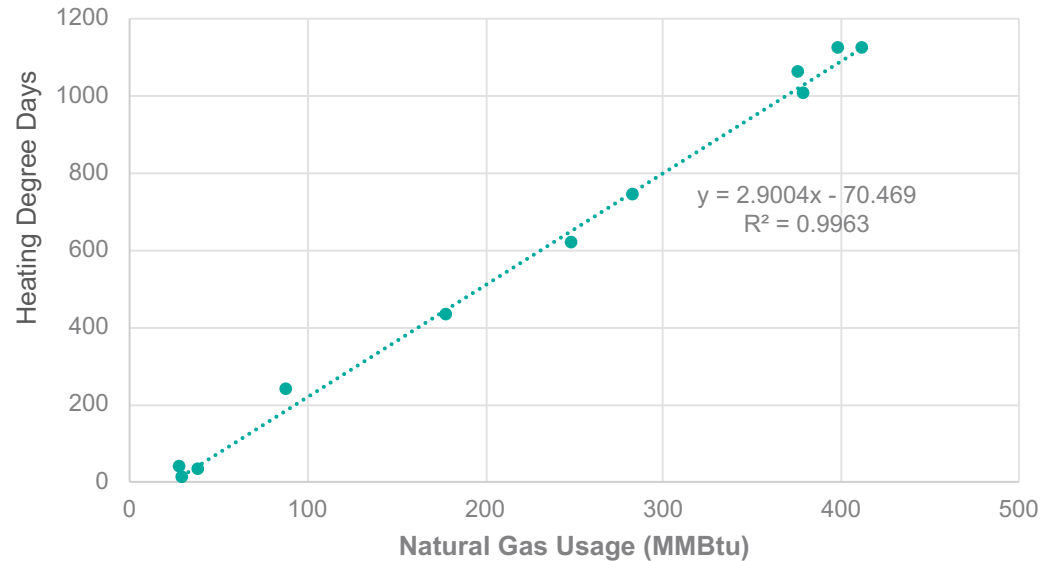
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Provided guidance on next steps

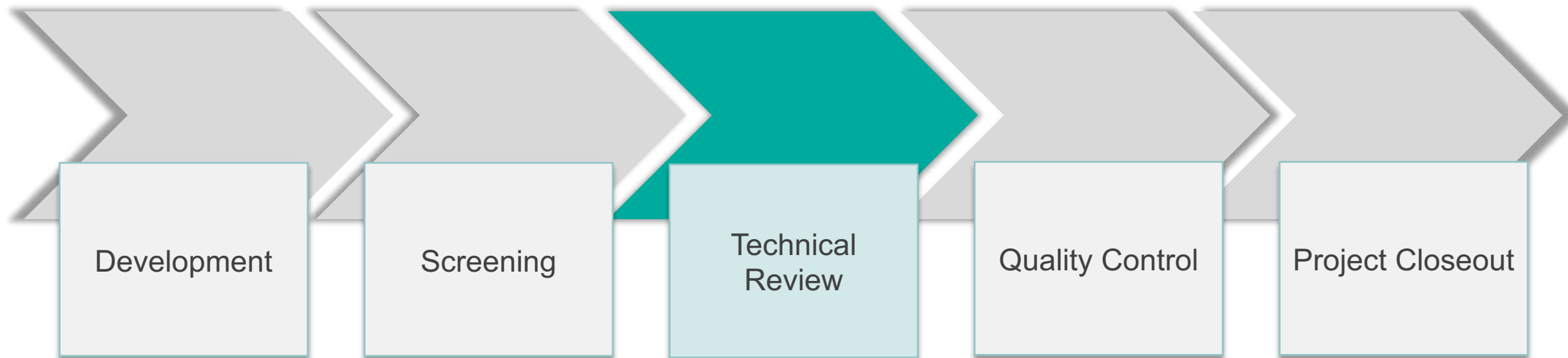
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Planned to follow-up periodically

Natural Gas vs. Heating Degree Days



TECHNICAL REVIEW



Key Activities

- Validate project costs and energy savings
- Document the review methodology
- Link review findings to PA's database

Challenges

- Complexity of measure
- Accurately forecasting energy impacts



MANUFACTURING FACILITY COMPRESSED AIR SYSTEM EXPANSION

1

Project Description

2

Data collection

3

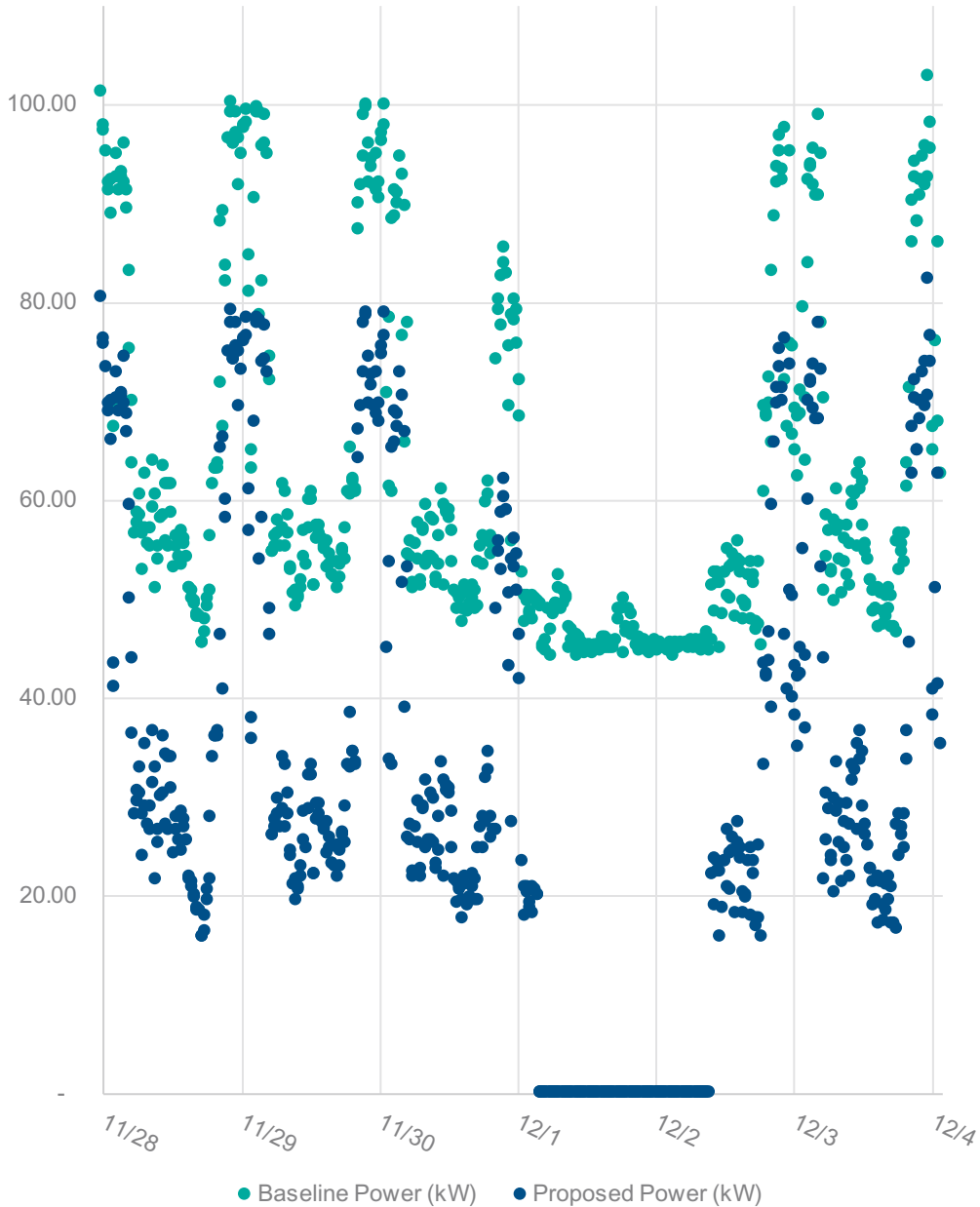
Validating costs and energy impacts

4

The Total Resource Cost (TRC) test

5

Documentation and incentive approval



VALIDATING PROJECT IMPACTS

1

Using flow (CFM) data

2

Extrapolating annual impacts

3

Baseline versus Proposed Performance

4

Documentation and incentive approval

QUALITY CONTROL



Key Activities

- Complete quality control review
- Incentive review submitted for approval

Challenges

- Rectifying any outstanding discrepancies

HOSPITAL STEAM DISTRIBUTION PIPING INSULATION

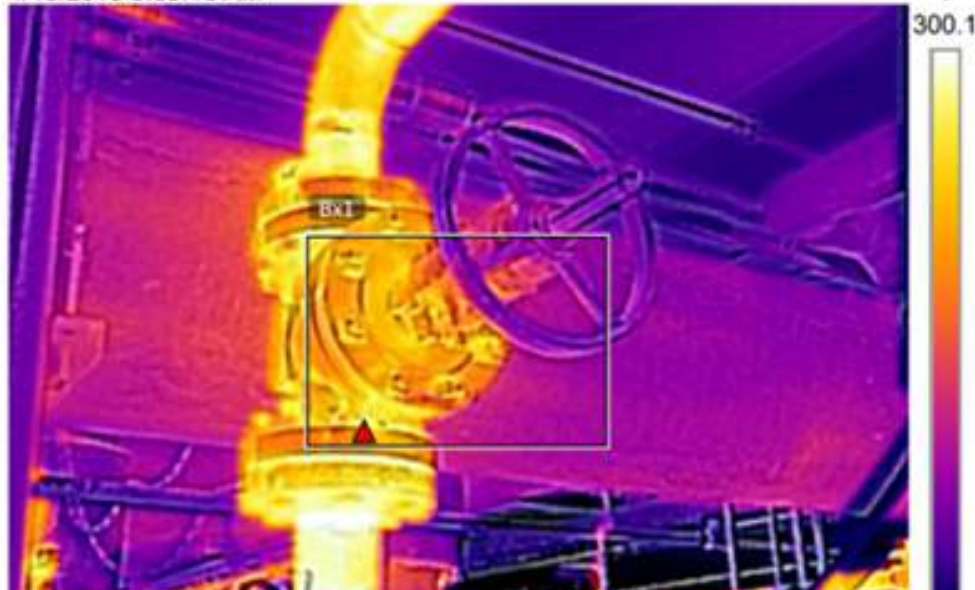


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1

Material and temperature inventories

2

Familiarity with measure and vendor

3

Double-checking calculations

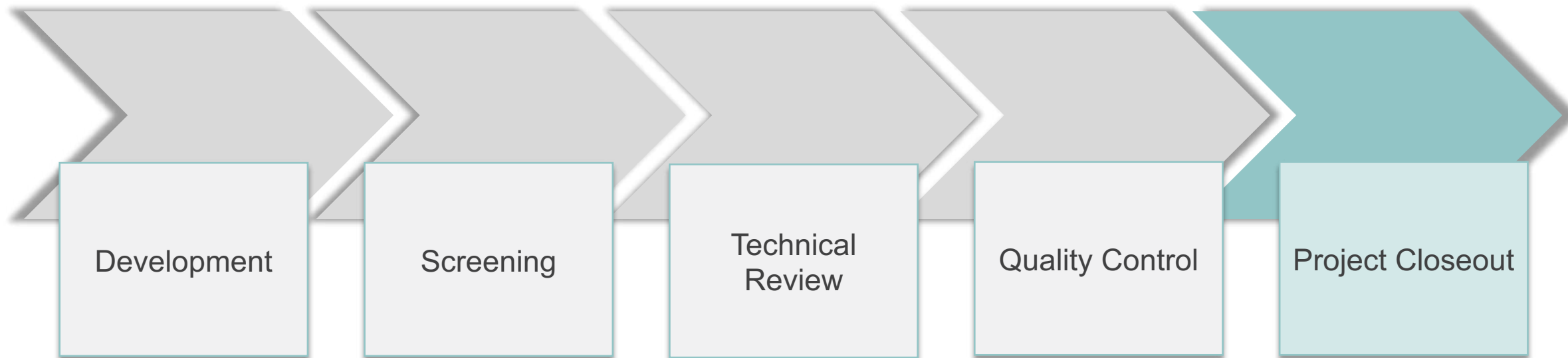
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Double-checking data tracking

5

Incentive approval

PROJECT CLOSEOUT



Key Activities

- Complete final inspection
- Review project invoices
- Incentive invoicing
- Final report and database closeout

Challenges

- Altered scope of work or project timeline
- Re-validating project costs and energy savings



POST-INSTALLATION INSPECTION OF A BUILDING AUTOMATION UPGRADE

1

Project background

2

Site visit

3

Final inspection report and TRC

4

Incentive invoicing

5

Project closeout

COLLECTING INFORMATION TO CONFIRM INSTALLATION

1

Equipment installation photos

2

Controls programming confirmation

3

Project costs

AHU-8 : Calculated Econ Damper / Value
AHU-8 : RA CO2 Status / Value

435.0 ppm

430.0 ppm

425.0 ppm

420.0 ppm

415.0 ppm



DELIVERY CORE PRACTICES



1

PROJECT DATA TRACKING AND QUALITY CONTROL

Built-in opportunities to ensure data tracking and technical reviews are accurate.

2

TECHNOLOGY AGNOSTIC

A qualifying project is limited primarily by cost-effectiveness and meeting minimum program requirements.

3

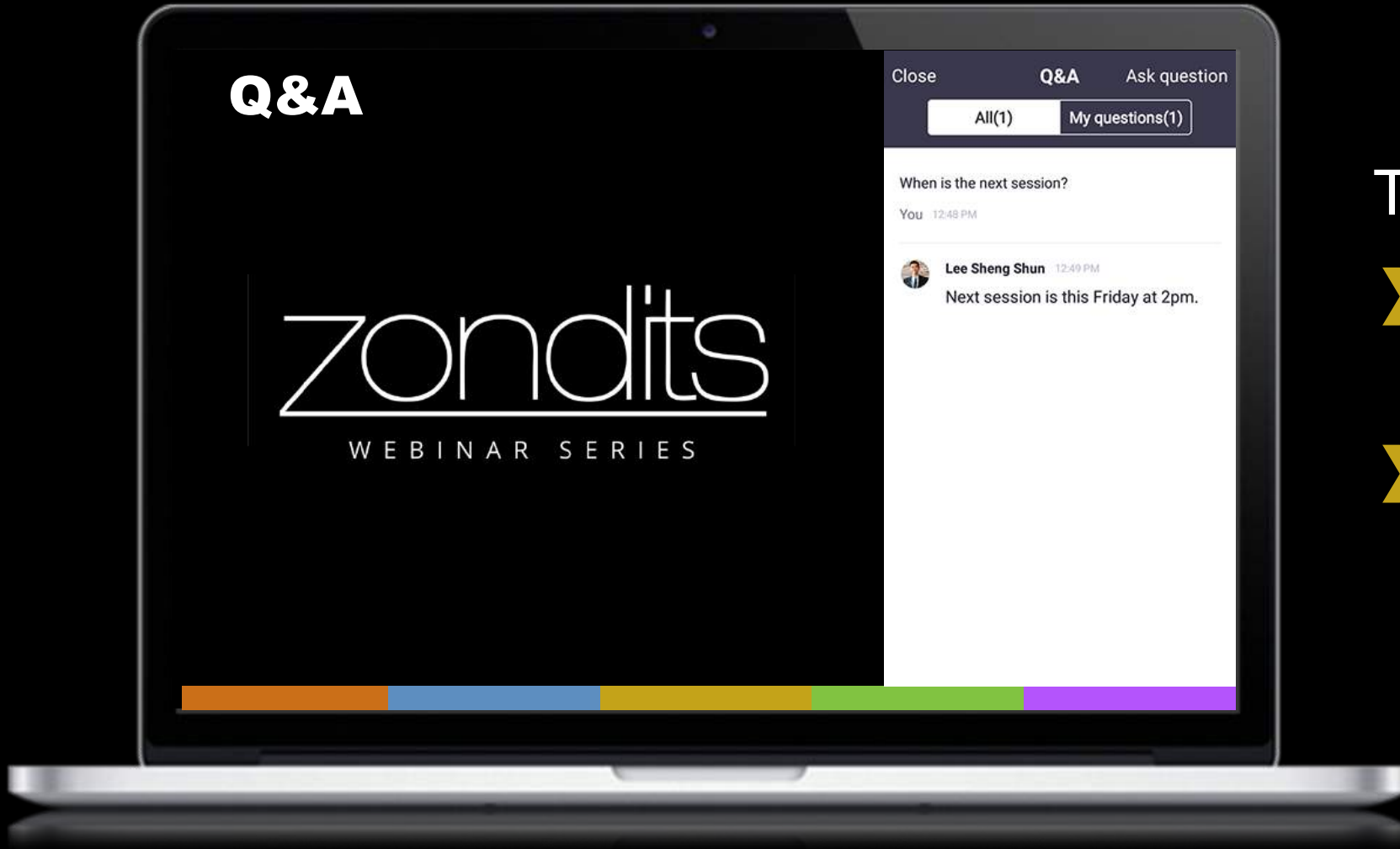
FOCUSED ON DATA

Leverages operating data, equipment and design specifications, weather data, and project economics to assess energy impacts.

4

EMPHASIZES LONG-TERM RELATIONSHIPS

Places emphasis on repeat customers, reducing wasted energy and operating costs, and overcoming capital expenditure barriers.



To ask a question:

- Type your question into the Q&A box.
- Click Send.

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