Industrial energy study process

What is an industrial energy study?

An industrial energy study is used to identify and evaluate efficiency opportunities, and can help you in building a business case for an energy management project. The study estimates the energy savings and implementation costs of a potential project.

In this guide you'll learn:

- Who is involved in the industrial energy study process as well as their roles and responsibilities;
- Steps to successfully undertake a BC Hydro funded industrial energy study; and
- Next steps after the study is complete.

Who is involved?

An industrial energy study involves the customer, the Alliance member and BC Hydro representatives that include the Key Account Manager (KAM), Engineering and Operations.

What are the steps?

1. OPPORTUNITY IDENTIFICATION

The customer, with support from their KAM, identifies an opportunity for an industrial energy study. The identification phase includes:

- Description of the system to be studied
- Existing system problems or inefficiencies as well as potential improvements
- System specifications such as size, energy consumption, operating conditions, etc.

- Engineering is available for consultation at this identification phase, which is strongly encouraged for large and complex projects.

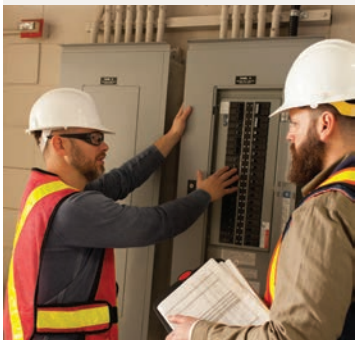
2. ALLIANCE MEMBER REFERRAL (OPTIONAL)

If requested, BC Hydro can provide an Alliance member referral to the customer for their industrial energy study. The specific process or equipment expertise required for the study is matched with the technical capabilities of an Alliance member.

3. PRE-PROPOSAL MEETING

- KAM schedules a pre-proposal meeting with the customer, the Alliance member and BC Hydro representatives to discuss details of the industrial energy study. The objectives of this meeting are:
  - Create a clear project definition
  - Review the BC Hydro energy study guidelines
  - Define the scope of the study and decide which aspects are fundable by BC Hydro
  - Confirm the technical capabilities required by the Alliance members
  - Estimate study costs
  - Determine study report deliverables

Alliance member qualifications must match the technical capabilities required to conduct the study



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4. STUDY PROPOSAL

- Alliance member provides a detailed study proposal to the customer and KAM
- Alliance member completes the BC Hydro energy study proposal template
- Customer accepts the study proposal and requests the funding application be initiated by the KAM
- Operations sends confirmation to the customer that the application has been received

5. PROPOSAL REVIEW

- Engineering completes a technical review of the industrial energy study proposal
- Engineering verifies the technical qualifications of the Alliance member's engineer–of–record and project team
- Engineering approves the study proposal and communicates results of the technical review to the KAM and Operations. Engineering will work with the Alliance member and customer on any clarifications or revisions that may be required prior to approval
- KAM communicates results of the proposal review, including any agreement conditions
- Operations drafts the funding agreement contract between BC Hydro and the customer

6. CUSTOMER AGREEMENT

- KAM sends funding agreement to customer who reviews, signs and returns to Operations
- Customer notifies the Alliance member that the BC Hydro funding agreement has been signed
- Customer signs separate agreement with the Alliance member for services provided
- Study work begins

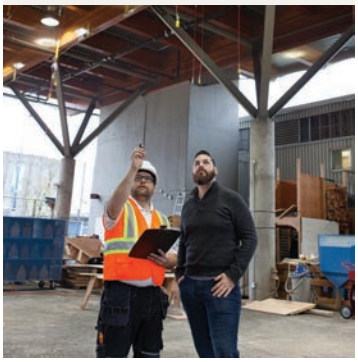
7. INDUSTRIAL ENERGY STUDY REPORT

- Alliance member submits study report to the customer and BC Hydro
- Engineering completes a technical review of the study report
- Engineering approves the study report and communicates results of the technical review to the KAM and Operations. Engineering works with the Alliance member and customer on any clarifications or revisions that may be required
- Alliance member submits their invoice upon completion of the technical review

8. INVOICE PAYMENT

- Operations reviews the invoice and verifies the costs based on the estimates from the proposal
- BC Hydro issues payment once the invoice review is complete
- Invoice processing and payment may take up to 8 weeks from the time the technical review is complete and the invoices are submitted

Any work beyond the scope of the agreement requires pre–authorization from BC Hydro to qualify for funding



Alliance member will submit invoice to either BC Hydro or the customer as per the energy study funding agreement

What are the next steps?

ALLIANCE MEMBER

- Meets with the customer to discuss industrial energy study report recommendations
- Follows up with the customer on next steps for project implementation

CUSTOMER

- Creates a business case from the study report recommendations
- Reviews the program incentive options with KAM
- Seeks internal approval to proceed with a project

Incentive funding requires pre–approval and a signed agreement from BC Hydro prior to purchasing equipment or commencing work