

Energy Management Plan Guide

**Energy Efficiency and Conservation Programme
July 2017**

PREFACE TO THE ENERGY MANAGEMENT PLAN TEMPLATE:

The first step in managing energy costs in any company is creating an Energy Management Plan. This document contains a template that lays out a logical format for capturing information critical to the development of an energy management plan. It formalizes the thought process involved in understanding the relative magnitude of energy costs, the possible ways of reducing energy consumption, identifying energy targets that are likely to be achievable, and other associated activities that need to occur. The energy management plan provides an ongoing framework for optimizing the overall energy use of the company and achieving success based on established targets. The energy management planning is intended to be a process of “continuous improvement”, a closed-loop feedback approach is the most effective in demonstrating results that will justify further investment in energy efficiency and energy conservation. The following diagram shows the circular steps that are recommended for adoption into the planning process:



Plan: Whatever the process being undertaken in a company a plan of action is always the first step in creating a new product. Creating the energy management plan ensures budgets, resources, and timelines are established to meet the targets and objectives laid out in the plan. Include tracking and monitoring processes within the plan to ensure effective reporting to management.

Do: Execute the plan by deploying the resources identified and budgets, prepare status reports, and implement the communication strategy. With a successful communication strategy, to disseminate information to your stakeholders, all parties will be well informed of the role they play in achieving the objectives of the plan.

Check: Monitor performance of **each** project and program implemented against the desired outcomes as planned and report to management, with recommendation for improvements or changes to the project course.

Act: Analyse the variances to the plan and their causes. Recommend improvements, course corrections, and modifications to the plan.

EXECUTIVE SUMMARY:

Provide an overview of the plan in a few paragraphs.
Ideas to include:

1. Declaration of Commitment
2. Specification of energy plan targets and objectives over an appropriate planning time.
3. The baseline energy usage consumption of the facility
4. The potential energy conservation and efficiency projects with estimated savings, incentives, capital cost, and timelines.
5. A brief outline of medium term energy management activities planned.
6. Communication strategies and employee awareness program.

Include summary table(s) of relevant numbers for current energy performance, targets, projects etc.

BACKGROUND:

Describe the facilities operations, and factors that affect energy use. Some ideas for inclusion here are:

1. Business overview:
 - a. Description of business history and current structure.
2. Describe any existing metering of monitoring systems. (if any)
3. List past energy and feasibility studies. (If any)
4. Key challenges and constraints to achieving energy reduction goals.

STRATEGIC OBJECTIVES & VISION:

State your company's energy policy here, if one currently exists. An example energy management policy would be:

“The Ministry of Energy Management will endeavour to reduce energy consumption through all available means so that by 2018 our total energy usage will be 20% less than 2017; in keeping with the Energy Policy of the Vision 2030 Plan for Jamaica.”

Strive to use this plan to generate management acceptance of the importance of energy planning, and create a formal energy policy for the company. State a target timeline here for energy policy creation.

Does the company:

- Have broad awareness of the benefits of Energy Efficiency and Energy Conservation.
- Collect and utilise information to manage energy use

- Integrate Energy Management into their overall management structure
- Provide leadership on Energy Management through dedicated staff and a committed energy efficiency policy.
- Have an energy management plan for the short and long terms
- Have a procurement policy that favours energy efficient equipment and materials

ENERGY TEAM (COMMITTEE):

State here the composition of the Energy Management Committee, and express the mandate of the committee. Identify individuals with knowledge and experience in energy management from operations, maintenance etc. to be a part of the committee to identify and execute potential energy projects.

The importance of having a senior executive as a regular participant, and a member of the committee is highly recommended. This ensures that the executive management team is well informed of ongoing projects and progress towards to stated energy management goals.

Resolve to bring the energy committee together on a regular basis to systematically work through approval and implementation of the action plan.

ENERGY BASELINE:

This section requires some basic data gathering on how and where energy is used in the Company (Energy Audit). The more detail that is presented in this section, the easier it will be to demonstrate success of the plan and identify potential projects for savings.

Create a table of known opportunities for energy savings projects involving capital investment.

List the systems with identified savings along with their energy consumption, potential for savings, and next steps to achieving the savings.

OPERATIONAL SAVINGS AND EMPLOYEE AWARENESS PLAN:

Opportunities to improve energy efficiency and conservation and reduce consumption through operational and employee awareness programs should not be overlooked. The energy management plan could provide incentives for these conservation activities, and should not be completed without addressing these opportunities.

Employee awareness programs executed to identify and target everyday actions that employees can be encouraged to do, with the intent that the actions become second nature in order for the savings to continue well past the initial push for awareness.

Investigate and document opportunities here for operational and employee awareness savings.

Behaviour change tools such as prompts can be utilized in the employee awareness aspect of the energy management plan.

ENERGY CONSERVATION TARGETS:

Using the potential energy savings identified in the previous sections, set annual conservation targets for five years. Include stretch targets in high/medium/low scenarios for estimated savings.

Schedule time annually to update this plan and extend the conservation target for another year. This will produce a rolling 5 year target that when compared to results achieved, should continue to justify investment in conservation for years to come.

ACTION PLAN:

Turn the targets in the previous section into actionable tasks by tabulating projects, timelines, and accountabilities. A spreadsheet can be used as an action plan template for prioritization, tracking, and reporting.

Identify any barriers to the implementation of each capital project and think about what strategies could eliminate the barriers. Provide an assessment of the ease of implementing each identified project.

In addition to identified capital projects, list the approach and strategies to identify further conservation opportunities that may exist including those relating to:

- Behavioural Change;
- Building Envelope;
- Other;

MONITORING AND REPORTING

Quarterly updates through newsletters highlighting the current development and status of the project(s), and a final end of the year report will cover the achievement of the plan and the projects and the objectives outlined.

References:

City of Thunder Bay. (2011).The Strategic Approach to Corporate Energy Management.

OPA (2012). Energy Management Plan Template.