

Section: Planning

Task 12: We establish objectives and energy performance targets.

Getting It Done

- 1. Develop and record your organization's objectives and energy targets.
- 2. Obtain top management's approval of the objectives and energy targets and communicate appropriately.
- 3. Communicate the energy objectives and energy targets appropriately to your organization

Task Overview

Objectives and energy targets are important outputs of the planning process. Objectives are specific outcomes that your organization sets for itself in order to meet its energy policy commitments. Objectives can be strategic, tactical, or operational. Energy targets are quantified objectives of energy performance improvement. The objectives and energy targets, along with their related action plans (see Task 13 Action Plans for Continual Improvement), are the driving force for continual improvement of your organization's energy performance and energy management system (EnMS).

This guidance is relevant to sections 6.2.1 and 6.2.2 of the ISO 50001:2018 standard.

Associated Resources Short Description

no resources for this questions

Full Description

Gather and review appropriate inputs to establish objectives and energy targets

In ISO 50001, the term *objective* means "results to be achieved." No specific results are mandated by the standard, and in turn objectives are established by you so long as they are consistent with the commitments documented in the energy policy. It is important to note that the definition of *objective* accommodates both quantitative and qualitative results. This means that objectives can relate to the continual improvement of the energy management system (EnMS), energy performance, or other business objectives. Objectives related to improvement of the EnMS are often qualitative, although it is preferable that the improvement be quantified in some way.

Energy targets are quantifiable objectives of energy performance improvement. Energy targets can be associated with other objectives, or they can be stand-alone results to be achieved.



An important first step in establishing objectives and setting energy targets is to get the right people together and provide them with the inputs needed to develop relevant objectives and energy targets. The energy team is a key participant in this activity, but involving other functions can be beneficial if they are not already represented on the energy team.

Learn More: Other functions to involve in developing objectives and energy targets

For the purpose of establishing objectives and energy targets, a recommended best practice is to supplement the energy team, as appropriate, with the following:

- Individuals with energy expertise
- Personnel in specialized functions, such as accounting or finance
- Personnel familiar with operational or production equipment
- Management familiar with organizational plans and goals
- Suppliers or contractors that provide energy equipment or technical resources
- Interested parties, such as customers

There are specific requirements that objectives and energy targets must meet. They must be consistent with the energy policy. This means that the objectives and energy targets are the mechanisms for putting the energy policy commitments into action. For example, an objective to reduce overall energy consumption by 2022, with an energy target to reduce natural gas consumption by 5 percent by the end of this fiscal year is intended to achieve energy performance improvement, one of the commitments made in the energy policy.

Objectives and energy targets must take into account applicable requirements and opportunities for energy performance improvement. Applicable requirements include the legal, voluntary, and other requirements of interested parties that you determined in Task 2 People and Legal Requirements

Affecting the EnMS. This means that you need to consider and meaningfully incorporate the potential energy improvement opportunities that you identified, prioritized, and can realistically achieve as part of the energy review in Task 10 Improvement Opportunities Your objectives and energy targets should focus on the requirements your organization has to meet and the potential energy projects identified as a high priority that can be achieved realistically.

Your objectives and energy targets should also consider the significant energy uses (Task 9 <u>Significant Energy Uses (SEUs)</u>) you have identified. The fact that significant energy uses (SEUs) must be considered in objectives and energy targets recognizes that not all SEUs may be candidates for improvement, in spite of the fact that they are major energy consumers. However, if there is an attractive improvement opportunity related to an SEU, you are encouraged to set an objective and/or energy target related to that improvement.

Other inputs that you may want to consider in the objectives and energy targets are the realities of your organization's business and financial situation, operating conditions, and constraints. The goal is to set objectives and energy targets that are achievable and compatible, and that align with your organization's



strategic business plans and result in successful improvement of energy performance and the EnMS.

Examples of objectives and energy targets

Objectives can be:

- strategic, tactical or operational.
- results to be achieved for multiple disciplines (e.g., achieve energy, environmental, and financial results).
- applied at different levels (e.g., strategic, organization-wide, project or process specific).
- expressed in different ways (e.g., aim, goal, purpose).

An example of an objective related to energy performance improvement is: "Reduce energy consumption 10 percent in five years from the 2019 baseline."

An example of an objective related to improvement of the EnMS is: "Improve energy-related communications to on-site suppliers and contractors by the end of FY2020."

Energy targets are quantitative and may or may not be associated with objectives.

Examples of energy targets that may or may not be associated with the previous example of an objective related to energy performance improvement are:

- "Reduce electricity consumption 5 percent compared to a 2019 baseline by the third Quarter of
- "Reduce lighting system consumption 10 percent compared to a 2019 baseline by the end of FY 2020."

As part of taking into account energy performance improvement opportunities in objectives and energy targets (see "Gather and review appropriate inputs" above), you may find it necessary to closely evaluate the potential energy savings associated with a specific energy opportunity to determine an appropriate objective or energy target. Or, alternatively, an objective or energy target will drive the choice of which energy opportunities are implemented to achieve that objective and/or energy target.

Objectives and energy targets must be monitored through an ongoing process of review. The extent to which objectives and energy targets have been achieved is reported to top management through the management review process (see Task 23 Management Review). Sometimes after the initial establishment of the objectives and energy targets, an organization discovers that the data or metrics needed to measure or monitor the objective and/or energy target needs to be revised.

Documented information on the objectives and energy targets must be retained. The information retained may be in any format appropriate for your organization. The optional Playbook worksheet is one tool to recording objectives and energy targets and the required inputs.

Obtain management approval



Top management is responsible for ensuring that objectives and energy targets are established, for ensuring they align with the organization's strategic direction, and for providing the resources needed to achieve them.

Present the objectives and energy targets to management for review and approval in a clear and understandable format. Sufficient information should be provided to justify the purpose of the objective(s) and energy target(s) and its relationship to the organization's business goals and energy policy commitments. Management approves the objectives and energy targets or provides direction for any needed changes.

The optional Playbook worksheet provides a convenient way to communicate the proposed objectives and related targets to management. This helps inform management on the relevant inputs and identifies how the objectives and energy targets will be monitored.

Communicate the objectives and energy targets

Once the objectives and energy targets have been approved by top management, they are broadly communicated across the organization using the communication and training processes of the EnMS (see Task 15 Awareness and Communication). Start by communicating the objectives and energy targets back to the energy team and then, to all personnel who can affect them or have a role in achieving them. While some personnel may not have direct responsibility for achieving the objectives and energy targets, broad awareness of your organization's improvement efforts promotes a culture of energy efficiency and supports positive energy behavior.

Employees and on-site contractors will need to be aware of how they contribute to achieving the objectives and energy targets, so ensure that this information is incorporated into your organization's EnMS Awareness Training (see Task 15 Awareness and Communication). Periodically update personnel on progress made towards achieving the objectives and energy targets, and celebrate success when they are achieved.

Decarbonization

Objectives and energy targets, along with their related action plans (see Task 13 Action Plans for Continual Improvement) are important outputs of the planning process and a key driving force for the EnMS. When managing energy-related GHG emissions through your EnMS, include GHG-related emission reduction objectives and performance targets to help drive the organization's continual improvement of energy-related GHG emissions performance.

In setting GHG-related objectives and targets, consider:

- Any applicable GHG emissions-related requirements from your corporate offices or others that you determined in Task 2 People and Legal Requirements Affecting the EnMS,
- The potential GHG emission performance improvement you identified and prioritized in Task 10 Improvement Opportunities,



- The significant energy uses you identified in Task 9 Significant Energy Uses (SEUs), and
- Any financial, operational, or business constraints.

Objectives can be strategic, tactical, or operational and can be expressed in different ways. Two common ways to express GHG emissions objectives are as 1) absolute GHG emission reductions over a defined period of time (example: reduce GHG emissions by 45 percent below 2000 levels by 2030), and 2) intensity GHG emissions reductions relative to a business metric over time (example: reduce GHG emissions by 12 percent per ton of clinker between 2020 and 2028).

GHG emissions-related targets should provide a quantifiable objective of GHG emissions performance improvements. For example:

- Reduce electricity-related (i.e. Scope 2) GHG emissions 20% compared to a 2019 baseline by the end of the fourth quarter of 2021.
- Reduce on-site (i.e. Scope 1) GHG emissions 15% compared to a 2019 baseline by the end of the fourth quarter of 2021.

The GHG Protocol Corporate Standard, Chapter 11: Setting a GHG Target, provides additional guidance for setting GHG objectives and targets.

EPA provides a <u>self-assessment</u> to help companies evaluate, at a high level, how their GHG inventorying and target-setting approaches compare to large peer companies representing different industry sectors.

This self-assessment applies to companies at different levels of ambition:

- Entry-level: For companies beginning to address their GHG emissions, this resource aims to help them identify which inventorying and target-setting actions reflect common business practices today and provide them with a roadmap for developing their own inventories and setting targets.
- Intermediate: For companies further along their sustainability journey, this self- assessment can validate more advanced inventorying and target-setting behaviors that position them to deepen GHG emission reductions.
- Advanced: For leading companies, this resource can also validate their efforts and encourage them to explore implementing more cutting-edge GHG management efforts, eventually pushing such innovations into the mainstream and sharing practices with others.

Establishing a new EnMS prioritizing decarbonization

If you do not have an existing 50001 Ready-based EnMS and want to build one that also helps your organization manage GHG emissions, you should follow the guidance in the "Full Description" tab keeping the following in mind:

1. Gather and review appropriate inputs to establish EnMS objectives and targets. Review any inputs that may dictate or influence your GHG-related objectives and targets. Establish GHGrelated objectives and targets EnMS objectives and targets considering the documents discussed above. The energy team should be a key participant in this activity but may choose to involve other organizational functions.



- 2. **Obtain management approval for the objectives and targets**. Top management should approve the GHG emission-related objectives and targets and understand their relationship to the organization's GHG-related business goals and GHG-related energy policy commitments.
- Communicate the objectives and targets. Employees and contractors need to be aware of how
 they contribute to achieving the GHG-related energy objectives and targets. Make sure this is
 incorporated into your communication and training processes (see Task 15 <u>Awareness and</u>
 <u>Communication</u>).

Adapting an existing EnMS to prioritize decarbonization

If you have an existing 50001 Ready-based EnMS and want to adapt it to manage energy-related GHG emissions, you should:

- Review and update your existing EnMS objectives and targets. Review any inputs that may
 dictate or influence your GHG-related objectives and targets. If needed update your EnMS
 objective and targets and, considering the documents discussed above, add GHG-related
 objectives and targets. The energy team should be a key participant in this activity but may
 choose to involve other organizational functions.
- 2. **Obtain management approval for the updated objectives and targets**. Top management should approve the GHG emission-related objectives and targets and understand their relationship to the organization's GHG-related business goals and GHG-related energy policy commitments.
- 3. **Communicate the updated objectives and targets**. Employees and contractors need to be aware of how they contribute to achieving the GHG-related energy objectives and targets. Use your existing communication and training processes (see Task 15 <u>Awareness and Communication</u>).

Commercial Emissions Reduction Planning Framework

The guidance for this task is from the following sections from the ERP Framework: ERP Framework Milestone 1.

After establishing the GHG inventory, the organization can define the baseline year and timeline for GHG emissions reduction targets. Target setting is typically a percent reduction in GHG emissions compared to a baseline year in a certain time frame for a specific scope (e.g., 50% reduction in Scope 1 and 2 GHG emissions by 2030 from a 2020 baseline). Some organizations may complete portfolio-level analysis prior to publicly announcing reduction targets to increase confidence in their ability to achieve the targets. (Milestone 1)

Industrial Emissions Reduction Planning Framework

While GHG emissions reduction objectives and targets will often align with energy-related objectives and targets, there may be occasions where GHG emissions reduction objectives and targets are at odds with energy-related objectives and targets. GHG emissions might also be direct process emissions and not related to energy use. In such situations, the energy team and top management will need to review their energy policy and broader energy and environmental goals to seek alignment.



The guidance for Task 12 is found within the following section of the ERP Industrial Framework:

Milestone 1:

Set GHG emissions reduction targets - Publicly reported GHG targets provide transparency, accountability, and credibility to emissions reduction efforts. They also help organizations accurately measure and quantify emissions reductions. Setting ambitious GHG emissions targets may help increase support from senior management and secure funding for internal GHG reduction opportunities.

Define GHG emissions reduction targets relative to a baseline year representing typical operations, with clear deadlines. Organizations may set multiple targets on different time scales - long-term, ambitious goals (e.g., net-zero emissions by 2050) combined with interim goals on shorter time scales (e.g., 50% reduction by 2030).

Targets should be set with buy-in from corporate leadership, and should be aligned with other strategic goals. For example, in the process of setting a GHG emissions reduction target, organizations may also set an energy intensity reduction target or a renewable electricity procurement target. Whether aligning with pre-existing targets or setting new ones, these targets must be weighed simultaneously as the overall GHG target is defined as they may impact progress towards the GHG target. The same is true for sub-targets that apply to specific subsets of the organization, for example, targets that apply to a specific region or business unit.