**Date last modified/updated:** Click here to enter a date. **Internal audit:** Click here to enter a date.

**Who last modified/updated:** Click here to enter text. **Management review:** Click here to enter a date.

**This part of the Navigator Playbook is completed when you have:**

1. **Developed and recorded your organization’s objective and energy targets.**
2. **Obtained top management’s approval of the objectives and energy targets and communicate appropriately.**
3. **Communicated the energy objectives and energy targets appropriately to your organization.**
4. Develop and record your organization’s objective and energy targets.

|  |  |
| --- | --- |
|  | We have gathered a team to develop and record our targets. |

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|  | As appropriate, we supplemented our energy team with: |

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

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|  | Our team consists of the following individuals: |

**Team member name Function represented**

|  |  |  |
| --- | --- | --- |
|  | *[Key Participant]* | *[Energy Team]* |
|  | Click here to enter text. | Sustainability |
|  | Click here to enter text. | Compliance |
|  | Click here to enter text. | Facilities |
|  | Click here to enter text. | Research |
|  | Click here to enter text. | Business Operations |

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|  | We have provided our team with the inputs needed to develop relevant objectives and energy targets: |

We developed objectives and targets using 10-year site development plans, EnMS scope and boundaries, and how the EnMS aligns with business strategies and risks, and the Energy Policy.

|  |  |  |
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| **Our objectives and energy targets:** | | |
|  | Are consistent with our energy policy and effectively spur our energy policy commitments into action. | Click here to enter text. |
|  | Consider and fully incorporate the potential energy improvement opportunities identified, prioritized, legal requirements and those that can be realistically achieved in the energy review. | Click here to enter text. |
|  | Consider the significant energy uses (as identified in the Significant Energy Uses task and when identified we set an objective and/or energy target related to that improvement. | Click here to enter text. |
|  | Consider our organization’s business and financial situation, operating conditions, and constraints that are achievable, compatible, and align with your organization’s strategic business plans, and result in successful improvement of energy performance and the EnMS. | Click here to enter text. |

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| **Our objectives related to energy performance include:** | |
|  | *[ex: “Reduce energy consumption 10 percent in five years from the 2019 baseline.”]* |
|  | Reduce Data Center electricity consumption by 25% in 5 years based on a 2015 baseline. |
|  | Reduce SEM electricity consumption by 20% in 2 years based on a 2019 baseline. |
|  | Reduce Wet lab energy use by 15% in 3 years based on a 2015 baseline. |
|  | Reduce site energy use by 15% in 3 years a based on a 2015 baseline. |

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| **Our energy targets are quantitative and include:** | |
|  | *[ex: “Reduce electricity consumption 5 percent compared to a 2019 baseline by the third Quarter of 2021.”]* |
|  | Reduce SEM electricity consumption by 5% by September 2020 based on a 2019 baseline. |
|  | Click here to enter text. |
|  | Click here to enter text. |

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| **We have established:** | | |
|  | A process for monitoring, reviewing and updating objectives and targets on a continual basis. | Click here to enter text. |
|  | Roles and responsibilities for monitoring and reviewing this progress. | Our facilities team will take responsibility for monitoring and reviewing EnPI calculations. |
|  | A practice of reporting objectives and energy target achievements to top management through the management review process introduced in the Management Review task. We issue revisions to objectives as needed. | Click here to enter text. |
|  | We retain documented information on the objectives and energy targets. | Click here to enter text. |

*The Energy Objectives and Targets Worksheet below can be useful to record objectives, energy targets and required inputs.*

Energy Objectives and Targets Worksheet

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reduce SEM electricity consumption by 20% in 2 years based on a 2019 baseline. | | | **Doc ID:**  Click here to enter text. | |
| **Target 1:**  Reduce SEM electricity consumption by 5% by September 2020 based on a 2019 baseline | | | | |
| **Target 2:**  Click here to enter text. | | | | |
| **Target 3:**  Click here to enter text. | | | | |
| **List the energy policy commitment(s) relevant to this objective:**  Reduce energy consumption and waste. | | | | |
| **Considerations** | | | | |
| Is this objective related to one or more legal, regulatory or other energy requirement(s)?  YES X NO  **If yes, list the relevant legal or other requirements:**  Click here to enter text. | | **How were applicable legal and other energy requirements taken into account in the development of this objective and related targets?**  EO 13834 requires resilience and efficiency, which we promote by reducing inefficient appliance use. | | |
| Is this objective related to one or more significant energy uses? X YES  NO  **If yes, list the significant energy use(s):**  SEM (microscopes) | | **How were significant energy uses taken into account in the development of this objective and related targets?**  Click here to enter text.  This objective and target pair were formulated based on conversations with SEM users, and their input on current appliance use norms. Together we identified significant low-cost opportunities for improvement, suggesting we could achieve significant savings quickly. | | |
| **How has the prioritized list of opportunities from the energy review been considered in the development of this objective?**  yes | | | | |
| **What technological options are feasible for this objective?**  Less energy-intensive appliances for initial data assessment to see if the data is worth reviewing with the SEM. | | | | |
| **What financial requirements or conditions are relevant to this objective?**  Click here to enter text. | | | | |
| **What source of funds will be utilized for this objective/target?**  **X** **Capital budget**  **X** **Maintenance budget**  **External loan**  **Performance contract**  **Guaranteed savings**  **Other**  Click here to enter text. | | | | |
| **What business and operational conditions or constraints are relevant to this objective?**  We must work closely with users to develop norms for best-practice use. This objective is primarily based on behavior-changes. | | | | |
| **Who are the interested parties who have or may have views relevant to this objective and target(s)?**  Lab researchers, facilities managers and lab managers. | | | | |
| **How have the views of interested parties been considered?**  Active participation in target development and SEU identification. | | | | |
| **Monitoring and Measurement** | | | | |
| How will the objective be monitored and measured? We will monitor this objective through meter data collection, and measure through annual EnPI calculation. | | How will the target(s) be monitored and measured? We will monitor this objective through meter data collection, and measure through annual EnPI calculation. | | |
| What data will be collected or analyzed? We will collect meter data from the building housing the SEMs and occupancy data from user logs. | **Who will collect or analyze the data?** (Responsible Positions)  Facilities team and energy manager | How often will monitoring and measuring be done? Monitoring as data collection occurs monthly. We will measure performance before and after projects are implemented as spelled out in the respective action plans. | | What will be the record of monitoring and measurement? We will make records of EnPI tool analysis. Similarly, we will maintain sorted folders for monthly data collection. We will make record monthly records of meters. |
| **What monitoring and measurement equipment will be utilized?**  We will utilize relevant sub-meters and utility bills. | **Which equipment will require calibration?**  N/a for this objective. | **Is this equipment already in the calibration system?**  n/a | | What will be the record of calibration? n/a |
| **What will be the EnPI (if any) that will be used to report this objective/target(s)?**  Click here to enter text. | | | | |

|  |  |
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| **Related Energy Management Action Plans**  (List the Action Plans associated with achieving this objective and related targets) | |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. |
| **Controls** | |
| **What operational controls are needed?**  Click here to enter text. | **List any controls that are already in place:**  Click here to enter text. |
| **Prepared by:**  Click here to enter text. | **Date:**  Click here to enter text. |

1. Obtain top management’s approval of the objectives and energy targets and communicate appropriately.

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|  | We have a process in place to report objectives and energy target achievements to top management using the management review process introduced in the Management Review task and issue revisions as needed. | We report this to top management in briefings. |

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| **Top Management Responsibilities:** | |
| Objectives and energy targets have been established | These are approved by top management. |
| These objectives and energy targets align with our organization’s strategic direction. | We have mind-mapped the relationship between policy and smaller scale objectives and targets to ensure that these elements fit together. |
| Resources needed to achieve objectives and targets are provided. | We have ensured that the energy team members all have cleared time to commit to this initiative, and have coordinated with contractors to be prepared to implement ESPCs as needed. |
| Objectives and energy targets are either approved or direction is provided for any needed changes. | Top management approves these in management review meetings. |

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| **Team Responsibilities:** | |
| Objectives and energy targets are presented to management for review and approval in a clear and understandable format. | Energy Team leader is responsible for communicating selected objectives and targets. |
| Sufficient information is provided to justify the purpose of the objective(s) and energy target(s) and its relationship to the organization’s strategic direction and energy policy commitments. | This information is communicated by the Energy Team leader. |

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| **Top Management Approval:** | | |
|  | Top Management has reviewed and approved Baselines, Objectives and Targets, and have offered their support. | |
|  | Who approved: | Click here to enter text. |
|  | Date approved: | Click here to enter a date. |

*The Energy Objectives and Targets Worksheet provided earlier in this task can be useful in communicating to management the proposed objectives and related targets, relevant inputs and in detailing the monitoring processes in place.*

1. Communicate the energy objectives and energy targets appropriately to your organization

**We have communicated our objectives and energy targets to the following groups:**

|  |  |  |
| --- | --- | --- |
|  | The energy team | Click here to enter a date. |
|  | All personnel who can affect these objectives and targets or have a role in achieving them | Click here to enter a date. |
|  | Employees and on-site contractors have been made aware of how they contribute to achieving the objectives and energy targets, | Click here to enter a date. |
|  | Broadly across our organization’s improvement efforts to promote a culture of energy efficiency and support positive energy behavior. | Click here to enter a date. |

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|  | Objectives and Targets have been incorporated into our organization’s EnMS Awareness Training | This is section three of our training. |

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|  | We periodically update personnel on progress made towards achieving the objectives and energy targets and celebrate success when they are achieved. | We send quarterly emails to a subscriber list and annual emails to the site. |

*The below table can be useful in helping to track your training and communication efforts:*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Communication / Training Event** | **Targeted Audience** | **Event Date** | **Responsible Party Name** | **Responsible Party Signature** |
| Annual training | All site | September, annually | Communications team developed this material in coordination with the energy team leader | Click here to enter text. |
| Efficient Procurement | Contracting and Procurement professionals | Click here to enter a date. | Procurement Liaison in coordination with energy team leader | Click here to enter text. |
| SEU Maintenance | Maintenance Technicians | Click here to enter a date. | Facilities Managers for each respective SEU | Click here to enter text. |
| SEU Operations | SEU users | Click here to enter a date. | Facilities Managers for respective functions | Click here to enter text. |
| Click here to enter text. | Click here to enter text. | Click here to enter a date. | Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. | Click here to enter a date. | Click here to enter text. | Click here to enter text. |
| Click here to enter text. | Click here to enter text. | Click here to enter a date. | Click here to enter text. | Click here to enter text. |

Top Management Approval

|  |  |  |
| --- | --- | --- |
|  | Date approved: | Click here to enter a date. |
|  | Who approved: | Click here to enter text. |

Comments

Click here to enter text.