**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 energy performance indicators (EnPIs) for your organization including an EnPI for each SEU. If relevant variables significantly affect energy consumption, normalized EnPIs.**
2. **Developed an energy baseline (EnB) for EnPIs in order to later determine energy performance improvement.**
3. **Communicated proposed EnPIs and EnBs to top management so they can ensure the EnPIs and EnBs are appropriate for the organization.**
4. **Recorded and regularly reviewed the method used to determine and update EnPIs and established the conditions under which adjustments to the baseline(s) will be made.**
5. **Compared EnPI values to their respective EnBs on a regular basis.**
6. **Implemented a process for ongoing monitoring, measurement and analysis of your EnPIs, EnBs, and energy performance improvement.**
7. Develop energy performance indicators (EnPIs) for your organization including an EnPI for each SEU. If relevant variables significantly affect energy consumption, normalize EnPIs.

[ ]  We have developed our energy performance indicators (EnPIs) using information from the energy review in the Energy Data Collection and Analysis task.

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| [ ]  | We have assigned responsibilities of EnPI development at our organization.  | Our Energy Manager, EMS internal consultant with support from our facilities managers develop our EnPIs  |

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| [ ]  | Our **energy team** is responsible for developing our list of EnPIs. | Click here to enter text. |
| [ ]  | **Top management** is responsible for ensuring EnPIs appropriately represent energy performance, which can be accomplished through the management review process detailed in the Management Review task.  | Top management reviews the EnPIs after they are developed and updated. |

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| [ ]  | We have assigned an EnPI for each significant energy use (SEU).  | SEMs—kWh consumption per use; kWh consumption per monthWet Lab—kWh consumption per monthly occupation; BTU’s natural gas per monthData Center—kWh consumption per sq footWe also assess site energy performance using kWh per sq foot |
| [ ]  | Each of the EnPI’s we have selected provide immediate value to key stakeholders.  | We developed them with the respective facility managers |

*Note: For 50001 Ready recognition specific EnPIs and EnBs are required. See program requirements online in the 50001 Ready Navigator for more information.*

[ ]  We have established criteria for identifying EnPIs, detailed below:

Then we work with the respective facility managers to make sure we meet relevant compliance requirements with indicators and streamline requirements. We add at most 2 additional metrics to those required for additional performance improvement insights.

We chose a baseline of 2015 to match relevant federal requirements.

[ ]  We have established methods for determining EnPIs, detailed below:

We use regression analysis conducted in the EnPI tool to assess relationships between relevant variables and SEU performance.

[ ]  We have established a process for recording and reviewing these methods on a regular basis.

We maintain records of regression outcomes updated annually and review our method efficacy during the internal audit.

[ ]  We have created a list of EnPI(s) for our facility, and have detailed below:

| **EnPI** | **Energy Input, units** | **Description of intended use of EnPI**  |
| --- | --- | --- |
| SEMs—kWh consumption per use; kWh consumption per month | Daily building meter data (kWh) and record of use (sign-in sheet) | Click here to enter text. |
| Wet Lab—kWh consumption per monthly occupation; BTUs of natural gas consumption per month | Daily building meter data (kWh) and occupation based on work days/teleworking agreements and spot checked with visual assessment; Natural gas utility bill | Click here to enter text. |
| Data Center—kWh consumption per sq foot | Daily building meter data (kWh) and build blue print | Click here to enter text. |
| Site—kWh per sq foot; kWh/month | Utility bill (kWh) and site blue print |  |

1. Develop an energy baseline (EnB) for EnPIs in order to later determine energy performance improvement.

We will use a 2015 baseline for energy consumption.

Providing responses to the questions below can help in identifying the relevant EnBs for the established EnPIs:

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| [ ]  | How will each EnPI be used for evaluating energy performance? Is there a logical EnB for each? | 2015 is a logical baseline for our EnPIs because it is the foundation for performance improvement regulations with which we must comply. |
| [ ]  | What are the historical changes to facilities, equipment, systems, processes, or organization that would change how energy performance is evaluated? | We added site square footage, but this did not impact the SEUs we currently have selected. We will keep this in consideration for site-wide consumption calculations. |
| [ ]  | What stakeholder interests should be considered when establishing EnB for the EnPI? | Facilities managers, compliance, top management, and sustainability team. As relevant we include research managers.  |
| [ ]  | Are there strategic initiatives that would be measured or influenced by one or more of the established EnPIs? Is there an EnB associated with these strategic initiatives? | N/a |
| [ ]  | What are the historical periods that have reliable, consistent data for the established EnPIs? | We have the required building meter data from 2013 onward. We have site level data from 2000 onward. |

1. Communicate proposed EnPIs and EnBs to top management so they can ensure the EnPIs and EnBs are appropriate for the organization.

[ ]  Identified EnPIs and EnBs have been approved by top management.

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| Who approved? | Click here to enter text. |
| When approved? | Click here to enter a date. |

1. Record and regularly review the method used to determine and update EnPIs and establish the conditions under which adjustments to the baseline(s) will be made.

[ ]  We maintain documented information on the methods we use to determine and update our organization’s EnPIs.

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| Who maintains the documented information? | Energy manager is responsible for maintaining the documents of our EnPI methods |
| Where are these records maintained (e.g. energy manual or energy planning procedure)? | These records are in our energy manual shared drive. |

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| [ ]  | We evaluate any changes in facilities, equipment, systems, processes, operating procedures, materials, relevant variables, and many other factors. We adjust the EnPI as necessary. | We do this annually and with any major changes |

1. Compare EnPI values to their respective EnBs on a regular basis.

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| [ ]  | EnPI values are reviewed and compared to their respective EnBs, as appropriate. | We do this annually. |
| [ ]  | Calculated EnPI values and their associated EnBs are retained as documented information and periodically reviewed to determine if adjustments are required.  | Click here to enter text. |
| [ ]  | We have a process in place where we make adjustments to an EnB in the following instances:* When the EnPIs no longer accurately reflect the organization’s energy performance
* When there are major changes to static factors, the process, operational patterns, or energy systems
* According to a predetermined method
 | As a team we assess the EnB and what changes occurred that may have changed it’s reflection of our energy performance. If we unanimously agree, we update the EnB to the current year.  |
| [ ]  | We maintain records of modifications and updates to EnBs to ensure energy performance measures remain relevant and meaningful. | Click here to enter text. |

1. Implement a process for ongoing monitoring, measurement and analysis of your EnPIs, EnBs, and energy performance improvement

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| [ ]  | Calculated EnPI values and EnBs are recorded and reviewed on a regular basis. | We record our and review our EnPIs in annual EnMS strategic meetings/management reviews |
| [ ]  | The components of EnPIs that are measured or calculated are managed for accuracy and repeatability in the energy data collection plan (as addressed in the Energy Data Collection and Analysis task).  | Energy manager conducts accuracy assessments with support from other sustainability team members. |
| [ ]  | Top management’s review of energy performance includes a review of performance as determined by the EnPIs and the related EnBs.  | Click here to enter text. |
| [ ]  | Top management ensures changes are made when the above-mentioned metrics are no longer appropriate. | Click here to enter text. |

Top Management Approval

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

Comments

Click here to enter text.