**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. **For purchases related to SEUs, clearly identified any energy performance-related requirements. Communicated these requirements to suppliers and/or service providers, and informed them that energy performance is part of the evaluation criteria.**
2. **Evaluated your organization’s current procurement processes for items that can significantly impact energy performance.**
3. **Determined and taken any needed actions to adjust existing procurement processes to meet EnMS requirements.**
4. **Developed life-cycle criteria for specific types of procurement activities if you do not have them already.**
5. **Developed and communicated specifications for the purchase of energy supply and ensuring the energy performance of procured equipment and services.**
6. **Determined if any specifications for the purchase of energy supplies are applicable to ensure the energy performance of equipment and services purchased.**
7. For purchases related to SEUs, clearly identify any energy performance-related requirements. Communicate these requirements to suppliers and/or service providers, and inform them that energy performance is part of the evaluation criteria:

For purchases related to SEUs, we:

|  |  |  |
| --- | --- | --- |
|  | Identified energy performance-related requirements. | This is included in design and procurement documentation. Energy efficiency standards are dictated and energy performance affects are noted. |
|  | Communicated requirements to suppliers and service providers. | This is included in contract language, and in our initial communication to our suppliers and providers about implementing our new EnMS. |
|  | Informed suppliers that energy performance is part of the evaluation criteria. | This is included in contract language, and in our initial communication to our suppliers and providers about implementing our new EnMS. |

1. Evaluate your organization’s current procurement processes for items that can significantly impact energy performance:

Our current procurement process is:

1. Engineer or Manager (or team member) identify procurement need and acquire any required supervisory approval
2. Requester notes the specs of the product needed
3. Requester emails department Procurement Professional with request and product specs
4. For office appliances, the Procurement Professional re-purchase current model unless a specific other model is requested. For novel office appliances, the Procurement Professional coordinates with the requester to choose the best option.
5. For process equipment, Procurement Professional works in tandem with Process Engineers and Energy Team to review Design Considerations, including energy efficiency requirements.
   1. Procurement Professional chooses appropriate contractor with input from Process Engineers and Energy Team

We evaluated the following factors relating to service providers’ impact on energy performance:

Training

* All suppliers and contractors are made aware of our updated energy policy, energy considerations in design and procurement, and EnMS system.

Certifications

* No certifications related to EnMS are required of our suppliers or contractors but they are considered a plus when choosing new suppliers.

Experience with similar energy uses

* New contractors and suppliers are evaluated based on their past work and familiarity with wastewater treatment plants, pumping, and other SEU-related processes.

Skilled trades availability

* New contractors and suppliers are evaluated based on their past work and experience.

Procurement practices for parts or materials

* We have communicated priorities to procurement professionals and relevant service providers regarding procurement related to our SEUs and established best practices for ensuring that energy performance is appropriately prioritized.

Client recommendations or reviews

* Not applicable.

Other Click here to enter text.

1. Determine and take any needed actions to adjust existing procurement processes to meet EnMS requirements:

*The following worksheet can be useful to assist in identifying any needed actions.*

Procurement Policy Checklist

Use this checklist to review your organization’s current purchasing policy for products, equipment and energy services that can significantly impact energy performance. Note any needed modifications to the existing system under Actions Needed.

|  |  |  |
| --- | --- | --- |
| Our procurement policy: |  | Actions Needed: |
| 1. ensures energy performance is considered (especially of SEUs). |  | Covered |
| 1. has criteria for evaluating energy use, consumption and efficiency over the lifetime of products, equipment or services. |  | Covered (as part of energy considerations in Process Design) |
| 1. includes evaluation of energy use, energy consumption, and energy efficiency over the planned or expected operating lifetime for purchases that significantly affect energy performance. |  | Covered (as part of energy considerations in Process Design) |
| 1. includes evaluation and selection criteria for products, equipment, or services to be purchased (especially for SEUs). |  | Click here to enter text. |
| 1. includes procurement criteria that ensures energy performance and life cycle assessment/costing are prioritized. |  | Click here to enter text. |

Our procurement policy, as related to energy performance and our EnMS, is:

Click here to enter text.

|  |  |  |
| --- | --- | --- |
| The following been communicated to suppliers and/or service providers: |  | Actions Needed: |
| 1. Energy performance-related requirements is part of evaluation criteria. |  | Include this explanation and a short description of how we set our evaluation criteria in our EnMS training for suppliers. |
| 1. this evaluation criteria is a necessary factor in procurement. |  | We have explicitly dictated this information to our suppliers in a memo. |

We have defined, developed, documented, and implemented specifications for energy supply purchases.

Our energy purchasing policy/specification is:

We are working in tandem with municipal authorities in putting together a long-term strategy for converting to 100% renewable energy.

|  |  |  |
| --- | --- | --- |
|  | Procurement lead name: | Jimmy Doe |

1. Develop life-cycle criteria for specific types of procurement activities if you do not have them already.

*The worksheet below can assist in establishing life-cycle criteria for procurement activities:*

Procurement Checklist

Use this checklist to review your organization’s current purchasing process for products, equipment and energy services that can significantly impact energy performance. Note any needed modifications to the existing system under Actions Needed.

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Yes** | **No** | **Actions Needed** |
| 1. Do personnel who affect purchasing consider the following? |  |  | Click here to enter text. |
| * 1. Significant energy uses and their related controls? |  |  | Click here to enter text. |
| * 1. Energy objectives, targets, and related action plans? |  |  | Click here to enter text. |
| * 1. Energy performance as indicated by your EnPIs? |  |  | Click here to enter text. |
| * 1. Sustaining the improvements of past energy projects? |  |  | Click here to enter text. |
| * 1. Maintenance of energy systems (e.g., lighting, compressed air, steam, etc.)? |  |  | Click here to enter text. |
| * 1. Life cycle costs? |  |  | Click here to enter text. |
| 1. Have criteria for assessing energy use, consumption and efficiency over the lifetime of the product, equipment or service been established and implemented? |  |  | LCA are required for all municipal equipment purchases |
| 1. Have the following been communicated to personnel who affect procurement? |  |  | All below were communicated in procurement’s EnMS training |
| * 1. The outputs of energy planning such as the significant energy uses and related controls; energy objectives, targets, and related action plans; EnPIs |  |  | Click here to enter text. |
| * 1. Operational controls to sustain the improvement results of past energy projects? |  |  | Click here to enter text. |
| * 1. Key maintenance items related to the organization’s energy systems (e.g., lighting, compressed air, steam, etc.)? |  |  | Click here to enter text. |

|  |  |  |  |
| --- | --- | --- | --- |
| 1. Do specifications for items being purchased clearly identify any energy performance related requirements? |  |  | Yes, Energy Team is consulted on any process-related equipment decisions. |
| 1. Have energy performance-related requirements been communicated to suppliers? |  |  | Yes, all suppliers have been made aware of new EnMS and energy requirements |
| 1. Have suppliers been made aware that energy performance is part of the evaluation criteria? |  |  | Yes, see above. |

Life Cycle Cost Assessment Worksheet

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Energy Use: Click here to enter text. | | | | | | 5Financial Discount Rate: Click here to enter text. | | | | | |
| Energy Cost: Click here to enter text. | | | Maintenance Labor Cost: Click here to enter text. | | | | Unit Replacement Time: Click here to enter text. | | | | |
| **Options** | **Energy**  **Consumption (Annual)** | **Initial Purchase Cost** | **Number of Units Needed Per Year** | **1Annualized Maintenance and Repair Cost** | **2Annual Energy Cost** | | **Expected Operating Life** | **Disposal Cost** | **3Annualized Replacement Cost** | **Salvage Value** | **4Life Cycle Cost** |
| A) | 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. | Click here to enter text. | Click here to enter text. |
| B) | 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. | Click here to enter text. | Click here to enter text. |
| C) | 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. | Click here to enter text. | Click here to enter text. |
| D) | 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. | Click here to enter text. | Click here to enter text. |
| E) | 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. | Click here to enter text. | Click here to enter text. |

1 Annualized Maintenance and Repair Cost = (Labor cost)(# hrs)(# units)

2 Annual Energy Cost = (Annual Energy Consumption)(Energy cost/kwh)

3 Annualized Replacement Cost= Initial Purchase Cost/Operating Life (yrs)

4 Life-Cycle Cost = Annualized Maintenance and Repair Cost + Annual Energy Cost + Annualized Replacement Cost - Salvage Value

5Note: To account for time value of money, annualized costs may be discounted to present value.

|  |  |
| --- | --- |
| **Prepared by:**  Click here to enter text. | **Date Prepared:**  Click here to enter text. |

1. Develop and communicate specifications for the purchase of energy supply and ensuring energy performance of procured equipment and services.

*The following worksheet can assist in developing and communicating your procurement specifications*

Working with Corporate to Establish Energy Related Procurement Processes

|  |  |  |  |
| --- | --- | --- | --- |
| **Consider the following:** | **Yes** | **No** | **Actions Needed** |
| * How does procurement information currently flow between your organization and corporate? |  |  | Click here to enter text. |
| * How can I make corporate aware of purchases related to significant energy uses? |  |  | Click here to enter text. |
| * What is corporate’s role in developing energy performance specifications for energy related processes? |  |  | Click here to enter text. |
| * Is there a process for providing energy related specifications to the procurement function? |  |  | Click here to enter text. |
| * Does the evaluation process include a consideration for energy performance? |  |  | Click here to enter text. |
| * Who will have the responsibility for evaluating energy related purchases? |  |  | Click here to enter text. |
| * Who will notify suppliers that energy performance is part of the procurement evaluation process? |  |  | Click here to enter text. |
| * Does corporate have a life cycle assessment process? |  |  | Click here to enter text. |
| * How will significant impact on energy performance be determined and evaluated? |  |  | Click here to enter text. |
| * Is there information your organization can provide to the corporate procurement function to make their procurement decisions more effective for your energy management system? |  |  | Click here to enter text. |
| * Is there energy supply price signal information that the procurement function can provide to your organization that might impact operational decisions? |  |  | Click here to enter text. |
| * What connections or relationships need to be established between your organization and the procurement function? |  |  | Click here to enter text. |

1. Determine if any specifications for the purchase of energy supplies are applicable to ensure the energy performance of equipment and services purchased.

*The next worksheet can assist in identifying energy supply parameters and formulate suitable energy supply purchasing specifications.*

Energy Purchasing Specification Summary

|  |  |  |  |
| --- | --- | --- | --- |
| **Prepared by:** | Click here to enter text. | **Date Prepared:**  Click here to enter text. | Click here to enter text. |
| **Approved by:** | Click here to enter text. | **Date Approved:**  Click here to enter text. | Click here to enter text. |

**Energy Source**

This specification defines the requirements for (source):

Electricity

Natural Gas

Fuel Oil

Propane

Coal

Biomass

Waste material: description

Click here to enter text.

**Quantity**

Amount to be delivered: Click here to enter text.

Delivery units: Click here to enter text.

Delivery method:

Above ground transmission line

Pipeline

Tanker truck

Rail

Trailer truck

Other: Click here to enter text.

Delivery period:  quarterly,  monthly,  weekly,  daily,  other-specify Click here to enter text.

**Quality**

Define expected characteristics of energy supply, including factors important to the proper operation of the facility and its energy consuming equipment. For electricity, consider voltage, amperage and power quality such as voltage sag, frequency of power interruptions and interruption length.

For fossil and renewable energy, quality may include energy content, ash content, amount of regulated constituents, guarantee less than:  Sulfur Click here to enter text. %;  heavy metals Click here to enter text. %

List energy quality requirements:

|  |
| --- |
| Click here to enter text. |

**Price**

The energy price will be based on (select electricity or fuel):

**Electricity**  **Fuels**

published rate schedule  market price plus

time-of-use rate  fixed price

marginal rate (real-time pricing)  well-head

market price plus delivery  delivery

fixed rate per unit  transportation

interruptible rate  other:

other:

The total energy cost will be determined by:

total energy consumption

demand charges

mass/volume consumed;

delivery volume

other method

**Miscellaneous Requirements**

Other requirements (including legal or regulatory), not specified elsewhere, that the energy source must satisfy include: (list)

|  |
| --- |
| Click here to enter text. |

**Contract Period/Renewal**

The effective dates during which the energy specifications described above apply.

From: (Enter Date) YYYY/MM/DD

Until: (Enter Date) YYYY/MM/DD

Prior to contract renewal, the energy specifications listed above will be reviewed and revised as required by on-going operations.

**Invoicing Method and Timing**

Invoices will be submitted by: Invoice submission location:

Paper document  Plant office

Electronic  Divisional office

Other (specify): Click here to enter text.  Corporate office

Invoice submission interval:

Daily

Weekly

Monthly

At delivery

Other: Click here to enter text.

**Approval for Payment**

The following groups or individuals will review energy purchasing invoices and approve for payment (check all that apply):

Purchasing

Receiving

Production

Management

Other (specify):

**Method of Payment**

Check

Bank draft

Electronic funds transfer

Credit

Other

Top Management Approval

|  |  |  |
| --- | --- | --- |
|  | Date approved: | Jim Doe |
|  | Who approved: | 12/1/20 |

Comments

Click here to enter text.