**New facility prioritization scorecard**

Tables 1 and 2 show the attributes and business objectives that will be assessed for each facility requesting CEI program assistance. Each element is weighted to indicate its importance to the overall assessment. The questions listed below Tables 1 and 2 guide the scoring process.

**Table 1: Attribute and Objective Scoring**

|  |  |  |  |
| --- | --- | --- | --- |
| **Organizational Attributes** | **Weighting Factor** | **Facility Score (0 to 10)** | **Weighted Facility Score** |
| Business Viability  | 25% |  |  |
| Criteria for Fiscal Decisions | 20% |  |  |
| Energy Leadership  | 25% |  |  |
| Employee Environment | 15% |  |  |
| Facility Environment  | 15% |  |  |
| **Total**  | **100%** |  |  |

**Table 2: Business Objective Scoring**

|  |  |  |  |
| --- | --- | --- | --- |
| **Business Objectives** | **Weighting Factor** | **Facility Score (0 to 10)** | **Weighted Facility Score** |
| Business Opportunity  | 35% |  |  |
| Risk Management  | 30% |  |  |
| Market & Production Growth  | 20% |  |  |
| Corporate Positioning  | 15% |  |  |
| **Total**  | **100%** |  |  |

# Organizational Attributes

## Business Viability: Considering the facility’s current financial situation and outlook, what is the customer’s ability to invest in Energy Efficiency?

* The following information will help determine the business viability of a facility:
	+ Financial data that can be obtained from annual reports of public companies
	+ Capital expenditures over last three years
	+ Plant and equipment assets over last three years (not including inventory)
	+ Debt coverage ratio
	+ EBITDA growth
	+ Gross margin growth
	+ Debt/equity ratio
	+ Weighted Average Cost of Capital (WACC)
	+ Return on Equity (ROE)
* Is the facility capacity stable or growing?
* Is there a high turnover of personnel? Are there ongoing labor-related issues?
* Is the company the subject of a merger or acquisition? Is it in receivership?

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| **Business Viability Score**A zero value indicates that the facility has an extremely limited ability to invest; a 10 indicates that the facility has a strong financial position and future. |  |

## Criteria for Fiscal Decisions: Does the facility have a process in place that permits decisions on energy-saving capital investments with a reasonable payback period?

* Does the annual budget include factor inputs and production targets as well as dollar figures?
* Are asset purchases judged primarily on a life-cycle cost basis instead of on initial cost?
* Does the facility invest in plant improvements instead of simply fixing what is broken?
* What is the payback criterion for energy efficiency investments: less than one year? less than two years? less than three years? more than three years?
* Is the facility willing to use leases and other off-balance sheet methods to finance major acquisitions?

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| **Fiscal Decision Score**A zero value indicates that the facility will not make any financial investments unless the payback is considerably less than a year; a 10 indicates that the facility has invested in energy saving equipment with paybacks considerably more than two years. |  |

## Energy Leadership: Has the facility’s executive management demonstrated a willingness to provide leadership on energy efficiency initiatives?

* Does the facility have an energy policy?
* What is the corporate management knowledge of energy costs and opportunities? (Why have they decided to address energy usage?)
* Does the facility have an energy champion who is responsible for energy management and reports directly to the facility’s chief executive? Energy champions should:
	+ Have thorough knowledge of technology and staff capabilities at the facility level
	+ Be capable of preparing financial analyses to support engineering proposals
	+ Spend more than 50 percent of their time on energy issues
	+ Be capable of influencing decision-making at the general manager level
	+ Understand utility rate structures
* Has the energy champion implemented major projects or programs recently?
* Does the facility actively maintain a quality management system such as ISO 9000 or Total Quality Management?
* Does the corporate office consistently review costs and quality performance data for all facilities?
* Are production metrics integral to performance evaluations for facility managers and staff?

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| **Energy Leadership Score**A zero value indicates un-likeliness that the facility’s executive management would provide leadership on energy issues; a 10 indicates that senior management has demonstrated the ability to lead energy efficiency initiatives. |  |

## Employee Environment: Does the facility’s culture empower employees to give input and make decisions on quality or safety that would translate into energy efficiency opportunities?

* Does the facility support technical training of facility personnel?
* Does the facility use incentive programs and methods of recognition for safety, quality, energy or raw materials stewardship?
* Is energy efficiency viewed as an opportunity rather than an annoyance?
* Does the facility have engineers on staff?
* Does the facility have a preferred outside engineering firm that it uses on an ongoing basis?
* Are the chief engineers comfortable using software to analyze engineering issues?
* Do plant managers develop project proposals for capital budgeting purposes?
* Does the facility have excessive staff turnover?

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| **Positive Employee Environment Score**A zero value indicates that employees have a very low awareness of energy efficiency and would likely regard the CEI program as a nuisance; a 10 indicates that energy saving projects and measures have been (or could be) regularly implemented by self-motivated employees. |  |

## Facility Environment: Is the facility generally well-maintained, clean, orderly, and a healthy places to work? Or is it in a poor state of repair?

* Is the facility a consistently high performer with respect to health and safety?
* Are facility staff well trained for their jobs?
* Is the facility well-maintained?
* What is the age of the facility and its equipment set?
* How does the facility rank in terms of the application of recent technological advances with respect to their processes (cutting edge, keeping up with the competition, or dinosaurs)?
* Does the facility maintain a scheduled maintenance routine for powerhouses, motor drives, pumps, compressed air, and similar systems?
* Does the facility have a documented process for commissioning (tuning) systems?
* Are production, inputs, and cost performance data created and utilized at the facility level?

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| **Facility Environment Score**A zero value indicates an aging facility with few recent investments; a 10 indicates that the facility is well-maintained and that ongoing investments keep it in better condition than the competition’s. |  |

# Business Objectives

1. **Business Opportunity: What percentage of the facility’s costs does energy account for?**
* Cost Reduction Opportunities
* What are the facility’s expenditures for electricity and other fuels?
* What are the facility’s current cost reduction plans?
* What are the facility’s energy costs as a percentage of its operating budget?
* What is the expected payback period for capital improvements?

Financial Performance Goals

* Where does the facility see the most significant opportunities for improving financial performance?
* How does the facility see an improvement in energy efficiency affecting other financial indicators?

|  |  |
| --- | --- |
| **Business Opportunity Score**A zero value indicates that the facility’s energy costs are less than 2%; a 10 indicates that the facility’s energy costs are more than 25% of total operating costs |  |

1. **Risk Management: How sensitive is the facility to energy price and energy reliability?**
* Does the facility have any energy supply reliability issues?
* What is the facility’s exposure to energy price increases?
* What does the facility spend annually for electricity (kWh), natural gas (BTU), and/or other fuels and/or other energy units?
* Are the facility’s current and future environmental impacts a concern to top management?

|  |  |
| --- | --- |
| **Risk Management Score**A zero value indicates that energy is not very important to the facility’s operation; a 10 indicates that a 10-percent increase in energy costs may threaten the business’s viability. |  |

1. **Market & Production Growth: Is the facility likely to expand and grow?**
* Is the facility’s capacity stable or growing?
* Does the facility have production goals?
* Does the facility have market share goals?
* What has been the facility’s history achieving production and market share targets?

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| **Growth Score**A zero value indicates that the facility is at risk of closing down within two years; a 10 indicates that the facility has already implemented plans and made expenditures in anticipation of growth. |  |

1. **Corporate Positioning: How interested is the facility in surpassing its competitors with respect to environmental and energy conservation issues?**
* Has the facility adhered to other compliance initiatives or agreements relating to environmental and social issues?
* Is the facility under public scrutiny or “good citizenship” expectations?
* Do corporate leaders perceive energy efficiency as an opportunity or an annoyance?
* Has the facility demonstrated—per its web site, annual reports, or other company communications—its interest in developing a corporate culture that emphasizes conservation?

|  |  |
| --- | --- |
| **Corporate Positioning Score**A zero value indicates that the facility has demonstrated no initiative to exceed environmental permit requirements or implement energy efficiency measures; a 10 indicates that the facility is ISO 9000 and 14000 certified, and has published accomplishments with respect to energy efficiency. |  |

# Acknowledgements

* This work is based on the assessment tool developed by BC Hydro, which was shared through the CEE group in September, 2008
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* Russell, C. A Self Test of Organizational Aptitude for Managing Energy, Alliance to Save Energy, Washington, DC, March 2005