



**COMMISSION  
AGENDA MEMORANDUM**

**Item No.** 7c

**BRIEFING ITEM**

**Date of Meeting** February 28, 2017

**DATE:** February 1, 2017

**TO:** Dave Soike, Interim Chief Executive Officer

**FROM:** Elizabeth Leavitt, Senior Director, Environment and Sustainability  
Leslie Stanton, Manager, Environmental Sustainability

**SUBJECT:** Results of Energy and Greenhouse Gas Assessment

**EXECUTIVE SUMMARY**

Environment and Sustainability Center of Expertise (COE) staff will brief Commission on results of the Energy and Greenhouse Gas (GHG) Assessment. The assessment was conducted by an internal stakeholder group of energy engineers and environmental program managers to evaluate and recommend a range of energy conservation and renewable fuel strategies. These strategies can be implemented by the Port to reach energy and greenhouse gas Century Agenda goals.

This work complements the energy and GHG analyses conducted in the Long Range Plan by evaluating and prioritizing a broader suite of options. Also, the Commission's Energy and Sustainability Policy Committee has reviewed the assessment and are proposing additional policy recommendations to assist the Port in meeting its energy and GHG reduction goals.

**STUDY APPROACH**

The objective of this study was to analyze and recommend a combination of conservation and renewable energy strategies to ensure the Port meets Century Agenda energy and GHG goals.

The COE began by identifying a group of internal stakeholders who would provide professional judgment and Port perspective on energy needs and projects. The stakeholder group is comprised of energy engineers and environmental program managers from both the Aviation and Maritime divisions. The COE also hired consultants Haley Aldrich to facilitate stakeholder meetings, analyze the recommended strategies, estimate results, and draft the findings.

The following tasks were conducted:

1. Develop a comprehensive list of energy approaches and strategies, including a review of energy strategies from five ports that have both maritime and aviation divisions,
2. Conduct an initial screening of those strategies based on feasibility and impact,
3. Estimate costs and impacts of remaining strategies,

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4. Rank the remaining strategies based on level of confidence in the technology for the final list of energy conservation and renewable energy strategies, and
5. Develop recommendations

#### **FINDINGS AND RECOMMENDATIONS**

The results of the assessment show that a number of strategies currently exist to enable the Port to meet its Century Agenda energy and greenhouse gas goals. More specifically,

1. Conservation strategies will address about 5 to 10% of our energy needs and 5% of its GHG reduction needs, and
2. Renewable fuel strategies will be needed to meet the remaining reductions necessary, particularly after 2030.

The assessment proposes a series of recommendations along with a schedule for the near-term strategies. Recommendations include both procedural and strategic approaches. For example, the Port could adjust its procedures by using longer payback periods when analyzing energy conservation efforts, given the low cost of our electricity and natural gas. Alternatively, the Port could adjust its strategy to purchase renewables by pursuing power purchase agreements (PPAs) for projects in eastern Washington rather than on Port property. This strategy could improve the return on investment for solar and wind projects.

#### **ADDITIONAL BACKGROUND**

The results of this assessment were also presented to the Energy Production Subcommittee of the Commission's Energy and Sustainability Policy Committee. The subcommittee agreed with the approach and findings, and recommended that the Port expand its stakeholder group to include energy experts outside the Port.

#### **ATTACHMENTS TO THIS BRIEFING**

- (1) Presentation slides
- (2) Complete *Energy and Greenhouse Gas Assessment* in slide format.

#### **PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

None