

**QUANTIFICATION PROTOCOL FOR
Engine Fuel Management and Vent Gas Capture**

Technical and Policy Issue Summary

October, 2008

Background

In conjunction with the development of the Alberta protocol document, a listing of key technical and policy issues was developed to guide discussions as part of the technical and stakeholder review processes. The following document provides a listing of the key issues for discussion. Many of the issues have both a technical and policy component and are listed under both sections, as required.

The following technical and policy issues may be considered as part of the technical and stakeholder review processes:

- Are the project and baseline configurations sufficiently broad as to capture the full scope of possible engine fuel efficiency projects and vent gas capture projects?
- Is the definition of the baseline scenario clear (page 14)?
- Does the use of brake specific fuel consumption (BSFC) as a metric for quantification adequately reflect the change in fuel consumption due to the implementation of an engine fuel management system (e.g. an air-fuel ratio controller)?
- Does the quantification approach in Table 2.4 address vent gas emissions appropriately (B5b on page 28)?
- Do the metering requirements in Table 2.4 (page 24) balance technical rigour and reasonableness (for the project proponent)?
- Is the procedure to determine the fuel savings from implementation of the engine management system in Appendix C (page 50) sufficient to quantify fuel savings under any conditions?
- Is the step-by-step procedure in Appendix C reasonable and technically accurate?
- Is the flexibility mechanism for projects that have not measured fuel consumption before and after the engine modification flexible enough to allow for all project proponents (see Flexibility Mechanism #2 on page 6, also see Appendix A)? Is the requirement for data from 5 operating engines of the same make and classification reasonable?
- Is the flexibility mechanism for flaring suitable for project proponents to apply (see Appendix A and B)?