

Terms of Reference



Renewable and Alternative Energy Project Team

Revised as per the March CASA Board meeting

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Background:

The Alberta government's Climate Action Plan, released in the fall of 2002, includes an increase in the use of renewable and alternative electrical energy as one means of reducing Alberta's green house gas emissions. The CASA Electricity Project Team (EPT), which reported to the CASA Board in November 2003, included a number of recommendations on renewable and alternative energy in its report (#s 55 – 64, appended to these terms of reference). Due to tight time frames and a number of policy issues that needed to be resolved, the electricity project team's recommendations include a recommendation that a team be struck and further work done on a number of issues related to renewable and alternative electrical energy. This group is being formed in response to these recommendations.

Renewable and alternative electrical energy, whose definition for the purposes of this team can be found in recommendation #57 in the November 2003 EPT report, includes low or zero emissions sources such as wind power, solar power, run-of-river hydro, biomass, and other small GHG-efficient sources. It does not include larger co-generation projects, although these are efficient means of generating electricity. While the cost of some of these technologies is becoming competitive, it is necessary to ensure that any barriers in the marketplace that are impeding the development of renewable and alternative energy are removed. These barriers include but are not limited to regulatory barriers, transmission and metering issues, the lack of a liquid market for green credits, and the belief that renewable energy is not able to provide reliable capacity to the grid.

Goal:

The goal of the Renewable and Alternative Energy Project Team is to implement the renewable and alternative energy recommendations found within the EPT report, with the aim of increasing the supply of renewable and alternative electrical energy in the province to meet the target of 3.5% new renewable and alternative electrical energy, as defined in recommendation 58 of the EPT report, by January 1, 2008.

Objectives:

In order to achieve its goal, the Renewable and Alternative Energy project team will accomplish the following objectives:

1. ***Develop tools and mechanisms to facilitate meeting the target and to implement the renewable and alternative electrical energy recommendations as described in the EPT report***
2. Develop a renewable and alternative electrical energy target beyond 2008, with corresponding tools and mechanisms.
3. Develop cost effective approaches and programs that enable the development of renewable and alternative electrical energy.
4. Develop interim benchmarks and reporting for the period between the present and January 1, 2008 to determine if the target is achievable and allow for adjustments to ensure the target is reached.

Key Task Areas:

1. Administration

a. Underpinnings

- i. Setting a further target for renewable and alternative electrical energy beyond 2008.
- ii. Clarifying the eligibility of upgraded facilities that result in incremental electrical energy for the target.
- iii. Clarifying whether the definition of retailer found in the Electric Utilities Act is sufficient for the purposes of implementing a retailer-based target for new renewable and alternative electrical energy.
- iv. Recommending options to resolve the issues listed below and identifying any additional issues for resolution related to implementing the retailer-based method described in the November 2003 report of the renewable and alternative energy sub-group of the EPT. The implementation of the retailer-based method is contingent upon the resolution of these issues to the satisfaction of affected stakeholders represented on the implementation team:
 1. Scope of audit process
 2. Timely development of a market for green certificates
 3. Provisions to allow providers of the Regulated Default Supply and Regulated Rate Tariff Options to flow through the costs associated with meeting the 3.5% target while continuing to support a competitive marketplace.
 4. Provisions to ensure retailers that have taken prudent measures to achieve the 3.5% target are not penalized if supply does not materialize in a timely manner.

5. Transitional provisions that take into account previously signed long term contracts.
6. Examine the need for compliance mechanisms and regulatory backstop

b. Implementation, Operation, and Management

- i. Examining ways in which the Alberta emissions trading system might be used to assist in developing renewable and alternative electrical energy
- ii. Examining ways in which Alberta' sectoral agreements might be used to assist in developing renewable and alternative electrical energy
- iii. Clarify the definition of green tags and green certificates to ensure they are compatible with both the provincial and federal government positions on emissions trading.

2. Enabling mechanisms

- a. Determining ways in which larger co-generation and low-impact electric energy sources can be encouraged.
- b. Seeking means by which programs such as the federal government's Wind Power Production Incentive program, the Renewable Energy Deployment Initiative and other production incentives described in the November 2003 report of the Renewable and Alternative Energy Sub-group of the EPT might be augmented by the Alberta government to promote Alberta's renewable and alternative energy sector
- c. Seeking means by which consumer engagement mechanisms as described in the November 2003 report of the Renewable and Alternative Energy sub-group of the EPT could be funded and implemented
- d. Examining options that would allow Climate Change Central, with the assistance of other groups such as the Office of Energy Efficiency, ENGOs, and retailers, to take the lead in the educating consumers about the sources of their electrical energy.
- e. Seeking means by which a Solar Infrastructure Initiative as described in the November 2003 report of the renewable and alternative energy sub-group of the EPT could be funded and implemented

3. Reporting

- a. Preparing a final report and recommendations to the CASA board covering the goals and objectives set out above.
- b. Preparing and implementing a plan to communicate to CASA stakeholders and other potentially interested people the results of the team's work.

Timelines:

It is expected that the Renewable and Alternative Energy Project Team will report to the CASA board in March 2005. An interim report, on the implementation mechanisms referred to in objective #1 should be made to the CASA Board in September 2004.

Budget:

The financial needs of this team are unknown at this time. There will be some funding available from Alberta Environment to be shared between this project team and the Energy Efficiency and Energy Conservation Project Team, and also the remaining funding from the EPT will be made available to these two groups. It is not anticipated that this group will require a great deal of financial resources beyond the costs relating to the preparation of its final report. Fundraising for this work beyond the available monies, if required, will be one of the tasks for this group.

Membership:

The following groups have been identified as having a stake in the outcome of this team's work:

- Electricity industry, including:
 - "Wires" companies
 - Independent Power Producers Association
 - Renewable and alternative electricity generators
 - Retailers
 - Self-retailers
 - Generators, both Renewable, Alternative, and others
- Alberta Environment
- Alberta Energy
- ENGOs
- Canadian Association of Petroleum Producers
- Alberta Electrical System Operator
- Canadian Chemical Producers Association
- Alberta Forest Products Association
- Canadian Petroleum Products Institute
- NewEra
- Climate Change Central
- Municipalities
- Federal Government
 - Environment Canada
 - Natural Resources Canada

CASA EPT Renewable and Alternative Energy Recommendations

55	<p>The Provincial Target for Renewable and Alternative Energy</p> <p>The Alberta government implement at the very least the 3.5% target for new renewable and alternative energy referenced in its <i>Albertans & Climate Change - Taking Action</i> plan.</p>
56	<p>The Basis for the Target for New Renewable and Alternative Energy</p> <p>Irrespective of the mechanism adopted for its implementation, the Alberta government calculate the 3.5% target for new renewable and alternative energy based on 100% of electric energy sold through the Alberta Power Pool, from Alberta sources.</p>
57	<p>Defining Renewable and Alternative Energy</p> <p>The following definition of Renewable and Alternative Energy be adopted by the Alberta government for the purposes of calculating the 3.5% target for new renewable and alternative energy:</p> <p>Renewable and Alternative Electricity is defined as that which is:</p> <ol style="list-style-type: none"> a) Power generated within the province of Alberta; and b) EcoLogo™ compatible in that it meets the EcoLogo™ criteria for Renewable Low-Impact Electricity, but from facilities that are not necessarily EcoLogo™ certified; <p style="text-align: center;">OR</p> <p>Alternative electricity supplies whose source meets the following criteria:</p> <ol style="list-style-type: none"> a) 5 MW or less; and b) greenhouse gas intensity less than or equal to combined cycle gas turbine 418 kg per MWh <p>Projects eligible for the target would be those that begin producing electric energy after December 31, 2001.</p>
58	<p>Calculating the Amount of New Renewable and Alternative Energy Generation</p> <p>The Alberta government use the following energy-based method to calculate new renewable and alternative power:</p> <p style="padding-left: 40px;">(Total new renewable and alternative electricity in MWh, as defined in recommendation 57) Divided by (Total power sold through the Alberta Power Pool in MWh)</p>
59	<p>Mechanisms for Achieving the Renewable and Alternative Energy Target</p> <p>The Alberta government consider developing a program to implement the mechanisms required to achieve a target of at least 3.5% new renewable and alternative energy by January 1, 2008. These mechanisms may include a “green certificate” program, emissions trading, offset credits, or any other mechanism to incent the use of green power.</p>
60	<p>The Retailer-Based Method for Achieving the Renewable and Alternative Energy Target</p> <p>The retailer-based method, described in this report, be the preferred option for achieving the target for additional renewable and alternative energy. The implementation team (see recommendation 64) will be tasked with recommending options to resolve the issues listed below and identifying any additional issues for resolution related to implementing the retailer-based method. The implementation of the retailer-based method is contingent upon the resolution of these issues to the satisfaction of affected stakeholders represented on the implementation team:</p> <ul style="list-style-type: none"> • scope of audit process; • timely development of a market for green certificates; • provisions to allow providers of the Regulated Default Supply Option to flow through the costs associated with meeting the 3.5% target; • provisions to ensure retailers that have taken prudent measures to achieve the 3.5% target are not penalized if supply does not materialize in a timely manner; and • transitional provisions that take into account previously signed long term contracts.

61	<p>Sectoral Agreements and Green Power</p> <p>The Alberta government, in any sectoral agreement negotiations, consider encouraging all purchasers of power to buy at least 3.5% new renewable and alternative electricity, as defined in recommendation 57, as a means of reducing their greenhouse gas emissions.</p>
62	<p>Net Metering and Net Billing</p> <p>Alberta Energy undertake a study to identify the technical, legal and financial issues associated with net metering and net billing, including a policy direction for the industry.</p>
63	<p>Infrastructure Needs</p> <p>Alberta Energy and the Alberta Electric System Operator examine the decision-making process for the renewable and alternative energy sector's infrastructure needs, with a view to:</p> <ul style="list-style-type: none"> a) ensuring that the process is accessible to the renewable and alternative sector, and b) improving the infrastructure for renewable and alternative energy.
64	<p>Renewable and Alternative Energy Implementation Team</p> <p>A CASA multi-stakeholder implementation team be formed to address the following issues, as well as issues that may be referred to it by other stakeholders or other sub-groups of the EPT. In forming this group, it is essential that all interested stakeholders who will be affected by the matters discussed be actively involved.</p> <ul style="list-style-type: none"> a) Setting a further target for renewable and alternative energy beyond 2008. b) Clarifying the eligibility of upgraded facilities that result in incremental power for the target. c) Determining ways in which larger co-generation and waste heat facilities can be encouraged and incented. d) Clarifying whether the definition of retailer found in the <i>Electric Utilities Act</i> is sufficient for the purposes of implementing a retailer-based target for new renewable and alternative electricity. e) Seeking means by which the federal government's Wind Power Production Incentive program, the Renewable Energy Deployment Initiative and other production incentives described in this report, might be augmented and integrated into Alberta's renewable and alternative energy sector. f) Seeking means by which consumer engagement mechanisms as described in this report could be funded and implemented. g) Seeking means by which a Solar Infrastructure Initiative, described in this report, could be funded and implemented. h) Examining options that would allow Climate Change Central, with the assistance of other groups such as the Office of Energy Efficiency, ENGOS, and retailers, to take the lead in the educating consumers about the sources of their electrical power. i) Examining ways in which the Alberta emissions trading system might be used to assist in developing renewable and alternative energy.