

AES Attachment B

Arctic Energy Action Team

“... leaving a legacy and creating a path forward ...”

Purpose

The purpose of the Arctic Energy Action Team (AEAT) is to cooperatively develop an international energy vision of the North through a broad coalition of energy, technology, and policy experts and stakeholders. The AEAT will provide a forum and a framework to formulate strategy and identify enabling technologies for the enhancement of extractive and renewable energy recovery; and the deployment of economical and environmentally sensitive energy sources to rural Arctic communities, with the goal of developing the Arctic as an energy province.

The AEAT will:

- Identify technology needs for the three challenge areas;
- Develop a roadmap (plan) that contains options for the development and demonstration of the enabling technologies for near term (0 – 5 years), mid-term (5 – 10 years) and long term (10 – 20 years);
- Identify the barriers that can be eliminated by cooperative action, with commitments needed at local, regional, national and international levels;
- Identify potential demonstration projects to validate a plan forward; and
- Edit and publish an Action Team report for submission to the Arctic Council and the International Polar Year organization by early 2009.

The AEAT will focus on these key challenges:

- Extractive energy
- Renewable energy
- Rural energy

In addition to the technology area, the following eight focus areas will be evaluated in all technology plans.

- Policy experiences in developing energy assets in the Arctic
- Required human resources for Arctic energy development
- Rural energy costs and concerns
- Shipping and transportation options and challenges
- Environmental concerns
- Infrastructure and the impact of climate change
- Impacts of energy development on the people of the North
- Energy security and the Arctic's role

Action Items

The Arctic Energy Action Team was convened on 18 October 2007 at the conclusion of the Arctic Energy Summit's Technology Conference with 21 participants attending the first organizational meeting. It is anticipated that other delegates who participated in the conference will join the team. The group is also open to interested parties who were not at the conference. Those interested in joining the action team, should email Jim Hemsath, senior fellow for energy at the Institute of the North at jhemsath@institutenorth.org

The following are the next steps that were identified at this meeting.

1. Identification of energy challenges – The following question has been circulated to the AEAT for comments and suggestions for energy challenges. Using consensus, it is hoped the three energy challenges can be identified by mid-November. The following examples are provided and may be valid, but the group needs to evaluate the suggested topics against other potential challenges faced in the Arctic and reach a consensus.

Identify a specific energy challenge that currently is not being addressed in the Arctic in the three technology focus areas. The challenge should be one that can be developed but currently has not been addressed either due to lack of technology or high costs.

As examples:

Extractive Energy: Large amounts of high quality coal exist in the Arctic (25% of known reserves), yet it is currently undeveloped. What technology would allow this resource to be utilized?

Renewable Energy: There are large tidal resources in the Arctic. Technology is becoming more available to take advantage of this resource in lower latitudes. Are there barriers (such as tidal ice) that would prevent this renewable resource from being used? What technology or approach would allow this resource to be utilized?

Rural Energy: Fully a third of energy usage in a rural community is in transportation fuels (ATVs, snow machines, boats). High costs of these fuels are significantly impacting rural subsistence lifestyles and the viability of these communities. What fuel technologies are available that could be used to mitigate this problem?

2. Communication – Using the SDWG website, the group will communicate and execute tasks via the internet. The Arctic Energy Summit's Arctic Synergy electronic newsletter will also be used for announcements and the recruitment of additional team members.
3. Everyone on the organizing group is working on some facet of Arctic energy development and/or deployment. The request was made for individuals to submit a brief bio (and picture) that will allow for any common areas or intersections of interest to be identified.