

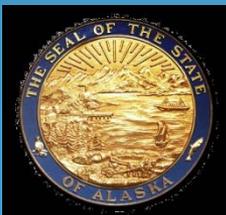


State of Alaska  
Governor's Climate Change Sub-Cabinet

**Adaptation Advisory Group Meeting  
Meeting #5**

**Economic Activities Technical Working Group  
EA TWG**

Alaska Forum on the Environment  
February 2 – 6, 2009  
Nancy Tosta, Ross & Associates



# Economic Activities TWG

- The EA TWG is developing recommendations for actions to address the effects of climate change on a wide range of Alaska's economic activities, including:
  - Oil and gas
  - Mining
  - Tourism and recreation
  - Ocean transportation
  - Rural and non-road transportation
  - Energy supply and demand
  - Boundaries and ownership
  - Sustainable jobs and economic development
  - Information collection and dissemination

# Overview of Options

- **EA-1:** Evaluate Potential Needs for Expanded Arctic Ocean Oversight and Regulatory Activities
- **EA-2:** Explore Economic Activity Opportunities Offered by Climate Change
- **EA-3:** Develop Scenarios for the Alaskan Economy
- **EA-4:** Establish a Center for Knowledge Sharing on Arctic Issues
- **EA-5:** Improve Availability of Mapping, Surveying, Charting and Imagery Data

## OVERVIEW

### Option 1. Evaluate Potential Needs for Expanded Arctic Ocean Oversight and Regulatory Activities

- Less ice in the Arctic may mean that more ports, infrastructure, and other facilities will be developed in the Arctic Ocean area. An increase in facilities will create job opportunities and require investments to ensure safety and environmental protection.
- **This option recommends identifying needed services and protections, including search and rescue, navigational safety, inspection, and enforcement of environmental and safety rules.**

## DESIGN/IMPLEMENTATION

### Option 1: Evaluate Potential Needs for Expanded Arctic Ocean Oversight and Regulatory Activities

- This option could be implemented through a Capital Improvement Project (CIP) to be tasked by the Governor's Office and led by AK-DOT to identify needed services and protections based on increased use and infrastructure in the Arctic Ocean.
- The CIP would identify and analyze Arctic requirements for services and capabilities and identify opportunities to share costs, facilities, equipment, and responsibilities among agencies.
- This project would recommend a schedule of expansion based on immediate, 5-10 year, and >10 year needs

## OVERVIEW

### Option 2: Explore Economic Activity Opportunities Offered by Climate Change

- Economic opportunities may exist because of the unique Alaskan environment and early experiences dealing with climate impacts
- **This option recommends exploring the economic opportunities that may result from climate change such as:**
  - **New possibilities in existing industries – forestry, agriculture, fishing, mining, oil & gas, tourism**
  - **Carbon management**
  - **Renewable energy (tidal, wind, hydroelectric) and energy efficiency**
  - **Sustainable infrastructure development**
  - **Adaptation and mitigation approaches applicable**

## DESIGN/IMPLEMENTATION

### Option 2. Explore Economic Activity Opportunities Offered by Climate Change

- Implementation mechanisms for this option include:
  - A State Executive Order to:
    - Establish a grant program for funding that may result from GHG market approaches
    - Establish a public/private board to identify and foster climate change-related opportunities, seek and receive funding (e.g., from new markets regulating GHGs), and disperse funds efficiently,

## OVERVIEW

### Option 3. Develop Scenarios for the Alaska Economy Affected by Climate Change

- The Alaskan economy will experience varying impacts due to climate change. A better understanding of the potential impacts of climate change to the State's natural resource based economy is needed
- **This option recommends that funding be provided to develop scenarios to examine both current and future economic strengths, weaknesses, opportunities, and threats as climate change continues to affect the resources of the State.**

## DESIGN/IMPLEMENTATION

### Option 3. Develop Scenarios for the Alaska Economy Affected by Climate Change

- Identify appropriate researchers/scientists to engage
- Identify models, scenario approaches, and parameters of interest (e.g., climate, social, cultural, technical, and economic)
- Acquire data and develop scenarios
- Distribute, discuss, and evaluate results to outline possible futures for the Alaska economy, including potential changes in population, infrastructure, sector job growth, etc.

## OVERVIEW

### Option 4. Establish a Center for Knowledge Sharing on Arctic Issues

- Many Alaskan organizations, as well as federal and international partners, are engaged in efforts related to Arctic issues and Alaska's role
- Efforts are often disparate and not coordinated
- Data related to the Arctic are difficult to find and use
- **This option recommends establishing a focal point to coordinate information on Arctic issues**

# DESIGN/IMPLEMENTATION

## Option 4. Establish a Center for Knowledge Sharing on Arctic Issues

- Review current Arctic initiatives and efforts – e.g., AK Marine Ecosystem Forum, State-Federal Climate Change Roundtable, AOOS to understand responsibilities and overlap
- Subcabinet - Establish a focal point (potentially online) for collecting and disseminating information relative to the various national and international forums on these Arctic issues. This focal point would support:
  - Networking to coordinate different efforts
  - Knowledge sharing with extensive information management and an online clearinghouse for documents and data on Arctic issues
- This (online) center could be housed within a state agency or at the University of Alaska

## OVERVIEW

### Option 5. Improve Availability of Mapping, Surveying, Charting and Imagery Data

- The ability to socially and economically respond to the effects of a changing climate requires improved knowledge about components of the physical environment (including elevation, sea levels, and coastal conditions)
- **This option recommends investments in an accurate and high-resolution statewide digital base map that includes a digital elevation model and imagery. The option supports the Alaska's current Statewide Digital Mapping Initiative (SDMI)**

## DESIGN/IMPLEMENTATION

### Option 5. Improve Availability of Mapping, Surveying, Charting and Imagery Data

- SDMI (led by DNR, DOT, Military and Veterans Affairs, U of A, USGS, and BLM) is willing to serve as a governing body, or can be used as a template if a broader representation is required
- A funding plan for DEM is needed (under development in DNR)
- Specifications and funding plan for a satellite imagery acquisition system (under development in DNR)
- SDMI currently has \$6M to develop initial specifications and plans, additional funding would need to be allocated to develop data sets

# *Thank you!*

<http://climatechange.alaska.gov/>

Contact info: Nancy Tosta, Ross & Associates

[nancy.tosta@ross-assoc.com](mailto:nancy.tosta@ross-assoc.com)

(206) 447-1805