Oil and Gas TWG
Teleconference Meeting #3

July 31, 2008 10:00am - 12noon

Governor’s Climate Change Sub-Cabinet
Center for Climate Strategies
Today’s Agenda

• Roll call
• Review and approval of TWG Call #2 summary
• Feedback from the MAG
• Next steps for TWG
• Inventory and Forecast
• Approach for setting priorities
• Public input and announcements
• Next call
Feedback from the MAG

• MAG suggested that two new policy options are actually criteria rather than policy options *per se*:
  – “Ensure growth of Alaska’s jobs and economy”
  – “Avoid redundancy and conflicting federal GHG program with other programs

• MAG suggested adding carbon capture, reuse and sequestration (CCRS) related to coal – ESD TWG to consider

• Implicit consent to proceed with catalog
Next Steps For TWG

1. Develop initial GHG inventories and forecasts
2. Identify possible GHG mitigation options ✓
3. Identify initial priorities for evaluation (by Sept?)
4. Evaluate supply potential, cost effectiveness; additional and feasibility issues as needed
5. Identify barriers, alternative policy design needs
6. Modify, add or subtract options as needed
7. Evaluate cumulative results of options
8. Iterate to consensus, with votes as needed
9. Aggregate options into implementation scenarios
10. Finalize recommendations and report language
Draft GHG emissions inventory & forecast for Oil and Gas Sector

• Methodology and data gaps currently under review
  – Energy consumption emissions need to be disaggregated from industrial sector (completed for 2002)
  – In other states, discrepancies have been found between EIA estimates and oil and gas industry data on energy consumption
  – Fugitive emissions are based on industry averages (information on AK flaring and venting activity is not directly assessed)
  – Fraction of entrained CO$_2$ in natural gas is uncertain
  – Challenges in projecting future production of fossil fuels
GHG estimates 2002 (MMTCO2e)

Fugitive Emissions
• Natural Gas - Production 0.01
• Natural Gas - Transmission 0.34
• Natural Gas - Distribution 0.06
• Oil Production 3.86
• Oil Refining 0.01
• Oil Transportation 0.01

Energy Consumption
• Title V facilities 15.26
• Non-Title V facilities ?

Total 19.55

Key Uncertainties
• Emission factors (based on National or regional averages)
• Refinery production (based on capacity and regional production)
• Non-title V energy consumption

See background spreadsheet on website
Key growth assumptions

• Average annual growth rates in energy consumption (all industry)
  – EIA energy + AK employment projections

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<tr>
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<td>2.3%</td>
<td>1.4%</td>
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<td>2.3%</td>
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<td>1.7%</td>
<td>1.1%</td>
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• Average annual growth rates in fossil fuel production
  – Natural gas production declines 3.9% per year
  – Oil production declines 1.3% through 2015 then 4.8%
  – Source: Alaska Department of Natural Resources Oil and Gas Annual Report 2006
High growth scenario?

• TWG has discussed option to add a high growth scenario. Ideas include:
  • Natural gas pipeline leading to higher natural gas production
  • Alternative growth assumptions for oil
  • Other ??
  • Information sources??
  • Sub-group of TWG??
Setting Priorities for Analysis

• Goal is to choose top 10 or so options that the TWG will then be asked to develop further
  – Design objectives, timing, implementation strategies
  – Related programs and policies in place
  – Quantification of estimated emission reductions and costs
  – Uncertainties, feasibility issues, additional benefits and costs
• Usually accomplished through TWG voting plus discussion
• These are priorities for analysis, not recommendations for option implementation
Public Input and Announcements
Next TWG Call

- Agenda:
  - Discussion of process for selection of priority options
    - or -
  - Discussion of selection of priority options
  - Further review of the emissions inventory and projection

- Proposed date/time for Call #4:
  - Thursday, August 28, 10:00am – 12noon