

National Petroleum Council
Global Oil and Gas Study

NPC Review
June 21, 2006

Study Origins

2005

- **June** Secretary Bodman speech to NPC members
- **October** Secretary Bodman study request to NPC
- **November** Agenda Committee recommends acceptance
- **December** Membership concurrence via ballot
Executive Committee established

2006

- **April** Coordinating Subcommittee established
- **May** Global Committee established
- **June** Status Report

Study Request – Suggested Questions

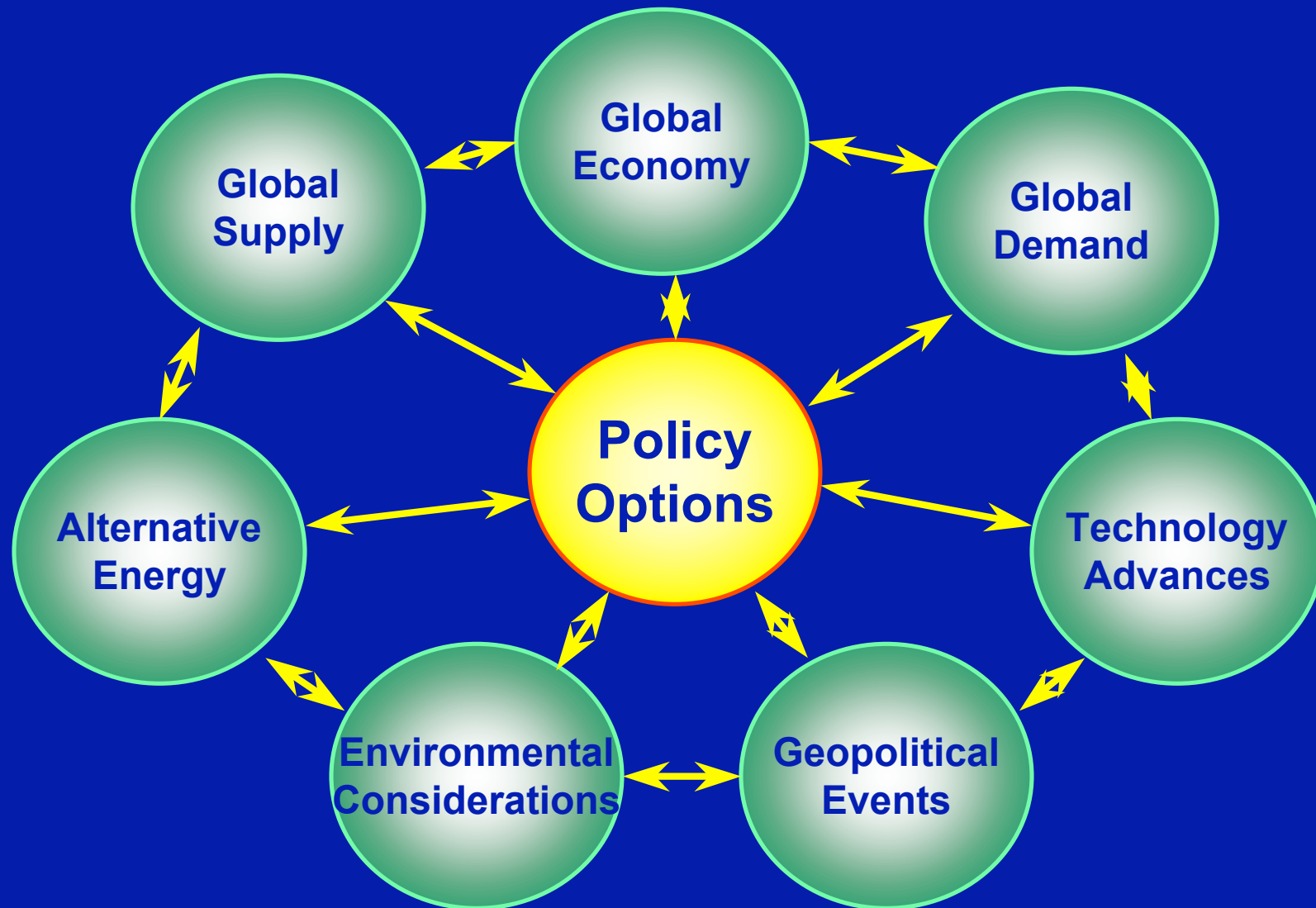
1. What does the future hold for global oil and natural gas supply?
2. Can incremental oil and gas supplies be brought on-line, on time, and at a reasonable price to meet future demand without jeopardizing economic growth?
3. What oil and gas supply strategies and/or demand-side strategies does the Council recommend the United States pursue to ensure greater economic stability and prosperity?

Study Principles

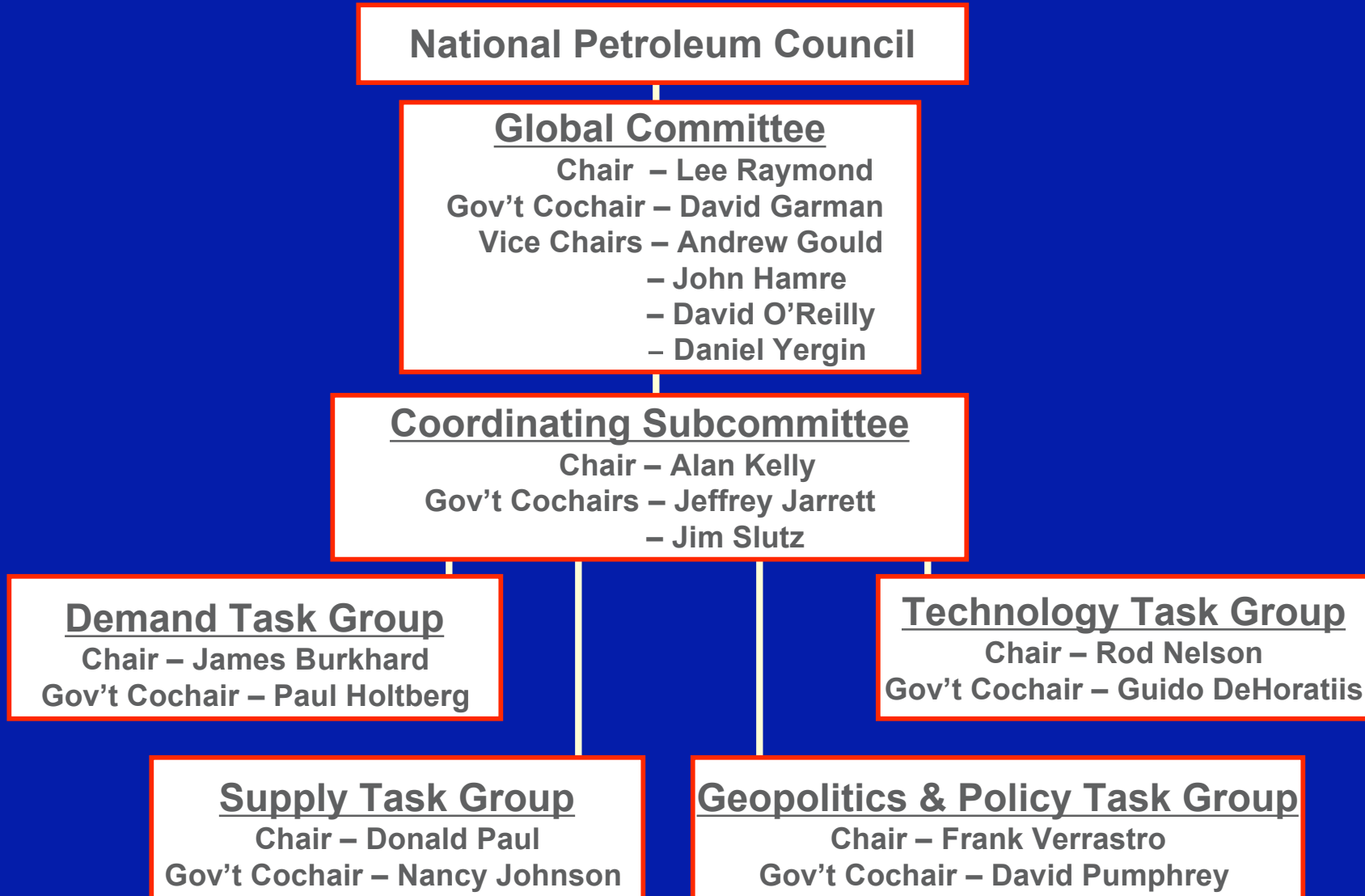
Principles

- Not another “grassroots” energy forecast.
- Will access and utilize public domain data sources.
- Input solicited from a broad range of interested parties.
- Emphasize long-term conditions, not near-term volatility.
- Recommendations supported by sound data and science.
- All study teams work within scope and on time.
- Full compliance with antitrust laws and regulations.

Study Scope – Oil and Gas



Study Organization



Study Approach

- Engage and include broad cross section of resources
 - ✓ NPC Membership & Executive Committee
 - ✓ CSC & Task Group members
 - ✓ Subgroup participants
 - ✓ Expert panels
 - ✓ Workshops
 - ✓ Focus Groups
 - ✓ One-to-One dialogue
 - ✓ Other

Study Coordinating Subcommittee



Deutsche Bank



Alliance to Save Energy



CERA



Schlumberger



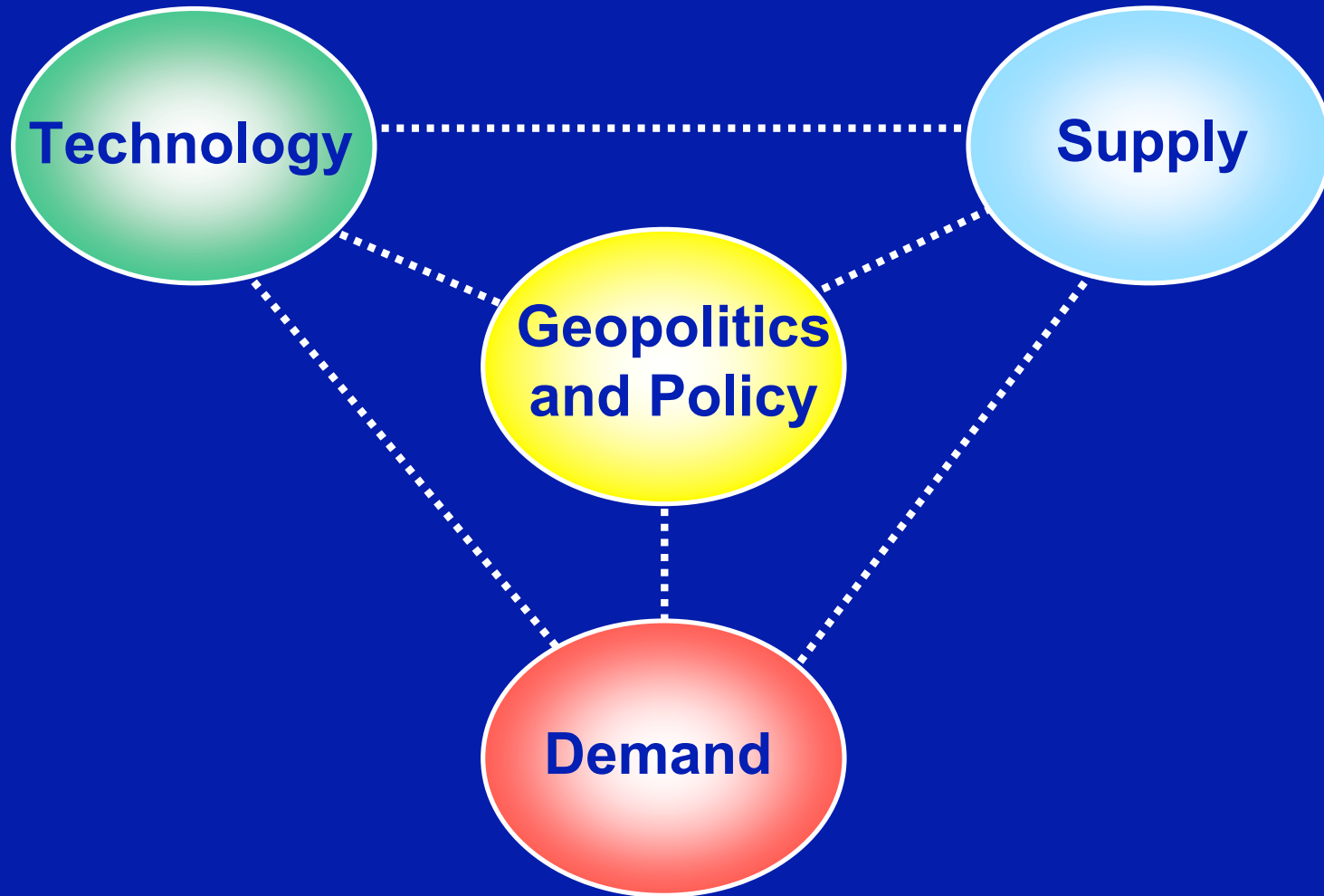
Resources for the Future



American Electric Power



Study Task Groups



Study Crosscutting Subgroups

Refining

Infrastructure

GTL & LNG

Biofuels & Renewables



Consumer & Social Trends

Economic Variables



Energy Efficiency

Unconventional Hydrocarbons

Nuclear

Coal

CO₂ Sequestration

Technology Development & Gov't role





Demand Task Group - Approach

- Define data needs and management system.
- Review world primary energy demand by fuel back to 1970.
- Gather EIA and IEA world primary energy demand to 2030.
- Review data and key drivers of oil and gas demand outlooks.
- Identify key sensitivities to oil and gas demand projections.
- Seek external views on key variables for oil and gas outlooks.
- Coordinate key variables with other Task Groups.
- Develop policy recommendations with Geopolitics & Policy Team.

Supply Task Group – Approach

- Evaluate a broad range of publicly available oil and gas supply models and projections, including fuel and power dimensions.
 - ✓ Define key rates and factors of the conversion system from geologic resources to reserves, production, and manufacturing.
 - ✓ Summarize assumptions and findings for the range of supply projections and assess outcomes for probability, shape, and timing of supply curves.
 - ✓ Assess supply variables to economic, technology, geopolitical, and environmental factors.
- Develop policy recommendations with Geopolitics & Policy Team.



Technology Task Group - Approach

- Identify and organize teams around technical themes.
- Theme work sessions will have broad participation.
- Close cooperation with other Task Groups.
- Engage NPC and non-NPC expertise on nuclear, coal, and renewables.
- Engage consumer groups and autos on demand issues.
- Strong cooperation from DOE to utilize past work on select topics.



Technology Task Group - Approach

- Develop views of :
 - ✓ Time horizons
 - ✓ Research budgets
 - ✓ Human resources
 - ✓ Technology penetration
- Develop policy recommendations with Geopolitics & Policy Team.

- Conduct literature review of geopolitics analysis.
- Establish and populate regional geopolitics teams.
- Expand outreach to include NGOs, environmental, diplomatic, and academic communities.
- Review historical policy decisions and consequences of choices.
- Establish policy team, including representatives from other Task Groups to :
 - ✓ Identify and analyze policy options
 - ✓ Develop recommendations

Study Forward Plan

- Resource and launch Task Groups.
- Accelerate public domain data gathering and analysis.
- Conduct periodic reviews:
 - ✓ Weekly CSC leader conference calls
 - ✓ Monthly CSC meetings
 - ✓ Milestone reviews with Global Committee
- Develop draft report 1Q 07.
- Committee and NPC final report approval 2Q 07.
- Communications and Outreach.

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