



**GECHS**  
GLOBAL ENVIRONMENTAL CHANGE  
AND HUMAN SECURITY

## A THREE-WAY CONNECTION



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State of the Arctic Conference  
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**The Arctic Express and Its Feedbacks to  
Global Environmental Change**

# A THREE-WAY CONNECTION

Climate Change



Hydrocarbons

Transportation



# CLIMATE CHANGE

- ◉ Feedbacks
- ◉ Tipping points



# HYDROCARBON EXTRACTION

- ◉ Arctic reservoir
- ◉ Distribution



# TRANSPORTATION

The Northern Sea Route



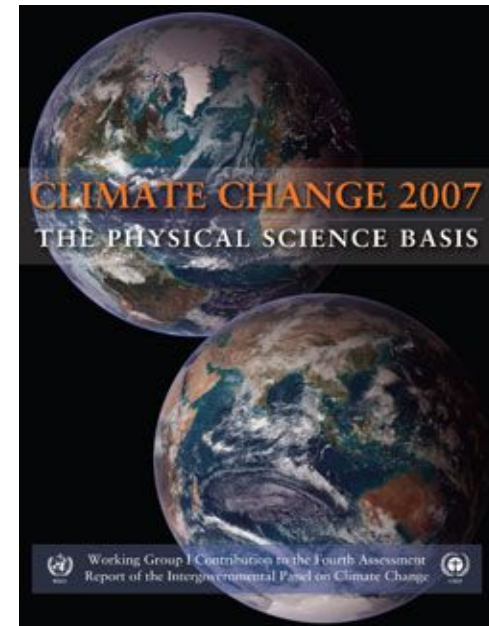
# DISCOURSES

- ◉ Shared meaning
- ◉ Political power



# THE EARTH SYSTEM DISCOURSE

- Biophysical processes
- Carbon capture and storage
- Global co-ordinated consensus



# THE ECONOMIC OPPORTUNITY DISCOURSE

- ◉ Environmental and economic values
- ◉ Technology
- ◉ Trade





# THE SOCIAL JUSTICE DISCOURSE

- ◉ Underlying structures
- ◉ Socioeconomic and political aspects
- ◉ Different experiences

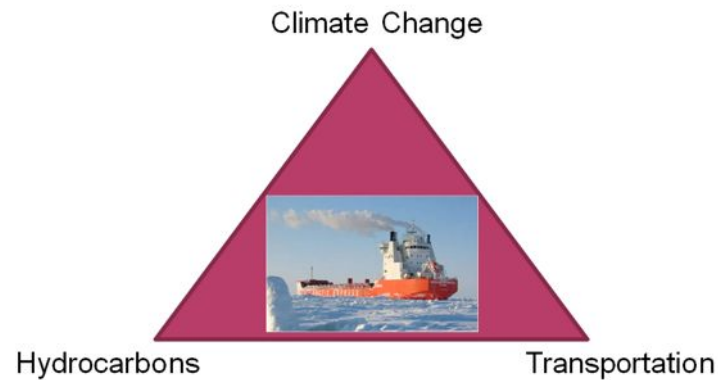


# ARE THE DISCOURSES CONNECTING?

- ⦿ Partially portrayed
- ⦿ Limited perspectives



# FRAMING MULTIPLE PROCESSES OF CHANGE



- ◉ Feedbacks
- ◉ Responses and new outcomes
- ◉ Differential exposure



# INTEGRATED ARCTIC PERSPECTIVE

- Redefining perspectives
- Identify linkages and feedbacks
- Integral approach

