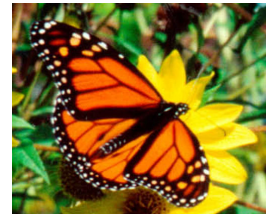
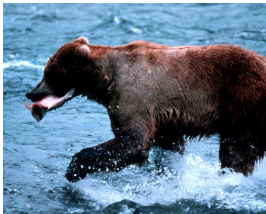




WWF-Canada Presentation to the JRP Open General Hearing, Feb 26th , 2007 Edmonton, AB

- Julia Langer, Director, Global Threats Program
- Peter Ewins, Director, Species Conservation

www.wwf.ca



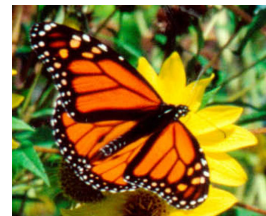
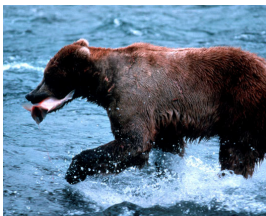


OVERVIEW

JRP (Dec 2006 Guidance): “Concern about possible end uses of gas shipped via the MGP should be directed to Open General Hearings”

WWF presentation focus:

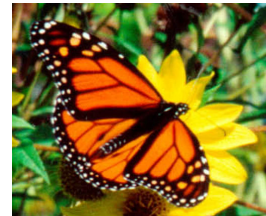
- 1.** In a carbon-constrained world, consideration must be given to the regional and global impacts of the proposed project, and induced fossil fuel developments, arising from the end use of the natural gas.
- 2.** A ‘sustainable energy strategy’ for the region/nation is an essential context for consideration of the project, including the timing/sequencing of basin-opening decisions and end use of the natural gas.





THE PROJECT AND ALTERNATIVES

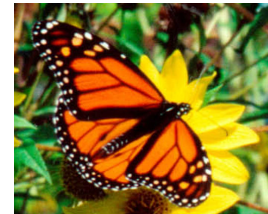
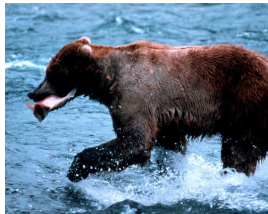
- MGP would open the NWT hydrocarbon basin, enabling large volumes of NWT natural gas to reach southern markets over this century.
- The gas itself is the main purpose of the pipeline, and a major component of 'The Project'.
- WWF consideration of The Project and its Alternatives relates to **WHETHER, WHERE, HOW AND WHEN** this fossil fuel resource should be used.





MGP IN A CARBON-CONSTRAINED WORLD

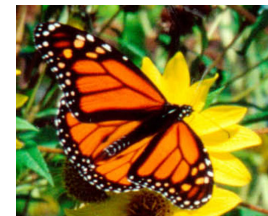
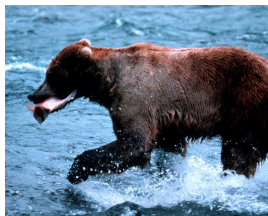
- Climate change is accelerating. Huge risks, disproportionately large in Canada's North.
- Expansion plans for oilsands (up to 5-fold) will require huge increases in energy supply, including NWT gas, and will be the single biggest contributor to Canada's rising GHG emissions. Syncrude production generates 3x the GHG emissions of conventional oil production.
- Canada's GHG emissions are ca. 30% higher than in 1990, and rising.
- The proposed MGP would double NWT GHG emissions.
- Canada does not have a 'Sustainable Energy Strategy' or a Kyoto implementation plan.





MGP IN A CARBON-CONSTRAINED WORLD

- The reality of climate change requires planning, decisions and actions to live in a deeply carbon-constrained world (see IPCC reports).
- Especially given growth, this means aggressive improvements in energy efficiency economy-wide, and swift, deep reductions in use of highly carbon-intensive fossil fuels.
- The conditions for fossil fuel use/reduction, including the appropriate and efficient use of NWT gas, are crucial aspects of assessing the proposed MGP.





NATURAL GAS: ROLE IN AVOIDING DANGEROUS CLIMATE CHANGE

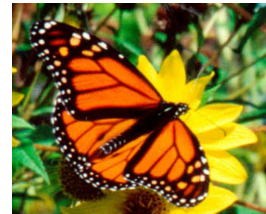
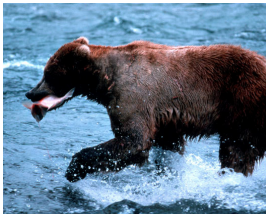
Must play a role in reducing reliance on more carbon-intensive fossil fuels, ie: coal:

- Produces far less GHGs, per BTU produced, than oil or coal.
(<http://www.naturalgas.org/environment/naturalgas.asp>)
- Offset carbon-intensive fuels, ie: coal.

Modelling scenarios for achieving GHG stabilization indicate that gas can/should play a 'bridging fuel' role in the 2020-2040 timeframe to avoid/reduce locking-in to new coal-fired electricity generation.

Must be used efficiently and appropriately, ie:

- most efficient way possible to minimize emissions, reduce demand and induced development.
- Not facilitate carbon-intensive emissions, such as in oilsands.

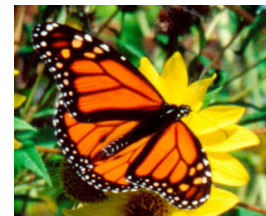
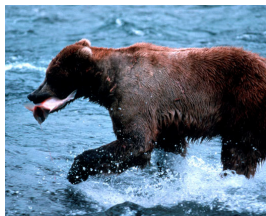




NATURAL GAS: ROLE IN AVOIDING DANGEROUS CLIMATE CHANGE

Must fit within an effective sustainable energy strategy, as part of a the transition from an unsustainable, carbon-intensive, to a carbon-constrained, renewable energy economy.

Must minimize induced development and cumulative impacts, by reducing demand through, at the minimum, efficient, GHG-reducing end uses of natural gas.





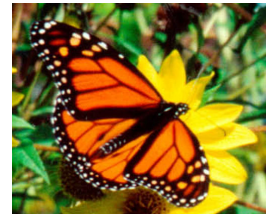
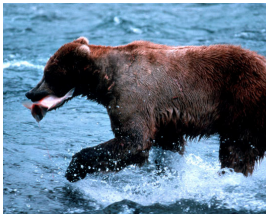
NATURAL GAS END-USE EFFICIENCY CAN/MUST IMPROVE

Many studies/scenarios demonstrate a range of end-use efficiencies for natural gas, and opportunities to displace the use of natural gas, offering opportunities to reduce direct GHG emissions and upstream impacts.

Eg: Industrial efficiency varies based on efficiency of heating/steam production equipment,

Eg: Combined heat & power (co-generation) has a range of electricity production efficiency, ie: displaces other fuels.

Eg: Residential heating efficiency varies with furnace and water heating efficiencies, can also be displaced via insulation/draft-proofing; solar technologies.

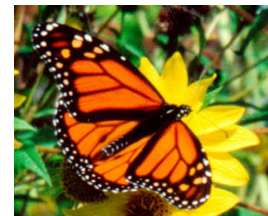
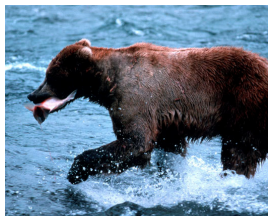




EFFICIENCY CAN IMPROVE BUT NOT SOLVE THE IMPACTS PICTURE

NRCan, CGA and CEA 2006 study (summary attached to WWF submission) projected economically viable efficiency improvement of 7-10% and a potential national saving of 277 Bcf of gas by 2025. WWF considers this very conservative.

For comparison, proposed MGP might transport $365 \times 1.2 = 438$ Bcf of gas per year. 3 Delta anchor fields = 6.1 Tcf of gas.



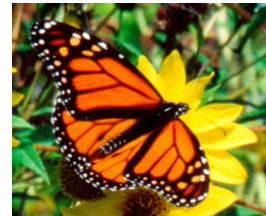
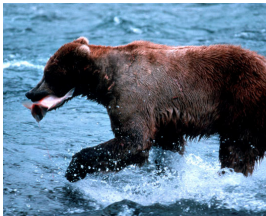


REDUCING DEMAND CAN REDUCE INDUCED DEVELOPMENT

Inefficient end use of the gas creates unnecessary demand for gas, which could lead to more (induced) development, and hence increased environmental impacts/risks into the future, including in northern Canada.

Inappropriate, carbon-intensive use in oilsands development has additional impacts on freshwater resources in Alberta's Athabasca sub-basin, which (ironically) are already, and will be further, stressed and stretched by warming trends (WWF & Sage Centre, 2006).

A full range of foreseeable induced development scenarios for the next 100 years in this newly-opening hydrocarbon basin in NWT must be considered, consistent with recent reviews provided by Duinker & Greig (2006).



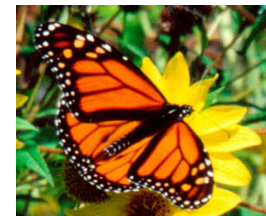
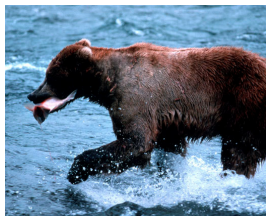


SUSTAINABILITY ASSESSMENT FRAMEWORK

Accelerating climate change and projected impacts changes the assumptions and range of considerations for assessing the sustainability of the proposed MGP.

Sir Nicholas Stern's 2006 review of the economics of climate change demolishes the assumption that a short-term vs. long-term balance can be found, and indicates that inaction will generate very significant future economic, ecological and social problems and losses, and no benefits.

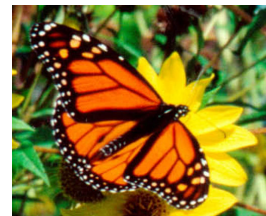
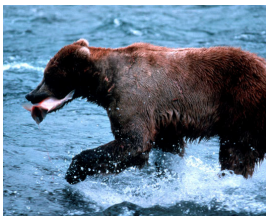
(http://www.hmtreasury.gov.uk/independent_reviews/stern_review_economics_climate_change/sternreview_index.cfm)





WWF RECOMMENDATIONS IN CONSIDERATION OF CLIMATE CHANGE

1. The JRP should only recommend the MGP proceed if a high quality national sustainable energy strategy and implementation system is in place, including state-of-the-art energy use efficiency, assisted by natural gas as a transitional fuel.
2. The JRP should assess impacts of a wide range of 21st Century scenarios for foreseeable induced development in opening the NWT hydrocarbon basin.
3. The JRP should thoroughly integrate the Climate Change contributions of MGP, and the gas it would transport, into its final assessment and report.





OVERALL WWF POSITION ON MGP

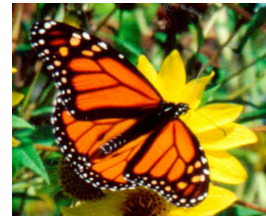
“Go” or “No-Go” on this project should be decided by the people who live in the region.

However, WWF has certain conditions that must be met before the project is even considered for “Go” vs. “No-Go”:

A: ‘Conservation-First’ principle.

B: Climate Change conditions: sustainable energy strategy; end use efficiency; gas as a transition fuel.

If these conditions aren’t met, the project should not even be considered.





ATTACHED MATERIALS:

1. WWF & Sage Centre (2006). 2 degrees C is too much!: Implications of global warming for Canada's water resources.
2. Duinker, P.N. & L.A. Greig (2006). Scenario analysis in environmental impact assessment: Improving explorations of the future. Environmental Impact Assessment Review (2006), in press. (14 pages).
3. Canadian Gas Association (2006). Demand side management potential in Canada: energy efficiency study. 4-page excerpt from Summary Report to CGA prepared by Marbek Ltd. and Jacard & Associates, Inc.

