

Presentation to the NWT Chamber of Commerce

“An Update on Energy Initiatives in the NWT”

Fort Smith, NWT

March 31st, 2009



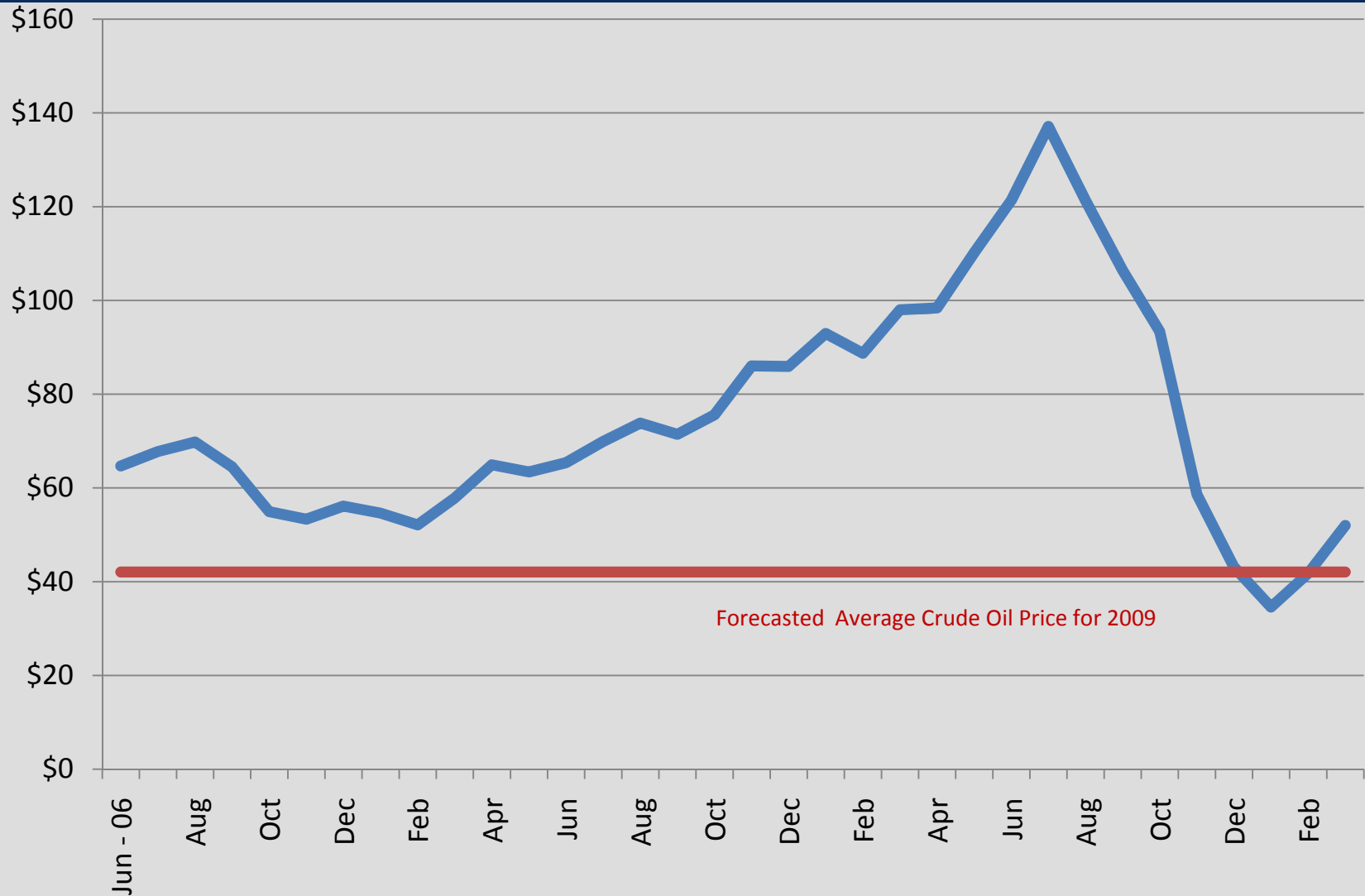
Northwest
Territories Industry, Tourism and Investment



Introduction

- Energy Pricing
- Canadian and U.S Approach to Energy
- NWT Energy Plan and Energy Priorities Framework
- Energy Priority Investments
- Key Energy Policy Initiatives
 - NWT Hydro Strategy (incl. Taltson Hydro Update)
 - Review of the NWT Electricity Regulation, Rates and Subsidy Programs (Electricity Review)
 - ATCO Proposal Review
 - NTPC Review
- Conclusion

Oil Prices – Price of Crude Oil Since June 2006



Forecasted Average Crude Oil Price for 2009

Oil Prices – Price of Crude Oil Since June 2006

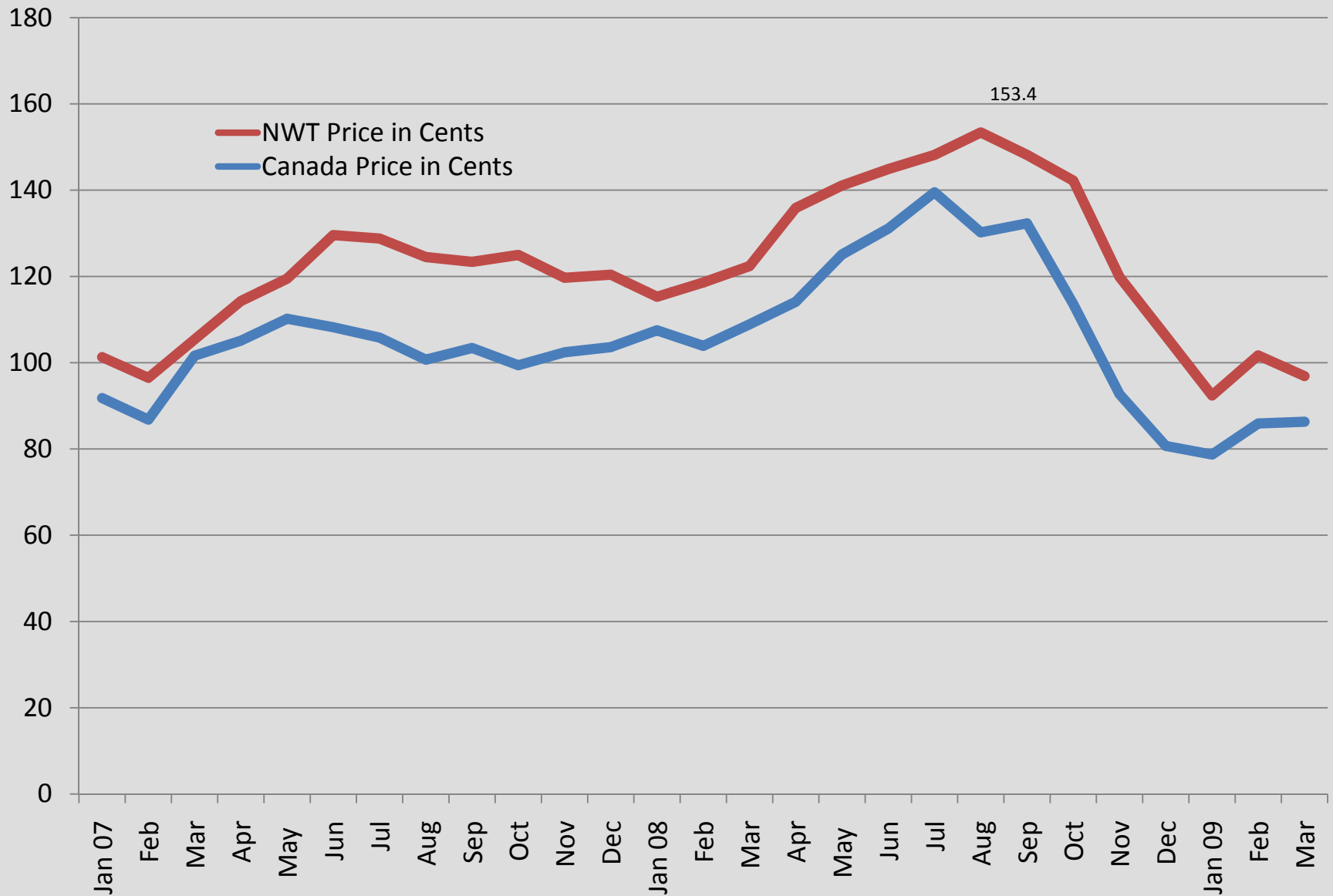
“The future direction of world oil prices in the short-term will largely depend upon the timing and pace of the recovery of the global economy. If economic growth in the United States and overseas rebounds sooner than expected, oil demand could experience stronger-than-expected growth and outpace production increases, leading to rising prices.”

(EIA Short-Term Energy Outlook, March 10, 2009)

“The future direction of world oil prices in the short-term will largely depend upon the timing and pace of the recovery of the global economy. If economic growth in the United States and overseas rebounds sooner than expected, oil demand could experience stronger-than-expected growth and outpace production increases, leading to rising prices.”

(NRCAN Fuel Focus, Crude Oil Overview, March 13, 2009)

Retail Gasoline Prices – The NWT and Canada



NWT Residential Electricity Rates – Selected Communities

Community	Energy Charge (Cents/kW.h)	Total Rate Riders (Cents/kW.h)	Total Energy Charge and Rate Riders (Cents/kW.h)	Service Provider
Whati	83.44	1.13	84.57	NTPC
Deline	75.55	7.65	83.20	NTPC
Lutsel K'e	73.85	4.68	78.53	NTPC
Tuktoyaktuk	68.81	1.99	70.80	NTPC
Fort Simpson	54.94	18.51	73.45	NTPC
Inuvik	52.45	7.90	60.35	NTPC
Norman Wells	39.79	4.92	44.71	NTPC
Fort Smith	15.13	1.23	16.36	NTPC
Fort Resolution	19.61	1.14	20.75	NTPC
Hay River	23.36	1.14	24.50	NUL (NT)
Fort Providence	44.13	9.27	53.40	NUL (NT)
Wekweeti	114.67	13.92	128.59	NUL (NT)
Trout Lake	89.28	10.33	99.61	NUL (NT)
Yellowknife	19.17	2.93	22.10	NUL (YK)

North American Electricity Prices

NOTE:
Electricity rates based on consumption of 1,000 kWh of electricity and exclude basic monthly charge and taxes.

Location	Price (Cents per kWh)
Yellowknife	22.10
New York	21.27
Boston	19.12
San Francisco	18.06
Fort Smith	16.36
Houston	14.89
Edmonton	13.45
Toronto	11.17
Regina	10.91
Vancouver	6.98
Montreal	6.81
Winnipeg	6.44

Current U.S. Position on Energy

- Under the American Recovery and Reinvestment Act of 2009 (Stimulus Bill), the US government has allocated \$50B for energy initiatives.

Energy Objectives of the Obama-Biden Administration:

- Help create 5 million new jobs by investing \$150 billion over the next 10 years towards building a clean energy future.
- Within 10 years, save more oil than we currently import from the Middle East and Venezuela.
- Put 1 million plug-in hybrid cars on the road.
- Ensure 10% of electricity comes from renewable sources by 2012 25% by 2025.

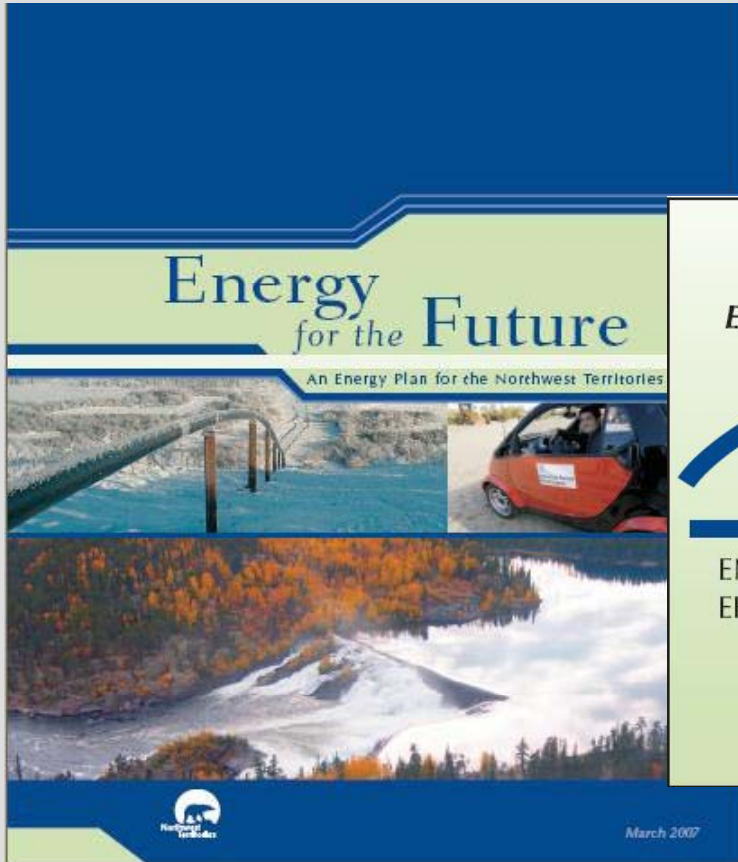
From the “Energy Agenda” of the Obama-Biden Administration – at www.whitehouse.gov

Current Canadian Position on Energy

- The Government of Canada has committed to make substantive investments in Energy initiatives in the 2009 budget.
- “While the Government is focused on guiding Canada through the global economic crisis, it will also attend to the other important long-term priorities, including developing a clean energy economy, ...”

From Canada's Economic Action Plan outline on “Staying the Course on Long-Term Initiatives”, one of the four main priorities of the Plan.

GNWT Energy Planning



Energy Priorities Framework

- The priorities developed within this document are based upon priorities identified by the 16th Legislative Assembly:
 - Pursue initiatives that reduce the cost of living, and in particular energy costs;
 - Work proactively with residents, communities and industry on mitigation of climate change; and
 - Advance alternative energy initiatives.



ENERGY PRIORITIES FRAMEWORK

Ministerial Energy Coordinating Committee

 October 2008



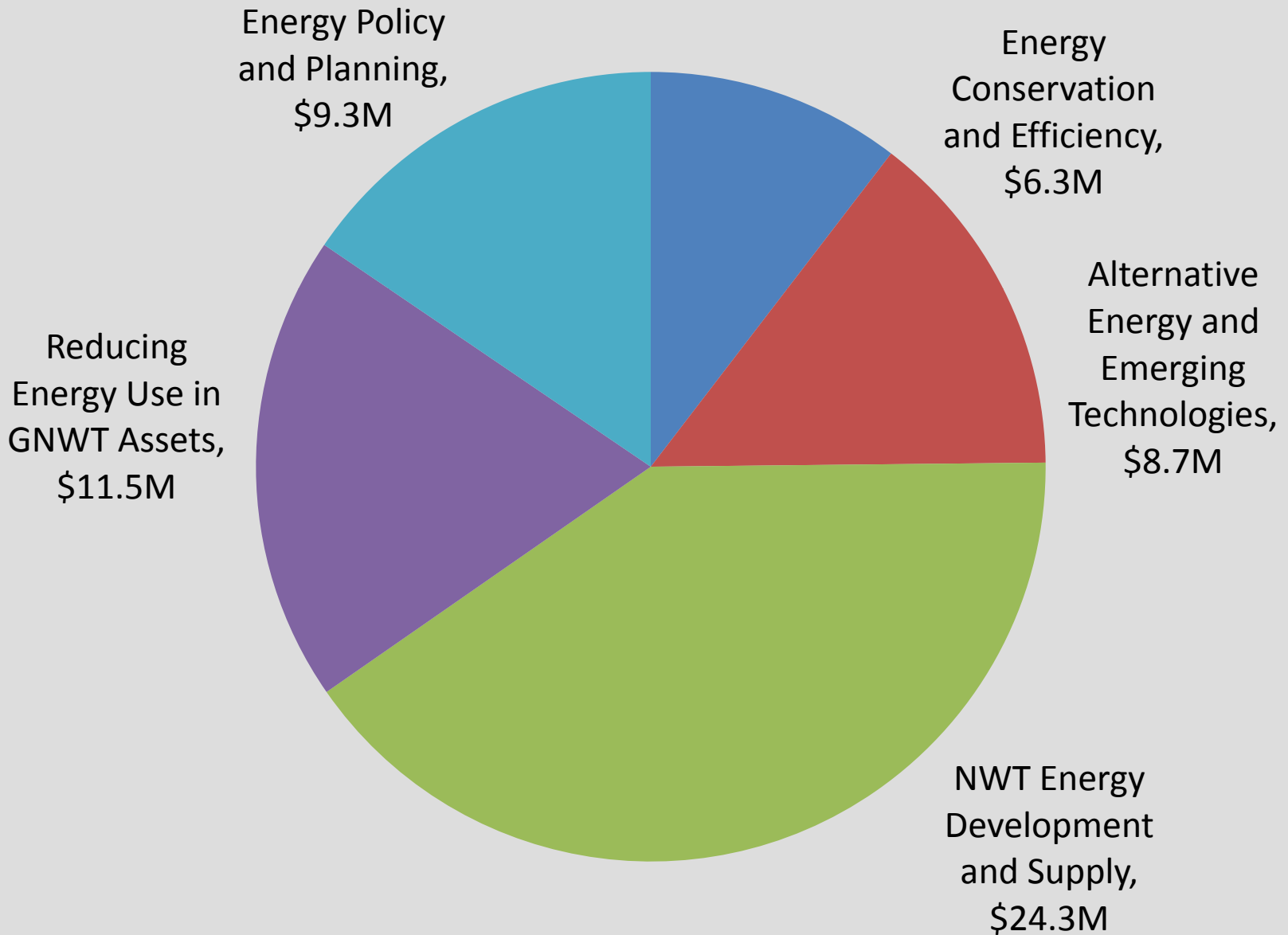
Energy Priorities Framework, October 2008

- The framework is based on the proposition that in the long term, we need to fundamentally change our energy supply, displacing imported diesel.
- There are a number of opportunities to make strategic investments and undertake pilot projects aimed at addressing our energy challenges:
 - Hydro projects, including mini-hydro
 - Biomass, including wood pellet boilers as well as a pilot project utilizing biomass for electricity generation
 - Wind, geothermal
 - Infrastructure investments such as transmission, energy conservation and efficiency investments, including capital retrofits

Energy Priorities Investment Plan

- Total investment of \$60 million *proposed* over the next years beginning in 09/10.
- In 09/10, \$17.5 M has been approved.

Energy Priority Investments by Energy Plan Pillar



Energy Priority Investments - Energy Conservation and Efficiency

- Expansion of Residual Heat - \$3.0M
 - Development and/or expansion of residual heat in four communities.
- Community Energy Plans – \$0.45M
 - Funding used to assist communities in completing CEP's.
- Energy Efficiency Initiatives - \$1.05M
 - Funding to be used for rebates for consumers and delivering workshops in the communities.
- Increased Community Awareness of AEA - \$1.75M
 - Includes positions for Inuvik, Norman Wells and Fort Simpson.

Energy Priority Investments - Alternative Energy and Emerging Technologies

- Biomass Strategy Implementation- \$5.0M
 - Development and implementation of a strategy on biomass.
 - Will include continued expansion of biomass for heating as well as examining the potential for use in generating electricity.
- Wind Energy Supply - \$2.9M
 - Installation of wind turbines in Tuktoyaktuk and one other Beaufort community.
- In-stream Hydro Power - \$0.45M
 - Funding to test out present technolog.
 - 25KW hydrokinetic turbine proposed for Ft. Simpson this summer.
- Support for Geo-thermal Technology - \$0.3M

Energy Priority Investments - NWT Energy Development and Supply

- Lutselk'e Mini-hydro - \$4M
 - Funding to complete project and not increase local power rates.
- Whati Mini-hydro - \$4M
 - Funding to develop either a transmission line or mini-hydro facility.
- Ft. Providence Transmission Line - \$7M
 - Potential contribution towards the construction of a transmission line from Hay River
- Bear River Feasibility - \$1.6M
 - To undertake environmental and technical work on the feasibility of the Bear River to supply hydro to the MVP, or other future resource development in the area.

Energy Priority Investments - NWT Energy Development and Supply (Con't)

- Natural Gas Conversion- \$0.5M
 - Conversion of Ft. Simpson, Tulita and Ft. Good Hope to natural gas appears to be economic. Efforts this year will include engagement of the communities.
- Taltson Expansion - \$2.7M
 - Funding will bring the project to a decision to construct
- Hydro Strategy - \$1.5M
 - Ongoing environmental, engineering and economic work.

Energy Priority Investments - Reducing Energy Use in GNWT Assets

- Capital Asset Retrofit Fund - \$9.5M
 - Includes installation of pellet boilers in Hay River and Fort Smith.
 - Energy Savings will be continually reinvested
- Public Housing Upgrades - \$2.0M
 - Retrofit of public housing.

Energy Priority Investments - Energy Policy and Planning

- Territorial Power Subsidy Program - \$9.0M
 - Increase funding to program.
- Electricity Review - \$0.2M
 - Community discussions, development of a Discussion Report (What we heard) and a Final Report of the Review Team.
- Energy Plan Renewal - \$0.1M
 - Update of the 2007 Energy Plan in 2011.

The NWT Hydro Strategy

- Contains proposed actions under four strategic areas:
 - Preparing for Hydro Development,
 - Protecting our Environment,
 - Financing Future Hydro Projects; and
 - Policy Initiatives.
- Released in December 2008 for comments.
- Final Strategy to be released in the next year.

Taltson Hydro Expansion – Public Benefits

- Environmental benefits
- Economic development, 400+ jobs in near term
- Reduced social support / Improved economic base in South Slave
- Infrastructure investment
- Revenues to shareholders
 - Aboriginal governments
 - GNWT (and in the future, resource revenues)
- Benefits to regulated customers
- NWT rate reduction / stabilization
- Potential for substantial profit in the long term and reduction to NWT electricity rates (application of dividends)
- Historical benefits gained from government vision and investment

Taltson Hydro Expansion – Project Approach

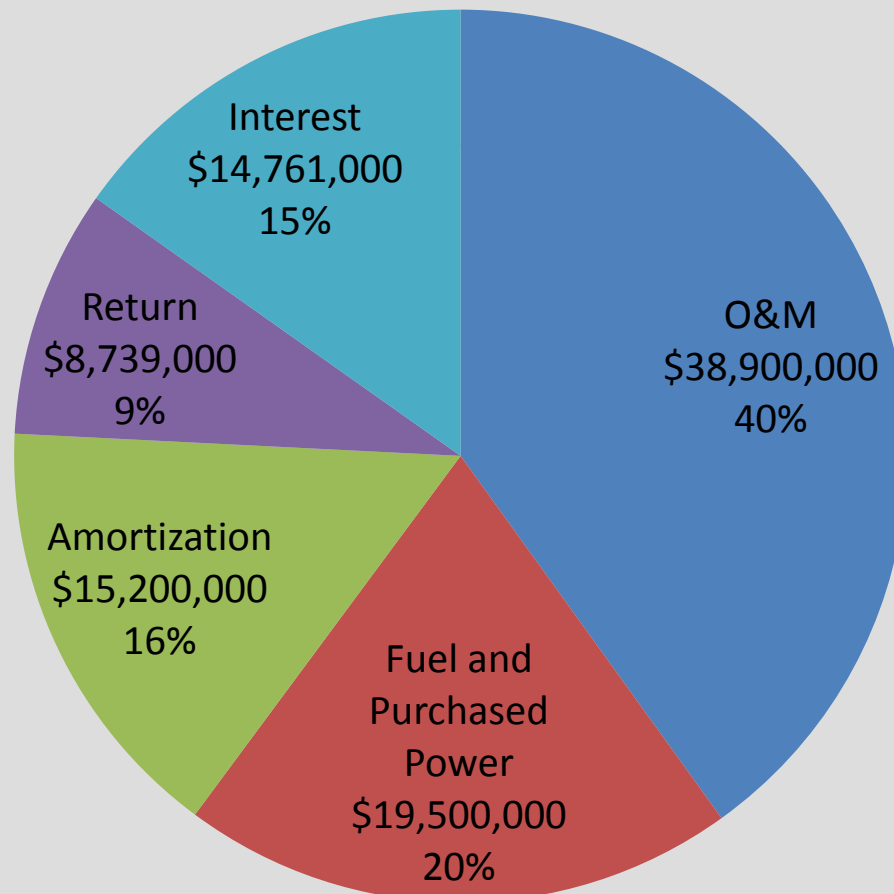
- Developers Assessment Report submission to MVEIRB
- Signed Project Development Agreement
- PPA Negotiations Process
- Regulatory Process
- Final Engineering Process
- Regulatory Approval – Federal Minister
- Final Design and Capital Cost Estimates
- Signed PPAs with Diamond Mines
- Federal Commitment to Exempt Taltson Debt
- GNWT Construction Backstop
- Finalize Project Financing
- Tender Construction Contracts
- Decision to Construct

The Electricity Review

- What is Our Shared Vision?
 - Reliable Energy Supply
 - Minimize Environmental Impacts
 - Costs to Customers – A Three Step Process:
 - Reduce Costs Where Possible;
 - Distribute the Costs Equitably; and
 - Ensure Affordability.

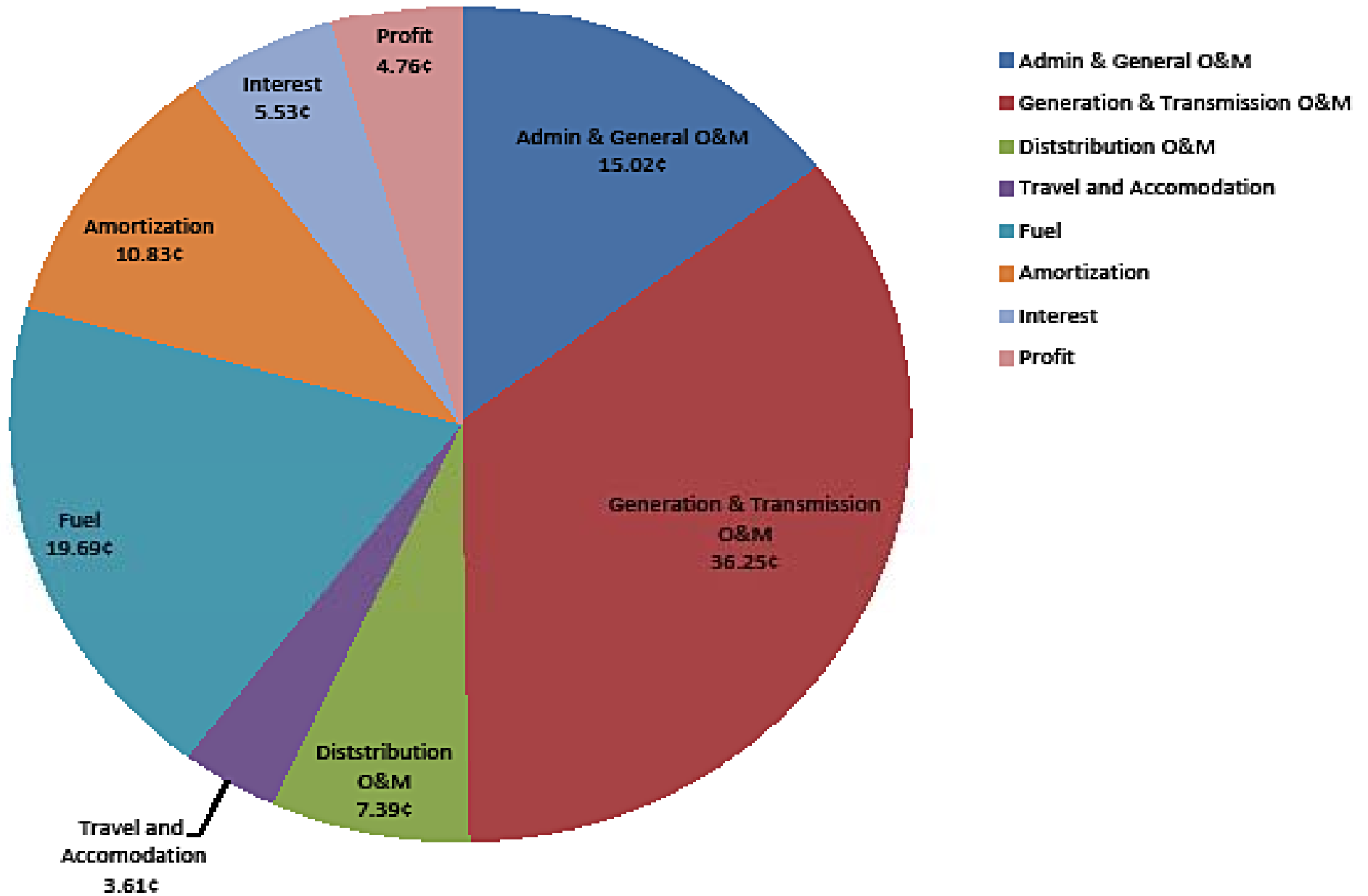
System Costs – NWT Wide

- Total costs for electricity generation, transmission and distribution in the NWT is approximately \$97 million.
- \$50 million for Hydro and \$47 Million for Thermal Communities.



Average Cost of 32 cents per kW.h

NTPC 2007/08 Rate Composition Jean Marie River Residential Energy Rate 103.08 cents/kWh



Key Issues

Electricity sector structure – can changes to the public/private structure of our electricity sector reduce costs?

Cost of electricity generation – the GNWT is undertaking a number of initiatives to reduce costs – with energy conservation and efficiency being the first response – what are other opportunities to reduce costs?

Community ownership and operation of local generation and distribution – Could community-owned and operated electricity companies reduce costs with the same degree of safety and reliability?

Key Issues

Cost of regulation – is the current regulatory structure too onerous, given the size and nature of the NWT electricity market? Are there efficiencies to be achieved?

Government role in regulation – should the GNWT be able to issue policy direction to the Public Utilities Board?

Simplified / levelized rate structure – should the GNWT move towards a more simplified, levelized rate structure?

Territorial Power Subsidy Program – is the current program effective in achieving its goals?

Electricity Review Community Discussions

COMMUNITY	DATE	TIME
Inuvik	March 04/2009	7:00-9:00PM
NWTAC Workshop for Non-Tax Based Communities	March 31/2009	8:30-5:00PM
Norman Wells	April 01/2009	7:00-9:00PM
Fort Simpson	April 08/2009	7:00-9:00PM
Hay River	April 20/2009	7:00-9:00PM
Fort Smith	April 22/2009	7:00-9:00PM
Yellowknife	April 23/2009	7:00-9:00PM

Electricity Review Process

Item	Date	Comments
Regional Centre Public Meetings	Feb – Apr	Discussions hosted by Mayors
Work Shop in Yellowknife for Non-tax-based communities	March 31	Facilitated by the NWTAC, two representatives from each non-tax based community
Drafting of the Final Community Discussion Report	Feb - Apr	Continually include public input, research and analysis
Release Summary of Community Discussion Report	May	Begins to set the stage
Release Final Report	June 30	Sets the direction
Implementation Plan	Fall 2009	Possibly phased implementation

Review of ATCO Proposal

- Review of unsolicited proposal announced on January 29th.
- GNWT will undertake an initial review by April 2009.
- Detailed report in the fall of 2009.
- Final determination will be informed by the Electricity Review.

NTPC Review

- Requested by the NWTAC and MLA's
- Objective: Compare NTPC costs with those of other utilities
- A technical review, with appropriate resources
- Opportunity to build a greater understanding of cost structure in our communities
- Report by September 2009

Conclusion

- Energy prices will rise again over the long term
- Environmental impacts of our energy use will continue to gain global attention
- Governments are making an unprecedented level energy and environmental investments
- The NWT will do it's part
- Lowering the *price* of power in the NWT in the short term and fundamentally changing supply in the long term is the challenge.