

## 2013 Energy Action Plan

The 2013 NWT Energy Action Plan (Energy Plan) being released by the Government of the Northwest Territories (GNWT) presents a three-year action plan and a long-term energy vision. This long term vision is based on the NWT Power System Plan, developed by the Northwest Territories Energy Corporation (NT Energy).

The Energy Action Plan builds on the successes of the 2007 Energy Plan. A great deal has been achieved since 2007, including:

- A substantial expansion of the services offered by the Arctic Energy Alliance, to support residents and businesses in reducing their own energy use. This includes the establishment of regional offices.
- Implementation of a Biomass Strategy, and the establishment of a robust renewable energy industry in the North and South Slave regions of the NWT. Estimates put the industry at 20,000 tonnes of wood pellets annually. That is equivalent of removing 2,300 homes off of oil to a low cost and environmentally sustainable alternative.
- Implementation of a Solar Strategy, including the development of the 104 kilowatt solar array in Ft Simpson.
- Investments in the energy efficiency of GNWT assets and public housing to ensure that the government is leading by example, and to build capacity of local businesses in making energy efficiency and conservation improvements to buildings.
- Efficiencies to the electricity system and the way electricity rates are established through the 2010 Electricity Review. This included the establishment of rate zones and efforts to make power more affordable in communities through lower electricity rates and an increase in the Territorial Power Subsidy Program.

The Power System Plan identifies electricity infrastructure needs over the next 20 years and proposes an electricity grid inter-tie between the North and South Slave grids and into the continental grid. Connections to the continental grid are possible through British Columbia, Alberta or Saskatchewan, but Saskatchewan likely holds the most promise due to its proximity to the Taltson hydro facility, located in the southeastern corner of the NWT.

The three year action plan contained in the Energy Plan covers the current 2013-14 fiscal year and establishes planning targets for investments to be made in 2014-15 and 2015-16. Proposed new investments include:

Media requests for interviews with Members of the Executive Council may be directed to:

- Building a transmission line from the existing Snare hydro system to the community of Whati. Technical and economic feasibility work is currently underway.
- Investments in energy efficiency programs and enhanced support to the Arctic Energy Alliance, including the establishment of a regional office in the South Slave. This will bring the number of regional energy offices to five. The other offices are in Inuvik, Norman Wells, Fort Simpson and Whati.
- Establishment of an electric hot water heater replacement program, currently being implemented as a pilot project in the communities of Fort Providence, Deline and Tulita. Electric hot water heaters can consume from 20 to 45% of a household's energy load.
- GNWT investments in wood pellet boilers in Norman Wells, in an effort to further expand the biomass supply chain throughout the Mackenzie Valley. Previous investments in biomass boilers are resulting in savings of over \$1 million per year for the GNWT.
- Investments in liquefied natural gas (LNG) supply, beginning with the Town of Inuvik. This investment will help address the current natural gas supply issue in Inuvik and open the door for further LNG development in the Beaufort Delta as well as Dehcho communities.
- Investments in solar, including solar-diesel hybrid systems and smart grid technology in smaller NWT communities. The first community for a pilot project will be Colville Lake. Projects in other communities will follow, including Jean Marie River and Lutselke.

The development of both plans was launched with the release of a Public Discussion Paper in October 2012. This was followed by the NWT Energy Charrette in November 2012.

A Charrette is a collaborative planning process that brings together a wide variety of viewpoints to develop a plan from the 'ground-up'. This differs from traditional approaches which often include consulting on a plan that has already been developed as a draft.

The NWT Energy Charrette brought together 125 energy stakeholders, including representatives from community and Aboriginal governments, non-government organizations, and experts from the NWT and other jurisdictions. The Energy Charrette Report was released in January 2013 and provided much of the basis for the development of the Energy Plan, as well as informed the development of the Power System Plan.

Over three years, the Energy Plan represents a proposed \$31.5 million investment. This budget includes all of the contribution funding provided by the GNWT for energy projects, programs, and to the Arctic Energy Alliance and the Northwest Territories Energy Corporation, a subsidiary of the Northwest Territories Hydro Corporation. The plan covers the current 2013-14 fiscal year and establishes planning targets for 2014-15 and 2015-16. These planning targets will be reviewed and revised as required by the Legislative Assembly through the regular budgeting process. The entire budget is detailed on pages 26 and 27 of the Energy Plan. Proposed new funding is reflected in the chart below:

NEW FUNDING				
Action Areas	Budget 2013-14	Target 2014-15	Target 2015-16	
Energy Conservation and Efficiency:				
Funding the Arctic Energy Alliance - Enhanced Support for	\$125,000	\$400,000	\$400,000	
Regional Positions  Energy Efficiency Incentive Program + Enhancement	200,000	100,000	100,000	
Commercial Energy Conservation and Efficiency Program	200,000	200,000	200,000	
Hot Water Heater Exchange Project	400,000	7BD	7BD	
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Sub-Total	925,000	700,000	700,000	
Energy Supply:	050,000	4 400 000	4 400 000	
Hydro: Whati Transmission Line	250,000	1,400,000	1,400,000	
Hydro: Water Monitoring/NWT River System Inventory	50,000	50,000	50,000	
Hydro: Large-Scale Transmission Planning	500,000	200,000		
Hydro: Great Bear River Mini-Hydro initiative	225 000	200,000	075 000	
Biomass: Funding for Biomass Projects	225,000	275,000	275,000	
Biomass: Promotion, Community Engagement and Project Evaluation	175,000	175,000	175,000	
Solar: Photovoltaic Electricity Generation	250,000	500,000	500,000	
Solar: Smart Grid Technology	125,000	125,000	125,000	
Wind: Storm Hills Wind Project	50,000	50,000		
Wind: Wind Monitoring	50,000	50,000	50,000	
Natural Gas: Introduce LNG Supply Chain in the Delta	100,000			
Natural Gas: Thermal Zone Conversion - Dehcho & Beaufort Delta		150,000	150,000	
Innovation: Alternative Energy Technology Program - Enhancement	100,000	100,000	100,000	
Innovation: Electric Vehicle Demonstration Project		15,000	15,000	
Sub-Total	1,875,000	3,090,000	2,840,000	
GNWT Leadership:				
Energy Efficiency Upgrades for Public Housing	700,000	700,000	700,000	
Government Leadership: Capital Asset Retrofit Fund	1,200,000	3,500,000	3,000,000	
Biomass Heating Systems	1,650,000	1,400,000	750,000	
Sub-Total	3,550,000	5,600,000	4,450,000	
Proposed Total	6,350,000	9,390,000	7,990,000	
TOTAL NEW FUNDING IN ENERGY PLAN	23,730,000			
EXISTING FUNDING				
Action Areas	Budget 2013-14	Target 2014-15	Target 2015-16	

EXISTING FUNDING					
Action Areas	Budget	Target	Target		
	2013-14	2014-15	2015-16		
Existing Programs	750,000	750,000	750,000		
Arctic Energy Alliance	1,135,500	1,135,500	1,135,500		
NWT Energy Corporation	700,000	700,000	700,000		
Total	2,585,500	2,585,500	2,585,500		
Total New + Existing	8,935,500	11,975,500	10,575,500		
TOTAL FUNDING REFLECTED IN ENERGY PLAN	31,486,500				