

WHAT IS THE ENERGY CONSERVATION ACTION PLAN?

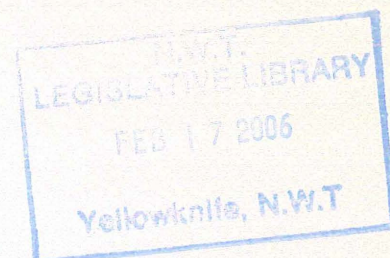
The Government of the Northwest Territories (GNWT) recognizes the challenges faced by residents in dealing with high costs of energy. Government departments, boards, and agencies are already helping residents manage energy use and costs. With energy costs at current high levels, this need is increasing. In response, the GNWT has implemented the **Energy Conservation Action Plan**.

The **Action Plan** does three things:

1. Builds and **expands** on the significant efforts already being made to address northern energy issues;
2. Introduces **new programs**; and,
3. Identifies **new and emerging technologies** being pursued.

The GNWT's **departments, boards and agencies are carrying out the Action Plan**. As well, programs of the NWT's energy efficiency clearing house, the **Arctic Energy Alliance (AEA)** are being expanded.

This document summarizes the Action Plan. Actions include those to assist the public and commercial sectors and to assist the GNWT in reducing its own energy consumption.



<p>I. EXPANDED PROGRAMS</p>	<p><i>The following are existing programs that are being expanded to further enhance their energy efficiency results. They include incentives, public education, government approaches to better manage its own energy efficiency in the workplace and energy efficiency research.</i></p>	
<p>RESIDENTIAL PROGRAMS</p>	<ul style="list-style-type: none"> ◆ Increase funding and capacity for the federal EnerGuide for Houses Program (EGH) to: <ul style="list-style-type: none"> * Increase grants to homeowners for the improvements recommended by professional energy evaluators. * Fund travel for evaluators to increase EGH energy audits and workshops in communities outside Yellowknife. * Increase the number of evaluators trained to deliver the program (8 new evaluators). * Inform previous EGH clients of the increased grant assistance. * Increase public advertising of EGH program. * Introduce the new EGH for Low-Income Houses and EGH Retrofit Programs for low-rise rental and social housing. 	<p>EnerGuide for Houses</p> <p><i>Lead Agency: Arctic Energy Alliance</i> <i>Additional Funds: \$70,000</i> <i>Status:</i></p> <ul style="list-style-type: none"> ⇒ Funding is in place for increased EGH grants to homeowners. ⇒ Five of eight planned new EGH evaluators are trained. ⇒ A significant increase in home retrofit activity shown by the dramatic increase in requests for follow-up EGH evaluations - evaluations to measure changes in energy use once home improvements have been made.
	<ul style="list-style-type: none"> ◆ Continue delivery of the Northwest Territories Power Corporation's (NTPC) Energy Assessment Program. 	<p>NTPC Energy Assessment Program</p> <p><i>Lead Agency: Northwest Territories Power Corporation</i> <i>Additional Funds: \$75,000</i> <i>Status:</i></p> <ul style="list-style-type: none"> ⇒ 150 assessments have been completed in Fort Smith; assessments have been started in Fort Resolution and Lutselk'e.

<p>RESIDENTIAL PROGRAMS (Con't.)</p>	<ul style="list-style-type: none"> ◆ Increase income support officers' training to include energy conservation, which will assist them in improving the energy efficiency behaviour of their clients. * Make energy efficiency resource materials available for Income Support Officers' distribution to clients. 	<p>Energy Conservation: Income Support Clients <i>Lead Agency:</i> Education, Culture and Employment <i>Status:</i> ⇒ Energy Conservation workshop presented at Income Support Officers' Conference, Jan. 16-20, 2006 (30 participants confirmed).</p>
	<ul style="list-style-type: none"> ◆ Update training in energy efficient technology for public building maintenance officers. 	<p>Building Maintenance Officer Training <i>Lead Agency:</i> Municipal and Community Affairs/Arctic Energy Alliance/Public Works and Services/Justice <i>Status:</i> ⇒ MACA's School of Community Government is delivering a 3-day Energy Management course February 14-16, 2006. Course focuses on developing good energy management practices for the operation of public buildings in communities. ⇒ Justice has trained building operators in existing energy saving features.</p>
	<ul style="list-style-type: none"> ◆ Develop and deliver expanded training in energy efficiency practices and client support to Local Housing Organizations (LHO). 	<p>LHO Training <i>Lead Agency:</i> NWT Housing Corporation <i>Status:</i> ⇒ NWT HC staff took part in a two-day workshop in January to develop course material and instructional modules intended, in large part, to improve energy conservation practices of housing clients. A workshop to deliver energy conservation information to LHO maintenance personnel will be held prior to the end of March 2006.</p>
	<ul style="list-style-type: none"> ◆ Produce and distribute public education materials providing householders and businesses with practical tips on how to reduce energy costs by conserving energy, and how to save energy with winter driving tips. 	<p>Conservation Information for the Public <i>Lead Agency:</i> Arctic Energy Alliance <i>Additional Funds:</i> \$15,000 <i>Status:</i> ⇒ Two new brochures are available and have been distributed.</p>

<p>RESIDENTIAL PROGRAMS (Con't.)</p>	<p>◆ Provide supplementary funding to the AEA for new temporary program delivery staff.</p>	<p>AEA Staff Resources Lead Agency: Arctic Energy Alliance Additional Funds: \$78,000 Status: ⇒ Two staff hired, with at least one more to be hired, over and above the new EnerGuide for Houses evaluators.</p>
<p>COMMERCIAL PROGRAMS</p>	<p>◆ Offer cash incentives for commercial operators who improve the energy efficiency of their businesses. Grants will top up the federal Energy Innovators Initiative program.</p>	<p>Commercial Operators Incentives Lead Agency: Arctic Energy Alliance Additional Funds: \$45,000 Status: ⇒ Potential clients have been identified and plans are under way to identify additional potential clients for this program. ⇒ Program information will be posted on the AEA website and communicated by the NWT Chamber of Commerce newsletter in early January 2006.</p>
<p>GOVERNMENT-ORIENTED PROGRAMS</p>	<p>◆ Increase marketing and implementation of retrofit programs for municipal and territorial public buildings and non-profit operators through the Energy Conservation Program.</p>	<p>Public Building Retrofits Lead Agency: Environment and Natural Resources Additional Funds: \$300,000 Status: ⇒ Fourteen retrofits for projects like energy efficient light bulb upgrades or boiler replacements were funded. Of this amount: <ul style="list-style-type: none"> • 73% spent outside of Yellowknife • 52% to GNWT departments • 38% to municipalities • 10% to non-profit organizations ⇒ Savings from these projects are expected to be \$140,000 every year. The annual savings come from the avoided need for 40,000 litres of diesel, 230,000 kilowatt hours of power and 68 million litres of water. Projects also stop the release of 148 tones of carbon dioxide.</p>

<p>GOVERNMENT-ORIENTED PROGRAMS (CON'T)</p>	<ul style="list-style-type: none"> ◆ Develop integrated community sustainability plans. Proposed funding will support the hosting of an Integrated Community Sustainability Plan conference, which will provide communities with information on the concepts associated with developing their respective Sustainability Plans, as well as, provide specific details on how to plan and develop a Community Energy Plan (CEP), a requirement under the Gas Tax Agreement. ◆ Continue to support AEA's CEP program. Proposed funding will support a full-time position within the AEA that will lead and coordinate the development of CEP with communities and also support communities with overall energy planning activities. ◆ Coordinate information sessions with community governments to provide energy conservation awareness and training. 	<p>Community Governments <i>Lead Agency:</i> Municipal and Community Affairs, Arctic Energy Alliance <i>Proposed Funds:</i></p> <ul style="list-style-type: none"> • \$100,000 (Community Sustainability Plan Conference, 2006-07) • \$150,000 (CEP Contribution to the AEA, 2006-07) <p><i>Status:</i> ⇒ The AEA is prepared to collaborate with GNWT departments in the provision of energy conservation training.</p>
	<ul style="list-style-type: none"> ◆ Purchase a heat sensing camera, blower door and other building energy efficiency testing equipment, train staff in their use, and test buildings. 	<p>Public Building Testing <i>Lead Agency:</i> Public Works and Services <i>Additional Funds:</i> \$100,000 <i>Status:</i> ⇒ Infra-red thermal scanning and electrical and mechanical inspections of 80 buildings is complete. During next two years, 400 GNWT and municipal buildings in the NWT will be surveyed. Surveys will identify buildings most in need of energy conservation upgrades.</p>
	<ul style="list-style-type: none"> ◆ Develop energy performance standards for public and community buildings. 	<p>Public Building Testing <i>Lead Agency:</i> Public Works and Services <i>Status:</i> ⇒ The good Building Practice for Northern Facilities (GBP) is being revised to incorporate the federal Commercial Building Incentive Program design and construction protocols, supporting the Model National Energy Code for Buildings as the accepted standard for energy utilization in northern buildings. This third edition of the GBP will be available within six months.</p>

<p>GOVERNMENT-ORIENTED PROGRAMS (CON'T)</p>	<p>◆ Research AEA and GNWT records to identify public buildings most in need of energy improvements.</p>	<p>Targeted Building Retrofits <i>Lead Agency:</i> Public Works and Services/ Arctic Energy Alliance <i>Status:</i> ⇒ AEA and PWS energy audit records assisted in identification of the 14 retrofit projects now being completed. Health and Social Services Authorities are working with AEA to develop operational procedures for better energy conservation in their facilities and to arrange energy audits for their facilities. ⇒ LED lighting has been installed at the Yellowknife Correctional Facility, and is expected to reduce cell security lighting costs by over 600%.</p>
	<p>◆ Develop and implement design standards to maximize energy efficiency of GNWT buildings.</p>	<p>Design Standards <i>Lead Agency:</i> Public Works and Services/ Environment and Natural Resources <i>Status:</i> ⇒ Energy performance standards identified in the revised Good Building Practice for Northern Facilities (GBP) will be reflected in new GNWT construction projects in the 2007-08 capital planning process. ⇒ Energy standards now being incorporated into the revised GBP have already been applied to a number of buildings over the last two years, ENR will work with PWS to assess how this Government-House-In-Order approach could assist municipal, business and housing sectors. The GBP (2nd edition) is available on the PWS website and can be used as recommended practices.</p>
	<p>◆ Continue development of GNWT Employees' Energy Conservation Program.</p>	<p>GNWT Employee Awareness <i>Lead Agency:</i> Environment and Natural Resources <i>Status:</i> ⇒ The program is being addressed through Energy Conservation Action Plan Communication Plan.</p>

<p>GOVERNMENT-ORIENTED PROGRAMS (CON'T)</p>	<p>◆ Increase tracking of energy costs by all departments, boards and agencies.</p>	<p>Energy Cost Tracking <i>Lead Agency:</i> Financial Management Board Secretariat <i>New Funding:</i> None required <i>Status:</i> ⇒ Improvements to the functionality of the Utility Tracking system will be identified and dealt with by the inter-departmental working group. ⇒ DOT will have data entry personnel established in all regions and will be conducting Utility Tracking system training in the near future. ⇒ HSS is working with Health Authorities to start tracking their utility use using this system.</p>
	<p>◆ Increase energy conservation and climate change content in NWT schools curriculum.</p>	<p>Climate Change Curriculum <i>Lead Agency:</i> Education, Culture and Employment <i>Status:</i> ⇒ AEA is actively participating with schools to promote energy efficiency and greenhouse gas mitigation. ⇒ Education week (February 20-24, 2006) is themed around energy.</p>

Energy Conservation Action Plan Update

2. NEW PROGRAMS	<i>The programs listed below represent new energy conservation initiatives.</i>	
RESIDENTIAL PROGRAMS	<p>◆ Provide cash grants to homeowners and small businesses for maintenance of boilers and furnaces.</p>	<p>Furnace/Boiler Maintenance <i>Lead Agency:</i> Arctic Energy Alliance <i>New Funds:</i> \$23,000 <i>Status:</i> ⇒ Application forms have been prepared. Homeowners will be notified of the program via inserts in January 2006 power bills. Contractors will be notified through the NWT Construction Association.</p>
	<p>◆ Develop and deliver home winterization workshops in 12 communities, teaching the skills of home energy efficiency.</p>	<p>Winterization Workshops <i>Lead Agency:</i> Arctic Energy Alliance <i>New Funds:</i> \$110,000 <i>Status:</i> ⇒ Workshop locations and delivery dates are being set. Workshops will be delivered by the end of March 2006.</p>
	<p>◆ Introduce Energy Star instruction workshops to Local Housing Offices, educating staff on the availability and advantages of appliances with lower energy demand.</p>	<p>Energy Star Workshops <i>Lead Agency:</i> NWT Housing Corporation <i>New Funds:</i> \$20,000 <i>Status:</i> ⇒ Workshop planning is underway in collaboration with Natural Resources Canada and the Arctic Energy Alliance. Workshop delivery is planned to take place prior to the end of March 2006.</p>
	<p>◆ Develop and carry out an NWT-wide social marketing strategy to reshape energy use norms among all NWT citizens.</p>	<p>Change Energy Behaviours <i>Lead Agency:</i> Environment and Natural Resources/Arctic Energy Alliance <i>New Funds:</i> \$200,000 <i>Status:</i> ⇒ Strategy is in development</p>
VEHICLE PROGRAMS	<p>◆ Investigate the feasibility of charging vehicle registration fees on the basis of vehicle weight and engine size (energy use).</p>	<p>Vehicle Fees <i>Lead Agency:</i> Transportation <i>Status:</i> ⇒ Transportation will begin investigating feasibility in early 2006.</p>

GOVERNMENT-ORIENTED PROGRAMS	◆ Develop and introduce vehicle fleet energy efficiency guidelines and implement Smart Driving Program for GNWT employees.	Vehicle Efficiency <i>Lead Agency:</i> Transportation/Financial Management Board Secretariat <i>Proposed New Funds:</i> \$20,000 (2006-07) <i>Status:</i> ⇒ Draft guidelines have been developed and are currently being reviewed. Proposed funding of \$20,000 would be required to implement the program, including the development of promotional materials.
-------------------------------------	--	--

<p>3. NEW AND EMERGING TECHNOLOGIES</p>	<p><i>The following initiatives demonstrate the Government's commitment to finding ways to mitigate energy costs through new and emerging technologies.</i></p>	
	<p>◆ Test the northern suitability of energy efficient vehicles, such as the Smart car and electricity-gas hybrids.</p>	<p>Vehicle Pilot Tests <i>Lead Agency:</i> Transportation <i>Proposed New Funds:</i> \$70,000 <i>Status:</i> ⇒ Two vehicles would be purchased in March 2006.</p>
	<p>◆ Test fuel technology for ferry operations.</p>	<p>Ferry Efficiency <i>Lead Agency:</i> Transportation <i>Proposed New Funds:</i> \$20,000 <i>Status:</i> ⇒ Discussions have started with a naval architect consultant.</p>
	<p>◆ Research performance of the high efficiency Conematic residential heating system, with installations in three Hay River duplexes and in Beaufort and Sahtu public housing units.</p>	<p>Pilot Residential Heating System <i>Lead Agency:</i> NWT Housing Corporation <i>New Funds:</i> \$54,000 <i>Status:</i> ⇒ Four Conematic boilers have been installed in Hay River. Four additional units have been delivered, two to Norman Wells and two to Inuvik, and will be installed prior to the end of March 2006. All eight systems will be monitored for fuel efficiency.</p>
	<p>◆ Test supplementary heaters for maintenance vehicles, to reduce idling.</p>	<p>Idling Pilot Test <i>Lead Agency:</i> Transportation <i>Proposed New Funds:</i> \$64,000 <i>Status:</i> ⇒ Heaters would be installed in 20 DOT vehicles.</p>

