

**ACTION PLAN 2000  
ON CLIMATE CHANGE**

**2001 - 2002  
ANNUAL REPORT**

SEPTEMBER 2002



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## Executive Summary

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The *Government of Canada Action Plan 2000 on Climate Change (Action Plan 2000)*, announced in the federal Economic Statement of October 2000, is a centrepiece of Canada's action on climate change. A five-year, \$500M initiative, *Action Plan 2000* targets key sectors and is expected, when fully implemented, to achieve an estimated annual reduction of 65 Mt in greenhouse gas (GHG) emissions by 2010 (45 Mt in domestic reductions and 20 Mt of private sector reductions generated through international projects facilitated by the Clean Development Mechanism (CDM) and Joint Implementation (JI) Office). While focussed primarily on GHG mitigation, *Action Plan 2000* also advances knowledge and foundation building in: climate science; impacts and adaptation; northern and Aboriginal communities; and technological innovation.

A horizontally-managed initiative led by Environment Canada and Natural Resources Canada, *Action Plan 2000* involves seven federal departments, and 45 specific measures in distinct but inter-related sectors. *Action Plan 2000* is supported by a corporate communications effort and also funds the "BIOCAP" initiative to help foster research networks and provide a bridge between the government and non-governmental organizations addressing biosphere GHG management.

This annual report addresses progress under *Action Plan 2000* during fiscal year 2001 - 2002. Overall, *Action Plan 2000's* first year of operations is considered a success. Given its conditional approval by Treasury Board at the end of May 2001, with final approval not until October 2001, the first half of the year focussed on developing program details and new mandatory accountability frameworks, implementing governance mechanisms, establishing resource infrastructures, and initiating partnerships with other levels of government and stakeholders. During the remainder of the year, efforts focussed on program implementation, partnership building, and increasing stakeholder and public awareness.

As of March 31, 2002, all *Action Plan 2000* measures were at the implementation stage with necessary staffing in place. Although the program was not expected to yield any GHG emissions reductions in the first year of operation, reductions were reported in the Transportation, Electricity, Buildings and the Industry Cross-Cutting sectors. While modest in terms of tonnage (approximately 0.61 Mt), these first reductions provide encouraging indications that *Action Plan 2000* measures have begun to show tangible results and are generating significant interest in the stakeholder community as further evidenced by the number of partnerships that have been, or are being, negotiated. For fiscal year 2001-2002, departments report that *Action Plan 2000* entered into partnerships that have resulted in formal commitment or signature with a value in the order of \$79M, mostly in external resources, comprising some \$17.3M in cash contributions, and in-kind contributions of \$61.7M. There are also a total of 42 in-kind signed partnerships arising from collaboration between organizations, for which specific dollar values are not available. Additional partnerships are under negotiation for most measures; new confirmed partnerships will be reported in future progress reports.

In terms of financial performance, and as expected at mid-year, Action Plan 2000 expenditures were significantly less than originally planned, largely due to delays in implementation and announcements. Approximately 54 % (\$35.2M) of the approved 2001-02 budget of \$64.8M was spent; of the remaining \$29.6M, all but approximately \$0.92M (1.4%) was reprofiled to future years.

*Action Plan 2000* is based on coordinated, sustained and informed action by governments, industry, interest groups and individual Canadians. It is a long-term initiative, with actions in the first years designed to build active partnerships, to establish the infrastructure necessary to achieve significant GHG emission reductions by 2010, and to continue advancements in knowledge and foundation building. Annual emission reductions are expected to be modest in the early years of the program. Emission reductions will increase over the funding period and beyond as funding ramps up and the program reaches a level of maturity, and as *Action Plan 2000* goals and objectives are more fully integrated in Canadian society.

In the coming fiscal year, efforts will focus on program delivery of the first full year of operations for all measures, with additional, albeit modest, increases in GHG emissions reductions anticipated in specific sectors. Preparations for the mid-program review scheduled for September 2003 will also commence in 2002-2003, and will include development of evaluation criteria and a review of GHG targets.

## Introduction

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Following the conclusion of the Kyoto Protocol in December 1997, Canada's First Ministers met to discuss ways to address Canada's climate change objectives. The National Climate Change Process, established in 1998, brings together industry, academia, non-government organizations, municipalities, and federal, provincial and territorial governments to develop climate change solutions. Building on the results of extensive consultations, Canada's federal, provincial and territorial governments agreed in 1998 to develop a series of national business plans outlining actions to be taken individually and collectively to respond to climate change.

*Action Plan 2000 on Climate Change* represents the Government of Canada's contribution to the *First National Climate Change Business Plan* and will continue to form a key component of federal climate change action in subsequent national plans. Announced in the federal Economic Statement of October 2000, *Action Plan 2000* targets key sectors and, when fully implemented, is expected to achieve an estimated annual reduction of 65 megatonnes of GHG emissions per year by 2010 (45 Mt in domestic reductions and 20 Mt of private sector reductions generated through international projects facilitated by the Clean Development Mechanism (CDM) and Joint Implementation (JI) Office). While focussing primarily on GHG mitigation, *Action Plan 2000* also supports continuing work in knowledge and foundation building in the areas of climate science, impacts and adaptation, northern and Aboriginal communities, and technological innovation.

A five-year, \$500M initiative, *Action Plan 2000* is a horizontally-managed initiative led by Environment Canada and Natural Resources Canada. Seven federal departments are directly involved, working on 45 specific measures in distinct but inter-related sectors. The overall initiative is supported by a corporate communications effort and also funds the "BIOCAP" initiative to help foster research networks and provide a bridge between the government and non-governmental organizations addressing biosphere GHG management.

This first annual report addresses progress under *Action Plan 2000* in fiscal year 2001-2002, the first year of the initiative following conditional approval by Treasury Board in May 2001 and final approval in October 2001. The report builds on the progress report produced in November 2001 and addresses progress at the sectoral level with a specific report on each of the sectors, as well as reports on corporate communications and the BIOCAP initiative. Financial performance is also covered in Annex 1 and provides details on expenditures in fiscal year 2001-2002 as well as a revised funding profile for all sectors and measures. Annex 2 of the report includes stand-alone progress reports on each of the 45 specific measures, as well as corporate communications and the BIOCAP initiative. This more detailed section also addresses the reporting elements required by the Results Based Management and Accountability Frameworks (RMAFs) approved by Treasury Board Secretariat, and will be produced on an ongoing basis as part of the annual reporting cycle.

## SUMMARY REPORTS

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### **Sector Summary Reports**

The following section provides an overview, at the sector level, of progress and results achieved during 2001-2002 under Action Plan 2000.

For each *Action Plan 2000* sector, a separate one-page narrative report highlights key accomplishments, briefly summarizes the status of measure implementation, and where appropriate, identifies challenges and next steps. Prepared by the federal department(s) leading the sectoral implementation, each sector report also indicates the total sector funding allocated over the five-year period and the estimated sectoral annual GHG emissions reductions anticipated by 2010.

The Annual Report contains 13 sectoral reports, reflecting the major economic and knowledge and foundation components of the program.



SECTOR	Transportation		
Overall budget (\$M)	96	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	8.89

Overall, there has been good progress in implementing the five transportation measures.

The *Canadian Transportation Fuel Cell Alliance* has established two Committees and five Working Groups representing about 100 participants in the hydrogen and fuel cell industry, provincial governments, fuel and equipment suppliers, non-government organizations, vehicle manufacturers, transit operators, colleges and universities, and federal government departments. Meetings were held throughout the year by the various bodies during which workplans were developed and specific activities initiated towards the demonstration of several hydrogen fuelling stations for fuel cell vehicles across Canada; the establishment of national and international standards for hydrogen fuelling systems; the development of advanced safety equipment and training and certification procedures; and the evaluation and comparison of different systems for producing and delivering hydrogen to vehicles.

The *Motor Vehicle Fuel Efficiency Initiative* has undertaken policy coordination with the US on a new fuel efficiency target through formal and informal meetings with US Department Of Energy (DOE) and Department of Transport (DOT) officers, and joint studies under the NRCan/DOE memorandum of understanding to support target development. Industry has been notified that negotiations are to start in mid-2002. Market research has been carried out on consumer awareness and new partnerships have been developed to broaden the reach of the education and awareness campaign. Thirty advanced technology vehicles have been sourced, acquired, tested and showcased to facilitate their introduction and use in Canada. A draft strategy paper for target negotiation and the education and awareness campaign has been prepared.

Under the *Future Fuels Initiative*, NRCan and Agriculture and Agri-Food Canada (AAFC) began consultations on the barriers and opportunities for ethanol market expansion with feedstock suppliers, ethanol manufacturers, refiners, auto-manufacturers, governments and public. A Memorandum Of Understanding was signed between AAFC and Farm Credit Canada for administering the National Biomass Ethanol Program.

The *Freight Efficiency and Technology Initiative* consists of establishing voluntary performance agreements with industry associations to reduce GHG emissions in the air, rail, trucking and marine freight sectors; implementing the Freight Sustainability Demonstration Program (FSDP) and training and awareness. Since program launch, project submissions were received for Round One of the FSDP; negotiations have begun with five industry associations on performance agreements, and promotion and training are underway to encourage further action to reduce GHG emissions.

The *Urban Transportation Showcase Program* team visited cities across Canada to promote the program. Results have been published on the program's website. Stakeholders confirmed the need to demonstrate the ability of various strategies to reduce GHG emissions from urban transportation and were supportive of an Information Network to facilitate sharing of success stories between municipalities. Forty-eight Expressions of Interest proposing a wide range of integrated strategies and measures to reduce GHG emissions from urban transportation and suggesting performance indicators were received from municipalities across the country. Once a Selection Committee is appointed, the process to choose the successful candidates will commence.

SECTOR	Electricity		
Overall budget (\$M)	60	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	7.0351
<p>All measures within the electricity sector have been initiated and the level of cooperation with partners and industry has been very positive, notwithstanding some concerns raised by fossil fuel burning generating stations.</p> <p>Work on the <i>Electricity Sector Covenant</i> initiative, in cooperation with provinces, the Canadian Electricity Association and member generators, is focussed on policy and regulatory constraints and development of a draft framework agreement for the sector. Negotiations of an actual covenant cannot proceed in the midst of the preparations for a Kyoto ratification decision.</p> <p>Negotiations are underway with Nova Scotia Power for <i>Government Procurement</i> of electricity from renewable sources, and purchases in the Alberta and Ontario markets are being pursued.</p> <p>The parameters of the <i>Market Incentive</i> measure have been developed and a consultation document was distributed to stakeholders for their comment. Within the next year, Letters of Interest will be issued to energy producers for their participation in the program.</p> <p>The <i>On-Site Generation</i> initiative has been announced and is currently underway. Application kits are available and have been distributed to targeted audiences. There are currently eight potential projects. There will be a promotional campaign during the next year to promote the program and generate further interest.</p> <p>Actions to <i>Reduce Barriers to Interprovincial Trade and Transmission</i> are focussed on developing standards for connection of distributed generation, with work on electricity transmission and trade barriers to follow. Two government/stakeholder committees have been established, a review of existing utility requirements across Canada has been undertaken, and a web-based communication tool has been launched to ensure open and widespread consultations.</p> <p>Initial steps have been taken to implement the <i>Consumer Information</i> initiative, including preliminary contact with stakeholders.</p>			

SECTOR	Oil and Gas		
Overall budget (\$M)	25	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	7
<p>The Oil and Gas Sector is covered by the CO<sub>2</sub> Capture and Storage Initiative. The intent of the initiative is to advance the understanding of the optimal use of the capture and subsequent storage of CO<sub>2</sub> as a means of reducing Canada's GHG emissions and to promote its commercialization.</p> <p>Several activities are underway to advance understanding, including:</p> <ul style="list-style-type: none"> <li>• A Contribution Agreement has been signed with the Petroleum Technology Research Centre for the International Energy Agency Weyburn Monitoring project (research pertaining to the geological storage of CO<sub>2</sub> in partially depleted oil reservoirs for use in enhanced oil recovery).</li> <li>• Significant leverage has been secured from other project sponsors, including the private sector.</li> <li>• An agreement has been signed with the Geological Survey of Canada on a program of work to increase knowledge of the CO<sub>2</sub> storage potential of unmineable coal beds in Alberta.</li> <li>• An agreement has been signed with the Alberta Geological Survey to perform inventorying work regarding the potential for CO<sub>2</sub> sequestration in depleted oil and gas reservoirs (for enhanced oil recovery)</li> <li>• A study of fiscal frameworks bearing upon CO<sub>2</sub> capture and storage has been contracted.</li> <li>• Studies have been received from the Canadian Energy Research Institute and from Vikor Energy Inc.</li> <li>• A dedicated CO<sub>2</sub> capture and storage unit has been created within NRCan to manage this initiative.</li> </ul> <p>In order to promote commercialization, NRCan is working with the provinces of Alberta and Saskatchewan, who are promoting CO<sub>2</sub> capture and storage and supporting industry efforts to develop commercial projects. Partnerships are possible in the future and should lever provincial funds.</p>			

SECTOR	<b>Buildings</b>		
Overall budget (\$M)	<b>95</b>	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	<b>6.1</b>

The Buildings Sector is comprised of three initiatives; the Commercial/Institutional Building Retrofit Program (CIBRP), Energy Efficient Housing Initiative (EEHI) and the Accelerated Standards Action Program (ASAP).

The CIBRP is an extension of the Energy Innovators Initiative and encourages owners and operators of existing commercial and institutional facilities to reduce operating costs and energy use through investments in energy efficiency. As of March 31, 2002, a document was produced that specified the details of the service, 13 organizations had received incentives and there were five facilitation services offered. Total GHG reductions were 0.15 Mt. Currently a securitization study is underway that may assist industry sectors that have difficulty obtaining traditional financing to complete energy retrofits.

The EEHI has a component for existing housing and one for new housing. The existing housing initiative consists of the Energuide for Houses (EGH) rating system that promotes energy efficient housing renovations. The new housing component consists of EGH for new houses and R2000 standard to encourage the construction and purchase of more energy efficient housing. Under Action Plan 2000, the EEHI underwrote EGH energy evaluations of 2,000 households across Canada. Average energy savings per household as a result of energy retrofit activities are \$480 with an average CO<sub>2</sub> reduction of 2.0 tonnes per year. The total GHG reduction from EGH were 3.3 Kt. In 2001-2002, 264 houses in Canada were built to the R2000 standard. Training was provided to over 50 builders and professionals. EEHI developed new software and had several successful marketing and promotional activities.

The ASAP goal is to accelerate the penetration of high efficiency products into the appliances and equipment stock by deploying a series of market based incentives that will encourage consumers to purchase the “best in class”. The U.S. based Energy Star program was implemented in Canada to promote the “best in class” energy efficient appliances and equipment. Various advertising campaigns and partnerships were developed including the engagement of Sears in the promotion and marketing of Energy Star, an incentive program with BC Hydro, an agreement with the Yukon on early retirement of refrigerators and Energy Star criteria is now used in the Government of Canada’s procurement policy. Given the late start of the initiative, it is too early to confirm GHG reductions for 2001-2002.

These Building Sector Initiatives will play an important role in helping Canada to reduce GHG emissions by educating and encouraging typical Canadian consumers and businesses to adopt and implement energy efficient practices into their everyday thinking and it is fully expected that all targets and objectives will be met in the coming years.

SECTOR	Agricultural		
Overall budget (\$M)	26	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	5.8
<p>The Mitigation Program for Canadian Agriculture (soil, nutrient and livestock management) involves: preparing suites of GHG best management practices (BMPs), raising awareness, and involving producers in fostering adoption of GHG reducing practices. The Program provides a "get-started" initiative, towards long-term GHG reduction by an estimated 5.8 Mt/year of CO<sub>2</sub> equivalent during the Kyoto commitment period 2008-2012. Program approval was received Oct. 2001. The remainder of 2001-2002 saw establishment of: a GHG Mitigation Advisory Committee encompassing industry, academia, producers, scientific, and federal/provincial government expertise in climate change and agriculture; a Scientific Working Group undertaking the measuring and verification component of the program; and formal negotiations with national industry groups for delivery of the awareness component of the program. Activities included purchasing specialized scientific equipment and developing of a work plan for field measuring summer 2002. Crucial for implementation of the program is identification of BMPs that reduce GHG emissions. Mitigation strategies were identified in 2001 and recommended by the Advisory Committee in April 2002.</p> <p>The Research Model Farms program will draw on findings from soil, nutrient, and livestock studies and evaluate net GHGs from combined elements of current and proposed farming systems. In particular, the initiative will look at the GHG budgets from whole farming systems, and integrate economic analysis into identifying suites of practices that best reduce overall net emissions. By tracing the secondary effects of a practice through the whole system, the program will provide more refined estimates of GHGs, and predict the extent to which proposed mitigation practices can increase sink potential and reduce emissions in whole farms. It will also help avoid conflicting recommendations based on individual elements of farming systems. Linking this information to integrated economic/environmental models will enable cost/benefit analysis to help assess potential adoption rates of recommended practices.</p> <p>The Research Model Farms program led extensive consultation and exchanges with AAFC scientists across Canada, which led to the development and approval of a detailed work plan, describing research to be conducted for the duration of the program. Activities include: measurements of GHGs in a wide range of farming systems, environments, and scale; development or refinement of models and algorithms that predict GHGs as a function of management, soil, and climate; finding ways of merging the estimates and algorithms to allow calculation of GHGs from whole farms, now and under future scenarios; and developing ways of relaying the emission reduction, sequestration and related economic findings to policymakers, producers, and the public. Measurement instrumentation has been purchased and measurements should begin early in 2002-2003.</p>			

SECTOR	Forestry		
Overall budget (\$M)	<b>10</b>	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	<b>0.302</b>
<p>The use of afforestation as a means to offset GHG emissions continued to gain considerable attention during 2001/02. Various provincial agencies began exploratory work gathering information on the impacts of past programs and activities. Ducks Unlimited developed a proposal for discussion that involved the use of trees as part of a conservation cover program. The Canadian Council of Forest Ministers continued their work on building the Forest 2020 concept and the federal government investigated the possibility of accelerating afforestation actions through the development of large-scale fast-growing plantation demonstrations.</p> <p>Due to the uncertainty over moving forward with a large-scale fast-growing afforestation demonstration program and the delays in program approvals, a decision was made not to formally announce the afforestation measure in 2001-2002. As a result, most of the activities planned for 2001/02 did not begin until the end of the fiscal year. Up until this point, efforts under the Feasibility Assessment of Afforestation for Carbon Sequestration (FAACS) initiative concentrated on the development of a work plan and a process to roll out to the Canadian Forest Service regional centres for information collection and afforestation pilot development. In addition, initial provincial discussions took place during 2001-2002 and preliminary work on private landowners attitudes' towards afforestation and afforestation co-benefits was conducted.</p> <p>The Shelterbelt component made significant progress. Implementation commenced with the formalization of arrangements for program delivery with partners and cooperators across the prairie region. A Communications Plan and promotional materials for the program were developed. In cooperation with the Climate Change Action Fund Agricultural Awareness Partnership Project, eight presentations describing the program's objectives and criteria were made to audiences across the prairie region.</p> <p>Production of shelterbelt stock at the Agriculture and Agri-Food Canada – Prairie Farm Rehabilitation Administration Shelterbelt Centre was increased in anticipation of the increased demand for tree material needed to meet the demands of the program (this included the hiring of staff and the acquisition of required nursery equipment) and necessary material was purchased. This equipment and material was distributed to Prairie Farm Rehabilitation Administration District offices for use in spring 2002 shelterbelt plantings. Potential clients were contacted directly to determine their interest in taking part in the first year of the program. A total of 248 applications for shelterbelt trees and plastic mulch for spring 2002 planting were received; 228 of the applicants were approved using the program criteria.</p>			

SECTOR	Minerals and Metals		
Overall budget (\$M)	10	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	1.65
<p>Three <i>Minerals and Metals Sector</i> measures are targeted at promoting the increased use of alternative and recycled materials, and another measure is aimed at identifying opportunities to further minimize GHG emissions through the adoption of new technologies and process modifications. Key activities necessary to achieve the measure's goals and objectives have been identified. Although it is too early to report on outputs it is expected that all targets and objectives will be met in the coming years.</p> <p>The <i>Supplementary Cementing Materials</i> (SCMs) measure promotes increased use of SCMs to replace cement in the manufacture of concrete thereby reducing GHG emissions associated with production of cement. Activities are underway to develop and disseminate to key stakeholders information on the benefits of SCMs. The outcome will be an extensive network of informed decision-makers who will optimize the use of SCMs in concrete.</p> <p>The <i>Concrete Roads</i> measure promotes the use of concrete in the construction of roads carrying significant volumes of heavy vehicles since the reduced rolling resistance associated with a rigid pavement decreases fuel consumption. Projects are underway to develop and collect data and to communicate to provincial and municipal personnel information the benefits of concrete roads. The outcome will be an extensive network of informed decision-makers and stakeholders who are aware of appropriate techniques for evaluating these benefits and for designing and building concrete roads.</p> <p>The <i>Enhanced Recycling</i> measure aims to improve the Canadian recycling infrastructure leading to substantially increased recycling of metals and minerals with consequent reductions in GHG emissions. Work is underway to gather technical and economic information on recycling and to provide opportunities for networking and information transfer. The outcome of these activities will be a better understanding of minerals and metals recovery and associated impediments to recycling in Canada; this, in turn, will inform governments and the marketplace as to future recycling/recovery opportunities.</p> <p>The <i>Studies and Monitoring for GHG Reduction Potential</i> measure aims to increase the available knowledge and understanding of ways to reduce GHG emissions in the minerals and metals sector. Studies which are underway may lead to recommendations for improvements in GHG reduction performance in current programs as well as proposals for new programs.</p> <p>Most projects have been undertaken on a partnership basis with cash and/or in-kind contributions from various stakeholders. The aggregate leverage for projects underway by March 2002 is currently estimated as \$2.50 contributed by partners for each \$1.00 of project funding. This more than meets the program target of matching funds from partners.</p>			



SECTOR	Industry Cross-Cutting		
Overall budget (\$M)	<b>32.1</b>	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	<b>7.213</b>

There are 10 Industry Cross-Cutting Measures including: Expansion of the Canadian Industry Program for Energy Conservation (CIPEC); Improved Tracking and Reporting of Energy Efficiency and Emission Trends; Emissions Benchmarking; Energy Efficiency Audits; Awareness Building; Industrial Buildings Incentive Program (IBIP); Renewable Energy Deployment Incentive (REDI) for Industry; Supply Chain Initiative, Energy Rating System and Cogeneration and District Heating.

The majority of the initiatives are managed by the Energy Sector of Natural Resources Canada. Industry Canada has sole responsibility for the Supply Chain Initiative. Environment Canada and Statistics Canada are also involved in some measures. Overall program governance takes place through a Director General Steering Committee, involving all funded departments.

Although the first year has been occupied with the ‘ground truthing’ of delivery mechanisms (staffing, incentive application forms, the development of publicity and marketing materials), there have been some accomplishments. For instance, audit partnership agreements have been negotiated in key industrial energy using jurisdictions across the country (Quebec, Ontario, Manitoba, Alberta, British Columbia). The CIPEC program has expanded by five trade associations, with new participants including the upstream oil and gas sector, the construction sector and the electricity generating sector. The initiation benchmarking activity exceeded all expectations with strong interest predicted from additional sectors as we go forward. Enhanced awareness funds were spent on a limited basis because of start-up requirements but the funding did lead to the publication of several technical publications and enhancements to NRCan’s Dollars to Sense Energy management workshop program.

Under lessons learned, the most significant would be the establishment of partnerships with complementary agencies across the country. Experience to date indicates that partnerships do not always result in the prompt achievement of goals and objectives. Very few energy audits were initiated by the partnership activity in Manitoba, Alberta and British Columbia while negotiating delays precluded the initiation of partnership-inspired audit activity in Alberta and Quebec.

It is too early to provide emission reduction impacts although work for 2002/03 involves the establishment of appropriate databases in order to assess overall program impacts on an interim and final basis. The results of the interim assessment will allow for appropriate program adjustments.

Looking ahead, the audit, benchmarking, tracking and reporting, supply chain, and CIPEC expansion’s initiatives are on track to meet their 2002/03 objectives in terms of activity and budget expended. Some difficulties in measure implementation for Awareness Building is

forecast at the moment. More details will be transmitted in the 2002-2003 mid-year report. There are strong indications that the REDI and IBIP programs will achieve their program goals.

SECTOR	Federal House In Order		
Overall budget (\$M)	13	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	0.3
<p>The Federal House in Order initiative is the federal government’s plan for meeting its GHG emission target of 31 percent below the 1990 level by 2010. It has two main objectives: the first is to demonstrate federal leadership in addressing climate change to other sectors of the economy and to the Canadian public; the second is to provide enhanced services to federal departments and agencies to help them achieve their GHG emissions reduction targets through buildings and transportation efficiency and fuel switching. A significant component of the federal emission reduction target, equivalent to 0.24 Mt reduction by 2010, is being achieved through the use of emerging renewable resources and is reported on elsewhere.</p> <p>Over the reporting period, activities and results under the initiative included:</p> <ul style="list-style-type: none"> <li>• Full allocation of the target among the 11 designated federal departments and agencies, with monitoring and reporting on progress through a centralized GHG data inventory;</li> <li>• Collection and assessment of data to enable federal progress to be reported as part of the Voluntary Challenge and Registry (VCR);</li> <li>• Promotion of the initiative to other levels of government through meetings with provinces, newsletter articles and conference presentations;</li> <li>• Promotion of the initiative federally with workshops to 700 federal managers and staff in over 20 departments and agencies across the country;</li> <li>• Enhancement of buildings program services with an overall annual increase in private investments under the Federal Buildings Initiative of \$12 million and resultant annual savings of \$ 1.2 million (cannot attribute specific House in Order share);</li> <li>• Enhancement to fleet program services with a new leadership vehicle initiative under Fleetwise and new federal initiatives for E-85 and low-level ethanol blends under Ethanol Fuel initiative (cannot attribute specific House in Order share);</li> <li>• Creation of a House in Order website, posters and tip sheets, and preliminary work on an awards program, employee awareness strategy, and an outside emissions pilot.</li> </ul> <p>On the horizon:</p> <ul style="list-style-type: none"> <li>• Continued reporting on progress in meeting the federal emission reduction target;</li> <li>• Ongoing demonstration of federal leadership to other governments and the private sector;</li> <li>• Expansion of impact of the initiative through enhanced federal program services; and</li> <li>• Expansion of the initiative to non-designated departments and continued development and promotion of emission reduction tools.</li> </ul>			

SECTOR	International		
Overall budget (\$M)	35	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	20

The International Sector comprises two measures: the Canadian International Technology Initiative and Canada's Clean Development Mechanism and Joint Implementation Office (CDM & JI Office).

The CDM and JI Office assists Canadian companies to obtain international emission reduction credits. The Office has increased awareness of CDM & JI across Canada and in developing countries and countries with economies in transition. There has been an increase of interest from Canadian companies in pursuing international projects as a result of national and regional workshops, participation at Globe 2002, and training seminars for Trade Commissioners and other staff at embassies abroad. International outreach efforts, combined with market studies, have generated approximately 75 project opportunities which the Office has disseminated to potential Canadian investors. This outreach has expanded the Office's contact database from 180 to 1100 contacts, including over 500 Canadian investors and consultants who receive regular updates on project opportunities and program activities. There has also been significant interest from eight host countries to enter bilateral agreements with Canada; the Office has concluded three MOUs and begun negotiations on five additional country agreements. The CDM & JI Office has enabled Canadian companies to move a step closer to eventual approval of their projects without incurring large transaction costs. One project in India has led to 2 Mt of emission reduction rights being secured by Canadian entities. It is important to note that the current dialogue regarding Canada's ratification of the Kyoto Protocol may influence planned activities and potential results. The Office will continue to actively participate in policy and analytical work related to international negotiations.

The International Technology Initiative's overall objectives are to identify and develop technology transfer projects overseas, facilitate the expansion of market opportunities for climate change technologies for Canadian companies, provide a sound analytical base for future international technology marketing activities, and encourage and build effective partnerships with other nations to help reduce GHG emissions through CDM & JI projects. A Technology Promotion Officer is now in Mexico assisting Canadian industry to market their climate change technology and expertise, and provide local information, briefings and market prospects to Canadian companies interesting in promoting their technologies. A mission was also led to Mexico City to assess Mexican climate-change technology priorities and needs, and the availability of Canadian industry and technologies to respond to the challenge. Another example of Canada's technology marketing efforts is the improved Canadian Environmental Solutions (CES), an interactive, multi-media information tool designed to market Canadian companies associated with climate change. CES is also used as a marketing and outreach instrument for CDM & JI partners, and is now available in Spanish to allow it to reach a broader market segment.

SECTOR	Multi Sectoral		
Overall budget (\$M)	44.2	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	3
<p>The Multi Sectoral measures will make a significant contribution to reducing emissions although, while most of these measures are mutually reinforcing, it is difficult to attribute a direct tonnage reduction to them. The Multi Sectoral sector is setting the policy framework and developing the administrative infrastructure to monitor and evaluate these measures and is investing in broader initiatives to reduce emissions across the economy.</p> <p>The Multi Sectoral comprises five measures: The Pilot Emission Removals, Reductions and Learnings (PERRL); the Industry Covenants Initiative; the Baseline Protection Initiative; the GHG Verification Centre; and the Technology Development and Innovation Program.</p> <p>PERRL is a new and innovative incentive and learning program where proponents, selected in a competitive process, will be paid per tonne of CO<sub>2</sub> when these tonnes are delivered to participating governments. The launch of PERRL was delayed to 2002-2003 in order to work on a number of program design and related legal issues.</p> <p>The Industry Covenants Initiative began analysis on the covenants approach to industrial GHG emissions reduction and preparatory work to consultations with industry and other stakeholders.</p> <p>The Baseline Protection Initiative, a voluntary program which helps companies establish their baseline reference level, will be available early in fiscal year 2002-2003 for on-line registration.</p> <p>The GHG Verification Centre has been conducting consultations on quantification and verification protocols with large industrial sectors. The Centre has also been collaborating on development of GHG quantification protocols for several government programs. The Centre's website and resource centre are now active. The demand for the Centre's expertise is near to exceeding its current capacity.</p> <p>The Technology Development and Innovation Program funds projects to stimulate innovative thinking, further advance existing greenhouse gas mitigation R&amp;D, develop goals and paths for technology development, create networks of expertise and hold technology workshops. Examples of interest are: new preliminary work on CO<sub>2</sub> sequestration in oil sands tailings, which confirms that such sequestration can be achieved; geologic sequestration of CO<sub>2</sub> as gas hydrate, which is attracting international attention; and excellent buy-in by key industry champions who support the development of technology roadmaps in fuel cells, oil sands, bio-products and clean coal.</p>			

SECTOR	<b>Knowledge and Foundation Science Impacts and Adaptation</b>		
Overall budget (\$M)	<b>50</b>	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	<b>Not Applicable</b>
<p>Knowledge and Foundation comprises two measures: Climate Science and Impacts and Adaptation.</p> <p>Systematic Climate Observations addresses gaps in Canada’s monitoring networks in three areas: atmosphere, oceans and cryosphere (snow, ice and glaciers). Significant progress has been made with respect to network planning, filling network gaps in the North, and in a global oceanographic monitoring system where initial Canadian data have been made available to scientists ahead of expectations. Biological GHG Sources and Sinks provides tools for the verifiable measurement of carbon-stock changes in Canadian forests and agricultural soils; and provide information for management and policy development to enhance the carbon-stock in the Canadian biosphere. The first year saw encouraging progress in the various research initiatives. Of particular note, in addition to the work on forestry and agricultural soils, is the work on water-covered lands and the transport of carbon by rivers. Links have been established across the research community with groups such as BIOCAP.</p> <p>In the coming year the monitoring initiatives will continue to move ahead with several northern sites slated for installation during the short summer period. GHG sinks research studies will be well underway, including an aircraft-based GHG measurement program for the forestry sub-component to develop a method for scaling measurements up from the site level to the landscape and regional level.</p> <p>The Impacts &amp; Adaptation program focussed on building the foundation for future decision-making on adaptation and in conjunction with the CCAF funding, awarding funding for research. Through two national workshops, research funded in the CCAF from 1998-2001 was evaluated with respect to progress in addressing gaps and lessons learned in the conduct of stakeholder- focussed research were shared. The competitive process to identify the hosts of the regional and sectoral components of C-CIARN was completed and 13 offices were established. C-CIARN workshops were held to raise awareness of the latest research results, engage new researchers and stakeholders in the issue and identify priorities for future research. Outreach to the research and stakeholder community was undertaken to raise awareness of the program and the use of a vulnerability approach in research. Activities were undertaken with the Aboriginal and Northern Climate Change Program to broaden engagement of the aboriginal community. As part of its assessment mandate, the program supported the participation of Canadians authors in the international Arctic Climate Impacts Assessment. Work also commenced on the preparation of national update on the latest knowledge on Canada’s vulnerability to climate change. The program office also led the federal and national activities to develop a framework for adaptation policy.</p>			

SECTOR	<b>Knowledge and Foundation Aboriginal and Northern Climate Change Program</b>		
Overall budget (\$M)	3.7	Annual GHG reduction target in 2010 of CO <sub>2</sub> (Mt)	Not Applicable
<p>The objectives of the Aboriginal and Northern Climate Change Program (ANCCP) are to facilitate the engagement of Aboriginal peoples and northerners in climate change activities and to undertake specific initiatives to address the energy needs of Aboriginal and northern communities, with an emphasis on capacity building, use of alternative energy sources, energy efficiency and best practices.</p> <p>The program supports Aboriginal groups to increase the understanding of climate change in Northern and Aboriginal communities, to conduct community consultations, to develop community climate change plans and strategies and to develop and distribute culturally relevant information about climate change, its impacts and solutions. It also supports selected pilot communities to examine opportunities for energy efficiency and renewable energy technologies through the development of comprehensive Community Energy Planning strategies that explore both energy supply and energy demand options.</p> <p>Consultation meetings have been held with various stakeholders including major Aboriginal organizations such as the Assembly of First Nations, Inuit Tapirisat of Kanatami, Inuit Circumpolar Conference, the Council of Yukon First Nations as well as territorial governments.</p> <p>Numerous initiatives have been undertaken or are underway with Aboriginal organizations and communities in the areas of: climate change, renewable energy and energy efficiency workshops; development of educational material; educational course curriculums; and, community energy planning. Activities are coordinated with other related climate change initiatives such as the Canadian Climate Impacts and Adaptation Research Network and the Climate Change Public Education and Outreach regional hub network.</p> <p>The ANCCP will continue to lay the foundation for increasing the capacity in Aboriginal and northern communities to understand the climate change issue and its relationship to energy use, and build the partnerships to address these issues within communities. While other AP2000 initiatives cover five years, the ANCCP is only a two-year program. It is expected that a longer-term initiative will be developed through ongoing consultations and from experience gained from the community energy planning pilots to ensure that the issues and needs most relevant to remote Aboriginal and Northern communities are addressed.</p>			

## Other Initiatives

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### Corporate Communications

The Corporate Communications is a five million dollars initiative available over two years for corporate communications activities, from a 1% levy on all *Action Plan 2000* measures

The overall goal for corporate communications is to broaden public awareness on climate change, promote domestic action, inform Canadians about international developments on climate change, and suggest actions they can take to make a difference. Goals include communicating the overall *Action Plan 2000* initiative (not the individual measures), emphasizing the government's commitment to address climate change through *Action Plan 2000*.

Two print advertisements appeared in 130 national newspapers in February-March 2002 to promote the upcoming distribution of the six millions copies of the climate change supplement in the same national newspapers. A follow-up survey demonstrated that 22% of people who received the climate change supplement, read it. Another 7% kept the supplement for future reference. Although the distribution of the supplement was funded through the Climate Change Action Fund, the two print advertisements that were placed contributed to increasing the readership of the supplement.

On the media side, climate change coverage has been reasonably balanced and there has been an increase in the overall coverage on climate change.

The Government of Canada's efforts to address climate change have now entered a phase of stakeholder and public consultations, following release of the Discussion Paper on Canada's Contribution to Addressing Climate Change in May 2002. Between June and year's end, use of the communications budget will continue to raise awareness of climate change and promote ratification. Our main objective is to increase awareness that actions to address climate change will contribute to a better quality of life through improved air quality and a more innovative economy.

2002-2003 will focus on the following three goals:

- Continue to increase Canadians' general awareness on climate change and build support for Canada's position on climate change;
- Promote the Government of Canada's actions and plans to mitigate the effects of climate change; and,
- Encourage Canadians to do their part to address climate change.

The development of advertising campaigns, fact sheets, an information kits for Members of Parliament as well as a collection of success stories, pictures and videos related to climate change are just some examples of how these goals can be reached.



## **BIOCAP**

BIOCAP Canada is a not-for-profit organization with members from provincial and federal government, industry, academia and other non-governmental organizations to further scientific understanding of how Canada's vast forests and farmlands can contribute to the fight against climate change while improving the Canadian economy and natural ecosystems. Housed at Queen's University, BIOCAP Canada is managed by a Board of Directors, on which the federal government is represented by EC, NRCan and AAFC as non-voting members. BIOCAP Canada has proposed to coordinate a series of national, university-based research networks that will collaborate with federal scientists and others to address scientific questions surrounding biosphere GHG management.

The BIOCAP initiative is funded through a contribution from five Action Plan 2000 measures, under the stewardship and overall coordination of Environment Canada. The initiative also has funding from the Climate Change Action Fund.

The BIOCAP Canada Foundation began work to meet its Federal Contribution Agreement targets beginning 01 December 2001. During this period BIOCAP became fully equipped and operational. It also established its research committees and advisory bodies and implemented the start of a comprehensive communications and outreach plan.

BIOCAP began by finalizing the federal agreement, establishing an MOU with Queen's University, hiring staff, and holding a public launch in Ottawa on March 19, 2002. Research networking efforts helped build a database of 5560 key researchers, experts and stakeholders and led to the formation of a 13-member, multi-sector Research Overview Committee. Research and Development Advisory Councils were set up in three of four research areas and began work to mobilize university research and identify 'research communities.' BIOCAP also hosted a national workshop as part of a five-part Pollution Probe forest carbon management series.

Membership expansion efforts across Canada during this period yielded a new industry partner (Alberta-Pacific Forest Products), a new provincial sponsor (Saskatchewan) and representation from Canada's north (Northern Climate Exchange). BIOCAP also signed and began implementing an MOU with BioProducts Canada. BIOCAP published a bilingual brochure and research leaflets, completed a comprehensive plan, and proceeded to develop BIOCAP's print and Website program.

## FINANCIAL PERFORMANCE

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### Overall expenditures and balance

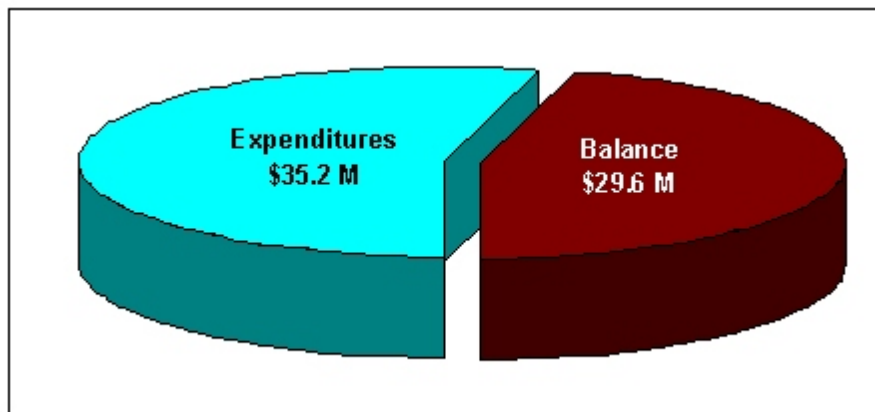
*Action Plan 2000* is a \$500 million initiative over five years. For fiscal year 2001-2002, *Action Plan 2000* had an overall approved budget of approximately \$64.8M (see Annex 1) as adjusted through the Annual Reference Level Update in November 2001.

As of end of March 2002, *Action Plan 2000* funded departments reported total expenditures of \$35.2M, which includes salaries, employee benefits program, accommodation costs where applicable, operations, grants and contributions. It also includes contributions to corporate communications (\$2.5M derived from a 1% levy on each measure) and the BIOCAP initiative (total of \$600,000 from specific measures).

The remaining balance comprises all financial resources not spent, that are either reprofiled through ARLU, carried forward, or lapsed. When all departmental financial processes are completed, final figures will be confirmed and numbers adjusted.

For 2001-2002, funded departments reported a remaining balance of \$29.6M, as illustrated in figure 1 below.

Figure 1: 2001-2002 Overall Financial Performance



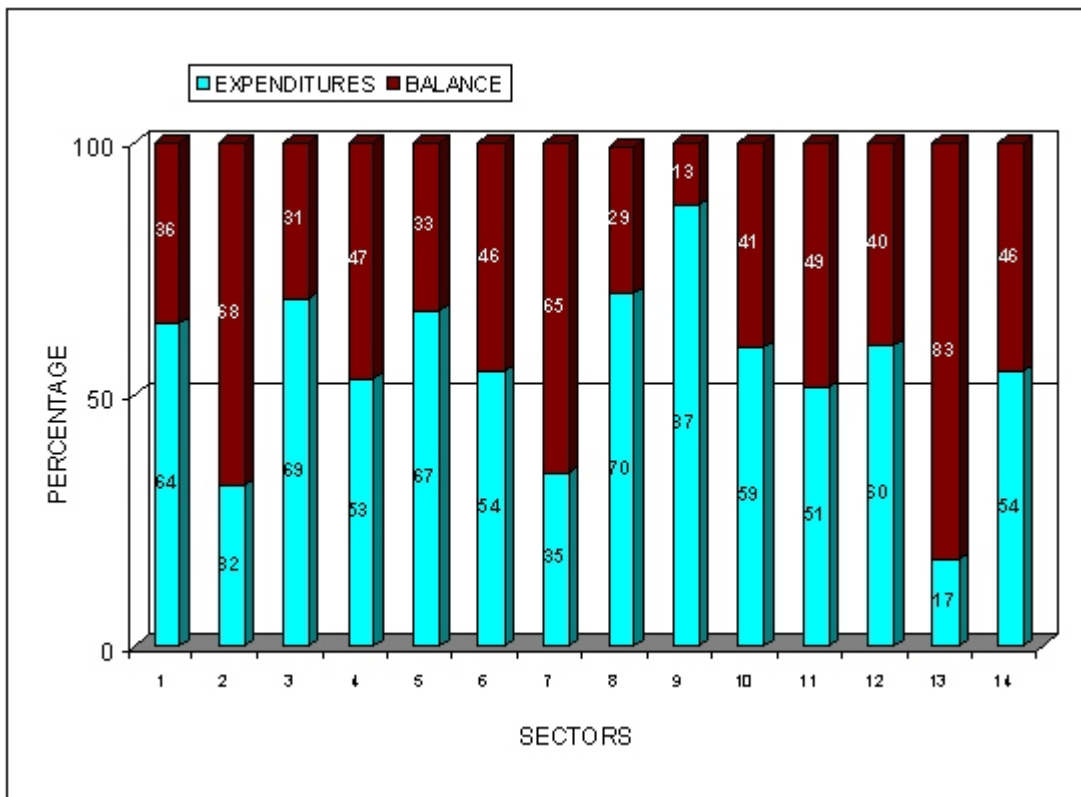
Annex I provides detailed expenditures and revised funding profiles for all measures.

## Sectoral expenditures and balance

The financial situation presented on the previous page is further disaggregated by sector in Figure 2 below. For each sector, data are presented for fiscal year 2001-2002 showing, as a percentage of the approved 2001-2002 budget, the expenditure (light shading), and the balance (darker shading).

As noted in the first progress report (January 2002) total 2001-2002 expenditures as of November 2001 were forecast to be \$43.8M . Departments reported that this shortfall was mainly due to the fact that recruitment of experts took longer than anticipated thereby delaying full implementation of a number of program activities. Considering that final approval of *Action Plan 2000* was provided at the end of May 2001 and that departments officially received their financial resources in November 2001, the average overall expenditure ratio (\$35.2M, 54%) reflects the actual period available for program implementation.

Figure 2: 2001-2002 Sector Financial Performance



1 = Transportation  
 2 = Electricity  
 3 = Oil and Gas  
 4 = Buildings  
 5 = Agricultural

6 = Forestry  
 7 = Min & Metals  
 8 = Ind. Cross-Cutting  
 9 = Fed. House in Order  
 10 = International

11 = Multi Sectoral  
 12 = Knowledge-Foundation  
 13 = Aboriginal and Northern  
 14 = Overall situation

Annex 2 of this report provides further details in terms of 2001-2002 performance, results and expenditures at the measure level.

Based on revised funding profiles, the budget for fiscal year 2002-2003 is \$113M. Objectives, milestones and anticipated results for 2002-2003 for each measure are also provided in Annex 2 of the report.

## **PATH FORWARD**

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*Action Plan 2000* is based on coordinated, sustained and informed action by governments, industry, interest groups and individual Canadians. It is a long-term initiative, with actions in the first few years designed to build active partnerships, to establish the infrastructure necessary to achieve significant GHG emission reductions by 2010, and to continue advancements in knowledge and foundation building.

In the coming fiscal year, efforts will focus on full program delivery. Additional, albeit modest, GHG reductions are anticipated in specific sectors. For example, additional reductions are already forecast over the short term in the buildings sector, and the multi-sectoral Pilot Emission Removals, Reductions and Learnings (PERRL) initiative is also expected to start obtaining GHG reductions. Annual emission reductions are expected to be modest in the early years of the program. Emission reductions will increase over the funding period and beyond as funding ramps up and the program reaches a level of maturity, and as *Action Plan 2000* goals and objectives are more fully integrated in Canadian society.

As partnerships continue to develop and evolve, and results are measured against performance objectives and milestones, some program refinements may be necessary at the measure and sector levels. Preparations for the mid-program review scheduled for the fall of 2003 will also commence in 2002-2003, and will include development of evaluation criteria and a review of GHG targets.

In preparation for the mid-program review, a review of measure-specific GHG targets will likely be necessary in late 2002-2003, as some departments have already flagged the need to review their respective targets in response to changing operational environments and new learnings. Any proposal for revision of GHG targets will be based on detailed analysis.

As with any horizontal file of the size and complexity of climate change, ongoing effective management of *Action Plan 2000* will be key and supporting governance structures and mechanisms will continue to evolve. Reports on progress and performance will continue to be provided on an annual basis, supported by abbreviated semi-annual progress reports.

**ANNEX 1**

**ACTION PLAN 2000**

**SECTORS AND MEASURES**

**2001-2002 EXPENDITURES AND FUNDS TRANSFERS  
AND  
REVISED MEASURES FUNDING PROFILES**

## 2001-2002 EXPENDITURES AND FUNDS TRANSFERS

ACTION PLAN 2000 SECTORS / MEASURES	Reduction Target Mt	TOTAL APPROVED FUNDING \$M	2001/02 APPROVED FUNDING \$	EXPENDITURES AS OF MARCH 31, 2002 \$	BALANCE \$
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TRANSPORTATION					
Urban Transportation Showcase Program	0.8	40	1,316,800	533,107	783,693
Motor Vehicle Fuel Efficiency Initiative	5.2	16	1,500,000	1,183,000	317,000
Canadian Transportation Fuel Cell Alliance	0.09	23	1,000,000	820,000	180,000
Future Fuels	0.8	3	649,000	348,000	301,000
Freight Efficiencies & Technologies	2	14	1,821,540	1,148,154	673,386
<b>SUB-TOTAL</b>	<b>8.89</b>	<b>96</b>	<b>6,287,340</b>	<b>4,032,261</b>	<b>2,255,079</b>
%				<b>64</b>	<b>36</b>

ELECTRICITY					
Covenants/Agreements	0	2	1,000,000	540,000	460,000
Government Procurement	0.235	30	1,000,000	697,100	302,900
Market Incentive	1.4	25	2,700,000	222,584	2,477,416
On-Site Generation	0.0001	1.2	400,000	106,000	294,000
Reducing Barriers To Interprov trade and Transmission	5.4	0.75	250,000	202,000	48,000
Consumer Information	0	1.05	350,000	55,250	294,750
<b>SUB-TOTAL</b>	<b>7.0351</b>	<b>60</b>	<b>5,700,000</b>	<b>1,822,934</b>	<b>3,877,066</b>
%				<b>32</b>	<b>68</b>

OIL & GAS					
CO <sub>2</sub> Capture & Storage	7	25	2,865,000	1,978,370	886,630
<b>SUB-TOTAL</b>	<b>7</b>	<b>25</b>	<b>2,865,000</b>	<b>1,978,370</b>	<b>886,630</b>
%				<b>69</b>	<b>31</b>

<b>ACTION PLAN 2000 SECTORS / MEASURES</b>	<b>Reduction Target Mt</b>	<b>TOTAL APPROVED FUNDING \$M</b>	<b>2001/02 APPROVED FUNDING \$</b>	<b>EXPENDITURES AS OF MARCH 31, 2002 \$</b>	<b>BALANCE \$</b>
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<b>BUILDINGS</b>					
Commercial/Institutional Buildings Retrofit Initiative	2.2	30	4,500,000	1,587,727	2,912,273
Improve Energy Efficiency of Residential Buildings	1.1	35	4,000,000	2,186,170	1,813,830
Accelerated Standards Program for Equipment and Appliances	2.8	30	3,000,000	2,324,496	675,504
<b>SUB-TOTAL</b>	<b>6.1</b>	<b>95</b>	<b>11,500,000</b>	<b>6,098,393</b>	<b>5,401,607</b>
%				<b>53</b>	<b>47</b>

<b>AGRICULTURAL</b>					
Nutrient - Livestock - Soil management	5.8	21	1,322,000	1,322,000	0
Research Model Farm	0	5	1,000,000	225,000	775,000
<b>SUB-TOTAL</b>	<b>5.8</b>	<b>26</b>	<b>2,322,000</b>	<b>1,547,000</b>	<b>775,000</b>
%				<b>67</b>	<b>33</b>

<b>FORESTRY</b>					
Afforestation	0.002	6	1,000,000	280,000	720,000
Shelterbelts	0.3	4	800,000	700,000	100,000
<b>SUB-TOTAL</b>	<b>0.302</b>	<b>10</b>	<b>1,800,000</b>	<b>980,000</b>	<b>820,000</b>
%				<b>54</b>	<b>46</b>

<b>ACTION PLAN 2000 SECTORS / MEASURES</b>	<b>Reduction Target Mt</b>	<b>TOTAL APPROVED FUNDING \$M</b>	<b>2001/02 APPROVED FUNDING \$</b>	<b>EXPENDITURES AS OF MARCH 31, 2002 \$</b>	<b>BALANCE \$</b>
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<b>MINERALS AND METALS</b>					
Supplementary Cementing Materials	0.45	1.1	220,000	51,800	168,200
Concrete for Roads	0.5	3.5	700,000	81,900	618,100
Studies/Monitoring for GHG Reductions Potential	0	2	400,000	254,100	145,900
Enhanced Recycling Technologies	0.7	3.4	680,000	302,900	377,100
<b>SUB-TOTAL</b>	<b>1.65</b>	<b>10</b>	<b>2,000,000</b>	<b>690,700</b>	<b>1,309,300</b>
<b>%</b>				<b>35</b>	<b>65</b>

<b>IND. CROSS-CUTTING</b>					
<b>Enhancing Voluntary Platform for Ind Action</b>					
Expansion of CIPEC	3	2.5	200,000	200,000	0
Improved Tracking	0	5.5	1,100,000	879,500	220,500
<b>Improved Company-level GHG Emissions Management</b>					
Industry Benchmarking	1.2	8	800,000	637,737	162,263
Energy Efficiency Audits	0.5	5	500,000	549,100	-49,100
Supply Chain Pilot Project	0	1	100,000	73,045	26,955
Awareness Building	1.1	2.5	400,000	91,479	308,521
<b>Encourage Appropriate Capital Investment</b>					
Support for Co-generation and District Energy Systems	0	0.1	50,000	50,000	0
Industrial Buildings Incentive Program	0.01	3	400,000	208,411	191,589
Enhanced REDI	0.003	2	200,000	0	200,000
Energy Rating System	1.4	2.5	300,000	138,349	161,651
<b>SUB-TOTAL</b>	<b>7.213</b>	<b>32.1</b>	<b>4,050,000</b>	<b>2,827,621</b>	<b>1,222,379</b>
<b>%</b>				<b>70</b>	<b>30</b>



<b>ACTION PLAN 2000 SECTORS / MEASURES</b>	<b>Reduction Target Mt</b>	<b>TOTAL APPROVED FUNDING \$M</b>	<b>2001/02 APPROVED FUNDING \$</b>	<b>EXPENDITURES AS OF MARCH 31, 2002 \$</b>	<b>BALANCE \$</b>
<b>FED. HOUSE IN ORDER</b>					
GHG Inventory and Planning	0	7.5	1,500,000	1,300,000	200,000
Best Practices and Supporting Programs	0.3	5.5	960,000	845,000	115,000
<b>SUB-TOTAL</b>	<b>0.3</b>	<b>13</b>	<b>2,460,000</b>	<b>2,145,000</b>	<b>315,000</b>
%				<b>87</b>	<b>13</b>
<b>INTERNATIONAL</b>					
CDM & JI office	20	25.25	2,520,000	1,720,000	800,000
Technology	0	9.75	1,651,500	746,750	904,750
<b>SUB-TOTAL</b>	<b>20</b>	<b>35</b>	<b>4,171,500</b>	<b>2,466,750</b>	<b>1,704,750</b>
%				<b>59</b>	<b>41</b>
<b>MULTI SECTORAL</b>					
Baseline protection	0	1.7	299,840	274,840	25,000
PERRL	3	15	2,528,000	334,000	2,194,000
GHG Verification Centre	0	2.5	500,000	410,000	90,000
Covenants/Agreements	0	5	1,666,666	532,716	1,133,950
Technology	0	20	4,323,500	3,229,100	1,094,400
<b>SUB-TOTAL</b>	<b>3</b>	<b>44.2</b>	<b>9,318,006</b>	<b>4,780,656</b>	<b>4,537,350</b>
%				<b>51</b>	<b>49</b>

<b>ACTION PLAN 2000 SECTORS / MEASURES</b>	<b>Reduction Target Mt</b>	<b>TOTAL APPROVED FUNDING \$M</b>	<b>2001/02 APPROVED FUNDING \$</b>	<b>EXPENDITURES AS OF MARCH 31, 2002 \$</b>	<b>BALANCE \$</b>
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<b>KNOWLEDGE-FOUNDATION</b>					
Science	0	20	3,772,650	2,945,000	827,650
Impacts and Adaptation	0	30	4,910,000	2,247,982	2,662,018
<b>SUB-TOTAL</b>	<b>0</b>	<b>50</b>	<b>8,682,650</b>	<b>5,192,982</b>	<b>3,489,668</b>
%				<b>60</b>	<b>40</b>

<b>ABORIGINAL AND NORTHERN PROGRAM</b>					
Aboriginal and Northern Climate Change program	0	3.7	3,700,000	628,900	3,071,100
<b>SUB-TOTAL</b>		<b>3.7</b>	<b>3,700,000</b>	<b>628,900</b>	<b>3,071,100</b>
%				<b>17</b>	<b>83</b>

<b>OVERALL</b>	<b>67.2901</b>	<b>500.0</b>	<b>64856496</b>	<b>35191567</b>	<b>29664929</b>
%				54	46

### **SPECIAL AP-2000 FUNDED INITIATIVES**

<b>CORPORATE COMMUNICATIONS</b>		5	2,515,400	1,465,562	1,049,838
1% TAX FROM ALL MEASURES' TOTAL				<b>58</b>	<b>42</b>

<b>BIOCAP</b>		2.8	600,000	600000	0
Contributions from various measures				100	0.0

## REVISED MEASURES FUNDING PROFILES

ACTION PLAN 2000 SECTORS / MEASURES	Reduction Target (Mt)	2001/02 \$	2002/03 \$	2003/04 \$	2004/05 \$	2005/06 \$	TOTAL \$
<b>TRANSPORTATION</b>							
Urban Transportation Showcase Program	0.8	533,107	10,414,893	10,090,200	9,443,000	9,518,800	40,000,000
Motor Vehicle Fuel Efficiency Initiative	5.2	1,183,000	2,817,000	4,000,000	4,000,000	4,000,000	16,000,000
Canadian Transportation Fuel Cell Alliance	0.09	820,000	3,180,000	5,000,000	8,000,000	6,000,000	23,000,000
Future Fuels	0.8	348,000	788,000	721,000	574,000	569,000	3,000,000
Freight Efficiencies & Technologies	2	1,148,154	3,684,746	3,117,460	3,010,660	3,038,980	14,000,000
<b>SUB-TOTAL</b>	<b>8.89</b>	<b>4,032,261</b>	<b>20,884,639</b>	<b>22,928,660</b>	<b>25,027,660</b>	<b>23,126,780</b>	<b>96,000,000</b>
<b>ELECTRICITY</b>							
Covenants/Agreements	0	540,000	1,460,000	0	0	0	2,000,000
Government Procurement	0.235	697,100	2,252,900	5,960,000	9,090,000	12,000,000	30,000,000
Market Incentive	1.4	222,584	4,088,604	5,033,604	7,377,604	8,277,604	25,000,000
On-Site Generation	0.0001	106,000	694,000	400,000	0	0	1,200,000
Reducing Barriers To Interprov Trade and Transmission	5.4	202,000	348,000	200,000	0	0	750,000
Consumer Information	0	55,250	644,750	350,000	0	0	1,050,000
<b>SUB-TOTAL</b>	<b>7.0351</b>	<b>1,822,934</b>	<b>9,488,254</b>	<b>11,943,604</b>	<b>16,467,604</b>	<b>20,277,604</b>	<b>60,000,000</b>
<b>OIL &amp; GAS</b>							
CO <sub>2</sub> Capture & Storage	7	1,978,370	3,483,672	3,037,958	8,250,000	8,250,000	25,000,000
<b>SUB-TOTAL</b>	<b>7</b>	<b>1,978,370</b>	<b>3,483,672</b>	<b>3,037,958</b>	<b>8,250,000</b>	<b>8,250,000</b>	<b>25,000,000</b>

<b>ACTION PLAN 2000 SECTORS / MEASURES</b>	<b>Reduction Target (Mt)</b>	<b>2001/02 \$</b>	<b>2002/03 \$</b>	<b>2003/04 \$</b>	<b>2004/05 \$</b>	<b>2005/06 \$</b>	<b>TOTAL \$</b>
<b>BUILDINGS</b>							
Commercial/Institutional Buildings Retrofit Initiative	2.2	1,587,727	6,117,273	7,590,000	7,870,000	6,835,000	30,000,000
Improve Energy Efficiency of Residential Buildings	1.1	2,186,170	6,953,830	8,000,000	8,900,000	8,960,000	35,000,000
Accelerated Standards Program for Equipment and Appliances	2.8	2,324,496	6,228,504	7,149,000	7,149,000	7,149,000	30,000,000
<b>SUB-TOTAL</b>	<b>6.1</b>	<b>6,098,393</b>	<b>19,299,607</b>	<b>22,739,000</b>	<b>23,919,000</b>	<b>22,944,000</b>	<b>95,000,000</b>
<b>AGRICULTURAL</b>							
Nutrient - Livestock - Soil management	5.8	1,322,000	3,319,000	5,311,000	5,440,000	5,608,000	21,000,000
Research Model Farm	0	225,000	1,260,000	1,260,000	1,255,000	1,000,000	5,000,000
<b>SUB-TOTAL</b>	<b>5.8</b>	<b>1,547,000</b>	<b>4,579,000</b>	<b>6,571,000</b>	<b>6,695,000</b>	<b>6,608,000</b>	<b>26,000,000</b>
<b>FORESTRY</b>							
Afforestation	0.002	280,000	1,970,000	2,250,000	1,500,000	0	6,000,000
Shelterbelts	0.3	700,000	900,000	800,000	800,000	800,000	4,000,000
<b>SUB-TOTAL</b>	<b>0.302</b>	<b>980,000</b>	<b>2,870,000</b>	<b>3,050,000</b>	<b>2,300,000</b>	<b>800,000</b>	<b>10,000,000</b>
<b>MINERALS AND METALS</b>							
Supplementary Cementing Materials	0.45	51,800	388,200	220,000	220,000	220,000	1,100,000
Concrete for Roads	0.5	81,900	1,318,100	700,000	700,000	700,000	3,500,000
Studies/Monitoring for GHG Reductions Potential	0	254,100	545,900	400,000	400,000	400,000	2,000,000
Enhanced Recycling Technologies	0.7	302,900	1,057,100	680,000	680,000	680,000	3,400,000
<b>SUB-TOTAL</b>	<b>1.65</b>	<b>690,700</b>	<b>3,309,300</b>	<b>2,000,000</b>	<b>2,000,000</b>	<b>2,000,000</b>	<b>10,000,000</b>

<b>ACTION PLAN 2000 SECTORS / MEASURES</b>	<b>Reduction Target (Mt)</b>	<b>2001/02 \$</b>	<b>2002/03 \$</b>	<b>2003/04 \$</b>	<b>2004/05 \$</b>	<b>2005/06 \$</b>	<b>TOTAL \$</b>
<b>IND CROSS-CUTTING</b>							
<b>Enhancing Voluntary Platform for Ind Actionn (2.5)</b>							
Expansion of CIPEC	3	200,000	500,000	600,000	600,000	600,000	2,500,000
Improved Tracking	0	879,500	1,380,500	1,080,000	1,080,000	1,080,000	5,500,000
<b>Improved Company-level GHG Emissions Management (3.5)</b>							
Industry Benchmarking	1.2	637,737	1,522,263	1,480,000	2,180,000	2,180,000	8,000,000
Energy Efficiency Audits	0.5	549,100	850,900	1,200,000	1,200,000	1,200,000	5,000,000
Supply Chain Pilot Project	0	73,045	226,955	250,000	250,000	200,000	1,000,000
Awareness Building	1.1	91,479	908,521	500,000	500,000	500,000	2,500,000
<b>Encourage Appropriate Capital Investment (0.5)</b>							
Support for Co-generation and District Energy Systems	0	50,000	50,000	0	0	0	100,000
Industrial Buildings Incentive Program	0.01	208,411	705,589	662,000	712,000	712,000	3,000,000
Enhanced REDI	0.003	0	500,000	500,000	500,000	500,000	2,000,000
Energy Rating System	1.4	138,349	519,651	612,000	612,000	618,000	2,500,000
<b>SUB-TOTAL</b>	<b>7.213</b>	<b>2,827,621</b>	<b>7,164,379</b>	<b>6,884,000</b>	<b>7,634,000</b>	<b>7,590,000</b>	<b>32,100,000</b>
<b>FEDERAL HOUSE IN ORDER</b>							
GHG Inventory and Planning	0	1,300,000	1,700,000	1,500,000	1,500,000	1,500,000	7,500,000
Best Practices and Supporting Programs	0.3	845,000	1,175,000	1,160,000	1,160,000	1,160,000	5,500,000
<b>SUB-TOTAL</b>	<b>0.3</b>	<b>2,145,000</b>	<b>2,875,000</b>	<b>2,660,000</b>	<b>2,660,000</b>	<b>2,660,000</b>	<b>13,000,000</b>
<b>INTERNATIONAL</b>							
CDM & JI office	20	1,720,000	5,480,000	5,680,000	6,055,000	6,315,000	25,250,000
Technology	0	746,750	2,884,250	2,295,000	2,137,000	1,687,000	9,750,000
<b>SUB-TOTAL</b>	<b>20</b>	<b>2,466,750</b>	<b>8,364,250</b>	<b>7,975,000</b>	<b>8,192,000</b>	<b>8,002,000</b>	<b>35,000,000</b>

<b>ACTION PLAN 2000 SECTORS / MEASURES</b>	<b>Reduction Target (Mt)</b>	<b>2001/02 \$</b>	<b>2002/03 \$</b>	<b>2003/04 \$</b>	<b>2004/05 \$</b>	<b>2005/06 \$</b>	<b>TOTAL \$</b>
<b>MULTI SECTORAL</b>							
Baseline protection	0	274,840	375,040	350,040	350,040	350,040	1,700,000
PERRL	3	334,000	5,081,000	3,785,000	5,800,000	0	15,000,000
GHG Verification Centre	0	410,000	590,000	500,000	500,000	500,000	2,500,000
Covenants/Agreements	0	532,716	2,800,617	1,666,667	0	0	5,000,000
Technology	0	3,229,100	5,409,600	4,799,500	3,510,500	3,051,300	20,000,000
<b>SUB-TOTAL</b>	<b>3</b>	<b>4,780,656</b>	<b>14,256,257</b>	<b>11,101,207</b>	<b>10,160,540</b>	<b>3,901,340</b>	<b>44,200,000</b>
<b>KNOWLEDGE &amp; FOUNDATION</b>							
Science	0	2,945,000	6,170,100	5,564,800	5,320,100	0	20,000,000
Impacts and Adaptation	0	2,247,982	8,437,018	8,205,000	6,695,000	4,415,000	30,000,000
<b>SUB-TOTAL</b>	<b>0</b>	<b>5,192,982</b>	<b>14,607,118</b>	<b>13,769,800</b>	<b>12,015,100</b>	<b>4,415,000</b>	<b>50,000,000</b>
<b>ABORIGINAL AND NORTHERN CC PROGRAM</b>							
Aboriginal and Northern Climate Change Program		628,900	2,071,000	1,000,100	0	0	3,700,000
<b>SUB-TOTAL</b>		<b>628,900</b>	<b>2,071,000</b>	<b>1,000,100</b>	<b>0</b>	<b>0</b>	<b>3,700,000</b>
<b>TOTAL</b>	<b>67.2901</b>	<b>35,191,567</b>	<b>113,252,476</b>	<b>115,660,329</b>	<b>125,320,904</b>	<b>110,574,724</b>	<b>500000000</b>

## **ANNEX 2**

### **MEASURES SPECIFIC REPORT**

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