Industry Canada's 2012 Sustainable Development Strategy

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Industry Canada's 2012 Sustainable Development Strategy

Industry Canada's legislative responsibility for sustainable development is defined in its founding act, the *Department of Industry Act, 1995*, which mandates the Minister of Industry to "strengthen the national economy and promote sustainable development."

1. Industry Canada's Sustainable Development Vision Statement

In support of innovation and competitiveness, Industry Canada works with key partners to promote the benefits of sustainable development, and to encourage the greater adoption of sustainable technologies and practices by Canadian businesses, consumers and communities.

The Sustainable Development Vision Statement builds on Industry Canada's mandate and acknowledges the key role that Industry Canada has in fostering innovation and competitiveness, and promoting awareness of the economic benefits of sustainable development practices for businesses, consumers and communities.

Industry Canada will strive to be guided by this new vision statement in policy and program development and implementation. As Canadian business, consumers and communities adopt sustainable technologies and practices, there is likely to be positive benefits for the environmental goals of the Federal Sustainable Development Strategy—air, water and nature.

2. Industry Canada's Sustainable Development Practices

The remainder of Industry Canada's 2012 Sustainable Development Strategy presents information on how the department integrates sustainable development considerations into its decision-making process and in performance reporting. Information is included on Industry Canada's contribution to Themes I to IV of the 2010 Federal Sustainable Development Strategy, particularly addressing climate change and air quality and Greening Government Operations.

There is also a link to a list of <u>complementary activities</u> at Industry Canada related to sustainable development.

Sustainable Development and Decision-Making

Sustainable development considerations are integrated into Industry Canada's decision making process in four ways:

- i. through a dedicated sustainable development management system;
- ii. through sustainable development performance reporting;
- iii. through its participation in interdepartmental committees; and

iv. through the application of multi-criteria decision-making tools, including Strategic Environmental Assessment.

i. Sustainable Development Management System

The Assistant Deputy Minister of the Strategic Policy Sector is the Sustainable Development Champion for Industry Canada. In this role, the Assistant Deputy Minister leads the planning and implementation of the department's contribution to the Federal Sustainable Development Strategy and to Industry Canada's Sustainable Development Strategy.

Responsibility for sustainable development issues is also reflected in the Performance Management Agreements of the Director General of the Strategic Policy Branch and the Director of Policy Coordination and Regulatory Affairs at Industry Canada.

In support of the Sustainable Development Champion, the Strategic Policy Branch works closely with other parts of Industry Canada to integrate sustainable development considerations into policy and program development and implementation. This includes leading regular meetings of intradepartmental working groups on sustainable development policy and operational issues, and advising the Assistant Deputy Minister of Strategic Policy Sector, as needed.

Also, Industry Sector hosts a regular bi-weekly Coordination Meeting on Environmental Policy and Regulatory Developments and provides updates to the Assistant Deputy Minister of Industry Sector, as needed.

In keeping with the commitments made in <u>Industry Canada's 2011 Sustainable</u> <u>Development Strategy</u>, work is underway to strengthen the department's Sustainable Development Management System, for example, by integrating Industry Canada's Greening Government Operations leads into the system. This would ensure better alignment with the 2010 Federal Sustainable Development Strategy.

ii. Sustainable Development Performance Reporting

As required in the Federal Sustainable Development Strategy, Industry Canada will report progress annually on the implementation of its commitments under the Federal and Departmental Sustainable Development Strategies through the Departmental Performance Report.

iii. Participation in Interdepartmental Committees

Officials at Industry Canada are members of a number of interdepartmental working groups related to sustainable development, including on the Federal Sustainable Development Strategy, Strategic Environmental Assessment, life cycle assessment, green growth agenda, corporate social responsibility, and planning for the June 2012 United Nations Conference on Sustainable Development.

Officials at Industry Canada are also members of ad hoc, sector-focussed interdepartmental working groups related to consultations and regulatory development covering greenhouse gas emissions and Base Level Industrial Emissions Requirements.

<u>iv. Multi-criteria Decision-Making Tools, including Strategic Environmental</u> Assessment

As noted in Industry Canada's 2011 Sustainable Development Strategy, the department uses two main Cabinet Directives to inform its decision-making process with regards to environmental and sustainable development considerations. These tools will continue to be used in 2012:

- Cabinet Directive on Streamlining Regulation (2007); and
- <u>Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals</u> (2010).

Consistent with the *Cabinet Directive on Streamlining Regulation* (2007), all departments must perform a <u>cost-benefit analysis</u> of their regulatory proposals with a medium or high impact. The Directive also requires all departments to show that their recommended regulatory action maximizes the net economic, environmental, and social benefits to Canadians, business, and government over time more than any other type of regulatory or non-regulatory option.

A cost-benefit analysis allows for the comparison of all quantifiable, long-term economic, environmental and social impacts of a given regulatory proposal. By conducting cost-benefit analyses for all of its regulatory proposals, Industry Canada ensures that its recommended regulatory actions integrate environmental and sustainability considerations.

The Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals (2010) requires all departments to align their Strategic Environmental Assessments with the goals of the 2010 Federal Sustainable Development Strategy.

Industry Canada has begun work on reviewing its Strategic Environmental Assessment, in keeping with the commitments made in the 2011 Sustainable Development Strategy. This work will be reported in 2013.

In 2012, Industry Canada will incorporate best practices when reporting information on Strategic Environmental Assessments and linking results to Federal Sustainable Development Strategy to ensure that decision-making on issues related to the environment is transparent and in keeping with the 2010 Cabinet Directive. In particular, Industry Canada will publish in the Departmental Performance Report the number of preliminary and detailed Strategic Environmental Assessments conducted.

For more detail on Industry Canada's Strategic Environmental Assessment, please see the department's <u>Strategic Environmental Assessment website</u>.

3. Industry Canada's Contribution to Themes I to III of the Federal Sustainable Development Strategy

Under the Federal Sustainable Development Strategy, Industry Canada is responsible for seven implementation strategies that contribute to Theme I (<u>Addressing Climate Change and Air Quality</u>).

With respect to Theme II (<u>Maintaining Water Quality and Availability</u>) and Theme III (<u>Protecting Nature</u>) of the Federal Strategy, Industry Canada's ongoing work to promote the benefits of sustainable development, and to encourage the greater adoption of sustainable technologies and practices by Canadian businesses, consumers and communities has positive impacts on water quality and availability, and protecting nature.

The following lists seven implementation strategies that Industry Canada is responsible for, as they appear in Annex 1 of the 2010 Federal Strategy:

- Continue to provide science policy advice and policy frameworks, and work with portfolio agencies to fulfill commitments made in Canada's Science & Technology Strategy in support of the environmental science and technologies, natural resources and energy, and information and communications technologies research priorities. (Implementation Strategy 1.1.21)
- Continue to work with industry stakeholders to encourage and promote the adoption and adaptation of new technologies such as information and communications technologies, biotechnology and clean energy technologies. (Implementation Strategy 1.1.22)
- Continue to implement the Strategic Aerospace and Defence Initiative in support of strategic, research and development projects that contribute to new aerospace and defence technologies, and which may reduce greenhouse gas emissions and produce new energy efficiencies. (Implementation Strategy 1.1.23)
- Continue to promote the development and use of corporate social responsibility management tools by industry and the use of corporate social responsibility standards in the Canadian marketplace in support of environmental sustainability. (Implementation Strategy 1.1.24)
- Continue to collaborate with partners to enhance Canada's competitive advantage in hydrogen and fuel cell technology development and commercialization. (Implementation Strategy 1.1.36 / 2.1.24)
- Asia-Pacific Partnership: Manage Canadian Asia Pacific Partnership funded projects that promote the development, diffusion, and deployment of clean technologies (Implementation Strategy 1.1.50) (Completed)
- Continue to implement the Automotive Innovation Fund through to 2013 in support of strategic, large-scale research and development projects leading to innovative, greener, more fuel-efficient vehicles. (Implementation Strategy 2.1.26)

For a detailed description of these implementation strategies and how they contribute to the Federal Sustainable Development Strategy goals and targets, please see tables below.

<u>Description of Implementation Strategies Included in the</u> <u>Federal Sustainable Development Strategy</u>

Implementation Strategy

1.1.21 Continue to provide science policy advice and policy frameworks, and work with portfolio agencies to fulfill commitments made in Canada's Science & Technology Strategy in support of the environmental science and technologies, natural resources and energy, and information and communications technologies research priorities.

Link to FSDS Goals and Targets

Theme I Addressing Climate Change and Air Quality

Goal 1 Climate Change: Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change

Target 1.1 Climate Change Mitigation: Relative to 2005 emissions levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

Link to Industry Canada's PAA

Strategic Outcome 2.1 Science, Technology and Innovation Capacity

Program Activity 2.1.1 Government Science and Technology Policy Agenda

Description of the Implementation Strategy

IC is working closely with both portfolio agencies and Science Based Departments and Agencies, to further implementation of the federal S&T Strategy.

In 2008, the Minister of Industry received recommendations from the Science, Technology and Innovation council's (STIC) on sub-priorities of strategic importance to Canada. Related to sustainable development, under the priority of environmental science and technologies, STIC identified the following sub-priorities: water (health, energy, security); cleaner methods of extracting, processing and using hydrocarbon fuels, including reduced consumption of these fuels. Industry Portfolio agencies and other departments and agencies will apply these priorities to their research agenda's, as appropriate.

In June 2009, Minister Goodyear released an S&T Strategy Progress Report, noting that implementation was progressing well. IC continues to work through the ADM Committee on S&T, the whole-of-government co-ordinating body for S&T Strategy implementation, to provide policy advice and frameworks in support of the S&T Strategy.

Relationship with FSDS Target(s)

By identifying four priority areas in the S&T Strategy, this should encourage research in sustainable development related fields, notably in the sub-priority areas of clean energy and reduced fuel consumption. It is important to note that the S&T programs and activities in support of sustainable development, such as reducing greenhouse gas emissions, are conducted by other federal Science Based Departments and Agencies (e.g. Natural Resources Canada and Environment Canada).

Non-Financial Performance Expectations

IC encourages departments and agencies to go beyond the S&T Strategy commitments in order to "deepen" implementation, so that the spirit of the S&T Strategy can take hold, in this context, in the priority areas of environmental science and technologies and natural resources and energy.

Implementation Strategy

1.1.22 Continue to work with industry stakeholders to encourage and promote the adoption and adaptation of new technologies such as aerospace and information and communications technologies.

Link to FSDS Goals and Targets

Theme I Addressing Climate Change and Air Quality

Goal 1 Climate Change: Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change

Target 1.1 Climate Change Mitigation: Relative to 2005 emissions levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

Link to Industry Canada's PAA

Strategic Outcome 2.2 Science and Technology, Knowledge, and Innovation are Effective Drivers of a Strong Canadian Economy

Program Activity 2.2.3 Commercialization and R&D Capacity in Targeted Canadian Industries

Program Sub Activity 2.3.1 Industry-Specific Policy and Analysis for Innovation and Research and Development Investment

Description of the Implementation Strategy

Industry Canada is involved in the development of a Canadian Aerospace Environmental Technology Roadmap (CAETRM). The objective of CAETRM is to identify critical, enabling technologies and infrastructure that the Canadian aerospace industry will need in order to meet environmental and sustainability requirements over the next ten to fifteen years. The CAETRM was conceived to formulate a Canadian Strategy to identify the

technology drivers and trends, and address the need for a coordinated Canadian industry response to changes in the global aerospace landscape. In addition, the Green Aviation Research and Development Network (GARDN) fosters development of technologies that will reduce aviation's environmental footprint in a broad range of areas from noise and emission to materials and manufacturing processes. The objective of GARDN is to provide collaborative opportunities for the OEMs, SMEs, and other key stakeholders in the areas of environmental technologies. Activities related to GARDN are in support of the competitive excellence of Canadian aerospace products and services, the economic success of the member companies and the development and training of highly qualified personnel in the aerospace environmental field.

Work with industry through Precarn and CANARIE to support the development and application of intelligent systems, sensors, and advanced networks which optimize energy use and monitor and reduce pollution.

Specific project for FY 2010-2011 for Precarn under their T-Gap Program include:

- Smart Compressed Natural Gas (CNG) Refuelling Station
- Wireless Intelligent Building Sensor Network
- Wireless Pipeline Inspection Robot to Detect Leakages
- Infrastructure Operations Optimization for Oil Sands

CANARIE is the sponsor of the Green Star Network, which is built around three components. Industry Canada's Communications Research Centre (CRC) is a major partner in the CANARIE Greenstar Network, and actively participates in research that benefits carbon emission reduction.

- Networking and computational infrastructure at geographically distributed facilities via the CANARIE network;
- Middleware to provide cloud services to applications and users;
- A "Carbon Protocol" for the ICT industry, providing a quantified approach to CO2 emission reductions, based on the ISO14064 family of standards.

Relationship with FSDS Target(s)

CAETRM and GARDN are intended to assist the Canadian aviation industry in reducing its environmental footprint and meeting environmental and sustainability requirements (in operation and manufacturing) through environmental technologies, infrastructure development, and collaboration across the industry.

The development and application of intelligent systems and networks will reduce carbon consumption and GHGs. In manufacturing and resource processing, the adoption of an intelligent system which combines a network of energy or pollution sensors with automated infrastructure management software can very precisely adjust energy and resource requirements to optimize output, and avoid wastage, many times a second, if required. This can ensure a reduction in energy requirements, lower carbon emissions, and a lower cost per unit of output.

For intelligent building systems, heating, ventilation and air conditioning (HVAC) systems can be linked through ICT networks to advanced environmental monitoring sensors to minimize energy consumption and optimize the contribution of passive solar heating over a 24 hour period.

CANARIE'S Green Star network (GSN) has the goal of creating technology, protocols, and standards for reducing the carbon footprint of Information and Communication Technology (ICT). ICT is responsible for 2% of global CO2 emissions, due to high consumption of electricity produced from coal.

Non-Financial Performance Expectations

In fiscal year 2012–2013, Industry Canada will work to develop appropriate performance expectations for this implementation strategy. The quality and influence of Industry Sector's industry and supply chain analysis, and other industrial intelligence, has an indirect impact on the achievement of the FSDS goals cited.

Industry Canada provides an oversight for function for both Precarn and CANARIE which is outlined in the funding agreements between Industry Canada and Treasury Board. Industry Canada does not directly choose or manage projects, but rather ensures that that the provisions of the funding agreement are adhered to throughout the period of the agreement.

Implementation Strategy

1.1.23 Continue to implement the Strategic Aerospace and Defence Initiative in support of strategic, research and development projects that contribute to new A&D technologies, and which may reduce greenhouse gas emissions and produce new energy efficiencies.

Link to FSDS Goals and Targets

Theme I Addressing Climate Change and Air Quality

Goal 1 Climate Change: Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change

Target 1.1 Climate Change Mitigation: Relative to 2005 emissions levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

Link to Industry Canada's PAA

Strategic Outcome 2. Advancements in science and technology, knowledge, and innovation strengthen the Canadian economy

Program Activity 2.3 Research and Development Financing

Program Sub Activity 2.3.3 Strategic Aerospace and Defence Initiative

Description of the Implementation Strategy

The Strategic Aerospace and Defence Initiative (SADI) has three objectives, namely: to

encourage strategic R&D that will result in innovation and excellence in new products and services; enhance the competitiveness of Canadian aerospace and defence companies; and, foster collaboration between research institutes, universities, colleges, and the private sector.

Although the environment and sustainable development are not explicit objectives of SADI, results from some projects may reduce greenhouse gas emissions and produce new energy efficiencies.

Relationship with FSDS Target(s)

SADI's clients have projects that may result in environmental benefits. For example: CAE Inc. is developing new civil aviation simulation technologies, which will reduce air pollution and conserve fuel; Sputtek Inc. is developing a new protective coating that will use less lubricant and less energy and improve wear and corrosion-resistance; and Pratt & Whitney Canada Corp. are continuing their efforts to make aircraft engines quieter and more fuel efficient.

Non-Financial Performance Expectations

SADI's ultimate outcome is to contribute to the achievement of broader technological, economic, environmental and social benefits for Canadians.

Implementation Strategy

1.1.24 Continue to promote the development and use of CSR management tools by industry and the use of CSR performance and reporting standards in the Canadian marketplace in support of environmental sustainability.

Link to FSDS Goals and Targets

Theme I Addressing Climate Change and Air Quality

Goal 1 Climate Change: Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change

Target 1.1 Climate Change Mitigation: Relative to 2005 emissions levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

Link to Industry Canada's PAA

Strategic Outcome Program Activity(ies) Supporting All Strategic Outcomes

Program Activity 2.4 Internal Services

Description of the Implementation Strategy

Under this implementation strategy, Industry Canada will:

- Continue to develop information, guidance and management tools for business to help them integrate CSR practices into their operations in support of their

- Continue to post resources on the IC CSR website, building on existing tools such as the SME Sustainability Road Map and the Sustainability Tool Kit for Business.
- Undertake strategic outreach activities to enhance effectiveness and reach of these tools.
- Continue to promote CSR performance and reporting standards and practices relevant to Canadian business.
- Commission at least one survey of Canadian companies' CSR disclosure practices over the three year period of the Departmental SD Strategy.

Relationship with FSDS Target(s)

Increased private sector implementation of CSR practices will help reduce GHG emissions by the private sector. CSR practices which can help reduce GHG emissions include: eco-efficiency which leads to reduced energy consumption; rationalization of fleets towards more fuel efficient transportation; design for environment/sustainability (DfE, DfS), life cycle analysis (LCA), sustainable/lean manufacturing practices and extended producer responsibility (EPR) help reduce resource inputs into the production of products, thus reducing GHG emissions as large amounts of resources are not required to be shipped.

Non-Financial Performance Expectations

In fiscal year 2011-12, Industry Canada will work to develop appropriate (SMART, outcomes-based) performance expectations for this implementation strategy.

Implementation Strategy

1.1.36 / 2.1.24 Continue to collaborate with partners to enhance Canada's competitive advantage in hydrogen and fuel cell technology development and commercialization.

Link to FSDS Goals and Targets

Theme I Addressing Climate Change and Air Quality

Goal 1 Climate Change: Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change

Target 1.1 Climate Change Mitigation: Relative to 2005 emissions levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

Goal 2 Air Pollution: Minimize the threats to air quality so that the air Canadians breathe is clean and supports healthy ecosystems

Target 2.1 Air Pollutants: Reduce air pollutants in order to maintain or improve air quality across the country and achieve the emission targets which are currently under development in consultations with provinces and stakeholders.

Link to Industry Canada's PAA

Strategic Outcome 2.2 Science and Technology, Knowledge, and Innovation are Effective Drivers of a Strong Canadian Economy

Program Activity 2.2.1 Canada's Research and Innovation Capacity

Program Sub Activity 2.3.1 Industry-Specific Policy and Analysis for Innovation and Research and Development Investment

Description of the Implementation Strategy

Work on the clean energy technologies sector focuses on fostering development of energy sub-sectors where IC has an influence and where Canada has an emerging competitive advantage, such as supplier industries for fuel cells, wind, solar, and ocean energy. To this end, Industry Canada provides expert analysis, advice, and facilitation to raise awareness of Canadian technology and service capabilities in emerging energy sectors; promotes global supply chain opportunities; and produces reasoned policy recommendations.

Recent activities related to this implementation strategy include the creation of supply chain studies and sector profiles for wind and fuel cell industries, participation in the International Partnership for Hydrogen and Fuel Cells in the Economy (IPHE), and cochairing of the federal Hydrogen and Fuel Cell Interdepartmental Committee. IC also plans to collaborate on the development of a marine energy technology roadmap. IC will continue to examine the current business environment for Canadian firms, ensuring that business issues are understood in policy making and leveraging available resources across the federal government to strengthen Canada's strategic advantages

Relationship with FSDS Target(s)

Enhancing the development and commercialization of clean energy technologies can accelerate the deployment of lower-emitting energy generation. Deployment of energy generation technologies such as wind and energy carriers such as hydrogen fuel cells will help to reduce emissions of greenhouse gases. Commercialization of hydrogen fuel cells could have utility in moving toward this goal, as they are a versatile technology with a variety of applications.

Non-Financial Performance Expectations

In fiscal year 2011–2012, Industry Canada will work to develop appropriate performance expectations for this implementation strategy. The quality and influence of Industry Sector's industry and supply chain analysis, and other industrial intelligence, has an indirect impact on the achievement of the F-SDS goals cited.

Implementation Strategy

1.1.50 Asia-Pacific Partnership: Manage Canadian Asia Pacific Partnership-funded projects that promote the development, diffusion and deployment of clean technologies (with Environment Canada and Natural Resources Canada).

Link to FSDS Goals and Targets

Theme I Addressing Climate Change and Air Quality

Goal 1 Climate Change: Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change

Target 1.1 Climate Change Mitigation: Relative to 2005 emissions levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

Link to Industry Canada's PAA

Strategic Outcome N.A.

Program Activity N.A.

Program Sub Activity N.A.

Description of the Implementation Strategy

Industry Canada participated in the work of the APP Task Forces and facilitated the involvement of the private sector. In this context, consultations with key domestic industrial sectors were held.

The APP initiative will not continue after 2010–2011.

Relationship with FSDS Target(s)

N/A – initiative will not continue after 2010–2011.

Non-Financial Performance Expectations

N/A – initiative will not continue after 2010–2011.

Implementation Strategy

2.1.26 Continue to implement the Automotive Innovation Fund through to 2013 in support of strategic, large-scale research and development projects leading to innovative, greener, more fuel-efficient vehicles.

Link to FSDS Goals and Targets

Theme I Addressing Climate Change and Air Quality

Goal 2 Air Pollution: Minimize the threats to air quality so that the air Canadians breathe is clean and supports healthy ecosystems

Target 2.1 Air Pollutants: Reduce air pollutants in order to maintain or improve air quality across the country and achieve the emission targets which are currently under development in consultations with provinces and stakeholders.

Link to Industry Canada's PAA

Strategic Outcome 2.2 Science and Technology, Knowledge, and Innovation are Effective Drivers of a Strong Canadian Economy

Program Activity 2.2.3 Commercialization and R&D Capacity in Targeted Canadian Industries

Program Sub Activity 2.2.3.X to be identified by SPS

Description of the Implementation Strategy

Budget 2008 announced that the government would provide \$250 million over five years to support strategic, large-scale R&D projects in the automotive sector, in developing innovative, greener and more fuel-efficient vehicles.

Under the Automotive Innovation Fund (AIF), Industry Canada considers funding proposals that provide for private sector investment in Canada of more than \$75 million over five years for vehicle or powertrain assembly operations associated with significant automotive innovation and R&D initiatives. The objectives of the AIF are as follows:

- build automotive research and development capacity in Canada and secure knowledge-based jobs;
- enhance the government's science and technology (S&T) and environmental agendas;
- support the development and/or implementation of innovative, fuel efficient technologies or processes;
- promote long-term economic benefit to Canada including significant job creation/retention; and
- leverage private sector investments to foster Canadian competitiveness.

Each eligible project considered for funding is subjected to a comprehensive due diligence process that may involve external experts that will examine the feasibility of the proposed eligible project. All proposals are assessed in the context of their relevance to the objectives of the AIF and must provide environmental, technological, and economic benefits to Canada.

Reporting requirements are outlined in the AIF's Results-based Management and Accountability Framework and Risk Based Audit Framework (RMAF-RBAF). The RMAF and RBAF provide a strategy for monitoring and evaluating project performance, and a risk-based approach to monitor and manage risks associated with the project.

Relationship with FSDS Target(s)

Eligible activities supported under the AIF are those typically associated with major

automotive innovation and R&D initiatives to develop and build greener, more fuel-efficient vehicles, including:

- new product development (e.g., advanced emissions technologies, energyefficient engines and transmissions, advanced materials, including engineered plastics, and lightweight components and materials);
- leading-edge engineering and design, and prototype development;
- advanced product testing that ensures cleaner, more efficient automotive performance, and reduced greenhouse gases;
- development of new production methods and process technologies, including advanced flexible manufacturing techniques;
- new or expanded facilities to produce leading-edge and more energy efficient vehicles and powertrains;
- substantive investments in new flexible manufacturing processes; and
- introduction of other new transformative production technologies to substantially increase productivity and efficiency (e.g., robotics and advanced IT systems).

Non-Financial Performance Expectations

As a result of the projects (i.e. once successfully completed), it is anticipated that innovative, greener, and more fuel-efficient vehicles and/or powertrains will be assembled in Canada, and/or more innovative, fuel efficient technologies or processes will be implemented in the automotive sector.

Projects should result in reduced environmental impacts of the manufacturing and assembly of vehicle parts.

Projects should also increase the automotive R&D capacity in Canada and thus secure knowledge-based jobs in that sector.

4. Industry Canada's Complementary Sustainable Development Activities

In keeping with the commitments made in the 2011 Sustainable Development Strategy, a list of <u>complementary sustainable development activities</u> has been prepared for Industry Canada.

The list is structured according to the applicable Strategic Outcome and Program Activity, which is identical to the <u>Report on Plans and Priorities</u> and the <u>Departmental Performance Report</u>. The broad scope of the list demonstrates that many sectors in Industry Canada continue to encourage and implement sustainable development activities.

In 2012, Industry Canada commits to update this list.

5. Industry Canada's Contribution to Theme IV of the Federal Sustainable Development Strategy

As a participant in the Federal Sustainable Development Strategy, Industry Canada contributes to *Theme IV: Shrinking the Environmental Footprint: Beginning with Government*, through its internal services program activity. Specifically, the Department contributes to:

- green procurement targets (including targets related to training, performance evaluations, and management processes and controls);
- recycling all surplus electronic and electrical equipment in an environmentally sound manner;
- reducing internal paper consumption per employee by 20 percent from 2006–07 levels:
- achieving an 8:1 ratio of employees to printing units;
- adopting a guide for greening meetings and events;
- reducing greenhouse gas emissions from fleet vehicles by 17 percent from 2005–06 levels by 2020; and,
- achieving a high environmental performance of buildings.

Details on Industry Canada's commitments and targets towards Greening Government Operations are provided through the supplementary information tables itemized in the Report on Plans and Priorities. These tables, presented below, are also available on the Treasury Board of Canada Secretariat website.

Green Building Targets

8.1 As of April 1, 2012, and pursuant to departmental strategic frameworks, new construction, build-to-lease and major renovation projects, will achieve an industry-recognized level of high environmental performance. ¹

Performance Measure	RPP	DPR
Target Status		
Number of completed new construction, build-to-lease and major renovation projects in the given fiscal year, as per departmental strategic framework	N/A	
Number of completed new construction, build-to-lease and major renovation projects that have achieved an industry-recognized level of high environmental performance in the given fiscal year, as per departmental strategic framework.	N/A	
Existence of strategic framework	Expected completion March 2012	

Strategies/Comments

- 1. Industry Canada is developing and will adopt a strategic framework for this target by April 1, 2012. The strategic framework will address the minimum level of environmental performance, appropriate thresholds (dollar value or floor area) and applicable building types.
- 2. Industry Canada will be reporting on this target in the 2012–13 Departmental Performance Report (DPR).

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¹ This would be demonstrated by achieving LEED-NC Silver, Green Globes Design 3 Globes or equivalent

8.2 As of April 1, 2012, and pursuant to departmental strategic frameworks, existing Crown buildings over 1000m² will be assessed for environmental performance using an industry-recognized assessment tool.²

Performance Measure		RPP	DPR
Target Status			
Number of buildings over 1000m², as per departs strategic framework	mental	N/A	
D 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	FY 2011– 12	N/A	
Percentage of buildings over 1000m ² that have been assessed using an industry-recognized assessment tool, as per departmental strategic framework	FY 2012– 13	N/A	
	FY 2013– 14	N/A	
Existence of strategic framework		Expected completion March 2012	

- 1. Industry Canada is developing and will adopt a strategic framework for this target by April 1, 2012. The strategic framework will address the minimum level of environmental performance, appropriate thresholds (dollar value or floor area) and applicable building types.
- 2. Industry Canada will be reporting on this target in the 2012–13 DPR.

² Assessment tools include BOMA BESt, Green Globes or equivalent

8.3 As of April 1, 2012, and pursuant to departmental strategic frameworks, new lease or lease renewal projects over 1000m², where the Crown is the major lessee, will be assessed for environmental performance using an industry-recognized assessment tool.³

Performance Measure	RPP	DPR
Target Status		
Number of completed lease and lease renewal projects over $1000 \mathrm{m}^2$ in the given fiscal year, as per departmental strategic framework.	N/A	
Number of completed lease and lease renewal projects over $1000 \mathrm{m}^2$ that were assessed using an industry-recognized assessment tool in the given fiscal year, as per departmental strategic framework.	N/A	
Existence of strategic framework.	Expected completion March 2012	

Strategies/Comments

- 1. Industry Canada is developing and will adopt a strategic framework for this target by April 1, 2012. The strategic framework will address the minimum level of environmental performance, appropriate thresholds (dollar value or floor area) and applicable building types.
- 2. Industry Canada will be reporting on this target in the 2012–13 DPR.

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³ Assessment tools include BOMA BESt, an appropriately tailored BOMA International Green Lease Standard or equivalent

8.4 As of April 1, 2012, and pursuant to departmental strategic frameworks, fit-up and refit projects will achieve an industry-recognized level of high environmental performance.⁴

Performance Measure	RPP	DPR
Target Status		
Number of completed fit-up and refit projects in the given fiscal year, as per departmental strategic framework.	N/A	
Number of completed fit-up and refit projects that have achieved an industry-recognized level of high environmental performance in the given fiscal year, as per departmental strategic framework.	N/A	
Existence of strategic framework	Expected completion March 2012	

Strategies/Comments

- 1. Industry Canada is developing and will adopt a strategic framework for this target by April 1, 2012. The strategic framework will address the minimum level of environmental performance, appropriate thresholds (dollar value or floor area) and applicable building types.
- 2. Industry Canada will be reporting on this target in the 2012–13 DPR.

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⁴ This would be demonstrated by achieving LEED-CI Silver, Green Globes Fit-Up 3 Globes or equivalent

Greenhouse Gas Emissions Target

8.5 The federal government will take action now to reduce levels of greenhouse gas (GHG) emissions from its operations to match the national target of 17% below 2005 by 2020.

Performance Measure		RPP	DPR
Target Status			
Departmental GHG reduction target: Percentage of absolute reduction in GHG emissions by fiscal year 2020–21, relative to 2005–06		17%	
Departmental GHG emissions in 2005–06, in kilo equivalent	otonnes of CO ₂	1.911	
	2011–12	1.781	
	2012–13	1.759	
	2013–14	1.737	
	2014–15	1.716	
Departmental GHG emissions in the given fiscal	2015–16	1.694	
year, in kilotonnes of CO ₂ equivalent	2016–17	1.672	
	2017–18	1.651	
	2018–19	1.629	
	2019–20	1.607	
	2020–21	1.586	
Percent change in departmental GHG emissions	2011–12	- 6.80%	
	2012–13	- 7.93%	
	2013–14	- 9.07%	
	2014–15	- 10.20%	
	2015–16	- 11.33%	
from 2005–06 to the end of the given fiscal year	2016–17	- 12.47%	
	2017–18	- 13.60%	
	2018–19	- 14.73%	
	2019–20	- 15.87%	
	2020–21	- 17.00%	
Existence of an implementation plan to reduce G	HG emissions.	See comments below	

8.5 The federal government will take action now to reduce levels of greenhouse gas (GHG) emissions from its operations to match the national target of 17% below 2005 by 2020.

Performance Measure	RPP	DPR

- 1. Source of targeted GHG emissions: Fleet only (on-road vehicles).
- 2. To match the government-wide GHG reduction target of 17% by 2020–21, the Department's GHG fleet emissions targets were calculated using a linear model.
- 3. Industry Canada's GHG emissions reduction strategy takes technology advancements into account and will capitalize on the use of Public Works and Government Services Canada's green standing offers for vehicle purchases and internal communiqués for imparting information about the various tools to improve fleet efficiency and reduce emissions (e.g. anti-idling campaign).

Surplus Electronic and Electrical Equipment Target

8.6 By March 31, 2014, each department will reuse or recycle all surplus electronic and electrical equipment (EEE) in an environmentally sound and secure manner.

Performance Measure	Performance Measure		DPR
Target Status			
<u> </u>		Completion April 2011	
Total number of departmental locations with fully	2011–12	33%	
implemented EEE disposal plan, expressed as a percentage of all locations, by the end of the given	2012–13	66%	
fiscal year	2013–14	100%	

- 1. Definition of location: Six regions in total
- 2. Industry Canada's implementation plan will cater to all regions. In the National Capital Region, the reuse/recycle strategy for surplus EEE is already in the process of being fully implemented.
- 3. The implementation plan for the regions is based on the approach proposed by the Office of Greening Government Operations, Public Works and Government Services Canada, for target 8.6 in the Federal Sustainable Development Strategy Guideline and meets the Federal Sustainable Development Strategy's mandatory implementation strategy requirements for this target.

Printing Unit Reduction Target

8.7 By March 31, 2013, each department will achieve an average 8:1 ratio of office employees to printing units, where building occupancy levels, security considerations and space configuration allow.

Performance Measure		RPP	DPR
Target Status			
Ratio of departmental office employees to printing units in 201 where building occupancy levels, security considerations and sconfiguration allow		2:1	
	2011– 12	5:1	
Ratio of departmental office employees to printing units at the end of the given fiscal year, where building occupancy levels, security considerations and space configuration allow		8:1	
	2013– 14	8:1	

- 1. Definition of printing unit: Scanner, photocopier, fax, desktop printer, networked printer, multifunctional device
- 2. Scope: While some buildings may have a smaller ratio due to building occupancy or security considerations, on the whole, the Department will meet the target ratio.
- 3. Method for determining the number of printing units: In the National Capital Region, project consultants collected data by way of a floor-by-floor count of devices. Data from the regions were provided by the respective regional offices.
- 4. Method for determining the number of office employees: Number of employees obtained from Chief Information Office (CIO) Monthly Employee Report
- 5. Implementation strategies:
 - 1. Approach is two-pronged: soft target of 5:1 in 2011–12 and 8:1 in 2012–13. Most sectors have agreed to go to 8:1 in the first year.
 - 2. All devices will be networked.
 - 3. Use a single supplier / price-per-page model.
 - 4. CIO is target lead.

Paper Consumption Target

8.8 By March 31, 2014, each department will reduce internal paper consumption per office employee by 20%. Each department will establish a baseline between 2005–06 and 2011–12, and applicable scope.

Performance Measure		RPP	DPR
Target Status			
Number of sheets of internal office paper purchased or consumed per office employee in the baseline year selected, as per departmental scope.		10,261 Baseline year— 2009–10	
Cumulative reduction (or increase) in paper	2011–12	N/A	
consumption, expressed as a percentage, relative to 2012	2012–13	5%	
baseline year selected.		15%	

Strategies/Comments

- 1. Scope of project applicable to all Industry Canada employees, including those of the Canadian Intellectual Property Office.
- 2. Baseline paper consumption was determined from 2009–10 standing offer purchases.
- 3. Office employee numbers are per the Corporate Financial Reporting System and the Salary Resource Management System.
- 4. All employees reported on in this RPP will be subject to the target.

Green Meetings Target

8.9 By March 31, 2013, each department will adopt a guide for greening meetings.				
Performance Measure	RPP	DPR		
Target Status				
Presence of Green meeting guide.	Expected adoption March 2012			

- 1. The guide is in development and will be adopted by March 31, 2013.
- 2. The expected result is for departmental meetings to generate minimal environmental footprint and utilize minimum quantity of resources.
- 3. Key components of the Green Meetings Guide include suggestions on how to reduce the use of paper, transportation, procurement and accommodation, right from the planning stages of a meeting.

Green Procurement Targets

8.10 As of April 1, 2011, each department will establish at least three SMART green procurement targets to reduce its impact on the environment.

Commodity: Printers and multifunctional devices

Target: By March 2014, 95% of printers and multifunctional devices purchased by the Department will be environmentally preferred products.

Performance Measure	RPP	DPR
Target Status		
Number of environmentally preferred printers and multifunctional devices purchased, relative to the total number of printers and multifunctional devices purchased by the Department	N/A	
Progress against measure in 2011–12.	80%	
Progress against measure in 2012–13	90%	
Progress against measure in 2013–14	95%	

- 1. All equipment will be Energy Star compliant over nine technical categories.
- 2. Collaboration of multiple stakeholders is ongoing.
- 3. This self-selected target is SMART:
 - o Specific: Achievement level of 95%
 - Measurable: information available from the Xerox Device Manager software that will house information on all devices installed across the country
 - o Achievable: Project endorsed by senior management
 - o Relevant: Estimated dollar value of environmentally preferred equipment purchased is \$12.0 million over five years
 - o Time-bound: Date established for target implementation and completion

Commodity: Furniture

By March 2014, 90% of furniture purchases made by the Department will be environmentally preferred products.

Performance Measure	RPP	DPR
Target Status		
Dollar value of environmentally preferred furniture purchases, relative to the total value of all furniture purchases (baseline year: 2009–10)	75%	
Progress against measure in 2011–12	80%	
Progress against measure in 2012–13	85%	
Progress against measure in 2013–14	90%	

- 1. Data analysis will permit monitoring and reporting of furniture purchases.
- 2. This target will require collaboration among functional specialists, namely the Facilities Branch at headquarters and the departmental regions.
- 3. This self-selected target is SMART:
 - Specific: Achievement level of 90%
 - o Measurable: Information available from the departmental Integrated Financial Management System (IFMS).
 - o Achievable: With collaboration of functional specialists
 - o Relevant: Furniture purchases are a significant expenditure and represent an area for increased environmental benefit. Value of furniture purchased as at time of establishing target is \$3.8 million.
 - o Time-bound: Date established for target implementation and completion

Commodity: Vehicles

By March 31, 2014, 30% of Industry Canada's executive and light duty class vehicles will be environmental leadership vehicles.

Performance Measure	RPP	DPR
Target Status		
Number of environmental leadership vehicles owned by Industry Canada, relative to its total number of vehicles owned (executive and light duty class only)	N/A	
Progress against measure in 2011–12	22%	
Progress against measure in 2012–13	26%	
Progress against measure in 2013–14	30%	

- 1. Environmental leadership vehicles include hybrid vehicles and alternative fuel vehicles
- 2. Industry Canada's Vehicle Acquisition Plan will be reviewed centrally every year. Internal communiqués will be sent to the regions to reinforce the importance of identifying opportunities to replace the existing fleet with environmental leadership vehicles.
- 3. Data on vehicle purchases will be collected and reviewed on a continuous basis to monitor the Department's progress against the set target. The departmental Integrated Financial Management System (IFMS) and the Fleet Management Information System provided the by federal fleet management support services, ARI Financial Services Inc. will be the tools used to collect the information.
- 4. This self-selected target is SMART:
 - Specific: Achievement level of 30%
 - Measurable: Information available from the departmental Integrated Financial Management System (IFMS) and the ARI system
 - o Achievable: With collaboration of functional specialists
 - Relevant: Vehicle purchases are a significant expenditure and represent an area for increased environmental benefit. The value of vehicles purchased in 2009–10 was \$1 million.
 - o Time-bound: Date established for target

8.11 As of April 1, 2011, each department will establish SMART targets for training, employee performance evaluations, and management processes and controls, as they pertain to procurement decision making.

Training

By March 31, 2014, 90% of designated Materiel managers and Procurement personnel will have taken green procurement training.

Performance Measure	RPP	DPR
Target Status		
Number of Materiel managers and Procurement personnel who have completed green procurement training, relative to the total number of Materiel managers and Procurement personnel (baseline year: 2010–11)	60%	
Progress against measure in 2011–12	85%	
Progress against measure in 2012–13	90%	

- 1. Designated Materiel Management and Procurement personnel are those Procurement Group (PG) employees that are directly involved in procurement for the department.
- 2. Comptrollership and Administration Sector's 2010–11 Human Resources Plan describes the Sector's human resources (HR) priorities for 2011–12, including the HR objectives, staffing strategies, training and development plans, goals and future requirements that will allow the Sector to effectively meet and exceed its mandate over the long term. Green procurement training in 2011–12 will be included in the training plans for target positions.
- 3. Training progress will be monitored by the Contracting and Materiel Management section's Senior Training and Communications Advisor.
- 4. Proof that training was completed is mandatory and will be validated by the Senior Training and Communications Advisor.
- 5. This self-selected target is SMART:
 - o Specific: Achievement level for 2011–12 has been set at 85%. This target is specific to Materiel managers and Procurement personnel.
 - o Measurable: Information available from the departmental training coordinators
 - o Achievable: Green procurement training is free and available online.
 - Relevant: Industry Canada's Materiel managers and Procurement personnel routinely procure goods and services for which environmental alternatives are available.
 - o Time-bound: Date established for target implementation and completion

Performance Evaluations

By March 31, 2012, 75% of team leaders (PG-05) in the Contracting and Materiel Management section as well as the manager (PG-06) of this section will have environmental consideration clauses incorporated into their performance evaluations.

Performance Measure	RPP	DPR
Target Status		
Number of performance evaluations of identified positions that have environmental consideration clauses, relative to the total number of positions identified	N/A	
Progress against measure in 2011–12	75%	
Progress against measure in 2012–13	100%	

- 1. The Comptrollership and Administration Sector's 2010–11 Human Resources Plan describes its human resources (HR) priorities for 2011–12, including the HR objectives, staffing strategies, training and development plans, goals and future requirements that will allow the Sector to effectively meet and exceed its mandate over the long term.
- 2. By March 31, 2013 100% of the target group (PG 05's and the PG 06) within the Contracting and Materiel Management section will have environmental considerations incorporated into their performance evaluations.
- 3. Progress will be monitored through performance agreements and by means of mid-year review.
- 4. This self-selected target is SMART:
 - o Specific: Achievement level of 75%
 - o Measurable: Information available from performance agreements
 - Achievable: Green procurement training is free and available online and will be included in the performance agreement.
 - Relevant: Industry Canada's Contracting and Materiel Management Managers and Team Leaders routinely review and provide advice on procurement processes of goods and services, where environmental alternatives are available
 - o Time-bound: Date established for target completion

Processes and Controls

By March 31, 2016, environmental performance considerations will be integrated into 90% of procurement processes and controls.

Performance Measure	RPP	DPR
Target Status		
Number of designated processes and controls that have been modified to ensure that environmental performance considerations are integrated into procurement processes, relative to the total number of processes and controls	30%	
Progress against measure in 2011–12	60%	
Progress against measure in 2012–13	75%	
Progress against measure in 2013–14	80%	
Progress against measure in 2014–15	85%	
Progress against measure in 2015–16	90%	

- Revisions to integrate environmental factors into procurement processes and controls will take strategic planning into account and will incorporate best practices to improve these processes and controls and to support green decision making.
- 2. Taking a phased approach, Industry Canada will start with updating policy documents.
- 3. Secondly, the Department will focus on the processes and controls that have the greatest environmental impact and will develop best practices documents in support of green decision making.
- 4. Establish a monitoring control framework that includes environmental indicators.
- 5. This self-selected target is SMART:
 - Specific: Achievement level of 90%
 - o Measurable: Policies, processes, procedures and controls reside with the Comptrollership and Administration Sector (CAS).
 - o Achievable: CAS is the functional authority for Contracting and Materiel Management. The policy development group resides within CAS.
 - Relevant: The number of policies, processes and controls are significant, so their revision will achieve environmental benefits.
 - Time-bound: Date has been established for target completion, and the target strategies/comments include milestones.

6. Federal Sustainable Development Strategy

To consult the <u>Federal Sustainable Development Strategy</u> and obtain the broader federal context to departmental and agency sustainable development activities, please see the <u>Environment Canada website</u>.

The Federal Sustainable Development Strategy outlines the integrated, whole-of-government picture of actions and results to achieve environmental sustainability.

The Federal Sustainable Development Strategy website is the central location of all departmental sustainable development goals, targets and implementation strategies.

In the coming year, the department will contribute to the development of the next Federal Sustainable Development Strategy (2013-2016) by working with other government departments and other stakeholders to enhance the integration of economic sustainability considerations into the Federal Sustainable Development Strategy framework.

List of Sustainable Development Activities at Industry Canada

In the 2011 Sustainable Development Strategy, Industry Canada committed to document complementary sustainable development activities which have taken place in recent years or are currently underway.

This list of departmental activities reveals that Industry Canada has been actively integrating sustainable development into its policies and practices across the department, as mandated in the *Industry Canada Act*.

The following compendium of activities is organized by departmental strategic outcome.

Strategic Outcome 1: The Canadian Marketplace is Efficient and Competitive

Program Activity 1: Marketplace Frameworks and Regulations

In March 2011, the Canadian Intellectual Property Office of Industry Canada announced an initiative to expedite the examination of patent applications related to green technology. The amendments to the *Patent Rules* are in line with the government's priorities on science and technology, supporting the growth of small and medium-sized enterprises, developing a clean energy economy, and taking government action on global warming and capacity building. Accelerating the approval of patent applications relating to environmental (green) technologies will foster investment and expedite commercialization of environmental technologies. This in turn could help to resolve or mitigate environmental impacts or to conserve the natural environment and resources. No additional fee is required for advancing the examination of patent applications related to green technologies.

Program Activity 2: Spectrum, Telecommunications and the Online Economy

Industry Canada is advancing the digital economy in Canada by implementing the government's Digital Economy Strategy. Through the innovative utilization of electronic commerce and information and communications technologies, companies can create new products, services and processes which can provide sustainable outcomes.

Program Activity 3: Consumer Affairs

Industry Canada has put in place policies and infrastructure to support citizens' choices for responsible consumption of products and services, including consumer information tools. Working with key stakeholders, the department strives to provide a wide breadth of consumer information and services, and engages in research and policy development on consumer issues such as <u>sustainable consumption</u>. Industry Canada's Office of Consumer Affairs supports consumer groups and NGOs to ensure they provide effective input into policy development through its <u>Contributions Program for Non-Profit</u> <u>Consumer and Voluntary Organizations</u>, funding over 40 sustainable consumption related

Research projects since 2002. This work can be found through the Consumer Policy Research Database, which was developed to increase knowledge transfer across the consumer policy research community. The department also works to ensure that consumers have the information and tools needed to protect their interests, while encouraging industry to be more innovative and productive. This includes the development of ConsumerInformation.ca, an online portal that gives fast and easy access to accurate, relevant and reliable consumer information, developed in the public interest. Specific products include the development of a consumer guide to green claims.

Program Activity 4: Competition Law Enforcement

In June 2008, the Competition Bureau, an independent law enforcement agency under Industry Canada, released, in collaboration with the Canadian Standards Association, the *Environmental Claims: A Guide for Industry and Advertisers*. The Guide addresses a number of commonly used green claims and provides examples of best practices on how such claims can be used to assist businesses in complying with the false or misleading provisions of the laws enforced by the Competition Bureau.

Strategic Outcome 2: Advancements in science, technology, knowledge and innovation strengthen the Canadian economy

Program Activity 1: Science, technology and innovation capacity

Industry Canada's Science and Technology (S&T) strategy identified environmental science and technologies, and natural resources and energy, natural resources and energy, health and related life sciences and technologies, as priority areas for research and development. Under the S&T Strategy, \$230 million was invested over four years (2007-11) in the EcoEnergy Technology Initiative to support research, development and demonstration of clean-energy technologies.

Program Activity 2: Information and Communications Technologies (ICT) Research and Innovation

Industry Canada, through its portfolio partner CANARIE (Canada's Advanced Research and Innovation Network), provided \$2.4 million in funding for four ground-breaking Green IT projects aimed at reducing the ICT carbon footprint and measuring the impact of ICT and cyber-infrastructure on university electric consumption. This funding occurred as part of CANARIE's mandate between 2007-2012.

Program Activity 3: Industrial Research and Development (R&D) Financing

Industry Canada, through its portfolio partner the National Research Council, conducted a three year <u>National Bioproducts Program</u> (NBP) research program designed to have a net positive impact on sustainable energy; the environment; and rural revitalization. With a \$10M per year commitment over three years, four R&D projects were undertaken: <u>chemical and ethanol production from ligno-cellulosic materials</u>; <u>eco-materials and bio-</u>

polyols for the production of environmentally-friendly products for the industry; use of biomass and municipal waste to produce energy and chemicals through anaerobic digestion, gasification and pyrolysis; and establishing a Canadian capacity to produce biofuels from marine algae.

Strategic Outcome 3: Canadian businesses and communities are competitive

Program Activity 1: Small business research, advocacy and services

Industry Canada has produced a <u>SME Sustainability Road Map</u> to help Canadian companies integrate sustainability considerations into their operations, product development, and business strategies.

Industry Canada developed the *Clean, Lean and Green* web portal, which provided small and medium-sized enterprises with a selection of tools, guides and programs to help them harness the opportunities presented by sustainability.

To increase industry awareness of sustainable manufacturing practices, Industry Canada, in collaboration with the Canadian Federation of Independent Business, published a workbook in 2007, *Going for the Green: A Manufacturer's Guide to Lean and Green.* The guide was geared toward small and micro-businesses, and contained workbooks and eco-maps to assist small businesses in discovering problems and opportunities in their environmental, health and safety performance.

Program Activity 2: Industrial Competitiveness and Capacity

Industry Canada aims to increase the competitiveness of Canadian manufacturing and other high technology firms. Several programs are in place to support the transition of these industries towards sustainability, including the department's eco-efficiency <u>EE</u> web site.

From 2006 to 2008, Industry Canada's sustainable production sector teams collaborated with partners to develop tools and other resources, and provide training to encourage sustainable and lean manufacturing practices within Canadian industry. Specifically, amongst the products developed were the following: the *Canadian Resource Guide to High Performance Manufacturing;* the *manufacturing courseware web portal* was updated with 'Sustainable Practices in Design and Manufacturing' and 'Design for Environment'; and a benchmarking tool for Canadian manufacturers 'Lean Benchmarking for Canadian Manufacturers—Report of Performance Benchmarks'.

Industry Canada launched its <u>Design for Environment</u> (DfE) study in September 2009. The report provides unique analysis on the current trends and benefits of adopting DfE practices to improve business competitiveness. Information presented in the reports includes internal and external pressures, environmental and business benefits, benchmarking information, and Best-in-Class analysis on the adoption of DfE technologies and processes.

IC, in collaboration with Design Exchange and Canadian Manufacturers and Exporters, led research on programs to integrate sustainability into distribution and retailing. In 2009, IC released reports on *Logistics and Supply Chain Management*. The reports provided analysis to help Canadian supply chain managers and policy makers understand the current trends and to recognize the benefits of adopting GSCM practices to improve business competitiveness.

Industry Canada worked with the Organization for Economic Cooperation and Development (OECD) 2009-2010, along with other national governments, business representatives and international organizations to develop the *OECD* Sustainable Manufacturing Toolkit which was published in 2011. The Toolkit provides a step-by-step approach to measuring and benchmarking environmental performance, with a set of 18 internationally applicable, common and comparable key performance indicators to measure and improve the environmental performance of manufacturing facilities.

Industry Canada, through its portfolio partner the Canadian Tourism Commission, worked in collaboration with the Tourism Industry Association of Canada (TIAC) in 2008 to develop a toolkit for tourism operators entitled *Green your Business*, which provides practical tips and guidance to help the tourism industry adopt sustainable practices.

Program Activity 3: Community Economic Development

Industry Canada's <u>Computers for Schools</u> (CFS) program is an innovative partnership between government and industry. Co-founded by the government and TelecomPioneers, CFS refurbishes computers and related equipment donated by the public and private sectors. Once ready, these computers are then distributed across Canada to schools, libraries and registered not-for-profit learning organizations. More than 78 million pounds of electronic waste (or over 39,000 tons) has been diverted from land fill sites in Canada since 1993. Over the past 19 years, the CFS program has gained wide spread international recognition.

Program Activity 4: Internal Services

Industry Canada, in collaboration with other federal government departments, the government of the United States of America, and the United Nations Environment Program, contributed to the convening of the second North American Workshop on Sustainable Consumption and Production (SCP) held in Ottawa, January 31-February 1, 2011. The multi-stakeholder dialogue promoted bilateral collaboration on green building, and built on the first North American Workshop on SCP held in Washington, D.C., November 2008. The goal of these multi-stakeholder workshops was to define a regional approach to advancing SCP in North America, which could contribute to the development of a ten year framework of programs as called for under the United Nations Marrakech Process.

In support of SCP efforts in North America, IC commissioned the development of an *Actor and Activity Map for Sustainable Consumption and Production (SCP) in North America* in 2010. The report identified some of the key groups, networks, industry associations and civil society organizations engaged in advancing SCP in North America; developed a set of entry points for a broader inventory of tools, practices and approaches that help capture the diversity and complexity of SCP and the actors working within it; and suggested areas for additional and promising activity for cross-sectoral and bilateral collaborations.

Industry Canada has been working closely with the Department of Foreign Affairs and International Trade and other government departments for more than two years to contribute to Canada's work leading up to the United Nations Conference on Sustainable Development to take place in Rio de Janeiro, Brazil, June 20-22, 2012. In particular, IC has been contributing to policy development related to the theme of the green economy, and has contributed content to the Green Economy Tool Kit of leading practices put forward in Canada's national submission to the United Nations, including: CSR Tool Kit and SME Road Map; Computers for Schools; and Green Patents. Officials of IC, as well as portfolio partner Statistics Canada, have contributed to the development of green growth indicators for consideration by the international community.

Industry Canada regularly hosts expert academic and private sector speakers on sustainable development related themes so that officials may improve their understanding of the innovation, competitiveness and productivity benefits associated with the integration of sustainability thinking into business processes and practices. Among the speakers hosted include senior representatives of Canadian Tire, Deloitte Touche, Rio Tinto Alcan, CIBC World Markets, Ford, and Xerox. Academic speakers came from the universities of British Columbia, Simon Fraser, Ryerson, and Western Ontario.

Industry Canada also provides analysis and advice on the linkages between trade and the environment in the context of the Government's trade agenda and its support for sustainable development in Canada's international trade priorities. In particular, IC provides analysis and advice on market access for environmental goods, in order to enhance Canadian competitiveness in this sector, as well as on the Government's environmental assessments of free trade agreement negotiations, which examine likely environmental impacts of trade and investment negotiations in Canada in order to integrate environmental considerations into the decision-making process of an initiative. As an active participant in various OECD committees and working parties, IC contributes to OECD analysis and policy recommendations on green growth and eco-innovation.