

Departmental Performance Report (DPR) 2010-2011 Electronic Layer of Reporting on Elements of NRCan's Sustainable Development Strategy

Contributions to the Federal Sustainable Development Strategy

Context

As noted in Section IV of NRCan's <u>Report on Plans and Priorities 2011-2012</u>, the first <u>Federal Sustainable Development Strategy</u> (FSDS) was tabled in Parliament in October 2010. NRCan was required to meet requirements of the *Federal Sustainable Development Act* (2008) by developing a Departmental Sustainable Development Strategy to identify its contributions to the FSDS.

The FSDS established a new approach to link sustainable development planning and reporting to the Government's core planning and reporting mechanism (the Expenditure Management System). Consequently, this departmental strategy is currently being fully integrated into NRCan's annual Reports on Plans and Priorities (RPP) and reporting will take place through annual Departmental Performance Reports (DPR).

Reporting on NRCan Activities in DPR 2010-2011

NRCan's first strategy under this new approach was fully integrated into the RPP for the fiscal year 2011-2012. Although activities supporting the FSDS were not specifically set out in 2010-2011 RPP, this DPR contains reporting on relevant programs that sunset in the fiscal year 2010-2011.

The section below outlines relevant FSDS theme, goal, target and implementation strategy. It also provides the description of the NRCan activity, its relationship to the FSDS target(s), and reporting on the non-financial performance expectations for that activity.





FSDS Theme I - Addressing Climate Change and Air Quality

FSDS Goal 1 - Climate Change

Reduce greenhouse gas emission levels to mitigate the severity and unavoidable impacts of climate change.



FSDS Target 1.1

Climate Change Mitigation

Relative to 2005 emission levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

FSDS Implementation Strategy Clean Energy

1.1.20 Develop climate change strategies aligned with the United States including working collaboratively through the Canada-U.S. Clean Energy Dialogue to advance clean energy priorities. (EC, NRCan)

Clean Energy Policy

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 2 - Environmental Responsibility Program Activity 2.1 - Clean Energy Sub Activity 2.1.2 - Clean Energy Policy

Non-Financial Performance Expectations

This initiative sunset in FY 2010-2011. Non-Financial Performance Expectations apply to:

FY 2010-2011.

Output and Indicator

Implementation of recommendations in the Clean Energy Dialogue Action Plan.

- o All Action Plan projects and initiatives were implemented through three Clean Energy Dialogue (CED) working groups. Accomplishments from these projects included:
 - o Carbon Capture and Storage (CCS) Working Group: Existing collaboration in CO₂ injection and storage testing was expanded; information from large CCS demonstration projects was shared; and work to map CO₂ sources of geological storage opportunities progressed on schedule.
 - o Electricity Grid Working Group: Three major Canada-U.S. conferences were held on: labour recruitment and retention strategies for addressing workforce challenges in the electricity sector; increasing Canada-U.S. trade in clean electricity as a strategy for reducing continental greenhouse gas emissions; and policy issues associated with the transition to a smarter electric grid.

Description

The development of Canada's energy resources is an important component of Canadian prosperity, and can be achieved only through a globally competitive energy sector that is governed in a manner that is consistent with Canada's social and environmental goals.

To support such governance and the responsible development of Canada's energy resources, NRCan manages federal regulatory responsibilities and delivers current and timely energy related analysis, advice and recommendations to NRCan senior management on a variety of domestic and international energy issues, including the Canada-U.S. Clean Energy Dialogue. The Clean Energy Dialogue is the primary vehicle to advance bilateral cooperation with the U.S. on clean energy technologies that support greenhouse gas mitigation efforts.

Relationship to FSDS Target

Activities under the Canada-U.S. Clean Energy Dialogue will help to increase the uptake of clean energy technologies that can lead to reduced emissions of greenhouse gases. Thus, these efforts indirectly contribute to FSDS Target 1.1 - Climate Change Mitigation.

* Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 1 – Economic Competiveness; Program Activity 1.1 – Economic Opportunities for Natural Resources; Sub Activity 1.1.7 – Domestic and International Energy Policy.

- Clean Energy R&D Working Group:
- A technical assessment was completed in order to support Canadian participation in the U.S. Environmental Protection Agency's program related to ENERGY STAR products. As well, a Memorandum of Understanding between CANMET Materials Technology Laboratory and the U.S. Department of Energy's Oak Ridge National Laboratory was signed. The agreement will support cooperative R&D on developing materials and manufacturing processes for lightweight, energy efficient vehicles and clean energy production.



FSDS Implementation Strategy Clean Energy

Climate Change Mitigation

Relative to 2005 emission levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

1.1.26 Supply financial aid and develop capacity to reduce GHGs through adoption of emission-reducing technologies and practices. (NRCan)

Renewable Energy

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 2 – Environmental Responsibility Program Activity 2.1 – Clean Energy Sub Activity 2.1.3 – Renewable Energy

Non-Financial Performance Expectations

The ecoENERGY for Renewable Power program authority to enter into new contribution agreements ended in FY 2010-2011. The program continues to provide incentives to projects until FY 2020-21. Non-financial performance expectations apply to:

FY 2010-2011.

Expected Result and Indicator

Increased production of renewable electricity supply in Canada.

- Amount of clean electricity generation from low-impact renewable sources.
 - 4,458 megawatts of renewable power capacity and annual electricity production of 13.9TWh.

Outputs and Indicators

Project applications reviewed for funding.

- Number of projects reviewed under the ecoENERGY for Renewable Power program.
 - 350 projects were reviewed by the program resulting in 237 registered projects and 104 contribution agreements.

Contribution agreements signed.

- Number of contribution agreements signed for qualified projects under the ecoENERGY for Renewable Power program.
 - At March 31, 2011, the ecoENERGY Renewable Power program had 104 contribution agreements in place or signed representing close to \$1.4 billion in commitments over 10 years.

Description

The Government of Canada has committed to build on its successful clean electricity system by leading the world in clean energy generation. NRCan provides an incentive to electricity producers to increase Canada's supply of clean electricity from renewable sources like wind, biomass, small hydro, solar photovoltaic and ocean energy. In addition to reducing Canadian greenhouse gas emissions, these activities help to create a more sustainable and diversified energy mix. Renewable Energy is supported by the ecoENERGY for Renewable Power and the Wind Power Production Incentive programs.

Financial incentives provided to qualifying renewable electricity producers under the ecoENERGY for Renewable Power Program has encouraged the growth of more than 4,000 MW of new renewable electricity capacity in Canada and is expected to reduce GHG emissions between 6 and 6.7 megatonnes per year by 2012. Under the Wind Power Production Incentive program, 924 MW of new wind energy capacity has been developed in Canada and reduces GHG emissions by approximately 1.5 megatonnes per year.

Relationship to FSDS Target

Financial incentives towards clean electricity projects will result in reduction of greenhouse gas emissions that contribute to climate change. Thus, this initiative contributes directly to FSDS Target 1.1 – Climate Change Mitigation.

^{*} Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 2 – Environmental Responsibility; Program Activity 2.1 – Clean Energy; Sub Activity 2.1.2 – Renewable Energy Deployment.



FSDS Implementation Strategy Clean Energy

1.1.30

Climate Change Mitigation

Relative to 2005 emission levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

The Atlantic Energy Gateway initiative aims to facilitate development of the Atlantic renewable energy sector by fostering collaboration, common understanding, and communications among governments and the private sector, to maximize and expedite the development of renewable energy sources in the region. (ACOA, NRCan)

Energy Policy

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 1 – Economic Competiveness
Program Activity 1.1 – Economic Opportunities for Natural
Resources

Sub Activity 1.1.6 - Energy Policy

Non-Financial Performance Expectations

This initiative sunsets in FY 2011-2012. Non-Financial Performance Expectations apply to:

FYs 2010-2011 and 2011-2012.

Expected Result and Indicators

NRCan senior management has access to quality advice and information for timely decisions on energy-related issues.

- Sector-specific advice, analysis and recommendations are available as requested by senior management.
- Senior management satisfaction with relevance and usefulness of advice, analysis and recommendations provided.

The Atlantic Energy Gateway work plan was developed in collaboration with the Atlantic Provinces and agreed to by Deputy Ministers in September 2010. This initiative includes studies related to the modeling and analysis of generation, transmission, and electricity systems operation. It also includes developing studies on electricity markets, renewable energy project financing, supply chain development, research and development, and regulatory issues. The work plan is being implemented with a planned completion for December 2011.

The completion of the initiative, expected by March 31, 2012, includes presentation of the results to the federal and the four provincial deputy ministers.

Description

The development of Canada's energy resources is an important component of Canadian prosperity, and can be achieved only by a globally competitive energy sector that is governed in a manner that is consistent with Canada's social and environmental goals.

To support such governance and the responsible development of Canada's energy resources, NRCan delivers current and timely energy related analysis, advice and recommendations to NRCan senior management on a variety of domestic and international issues, including clean energy, climate change, renewable electricity, nuclear energy, uranium and radioactive wastes, and federal-provincial-territorial energy relations.

In particular, NRCan will promote and facilitate the development of clean and renewable energy sources in Atlantic Canada through the Atlantic Energy Gateway initiative. This initiative seeks to bring together the federal and provincial governments, the private and public utilities, the private sector, and other energy stakeholders across Atlantic Canada to develop a regional strategy for the development of clean and renewable energy projects.

Relationship to FSDS Target

The Atlantic Energy Gateway initiative will foster regional cooperation and collaboration in the planning and operations of the Atlantic electricity sector, which will facilitate the development of clean and renewable energy in the region, thereby displacing GHG-emitting sources of electricity. Thus, this initiative contributes indirectly to FSDS Target 1.1 – Climate Change Mitigation.

* Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 1 – Economic Competitiveness; Program Activity 1.1 – Economic Opportunities for Natural Resources; Sub Activity 1.1.7 – Domestic and International Energy Policy.



FSDS Implementation Strategy International Work on Climate Change

Climate Change Mitigation

Relative to 2005 emission levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

1.1.43 Work with international partners to implement commitments in the Copenhagen Accord such as mitigation targets and actions; short and long-term financing; mechanisms for technology and reducing emissions from deforestation and forest degredation; adaptation actions; and provisions for transparency and accountability of climate change actions. (EC, NRCan)

Clean Energy Policy

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 2 – Environmental Responsibility Program Activity 2.1 – Clean Energy Sub Activity 2.1.2 – Clean Energy Policy

Non-Financial Performance Expectations

This initiative sunset in FY 2010-2011. Non-Financial Performance Expectations apply to:

FY 2010-2011.

Output and Indicators

Advice, recommendations and analysis on specific international engagement in energy-related fora and projects.

- Advice, recommendations and analysis in support of international working groups, meetings and/or projects.
- Advice, recommendations and analysis in support of international climate change engagement.

As the Government of Canada lead on international technology negotiations under the United Nations Framework Convention on Climate Change (UNFCCC), as well as its associated Expert Group on Technology Transfer (EGTT), NRCan worked with other countries to establish a technology mechanism to support the development and deployment of technology under the UNFCCC at the Conference of the Parties (COP) 16 in Cancun in December, 2010.

As the Government of Canada lead on forestry issues under the UNFCCC, including negotiations on Reducing Emissions from Deforestation and Forest Degradation (REDD+), NRCan worked with other countries to establish a REDD+ mechanism under the UNFCCC at the Conference of the Parties in Cancun in December 2010. Additionally, as part of its 2010 fast-start financing commitment under the Copenhagen Accord, the Government of Canada contributed \$40 million to the Forest Carbon Partnership Facility's Readiness Fund to support the development of national capacities for developing countries to participate in REDD+ initiatives. NRCan also participates in the REDD+ Partnership, an interim platform for partner countries to scale up actions and finance for REDD+ initiatives.

Description

The development of Canada's energy resources is an important component of Canadian prosperity, and can be achieved only by a globally competitive energy sector that is governed in a manner that is consistent with Canada's social and environmental goals.

To support such governance and the responsible development of Canada's energy resources, NRCan delivers current and timely energy related analysis, advice and recommendations to NRCan senior management on a variety of domestic and international issues, including clean energy, climate change, renewable electricity, nuclear energy, uranium and radioactive wastes, and federal-provincial-territorial energy relations. Capacity building in these areas contributes to this FSDS implementation strategy by increasing NRCan's knowledge of emission reducing technologies and practices that support policy analysis and advice on climate change mitigation.

NRCan also supports the development of Canada's negotiating position in international fora related to climate change and clean energy. By working with international partners, NRCan supports the development and deployment of clean technologies to developing countries, thus facilitating the achievements of commitments under the Copenhagen Accord.

Relationship to FSDS Target

The Copenhagen Accord includes GHG emission reduction targets or mitigation actions for 85 countries, including all major emitters. Contributing to its implementation will therefore contribute to climate change mitigation. Thus, these efforts contribute indirectly to FSDS Target 1.1 – Climate Change Mitigation.

* Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 1 – Economic Competiveness; Program Activity 1.1 – Economic Opportunities for Natural Resources; Sub Activity 1.1.7 – Domestic and International Energy Policy.



International Work on Climate Change

Climate Change Mitigation

Relative to 2005 emission levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

1.1. 48 United Nations

1.1.48.2 Participate in strategic international climate change negotiations and engagement in the United Nations Framework Convention on Climate Change (UNFCCC), including leadership on key issues. (NRCan)

Clean Energy Policy

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 2 - Environmental Responsibility Program Activity 2.1 – Clean Energy Sub Activity 2.1.2 - Clean Energy Policy

Non-Financial Performance Expectations

This initiative sunset in FY 2010-2011. Non-Financial Performance Expectations apply to:

FY 2010-2011.

Output and Indicators

Advice, recommendations and analysis on specific international engagement in energy-related fora and projects.

- Advice, recommendations and analysis in support of international working groups, meetings and/or projects.
- Advice, recommendations and analysis in support of international climate change engagement.

NRCan officials supported preparations for numerous international meetings held under the United Nations Framework Convention on Climate Change (UNFCCC). NRCan prepared briefing material for senior officials to advance Canadian interests through the UNFCCC and related fora.

By participating in international fora, the department helped to advance policies on global climate change and clean energy. while reflecting Canada's domestic objectives. For example, Canada's clean energy and climate change objectives have been reflected in the Cancun agreements that were negotiated under the United Nations Framework Convention on Climate Change in November/December 2010.

Description

FSDS Implementation Strategy

The development of Canada's energy resources is an important component of Canadian prosperity, and can be achieved only by a globally competitive energy sector that is governed in a manner that is consistent with Canada's social and environmental goals. To support such governance and the responsible development of Canada's energy resources, NRCan delivers current and timely energy related analysis, advice and recommendations to NRCan senior management on a variety of domestic and international issues including: clean energy, climate change, renewable electricity, nuclear energy, uranium and radioactive wastes, and federal-provincial-territorial energy relations. NRCan also supports the development of Canada's negotiating position in international fora related to climate change and clean energy. like the United Nations Framework Convention on Climate Change (UNFCCC).

Relationship to FSDS Target

Canada supports constructive and ambitious global action that will contribute to climate change mitigation in the long term. By leading in technology negotiations, NRCan seeks an agreement that will support the development and deployment of clean technologies, which is a key element of climate change mitigation. Thus, these efforts contribute indirectly to FSDS Target 1.1 -Climate Change Mitigation.

* Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 1 – Economic Competiveness; Program Activity 1.1 - Economic Opportunities for Natural Resources; Sub Activity 1.1.7 - Domestic and International Energy Policy.



FSDS Implementation Strategy International Work on Climate Change

1.1.49 Multilateral Organizations Outside of the UNFCCC

Relative to 2005 emission levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

Climate Change Mitigation

1.1.49.1 Advance Canadian interests in a range of high-level climate change-related international fora, such as the G8, the Major Economies Forum on Energy and Climate (MEF), including the MEF initiated Clean Energy Ministerial; and the Asia-Pacific Economic Cooperation. (NRCan)

Clean Energy Policy

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 2 – Environmental Responsibility Program Activity 2.1 – Clean Energy Sub Activity 2.1.2 – Clean Energy Policy

Non-Financial Performance Expectations

This initiative sunset in FY 2010-2011. Non-Financial Performance Expectations apply to:

FY 2010-2011.

Output and Indicators

Advice, recommendations and analysis on specific international engagement in energy-related fora and projects.

- Advice, recommendations and analysis in support of international working groups, meetings and/or projects.
- Advice, recommendations and analysis in support of international climate change engagement.

NRCan officials participated in preparations for various major international meetings. NRCan also prepared briefing packages for senior officials to advance Canadian interests at major international meetings such as the G8 and G20, International Energy Forum, MEF Clean Energy Ministerial and the Energy and Climate Partnership of the Americas. The advice was consistently strategic, substantive and timely. Where relevant, these briefings were prepared through consultation with subject matter experts both inside and outside of NRCan, and with international counterparts where appropriate.

NRCan officials were actively engaged with a number of working groups and activities related to the International Energy Agency. NRCan involvement also included other high-level international events including:

- the Asia Pacific Cooperation Energy Ministerial meeting (Japan);
- the Energy and Climate Partnership of the Americas (U.S.A); and
- the World Energy Congress (Montreal), which also included a first Meeting of Ministers of Energy of La Erancehonia

Furthermore, NRCan was actively engaged in Canada's formal approval of the new Charter of the International Energy Forum.

Description

The development of Canada's energy resources is an important component of Canadian prosperity, and can be achieved only by a globally competitive energy sector that is governed in a manner that is consistent with Canada's social and environmental goals. To support such governance and the responsible development of Canada's energy resources, NRCan delivers current and timely energy related analysis, advice and recommendations to NRCan senior management and government on a variety of domestic and international issues including clean energy, climate change, renewable electricity, nuclear energy, uranium and radioactive wastes, and federal-provincial-territorial energy relations.

NRCan contributes to Canada's participation in high-level climate change-related international fora, including technology partnerships such as Clean Energy Ministerial (CEM), Carbon Sequestration Leadership Forum and Global Carbon Capture and Storage Institute. NRCan also actively participates in and provides input into various multilateral fora, such as the G8, G20 and APEC, whose focus includes green growth, the promotion of clean energy research and development and the enhancement of trade in environmental goods and services.

Relationship to FSDS Target

In the high-level climate change-related international fora (including technology partnerships such as Clean Energy Ministerial (CEM), Carbon Sequestration Leadership Forum and Global Carbon Capture and Storage Institute). Canada supports constructive and ambitious global action for climate change mitigation. By facilitating the development and deployment of clean technologies and undertaking concrete actions within international initiatives. NRCan contributes to reduce GHG emissions. For example, NRCan participates in the Global Superior Energy Performance Partnership under the CEM, which will support improvements in energy efficiency in buildings. Improvements in energy efficiency help to reduce GHG emissions associated with energy use by decreasing electricity demand. Thus, these efforts contribute indirectly to FSDS Target 1.1 - Climate Change Mitigation.

* Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 1 – Economic Competiveness; Program Activity 1.1 – Economic Opportunities for Natural Resources; Sub Activity 1.1.7 – Domestic and International Energy Policy.



FSDS Implementation Strategy International Work on Climate Change

international work on Climate

Climate Change Mitigation

Relative to 2005 emission levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

Asia-Pacific Partnership: Manage Canadian Asia-Pacific Partnership-funded projects that promote the development, diffusion and deployment of clean technologies. (EC, NRCan, IC)

Clean Energy Policy

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 2 – Environmental Responsibility Program Activity 2.1 – Clean Energy Sub Activity 2.1.2 – Clean Energy Policy

Non-Financial Performance Expectations

This initiative sunset in FY 2010-2011. Non-Financial Performance Expectations apply to:

FY 2010-2011.

Output and Indicators

Advice, recommendations and analysis on specific international engagement in energy-related fora and projects.

- Advice, recommendations and analysis in support of international working groups, meetings and/or projects.
- Advice, recommendations and analysis in support of international climate change engagement.

The Partnership focuses on expanding investment and trade in cleaner energy technologies, goods and services in key energy-intensive and energy supply sectors that offer the greatest potential to address climate change and air pollution challenges.

NRCan experts provided analysis and recommendations on project selection to the Canadian APP Secretariat. NRCan also facilitated private sector stakeholder participation in projects. As such, the APP provided a framework for international private-public sector partnerships that resulted in concrete initiatives and collaboration.

Further, NRCan officials participated in working group meetings and contributed their expertise to a number of Canadian APP projects in the area of energy efficient housing, carbon capture and storage, coal mining health and safety, and improved energy efficiency in the coal power sector.

Some project leads and industry stakeholders continue to explore the possibility of extending collaboration following the conclusion of the APP, in order to leverage ongoing relationships established by the partnerships and share lessons learned with a wider audience.

Description

The development of Canada's energy resources is an important component of Canadian prosperity, and can be achieved only by a globally competitive energy sector that is governed in a manner that is consistent with Canada's social and environmental goals. To support such governance and the responsible development of Canada's energy resources, NRCan delivers current and timely energy related analysis, advice and recommendations to NRCan senior management on a variety of domestic and international issues including clean energy, climate change, renewable electricity, nuclear energy, uranium and radioactive wastes, and federal-provincial-territorial energy relations.

The Asia-Pacific Partnership on Clean Development and Climate (APP) is a public-private partnership that seeks to accelerate the development, deployment and diffusion of clean energy technologies. The Partnership focuses on expanding investment and trade in cleaner energy technologies, goods and services in key energy-intensive and energy supply sectors that offer the greatest potential to address climate change and air pollution challenges. Participating countries collectively represent approximately 45 percent of the world's population, 49 percent of GDP, 50 percent of global emissions of CO2 from combustion sources.

Since Canada's engagement in the APP in 2007, the Government has invested a total of \$11.75M in 28 APP projects, which have leveraged more than \$77M in investments. NRCan has contributed significant technical and scientific expertise to a number of the APP task forces, including Building and Appliances, Renewable Energy and Distributed Generation, Power Generation and Transmission, and Coal Mining. The Department has also ensured that private sector stakeholders have had the opportunity to participate in APP projects.

Relationship to FSDS Target

NRCan's participation in the APP supports Canada's domestic and international efforts to address climate change. APP partner countries work together with private sector partners to meet goals for energy security, national air pollution reduction, and climate change in ways that promote sustainable economic growth and poverty reduction. APP projects also help open foreign markets to Canadian goods and services, helping to create new jobs and promoting domestic expertise. Thus, these efforts contribute indirectly to FSDS Target 1.1 – Climate Change Mitigation.

* Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 1 — Economic Competiveness; Program Activity 1.1 — Economic Opportunities for Natural Resources; Sub Activity 1.1.7 — Domestic and International Energy Policv.



FSDS Implementation Strategy International Work on Climate Change

Climate Change Mitigation

Relative to 2005 emission levels, reduce Canada's total greenhouse gas emissions (GHG) 17% by 2020.

1.1.53 Carbon Capture and Storage: Participate in a variety of technical multilateral cooperation for aincluding Global CCS Institute, the Carbon Sequestration Leadership Forum, the International Energy Agency and the MEF Clean Energy Ministerial Carbon Capture and Storage Action Group. (NRCan)

Clean Energy Policy

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 2 - Environmental Responsibility Program Activity 2.1 - Clean Energy Sub Activity 2.1.2 - Clean Energy Policy

Non-Financial Performance Expectations

This initiative sunset in FY 2010-2011. Non-Financial Performance Expectations apply to:

FY 2010-2011.

Output and Indicators

Advice, recommendations and analysis on specific international engagement in energy-related fora and projects.

- o Advice, recommendations and analysis in support of international working groups, meetings and/or projects.
- Advice, recommendations and analysis in support of international climate change engagement.

NRCan officials participated in preparations for various major international meetings on Carbon Capture and Storage (CCS). NRCan analysis helped to advance Canadian carbon capture and storage objectives via fora such as the International Energy Agency, the Carbon Sequestration Leadership Forum, the global Carbon Capture and Storage Institute and the Clean Energy Ministerial.

By participating in international fora, the department helped to advance policies on global climate change and clean energy. while reflecting Canada's domestic objectives. On CCS, NRCan has played a leadership role in promoting its benefits and leveraging knowledge gained through R&D and domestic demonstration projects to disseminate lessons learned internationally. Overall, the Government of Canada has contributed about \$1 billion over the last five years to support CCS research, development and demonstration projects.

Description

The development of Canada's energy resources is an important component of Canadian prosperity, and can be achieved only by a globally competitive energy sector that is governed in a manner that is consistent with Canada's social and environmental goals. To support such governance and the responsible development of Canada's energy resources, NRCan delivers current and timely energy related analysis, advice and recommendations to NRCan senior management on a variety of domestic and international issues including: clean energy, climate change, renewable electricity, nuclear energy, uranium and radioactive wastes, and federalprovincial-territorial energy relations. Carbon Capture and Storage has been recognized by the International Energy Agency, the G8 and other prominent organisations as being a key technology to be deployed in order to meet long-term GHG reduction targets. NRCan contributes to Canada's participation in high-level climate change-related international fora, including technology partnerships such as Clean Energy Ministerial, Carbon Sequestration Leadership Forum and Global Carbon Capture and Storage

Relationship to FSDS Target

NRCan's contributions to Canada's engagement in the international Carbon Capture and Storage fora contributes to the global deployment of this technology and supports domestic demonstration projects, where appropriate. Thus, these efforts contribute indirectly to FSDS Target 1.1 - Climate Change Mitigation.

* Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 1 - Economic Competiveness; Program Activity 1.1 -Economic Opportunities for Natural Resources; Sub Activity 1.1.7 - Domestic and International Energy Policy.



Air Pollutants

FSDS Theme I - Addressing Climate Change and Air Quality

FSDS Goal 2 - Air Pollution

Minimize the threats to air quality so that the air Canadians breathe is clean and supports healthy ecosystems.



FSDS Target 2.1

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 the provinces and stakeholders.

FSDS Implementation Strategy Clean Energy

2.1.16 ecoACTION programs reduce GHG emissions and can directly or indirectly contribute to air pollutant emission reduction. (NRCan, TC, INAC) +

Renewable Energy

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 2 - Environmental Responsibility Program Activity 2.1 – Clean Energy Sub Activity 2.1.3 - Renewable Energy

Non-Financial Performance Expectations

The ecoENERGY for Renewable Power program authority to enter into new contribution agreements ended in FY 2010-2011. The program continues to provide incentives to projects for 10 years, up to 2020-2021. Non-financial performance expectations apply to:

FY 2010-2011.

Expected Result and Indicator

Increased production of renewable electricity supply in Canada.

- Amount of clean electricity generation from low-impact renewable sources.
 - 4,458 megawatts of renewable power capacity and annual electricity production of 13.9TWh.

Outputs and Indicators

Project applications reviewed for funding.

- Number of projects reviewed under the ecoENERGY for Renewable Power program.
 - 350 projects were reviewed by the program resulting in 237 registered projects and 104 contribution agreements.

Contribution agreements signed.

Number of contribution agreements signed for qualified projects under the ecoENERGY for Renewable Power program.

Description

The Government of Canada has committed to build on its successful clean electricity system by leading the world in clean energy generation. NRCan provides an incentive to electricity producers to increase Canada's supply of clean electricity from renewable sources like wind, biomass, small hydro, solar photovoltaic and ocean energy. In addition to reducing Canadian greenhouse gas emissions, this initiative will help to create a more sustainable and diversified energy mix. This initiative is supported by the ecoENERGY for Renewable Power and the Wind Power Production Incentive programs.

Financial incentives provided to qualifying renewable electricity producers under the ecoENERGY for Renewable Power Program will encourage the growth of more than 4,000 MW of new renewable electricity capacity in Canada and is expected to reduce GHG emissions between 6 and 6.7 megatonnes per year by 2012. Under the Wind Power Production Incentive program, 924 MW of new wind energy capacity was developed in Canada and reduces GHG emissions by approximately 1.5 megatonnes per year since 2008.

Relationship to FSDS Target

Financial incentives towards clean electricity projects will result in reductions of greenhouse gas emissions and air pollutants. Thus, this initiative contributes directly to FSDS Target 2.1 - Air Pollutants.

* Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 2 - Environmental Responsibility; Program Activity 2.1 - Clean Energy; Sub Activity 2.1.2 -Renewable Energy Deployment.

At March 31, 2011, the ecoENERGY Renewable Power program had 104 contribution agreements in place or signed representing close to \$1.4 billion in commitments over 10 years.

 $^+$ In NRCan's RPP 2011-2012, PAA Sub Activity 1.1.7 – Domestic and International Energy Policy (known under PAA 2010-2011 as Sub Activity 2.1.2 - Clean Energy Policy) was also identified as contributing to FSDS Implementation Strategy 2.1.16 until the end of FY 2010-2011. Subsequently, no correlation between that activity and this FSDS Implementation Strategy was found; therefore, no performance will be reported for that Sub Activity.



FSDS Implementation Strategy Clean Energy

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 the provinces and stakeholders.

2.1.19 The Atlantic Energy Gateway initiative aims to facilitate development of the Atlantic renewable energy sector by fostering collaboration, common understanding, and communication among governments and the private sector, to maximize and expedite the development of renewable energy sources in the region. (ACOA, NRCan)

Energy Policy

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 1 – Economic Competiveness
Program Activity 1.1 – Economic Opportunities for Natural
Resources

Sub Activity 1.1.6 - Energy Policy

Non-Financial Performance Expectations

This initiative sunsets in FY 2011-2012. Non-Financial Performance Expectations apply to:

FYs 2010-2011 and 2011-2012.

Expected Result and Indicators

NRCan senior management has access to quality advice and information for timely decisions on energy-related issues.

- Sector-specific advice, analysis and recommendations are available as requested by senior management.
- Senior management satisfaction with relevance and usefulness of advice, analysis and recommendations provided.

The Atlantic Energy Gateway work plan was developed in collaboration with the Atlantic Provinces and agreed to by Deputy Ministers in September 2010. This initiative includes studies related to the modeling and analysis of generation, transmission, and electricity systems operation. It also includes developing studies on electricity markets, renewable energy project financing, supply chain development, research and development, and regulatory issues. The work plan is being implemented with a planned completion for December 2011.

The completion of the initiative, expected by March 31, 2012, includes presentation of the results to the federal and the four provincial deputy ministers.

Description

The development of Canada's energy resources is an important component of Canadian prosperity, and can be achieved only by a globally competitive energy sector that is governed in a manner that is consistent with Canada's social and environmental goals.

To support such governance and the responsible development of Canada's energy resources, NRCan delivers current and timely energy related analysis, advice and recommendations to NRCan senior management on a variety of domestic and international issues including clean energy, climate change, renewable electricity, nuclear energy, uranium and radioactive wastes, and federal-provincial-territorial energy relations.

In particular, NRCan will promote and facilitate the development of clean and renewable energy sources in Atlantic Canada through the Atlantic Energy Gateway initiative. This initiative seeks to bring together the federal and provincial governments, the private and public utilities, the private sector, and other energy stakeholders across Atlantic Canada to develop a regional strategy for the development of clean and renewable energy projects.

Relationship to FSDS Target

The Atlantic Energy Gateway initiative will foster regional cooperation and collaboration in the planning and operations of the Atlantic electricity sector, which will facilitate the development of clean and renewable energy in the region, thereby displacing sources of electricity that emit greenhouse gases and other air pollutants. Thus, this initiative contributes indirectly to FSDS Target 2.1 – Air Pollutants.

* Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 1 – Economic Competitiveness; Program Activity 1.1 – Economic Opportunities for Natural Resources; Sub Activity 1.1.7 – Domestic and International Energy Policy.



FSDS Theme III – Protecting Nature

FSDS Goal 7 - Biological Resources

Sustainable production and consumption of biological resources within ecosystem limits.



FSDS Target 7.3

FSDS Implementation Strategy

Sustainable Forest Management

Improve the management of Canada's forest ecosystems through the development and dissemination of knowledge.

7.3.1 First Nations Forestry Program – support initiatives to enhance first nations' capacity to sustainably manage reserve forests and other forests. (INAC, NRCan)

Forest-based Community Partnerships

This activity was nested in NRCan's Program Activity Architecture (PAA) 2010-2011 as follows: *

Strategic Outcome 1 – Economic Competiveness Program Activity 1.2 – Natural Resource-based Communities

Sub Activity 1.2.2 – Forest-based Community Partnerships

Non-Financial Performance Expectations

Under the First Nations Forestry Program (FNFP), data was collected annually to March 31, 2011. Non-Financial Performance Expectations apply to:

FY 2010-2011.

Expected Results and Indicators

Knowledge products and tools related to economic opportunities in forest-based communities.

Number of knowledge products accessed.

In 2010-2011, its last year of existence before being formally ended March 31, 2011, the FNFP supported partnership projects across Canada in all aspects of sustainable forest management, knowledge and technology transfer, business opportunity facilitation and training support for specialized forestry technical training and work experience. Under a new whole-of-government approach called the Aboriginal Forestry Initiative, these partnerships continue to publish the results of this work in 2011. Publications will include papers by the Sustainable Forest Management Network, in 2011.

Our products, over 200 produced over the lifespan of the FNFP, were consistently among the most accessed from the CFS bookstore. 2010-11 Publications from the FNFP on subjects related to economic opportunities in forestry were accessed nearly 500 times from the bookstore in the past year, as well as being available at outreach events and CFS offices across the country.

Investments by forest-based community partners.

Ratio of program funds leveraged.

Description

The forest sector is an important industry in many regions of Canada and provides significant employment in close to 200 forest-dependent communities across the country. In the face of weakened markets and increased global competition, forest-based communities can benefit from dissemination of knowledge and tools to take advantage of emerging economic opportunities. NRCan provides financial contributions to forest community partnership organizations at 11 forest-based community sites, and Aboriginal communities across Canada. Under this Sub Activity, NRCan has two programs that contribute to this FSDS implementation strategy:

- The Forest Communities Program (FCP) supports forest community sustainable development research, knowledge development dissemination and transfer.
- The First Nations Forestry Program (FNFP) assists First Nations across Canada to build capacity in sustainable forest management.

The objective of these programs is to ensure that forestbased communities (both Aboriginal and non-Aboriginal) have the knowledge, products, tools and capacity to achieve sustainable forest management goals and can take advantage of forest sector opportunities.

Relationship to FSDS Target

The development and dissemination of knowledge and information for forest-based communities provided under Sub Activity - Forest-based Community Partnerships contributes to the improved management of Canada's forests. This information is actively disseminated among a broad range of forest communities and takes the form of workshops, fact sheets, annual reports and web-based tools. Moreover, through the National Forest Inventory and the State of Canada's Forests report, NRCan provides information that enables the public's access to information on Canada's forests. Thus, these initiatives contribute directly to FSDS Target 7.3 - Sustainable Forest Management.

* Note: In the Departmental Sustainable Development Strategy components of RPP 2011-2012, this activity was identified as nested within NRCan's Program Activity Architecture (PAA) 2011-2012 as follows: Strategic Outcome 1 – Economic Competiveness; Program Activity 1.1 – Economic Opportunities for Natural Resources; Sub Activity 1.1.5 – Forest-based Community Partnerships.

Since its inception in 1996, the FNFP supported over 2,400 forestry projects in First Nations communities across Canada, directly investing approximately \$59 million, and leveraging over \$202 million from communities and other partners, representing a ratio of greater than 2:1 leveraged every year.

Output and Indicator

Knowledge products and tools for forest-based communities.

o Number of knowledge products and tools developed.

Over 200 products were developed in the course of the program, with seven published in FY 2010-2011. These materials, including a brochure entitled, "Aboriginal Communities and Forestry," were disseminated widely to stakeholders, libraries and communities, along with being made available at outreach events.

List of Acronyms for Federal Organizations

The following acronyms are used to specify those federal organizations that lead, or share the accountability for, the implementation strategies identified in support of the FSDS targets.

- ACOA Atlantic Canada Opportunities Agency
- **EC** Environment Canada
- IC Industry Canada
- INAC Indian and Northern Affairs Canada
- NRCan Natural Resources Canada
- TC Transport Canada