




Market Name	Market Category	2011		2012		Method/Source	Description
		Low estimate	High estimate	Low Estimate	High Estimate		
 Air and Carbon							
Alberta Greenhouse Gas Emissions Trading System	Established Market	124,700,000	143,600,000	114,930,000	125,450,000	The totals represent the sum for offset sales and contributions to the technology fund. Technology fund is fixed at \$15/tonne CO ₂ e; range of prices for offsets is \$11 to \$15 for 2.63MT of offsets in 2012 (AB Climate Change Central).	Alberta's Specified Gas Emitters Regulation created a market between regulated companies and others who can lower emissions on a voluntary basis, such as by agricultural management improvements.
Ontario Emissions Trading Registry	Established Market	29,000	8,900,000	7,507	2,252,000	The estimated number of tonnes is 7,507. The estimated price range is \$1-\$300.	The Ontario Emissions Trading Registry is a regulatory instrument to track the creation, transfer and use of allowances and emissions reduction credits issued to reduce smog and acid rain causing pollutants from the electricity sector.
On-Road Vehicle and Engine Emission Regulations trading system	Established Market	0	0	0	0	There were no reported credit trades in the 2010 model year, according to Environment Canada: http://www.ec.gc.ca/Publications/94AEA92E-B89B-4C15-B85A-5AF5B6F2338E/FleetAverageNOxEmissionPerformanceReportOf2009.pdf	The on-road vehicle and engine emission regulations set greenhouse gas emission standards for on-road vehicles and engines; transfers of credits are allowed.
Heavy-duty Vehicle and Engine Greenhouse Gas Emission Regulations trading system	Established Market	Not applicable	Not applicable	Not applicable	Not applicable	This program was newly added to the 2013 survey; the first model year covered by the regulations is 2014.	The purpose of these regulations is to reduce greenhouse gas emissions from heavy-duty vehicles and engines by establishing emission standards; transfer of credits will be allowed.
Manitoba Sustainable Agriculture Practices Program	Payment Program	1,800,000	1,800,000	Not applicable	Not applicable	The program concluded in 2011 and will be replaced by the Growing Forward program; not included in 2012 value due to program termination.	The MSAP is a comprehensive program with a focus on reducing greenhouse gas emissions in the agriculture sector.
Pacific Carbon Trust	Established Market	18,000,000	18,000,000	13,886,815	13,886,815	As reported by the Pacific Carbon Trust: http://pacificcarbontrust.com/assets/Uploads/Auditor-General-Opinion-Letter-and-Financial-Statements-2012-13.pdf	The Pacific Carbon Trust is a Crown corporation of the Government of BC, created to deliver greenhouse gas offsets. In November 2013, the Government of BC announced the termination of the Pacific Carbon Trust.
Renewable Energy Certificates	Established Market	1,427,000	1,427,000	Not available	Not available	SEE TEXT BOX regarding data limitations for 2012; value reported for 2011 was based on 2007 information. Green-e verification report from the Center for Resource Solutions for 2007 data: http://www.green-e.org/docs/2011%20Green-e%20Verification%20Report.pdf	Tradable Renewable Energy Certificates (RECs) are a non-tangible, tradable commodity that represent proof that one megawatt-hour (MWh) of electricity was generated from a renewable energy resource.
Voluntary carbon offsets	Established Market	25,419,078	25,419,078	5,802,436	5,802,436	Value from Ecosystem Marketplace; converted to Canadian dollars.	Voluntary carbon offsets refers to all purchases of carbon offsets not driven by an existing regulatory compliance obligation.
Nova Scotia Voluntary Carbon Emissions Offset Fund	Established Market	Not applicable	Not applicable	Not applicable	Not applicable	Legislated in 2010 but currently not implemented.	The legislation will create an offset fund for projects that reduce greenhouse gas emissions. Investors will be able to buy credits to offset their own activities, such as air travel or the emissions generated by a business.
Quebec Cap and Trade for Greenhouse Gas Emission Allowances	Established Market	Not applicable	Not applicable	10,000,000	10,000,000	SEE TEXT BOX; 2013 value of \$11 million Not included in total for Air & Carbon, but included in the list of markets in 2013.	The cap-and-trade system's first compliance period is 2013-2014 and includes the industrial and electricity sectors; additional sectors are included in future compliance periods. The system is also open to voluntary participation.

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Federal Solvent Degreasing regulation transferable allowances	Established Market	16,318	16,318	Not available	Not available	No data available for 2012; 2011 value based on an estimated price of \$1/kg.	The Solvent Degreasing Regulations reduce releases of trichloroethylene (TCE) and tetrachloroethylene (PERC) and include tradable allowances.
TOTAL		171 million	190 million	121 million	134 million	2011 total as Reported in 2012 Survey	
 <h3 style="text-align: center;">Water Quality and Quantity</h3>							
South Nation River Total Phosphorus Management trading system	Established Market	0	0	Negligible	Negligible	As reported by the South Nation Conservation Authority.	The South Nation River watershed has a regulated water quality trading program; waste water dischargers must control their phosphorus loadings into the receiving waters of the watershed.
South Saskatchewan River Basin tradable water allocations	Established Market	4,550,149	4,550,149	5,000,000	5,000,000	Due to measurement challenges, the 2012 value is a rounding of the 2011 value; methodology will be reviewed for 2014 report. For the 2011 value, price estimates used are approximate; transfer values of \$7500 and \$5000 per acre-foot were used where transfer recipient was a municipality and an agricultural producer, respectively. Source: Alberta Environment.	The SSRB Management Plan allows for the trading of water rights, as authorized in the Alberta Water Act, to promote efficient use of water.
Ontario Landowner Environmental Assistance Program	Payment Program	1,387,522	1,387,522	3,000,000	3,000,000	2011 value provided by the Board of the Lake Simcoe Region Conservation Authority; 2012 value from the Lake Simcoe Region Conservation Authority, 2012 Annual Report: http://www.lsrca.on.ca/pdf/reports/annual_report_2012.pdf	The Landowner Environmental Assistance Program (LEAP) provides landowners with funding and technical assistance for environmental projects on their land.
Lake Simcoe Farm Stewardship Program	Payment Program	1,505,000	1,505,000	790,884	790,884	Value provided by Ontario Soil and Crop Improvement Association.	Farmers in the Lake Simcoe watershed implement best management practices that contribute to reducing levels of phosphorus in the lake and to improving wildlife habitat.
Ontario Drinking Water Stewardship Program	Payment Program	5,167,000	5,167,000	0	0	Program ended; not included in 2012 value. Information that the program ended in 2011 was provided by Ontario Soil and Crop Improvement Association.	The ODWSP, under the Clean Water Act, provides financial assistance for voluntary measures that protect municipal drinking water sources.
Watershed stewardship activities under Conservation Ontario umbrella	Payment Program	12,485,000	12,485,000	17,200,000	17,200,000	Values received from Conservation Ontario; some funding is omitted due to overlap with other markets included elsewhere in this survey.	Conservation Ontario is the network of 36 Conservation Authorities that deliver services and programs that protect and manage water and other natural resources in partnership with government, landowners and other organizations.
Prince Edward Island Alternative Land Use Services program	Payment Program	660,000	660,000	660,000	660,000	Value provided by PEI Department of Environment, Energy, and Forestry. The 2012 value is preliminary as ALUS program is currently under review.	PEI's Alternative Land Use Services (ALUS) program was launched in 2008 and today has more than 400 clients.
Alberta Growing Forward On-farm Water Management	Payment Program	3,200,000	3,200,000	3,200,000	3,200,000	2011 Value from Alberta Growing Forward annual reporting (not available online). No value available for 2012, however, the program is in its final year of operation (program transitions to Growing Forward 2 in 2013) so it is reasonable to assume constant funding for final year of operation.	This program provides technical assistance to agricultural producers to complete a long-term water management plan, and shares the cost of related enhancements of their on-farm water supply management.

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Saskatchewan Water Security Agency water use payments	Established Market	18,180,000	18,180,000	22,142,000	22,142,000	2012 information from the annual report of the SK Watershed Management Authority: https://www.wsask.ca/Global/About%20WSA/Annual%20Reports%20and%20Plans/Water%20Security%20Agency%20Annual%20Reports/SwaAnnualReport20112012.pdf Note: This is a correction to the 2011 value.	Water rental charges are described in the Saskatchewan Watershed Authority's annual report and are required by the provincial Water Power Act.
TOTAL		31 million	31 million	52 million	52 million	2011 total as reported in 2012 Survey	
 Habitat and Biodiversity Markets							
Federal Fish Habitat Management Program (changed in 2013 to the Fisheries Protection Program)	Payment Program	9,605,000	274,183,000	7,210,379	205,823,327	See TEXT box in 2013 Survey. The values presented here represent the high and low values arrived at through three different calculation methods, each built on different assumptions. As the program changed in 2013, the 2014 Survey will revisit the methodology.	When activity destroys or degrades fish habitat, a compensatory project can be undertaken to protect or restore fish habitat.
Manitoba Wetland Restoration Incentive Program	Payment Program	28,420	28,420	Not applicable	Not applicable	Not included in 2012 value due to program termination. Province of Manitoba public accounts: http://www.gov.mb.ca/finance/pdf/annualreports/pubacct_451_11.pdf	Landowners enter into a conservation agreement that ensures that wetlands are permanently protected and they receive a payment to recognize the value of the restored wetlands.
Federal wetlands compensation	Payment Program	Not available	Not available	Not available	Not available	No estimate available. It was unclear to what extent this would overlap with required federal Fisheries authorizations.	In accordance with the Federal Policy on Wetlands Conservation, Environment Canada has provided recommendations for measures such as conservation allowances in environmental assessment processes.
New Brunswick wetland habitat compensation	Payment Program	Not available	Not available	Not available	Not available	No value available for 2012	The province of NB encourages action-focused projects that will protect, rehabilitate or enhance the natural environment.
Nova Scotia wetland habitat compensation	Payment Program	Not available	Not available	450,000	450,000	Value provided by NS Department of the Environment.	The NS Department of Environment may issue approvals to alter some types of wetlands and require wetlands to be restored elsewhere to offset any loss during the alteration process.
PEI wetland habitat compensation	Payment Program	Not available	Not available	Not available	Not available	No value available for 2012	Preferred compensation methods include restoration and enhancement of wetlands, although the creation of a new wetland would also be a potential compensation method. Compensation may also include, but should not be limited to, the financing of wetland-related activities such as research and education.
Federal Habitat Stewardship Program for Species at Risk	Payment Program	9,000,000	13,000,000	9,000,000	13,000,000	Information from the Habitat Stewardship Program	The HSP provides funding to stewards for implementing activities that protect or conserve habitats for species assessed by the Committee on the Status of Endangered Wildlife in Canada.
Aboriginal Fund for Species At Risk	Payment Program	3,300,000	3,300,000	3,300,000	3,300,000	Approximate annual contributions from the Species at Risk Public Registry: http://www.registrelep-sararegistry.gc.ca/involved/funding/faep-asrp_e.cfm . Note that this figure includes research and capacity-building expenditures as well as habitat securement.	The AFSAR supports Aboriginal involvement in the conservation and recovery of species at risk across the country. Since its inception, projects have involved more than 90 communities and benefited more than 270 SARA-listed or COSEWIC-assessed species.

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Disbursements from the Environmental Damages Fund	Payment Program	150,677	150,677	714,671	714,671	Value from Environment Canada.	The majority of funds are directed to the fund through statutory fines and court-ordered payments. Environment Canada solicits project proposals from eligible groups and ensures projects are carried out in a cost-effective, technically feasible and scientifically sound manner.
Allocation Transfer Program for Fisheries (Pacific Region)	Established Market	Not available	Not available	Not available	Not available	No pricing data available as the quota price is tied to the value of the vessel and is not easily separated from the total license value.	The Allocation Transfer Program (ATP) was created in 1994 under the Aboriginal Fisheries Strategy (AFS) and allows for trading of fishing quotas.
Allocation Transfer Program for Fisheries (Maritime Region)	Established Market	Not available	Not available	Not available	Not available	No pricing data available as the quota price is tied to the value of the vessel and is not easily separated from the total license value.	The Allocation Transfer Program (ATP) was created in 1994 under the Aboriginal Fisheries Strategy (AFS) and allows for trading of fishing quotas.
Alberta tradable hunting rights	Established Market	510,000	3,375,000	572,800	4,377,000	Price ranges and quantities of sales and leases provided by the Alberta Professional Outfitters Society.	In Alberta, hunting rights can be sold or leased.
Manitoba Habitat Heritage Corporation conservation agreements	Payment Program	7,538,833	7538833	8,450,000	8,450,000	Value from the Manitoba Habitat Heritage Corporation's Annual Report: http://www.mhhc.mb.ca/info/annual.html .	Under this initiative, conservation agreements are designed to provide long-term protection and conservation of wildlife habitat.
Nature Conservancy of Canada programs (including Natural Areas Conservation Program)	Payment Program	32,400,994	32,400,994	23,855,813	23,855,813	Value of purchases of conservation lands and agreements, from Nature Conservancy financial statements: http://www.natureconservancy.ca/assets/documents/nat/2011-2012-Audited-Financial-Statements.pdf The 2011 values are a correction from the original report.	The Nature Conservancy of Canada invests in conserving and protecting important natural areas. The Government of Canada launched the Natural Areas Conservation Program with a vision of investing in direct, on-the-ground action to conserve important natural habitat in communities across southern Canada.
Ducks Unlimited Canada projects	Payment Program	62,995,000	62,995,000	53,800,000	53,800,000	Value of expenditures for enhancement, securement, and management of waterfowl habitat, from Ducks Unlimited Canada 2011/12 financial statements: http://www.ducks.ca/who-we-are/annual-reports/2012-annual-report/	Ducks Unlimited Canada delivers on-the-ground habitat conservation projects, research, education programs and public policy work to conserve, restore and manage wetlands.
North American Waterfowl Management Plan	Payment Program	89,716,305	89,716,305	83,521,501	83,521,501	Value from initiative's annual report and did not include the Western Boreal program http://www.nawmp.ca/pdf/HabMat2012English.pdf . The 2011 value is from the 2010/11 fiscal year. Note that some expenditures were outside of Canada, while others may overlap with expenditures in other markets.	This initiative is an international partnership that conserves and protects wetland and upland habitats, and associated waterfowl populations by connecting people with nature.
Wildlife Habitat Canada projects	Payment Program	38,500	38,500	1,278,715	1,278,715	Values calculated from Wildlife Habitat Canada annual reports. In 2011, funding provided to Ducks Unlimited and Nature Conservancy of Canada was omitted to avoid double-counting.	Wildlife Habitat Canada works to conserve, restore and enhance wildlife habitat in Canada by funding habitat conservation projects.
Various local-level Alternative Land Use Services programs	Payment Program	155,000	250,000	155,000	250,000	Vermillion, AB & Norfolk, ON reported data (9 other ALUS programs have no data available.) The 2011 values are a correction from the original report.	Alternative Land Use Services (ALUS) programs are found in many parts of AB, ON, MB and PEI; they provide incentives to restore wetland habitat, plant tall-grass buffers along streams, and create pollinator habitat among other projects.

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		Low estimate	High estimate	Low Estimate	High Estimate		
Ontario Species at Risk Stewardship Fund	Payment Program	4,000,000	4,000,000	5,000,000	5,000,000	Value from Ontario Ministry of Natural Resources.	The Species at Risk Stewardship Fund promotes protection and recovery through stewardship activities.
Quebec Partenaires Pour la Nature program	Payment Program	2,590,000	2,590,000	3,224,463	3,224,463	Value from Ministère du Développement durable, de l'Environnement et des Parcs. This value includes \$3,224,463 for the cost of acquiring land for natural areas protection. It excludes costs associated with legal recognition of the lands as protected areas, and costs for educational and awareness-raising projects. The 2011 values are a revision from the original report. 2012 values are for fiscal year 2012/13.	This program offers financial support for projects that have a goal of acquiring lands for the preservation of natural areas in Quebec.
Canada-PEI Agriculture Stewardship Program	Payment Program	968,062	968,062	755,000	755,000	Value from PEI Department of Agriculture and Forestry. This figure includes best practice implementation funding from the federal government, excluding the provincial government's contributions. The 2011 values are a correction from the original report.	The initiative offers technical and financial support to encourage producers to voluntarily implement beneficial management practices that reduce environmental risk and enhance soil, water, air and biodiversity resources.
Nova Scotia Environmental Farm Plan	Payment Program	Not available	Not available	Not available	Not available	Source is PEI Department of Agriculture and Forestry	The program helps farmers identify and assess environmental risk on their property and undertake best management practice implementation.
New Brunswick Environmental Farm Plan	Payment Program	1,405,000	1,405,000	3,108,000	3,108,000	Value from New Brunswick Department of Agriculture, Aquaculture, and Fisheries; it is the total "green investment" for the best management practice program implementation.	This program supports and promotes the development, adoption and implementation of environmental management practices.
Newfoundland and Labrador Environmental Farm Plan	Payment Program	845,000	845,000	845,000	845,000	Best Management Practice Implementation value from the initiative's evaluation report, representing an average from 2009-2012: http://www.nr.gov.nl.ca/nr/funding/growingforward/growing_forward_evaluation_2009_2012.pdf .	This program supports and promotes the development, adoption and implementation of environmental management practices.
Canada-Yukon Farm Stewardship Plan	Payment Program	44,000	44,000	51,000	51,000	Value from Yukon Department of Energy, Mines, and Resources	Under this initiative, funding is available for targeted on-farm actions or best management practices.
Canada-Saskatchewan Farm Stewardship Program	Payment Program	8,785,774	8,785,774	12,967,000	12,967,000	Value from the Saskatchewan Provincial Council of Agricultural Development and Diversification, and represents only a minimum expenditure. The 2011 values are a correction from the original report.	The Canada-Saskatchewan Farm Stewardship Program (CSFSP) is the Saskatchewan component of the National Farm Stewardship Program launched under Growing Forward.
Canada-Manitoba Environmental Farm Action Program	Payment Program	2,200,000	2,200,000	2,500,000	2,500,000	Preliminary value provided by Manitoba Agriculture.	This initiative works in partnership with Agriculture and Agrifood Canada & Manitoba Agriculture Food and Rural Initiatives to provide funds for agricultural producers to implement beneficial farm management practices.
Quebec - Mesures cofinancées du programme Prime-Vert	Payment Program	8,936,043	8,936,043	14,511,516	14,511,516	Value provided by Ministère de l'Agriculture, des Pêcheries et de l'Alimentation du Québec.	This is the Quebec version of the Growing Forward initiative, with funding used to implement programs for the agricultural and food processing sectors.
Canada - Ontario Growing Forward	Payment Program	7,680,000	7,680,000	760,000	760,000	Value provided by Ontario Soil and Crop Improvement Association.	This is the Ontario version of the Growing Forward initiative, with funding used to implement programs for the agricultural and food processing sectors.
Canada-Alberta Growing Forward	Payment Program	2,350,000	2,350,000	Data not available	Data not available	2011 value from program report, not publicly available; 2012 value not available.	This is the Alberta version of the Growing Forward initiative, with funding used to implement programs for the agricultural and food processing sectors.

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British Columbia Environmental Farm Program	Payment Program	3,500,000	3,500,000	Data not available	Data not available	2011 value from program report, not publicly available; 2012 value not available.	The program provides cost-shared incentives through the Growing Forward Agreement on-farm action Beneficial Management Practices Program.
Ontario Species At Risk Farm Incentive Program	Payment Program	777,000	777,000	613,393	613,393	Value provided by Ontario Soil and Crop Improvement Association.	The program offers up to 80% cost-share towards a set of best management practices on croplands, grasslands, riparian areas, wetlands, or even woodlands.
TOTAL		260 million	531 million	233 million	440 million	2011 total as reported in 2012 Survey	



Grand Totals

462 million 753 million 406 million 625 million