Canada-Yukon Agreement on the Transfer of Federal Gas Tax Revenues under the New Deal for Cities and Communities 2005-2015

Yukon Gas Tax Fund Outcomes Report

Grand Opening of the Mayo Recycling Centre

To March 31, 2013

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1.0 Introduction

1.1 Gas Tax Fund Allocations

On May 26, 2005, the Government of Canada and Government of Yukon signed the *Canada-Yukon Agreement on the Transfer of Federal Gas Tax Revenues under the New Deal for Cities and Communities 2005-2015*. Working together with the Association of Yukon Communities (AYC) and Yukon First Nations, the parties committed to investing the territory's $37.5 million share of federal gas tax revenues directly into Yukon communities.

Canada agreed to extend the Gas Tax Fund (GTF) to 2015, resulting in an additional $60 million (totaling $97.5 million) in funding for environmentally sustainable infrastructure in Yukon communities. As agreed to by all parties, Yukon's Gas Tax funds are divided among municipalities (68%), First Nations (25%), and the Yukon government on behalf of unincorporated communities (7%). Please refer to Table 1 for a summary of GTF allocations by jurisdiction.

Table 1. Total Yukon Gas Tax Allocation by Jurisdiction, 2005-2014

Year	Total	Unincorporated	First Nation	Municipal	% Total
2005-2006	$4,500,000	$315,000	$1,125,000	$3,060,000	4.5%
2006-2007	$4,500,000	$315,000	$1,125,000	$3,060,000	4.5%
2007-2008	$6,000,000	$420,000	$1,500,000	$4,080,000	6%
2008-2009	$7,500,000	$525,000	$1,875,000	$5,100,000	15%
2009-2010	$15,000,000	$1,050,000	$3,750,000	$10,200,000	15%
2010-2011	$15,000,000	$1,050,000	$3,750,000	$10,200,000	15%
2011-2012	$15,000,000	$1,050,000	$3,750,000	$10,200,000	15%
2012-2013	$15,000,000	$1,050,000	$3,750,000	$10,200,000	15%
2013-2014	$15,000,000	$1,050,000	$3,750,000	$10,200,000	15%
TOTAL	**$97,500,000**	**$6,825,000**	**$24,375,000**	**$66,300,000**	**100%**

1.2 Gas Tax Funding Categories

The GTF has provided a stimulus for territory-wide sustainable community planning as well as stable, reliable funding for a wide range of infrastructure and capacity building projects that meet community-specific needs. Communities may access the Community Works Fund to build community infrastructure that achieves the GTF goals of cleaner air, cleaner water, and reduced greenhouse gas emissions (GHGs). Eligible project categories under the GTF include the following:

- Water and wastewater management
- Solid waste management
- Community energy systems
- Public transit
- Active transportation infrastructure (e.g., bike lanes)
- Building system improvements that lead to significantly increased energy efficiency
- Community capacity building

CITY OF DAWSON COMPOST BIN

Drinking water, capacity building, building system improvements, and wastewater projects constitute 75% of the applications approved for Gas Tax funding to date in Yukon. This dual emphasis on core infrastructure and capacity building is consistent with the challenges many rural Yukon communities face: that of aging, inefficient or inadequate basic infrastructure and a lack of human resource capability to implement and/or maintain improvements.

The approximate distribution of Yukon Gas Tax Fund projects approved to date by funding category is shown in Figure 1, and Figure 2 shows the figures from 2009. It's interesting to see the distribution changes over the course of the fund. As time passed, the percentage of projects in the Public Transit and Community Energy Systems categories expanded.

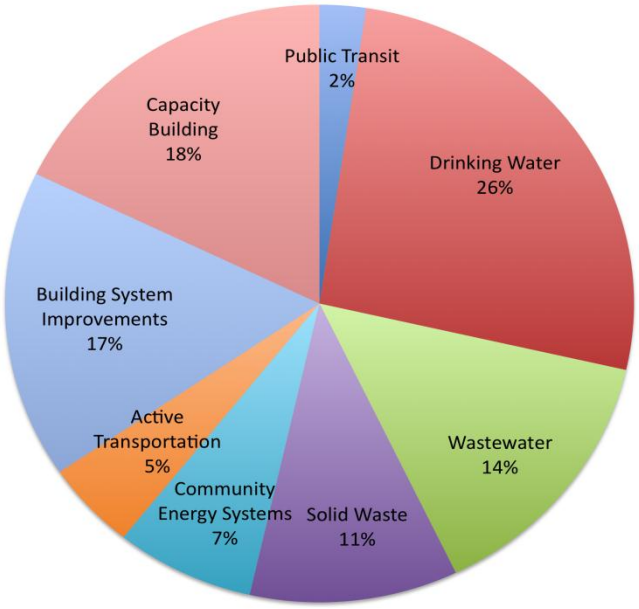


Figure 1 - Distribution of Projects to 2009

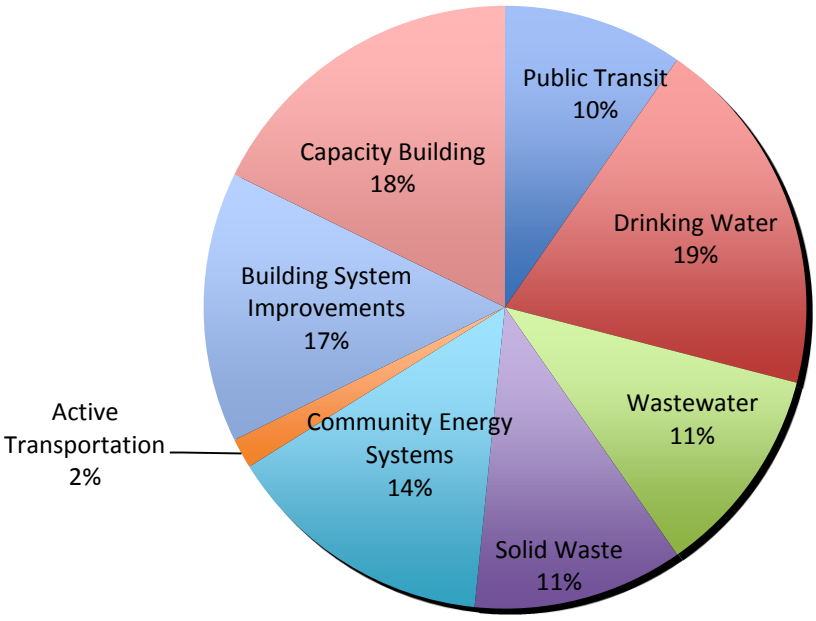


Figure 2 - Current Distribution of Projects to 2013

1.3 Integrated Community Sustainability Plans

Yukon's requirement that local governments complete an Integrated Community Sustainability Plan (ICSP) as the pre-requisite to drawing down funding for infrastructure projects under the GTF has resulted in a diverse range of community-based planning activity across the territory.

All Yukon municipalities and unincorporated Yukon and First Nations have developed ICSPs. Several are in the process of renewing these living documents.

1.4 Gas Tax Fund Participation

All Gas Tax recipients, eight municipalities and fourteen First Nations as well as unincorporated Yukon have accessed their Gas Tax Funds. At March 31, 2013, 151 projects have been approved for Gas Tax funding. 63 projects have reached the completion stage, with the remaining 88 currently underway or not yet initiated.

1.5 Public Transit Fund

The Public Transit Fund (PTF) allocated $390,654 in per-capita federal funding to Yukon for improvements to public transit infrastructure. In 2008, Yukon transferred the entire amount of its allocation under the PTF to the City of Whitehorse, which operates the only public transit system in the territory. Combined with funds from the Public Transit Capital Trust and a contribution from the municipality, four new transit buses were purchased at a total cost of just over $1.2 million.

Since 2008, four other Gas Tax recipients have purchased multi- passenger vehicles for community transportation, with Gas Tax Funds, reducing the number of vehicles travelling to events or traveling to the largest major City which is Whitehorse, thereby reducing greenhouse gas emissions.

CAFN 16 PASSENGER BUS & TRAILER

1.6 Gas Tax Fund Outreach

The first Gas Tax Workshop was held in 2009. Since then a workshop has been held on an annual basis. Participation is important as the workshop presents on different topics associated with the Gas Tax Agreement, which helps build capacity in municipalities and First Nations

The latest workshop was held in November 2012 with representation from all 22 recipients. Topics discussed were annual reporting, the Gas Tax project process, renewing ICSP's and a presentation from Infrastructure Canada on signage for projects.
Most recipients agree that the workshop is an important event that brings everyone together to discuss common issues or share project ideas.

2.0 Gas Tax Fund Projects - Outputs and Outcomes

GTF Recipients have engaged in a diverse range of projects with respect to eligible Gas Tax funding criteria. The outcomes of some projects can be easily quantified, whereas the outcomes of others are more difficult to express in numerical terms. Regardless, the list of projects in Annex (A) succeeds in meeting the GTF objectives of cleaner air, cleaner water, and reduced GHGs.

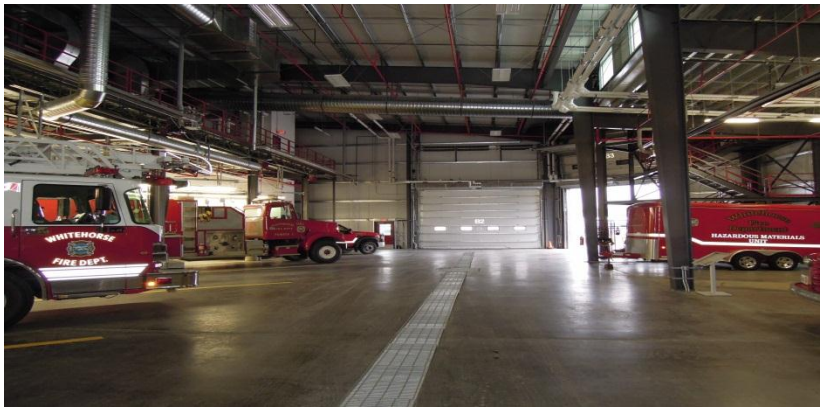
It is important to note that most of Yukon's power comes from four hydroelectric generating stations, the Whitehorse Dam, the Aishihik Dam, and Mayo A and Mayo B. These dams provide the bulk of power generation for Yukon. The back-up for these systems is diesel generation which is the prevalent source of power in communities not on the grid. With communities working towards reducing the load and demand for power, they reduce the amount of greenhouse gas emissions produced.

It is also important to note that oil burning forced air furnaces heat many Yukon buildings; therefore by improving the building envelope recipients are also reducing greenhouse gas emissions.

Please refer to the table in Appendix (A) for an overview all projects completed to date under the GTF in Yukon and their associated outputs and outcomes.

CAFN – DA KU ROOF REPLACEMENT

TRONDEK HWECHIN –OLD DAY CARE ENERGY RETROFIT



CITY OF WHITEHORSE – PUBLIC SAFETY BUILDING

3.0 Gas Tax Fund Project Success Stories

As of March 31, 2013 a total of 63 Gas Tax projects have been completed with support from the GTF. The following section highlights examples of how Gas Tax-funded projects are helping Yukon recipient communities reduce their environmental footprints and achieve the GTF goals of cleaner air, cleaner water, and reduced GHGs.

WASTE DIVERSION **VILLAGE OF MAYO**
PROJECT 2010-006 **MAYO RECYLING CENTRE**

On August 9, 2011 the Village of Mayo held the grand opening of their new 2000 sq. ft. recycling centre. This centre is wheelchair accessible, energy efficient, provides space for recycling, has a free store, is connected to water and power and has a fenced area for household hazardous waste.
The recycling centre is helping to reduce greenhouse gas emissions through the use of energy efficient windows, doors and lighting and a very high standard of insulation which helps keep the centre operating throughout the winter. Fencing and gates, as well as the household hazardous waste shed and outdoor storage were completed in 2012.
A free store allows residents access to useful items that might have been thrown into the landfill. The Recycling Centre collects the liquor recyclables from the Mayo Liquor Store and the volume of recyclables has doubled. They have also extended their hours of operation to accommodate residents of Mayo, Keno and Stewart Crossing.
The Recycling Centre is well insulated and energy efficient, and uses 2 energy efficient monitor heaters to heat the space, which has reduced heating costs and fuel consumption.
Waste and hazardous wastes are being diverted from the landfill and residents are recycling more, also reducing the amount of waste going to the landfill.

Mayo no longer burns waste at the landfill thereby eliminating greenhouse gas emissions. They are diverting hazardous wastes from the landfill by collecting them at the Recycling Centre and shipping them out for recycling. They are collecting other recyclables which eliminates these items from entering their landfill. By diverting these items they expect the life span of their landfill to increase and are reducing greenhouse gas emissions.

ACTIVE TRANSPORTATION PROJECT 2008-008

CITY OF WHITEHORSE BIKE LOCKERS

The City of Whitehorse is the capital and largest City in Yukon with a population of 27,889.
To promote active transportation and reduce GHG's the City has developed a number of commuter trails that both pedestrians and cyclists use. Many cyclists ride their bikes all season even at the coldest temperatures. The City of Whitehorse installed a number of bike lockers to encourage more people to ride their bicycles. It offers safe storage and protection for bicycles against the elements. By encouraging alternate methods of transportation the City is reducing greenhouse gas emissions.

BUILDING SYSTEM IMPROVEMENTS PROJECTS 2012-022 & 2012-027

TOWN OF FARO FURNACE REPLACEMENTS IN MUNICIPAL BUILDINGS

356 km. northeast of Whitehorse lays the Town of Faro. It was constructed in 1968 by Cyprus Anvil as a mining town. Much of the existing infrastructure dates back to this time.
The Town of Faro has begun a multi-phase project of replacing 30 year old furnaces that are inefficient, and a safety concern. They are being upgraded with new energy efficient furnaces that are star rated with efficiencies of 86% to 95.8%.
To date 8 furnaces have been replaced, with a 22% cost savings recognized by the Town of Faro.

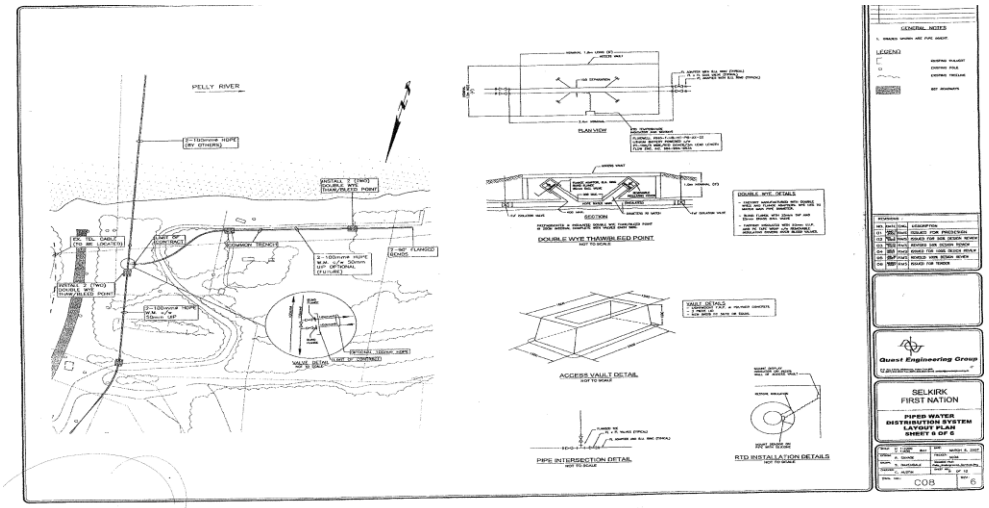
OLD

NEW

WATER **SELKIRK FIRST NATION**
PROJECT 2007-002 **SMALL DIAMETER PIPED WATER SYSTEM**

One of the main priorities of the Selkirk First Nation's Integrated Community Sustainability Plan was to install a small piped water system that would serve Pelly Crossing. The provision of safe drinking water was a health and safety issue for the First Nation.
A low flow pressure piped water distribution system was installed which included a pump house and chlorination system. 71 households and 8 community and government buildings were connected to the water distribution system. This system was 9,000 meters in length. One full-time water systems operator is trained and certified to maintain this system, the pump house and the chlorination system.

By installing a new drinking water system the Selkirk First Nation has ensured there is safe drinking water for its community members.



WATER **LITTLE SALMON CARMACKS FIRST NATION**
PROJECT 2010-009 **WATER TRUCK SHED**

Little Salmon Carmacks First Nation required safe storage for their water truck that would be separate from the storage of the sewer truck. By constructing a water truck shed, LSCFN has access to clean water that meets government standards for drinking water. This project was cost shared with MRIF.

4.0 Conclusion

In conclusion, Yukon Government has been able to facilitate Gas Tax projects with local governments that yield positive results. Figure 2 on page 3, shows how the distribution of projects has changed over the years, an increase in public transit by 8%, and an increase in community energy systems by 7%. There was also a decrease in drinking water of 7% and a decrease in wastewater of 3% due to recipients developing more projects in the other categories. The remaining distributions either stayed the same, or dropped slightly but these changes represent an increase in the number of Gas Tax recipients that participated and an increase in the number of projects since 2009.

The table of outputs and outcomes for projects (Annex A), outlines sixty- three completed projects that have contributed towards clean air, clean water, and reducing greenhouse gas emissions.

The infrastructure managed by local governments within the Yukon continues to benefit from Canada's investments in the Gas Tax Fund.

5.0 Looking to the Future

The current Gas Tax Agreement will end in 2014. In 2011 Canada passed legislation that ensures Gas Tax as a permanent fund. A new Gas Tax Administrative Agreement is currently being negotiated that will see these funds continue until 2024. Canada has agreed to index the fund, expand the categories, and ensure a smooth transition into the new Agreement.

This new Administrative Agreement will help communities build and revitalize public infrastructure that will help promote economic growth, a clean environment and sustainable communities. It will build on the successes of the First Agreement, provide a wider range of possible projects with the expanded categories, and encourage asset management.

Yukon has entered into discussions with Canada to renew the Gas Tax Fund agreement and negotiations are well underway.

The Government of Canada has indicated that new agreements are expected to be signed by March 31, 2014.

Municipalities, unincorporated Yukon and First Nations benefit directly from Canada's investment in infrastructure and they continue to plan and build communities with stable, predictable, long term funding.

Appendix (A) Summary of Outputs and Outcomes of Completed Gas Tax Fund Projects

Community/ Applicant	*Funds Received*	*Project Title*	*Outputs*	*Outcomes*
Water				
Selkirk First Nation	$233,820	Project 2007-002 Small Diameter Piped Water System	80 meters of pipe installed under the Pelly River; 11,000 meters of pipe installed in the ground; 95+ connections made to residential and community buildings.	Safe, clean source of drinking water for Pelly residents Project completed April 11, 2008.
Village of Teslin	$61,166.67	Project 2008-015 Recreation Complex Water Supply	Two 2500 gallon water tanks installed and 100 meters of pipe laid to connect new water source to existing system	Safe, clean source of drinking water made available at a well-used community building. Project completed July 10, 2009.
Town of Faro	$40,851.74	Project 2009-001 Well house#1 Motor VFD Upgrade	Installation of a new 50 h/p. variable frequency drive motor in well house#1.	More efficient water distribution and more efficient use of energy resources. Project completed December 3, 2009.
Town of Faro	$14,129.75	Project 2012-011 Well house #3 Motor VFD Upgrade	Installation of a new 20 h/p. variable frequency drive motor in well house #3.	More efficient water distribution and more efficient use of energy resources. Project completed October 10, 2012.
City of Whitehorse	$25,391.25	Project 2008-002 Water sampling stations	Installation of a water sampling station in Porter Creek that included the modification of an existing recirculation station vault which was modified by adding an insulated kiosk.	Increased year round water protection and more efficient use of energy resources. (reduced energy consumption) Project completed January 16, 2013.
City of Whitehorse	$28,167.85	Project 2009-007 Water Cross Connections & Bleeders	180 homes throughout Whitehorse were upgraded with water cross connections and thermostatically controlled bleeders, which use temperature sensors to trigger the bleeder when frost protection is needed.	Increased water conservation during winter months and more efficient use of energy resources (reduction in energy consumption). Project completed January 26, 2012.
City of Whitehorse	$160,000	Project 2009-022 Pump house & Recirculation Stations	Installation of a soft start mechanism at the Two Mile Booster Station and Installation of a high efficiency diesel backup generator, a new electrical booster pump and a	More efficient water distribution and more efficient use of energy resources. Project completed March 19, 2013.

			high efficiency variable frequency drive at the Crestview pump house.	
City of Whitehorse	$18,713.13	Project 2009-026 Ground Temperature Monitoring Stations	Installation of 6 permanent ground temperature monitoring stations in Logan, Granger, Arkell, Hillcrest, Takhini and Marwell.	Increased water conservation. 75,000 liters of potable water not bled into City sewers. Project completed February 21, 2013.
City of Whitehorse	$440,000.00	Project 2010-021 Downtown reconstruction of Hanson St.	Water bleeders were removed from 3 private residences, one commercial property, one children's home and an 18 unit condominium and replaced with a return water service and recirculation pump at each property. A water main was replaced and a new fire hydrant was added. A 1.5 meter/3 meter wide asphalt path was constructed which connects to existing trails and networks.	Increased water conservation, by not bleeding liters of clean drinking water, into the sewage system (savings of 5 to 1000 litres of water/day/household). The path reduced greenhouse gas emissions by providing a transportation mode for cyclists and pedestrians. Project completed November 22, 2011.
Dawson City	$131,786.34	Project 2009-035 Well Intake Optimization Program	3 wells were cleaned and chlorinated and three new pumps and motors were installed. Data loggers were installed for each of the three wells.	Provide safe groundwater supply for the City of Dawson. Project completed July 6, 2010.
Dawson City	$1,522,000.00	Project 2009-036 Reservoir Pump house chlorination HVAC Improvements	Improvements to the water distribution pump house chlorination room by installing an HVAC (heating, ventilation, and air conditioning) system.	Ensure safe drinking water supply for the City of Dawson. Project completed June 15, 2011.
Village of Mayo	$270,612.62	Project 2010-010 Rejuvenation of Warm water wells	2 warm water wells both 839 feet deep were rejuvenated they are used to heat the Mayo drinking water distribution system.	Provide safer drinking water for the Village of Mayo. Reduce greenhouse gas emissions by eliminating the use of fossil fuels to run oil fired boilers to heat the water. Approx. 163,000 litres of fuel required to run boiler/year. Project completed January 13, 2013.
Wastewater				
Carcross/Tagish First Nation	$180,000	Project 2007-004 Sewage Pump-out Truck Garage	Construction of new shop to house and maintain vacuum eduction truck in accordance with Yukon regulations	Cleaner water through relocation of shop away from lake; reduced GHGs via improved energy efficiency

				Project completed May 7, 2009
Village of Teslin	$3,200	Project 2008-013 Sewage Lagoon Fencing	34 meters of fencing installed around perimeter of lagoon	Cleaner water through protection of lagoon from illegal dumping of contaminants. Project completed October 27, 2008
Village of Teslin	$14,203.16	Project 2009-003 Recreation Complex Water Closet Replacement	23 toilets with 13 L flush capacity replaced with 6 L capacity toilets; 5 water-less urinals installed.	Cleaner water through decreased demand on freshwater supply and sewage lagoon. Project completed January 29, 2010.
City of Whitehorse	$124,639.33	Project 2008-001 Lagoon monitoring wells	Monitoring wells were drilled at the Crestview, Porter Creek and Whitehorse Sewage lagoons.	Ensure cleaner water by monitoring any leaking effluent into the adjacent groundwater. Project completed October 1, 2009.
City of Whitehorse	$5,724,855.77	Project 2008-005 Livingston Trail Sewage Outfall Pipe	A 1050 meter discharge pipe was constructed to connect the long term storage pond directly to the Yukon River. This gives the City the ability to maximize the volume discharged from the long term storage pond which results in maximizing retention and treatment of the effluent to 365 days and ensures the long term storage will have capacity to store treated effluent volumes for the next 30 years.	Ensures cleaner water being discharged into the Yukon River. Project completed August 26, 2011.
City of Whitehorse	$354,385.93	Project 2009-025 Macerator Porter Creek Flush Tank	Installation of a macerator which grinds up large solids in the sewage. This helps prevent blockages in the main and ensures solids are completely broken down. Sludge accumulation in the primary treatment cells of the Livingstone Trail Environmental Control facility have declined from 0.81 m to 0.66 m in cell A and from 0.45 m to 0.08 m in cell B during the period June 2010 to June 2011which is due to the new macerator.	Ensures cleaner water by reducing the potential for adverse environmental impacts during discharge of treated affluent. Reduces settling solids and reduces the amount of Actizyme (biological sludge reduction additive) the City uses. Project completed August 12, 2008.
Village of Carmacks	$29,323.78	Project 2009-055 Tantalus Sewer Line Replacement	7 meters of sewer line was replaced on Tantalus Crescent., as part of a line servicing for the Village of Carmacks office, the RCMP building, Wild land Fire Management, the Tantalus School and a few residences.	Ensure cleaner water, by replacing sewer lines and reducing environmental risks. Project completed June 14, 2010.

Solid Waste				
Village of Teslin	$78,350	Project 2008-018 Solid Waste Transfer Station and Electrification	34 cement blocks placed to build a 2000 ft^2 retaining wall; two 30 cubic yard bins installed to house domestic waste; electricity supplied to the recycling shed located on site	Cleaner air due to significant reduction in waste burning; cleaner water through improved site management Project completed July 10, 2009.
Village of Teslin	$12,174.25	Project 2009-016 Compost Project	Preparation of a 500 ft^2 composting area including installation of a wire enclosure, general purpose fencing and electric fencing	Reduced GHGs through the conversion of a methane-producing process (landfilling organics) to non-methane producing process (composting) Project completed January 29, 2010.
Village of Teslin	$162,145.00	Project 2010-025 Compacting Garbage Truck	Purchase a garbage truck with compactor.	Reduced GHG's. There has been a 50% reduction in the number of trips made to the Teslin transfer station. More household waste was compacted, which allowed more volume of waste put into the bins that were taken to Whitehorse. Project completed September 2, 2011
City of Whitehorse	$78,201.10	Project 2009-021 Development & Improvement of Landfill	500 dump trucks of soil were generated by expanding cell #4 at the landfill site. A new waste data tracking and collection system was also installed.	Reduced GHG's by using the soil collected from expanding the cell to cover the waste which results in a reduction of methane gas and GHG"s. New electronic system sends data to the City downtown resulting in 25% fewer trips to the landfill thereby reducing GHG's. Project completed January 31, 2013.
Town of Watson Lake	$16,527.00	Project 2009-046 Recycling Centre Upgrades	Expansion of the recycling centre to allow for increased volumes of recycling and diverting waste from the landfill.	Cleaner air due to the significant amount of waste diverted from the landfill. 3.6 tons of waste diverted which also reduces GHG's. 106.5 cubic meters of recycling collected. Project completed November 12,

				2009.
Dawson City	$69,190.17	Project 2010-005 Dawson City Compost Facility	Construction of a municipal compost facility - 32x32 concrete pad to deter leachate 16x32x20 raven proof structure Purchase 4 sorting bins Produce & distribute education materials.	By diverting compostable materials from the landfill, this resulted in cleaner air and reducing GHG's as there is a reduction in the production of methane gas. Project completed March 28, 2011
Village of Carmacks	$12,495.00	Project 2012-005 Purchase a Compacting Garbage truck	Purchased a compacting garbage truck.	Reduced GHG's by picking up garbage from 220 households and 20 commercial/industrial users within the municipality and 115 households and 3 commercial/industrial users in the periphery thereby reducing the number of vehicles that would take garbage to the landfill site. Project completed October 10, 2012

Community/ Applicant	***Funds Received***	***Project Title***	***Outputs***	***Outcomes***
Public Transit				
Carcross/Tagish First Nation	$72,000	Project 2007-005 School Bus Shelters and Lighting	Three bus shelters were constructed to accommodate school children and reduce the number of vehicles driving	Reduced GHGs through the reduction of vehicle use during peak times Project completed May 7, 2009.
City of Whitehorse	$900,000.00	Project 2009-048 Transit Bus Replacement	Purchased 4 Nova LFS (low floor) transit buses which are EPA 2007 Emission Regulation compliant.	These 4 lighter buses are more fuel efficient with less polluting emissions, resulting in cleaner air and reducing greenhouse gas emissions. Project completed December 15, 2010.
Teslin Tlingit Council	$85,524.00	Project 2010-011 Purchase a 24 Passenger bus	Purchased a 24 passenger bus to assist in decreasing the number of vehicles making trips to various events around the Yukon.	Reduced GHG's by eliminating the number of vehicles driving to events. This bus makes 2 scheduled deliveries and picks

			The bus has been an essential transportation mode for the Elders in this community especially for those who are no longer able to drive. The bus is fully utilized for travel to sporting events, General Assembly meetings, and is used as a tour bus for summer trips to Juneau Alaska.	up at 2 high schools in Whitehorse, on Fridays and Sundays - 7 to 23 passengers/trip (366 km trip) which has eliminated 3 vehicles. 6 vehicles have been eliminated for travel to sporting events. Since the bus was purchased it has driven 100,000 km. Project completed January 12, 2011.
Champagne & Aishihik First Nation	$101,412.00	Project 2012-003 Purchase a Bus & Trailer	Purchased a 16 passenger, wheelchair accessible bus and a 16'trailer to take CAFN citizens to events and into Whitehorse.	Reduced GHG's. Over 36 trips were made to special events, with a total of 13,766 km travelled. 540 passengers travelled on these various trips. Project completed August31, 2012
Village of Carmacks	$34,223.93	Project 2012-019 Purchase a multi-passenger vehicle	Purchased a used, multi passenger vehicle. This bus was mostly used by the Village's recreation dept. to take youth to camps and special events.	Reduced GHG's by reducing the number of vehicles travelling to events. 15 passengers X3 trips – summer camp Baseball 3 trips 9 passengers Trips to Whitehorse min 4 passengers. Project completed March 16, 2013.
BUILDING SYSTEM IMPROVEMENTS				
Town of Watson Lake	$36,541.48	Project 2007-003 Administration Building Skylight Replacement	Skylights removed and replaced with insulated covered roof.	Reduced GHGs through improved energy efficiency Project completed March 19, 2008.

Town of Watson Lake	$163,748.64	Project 2009-014 Chiller Ice Unit Replacement	Purchased a new more energy efficient chiller ice making unit (plate and frame titanium core) for the hockey and curling arenas in the Recreation centre.	This model uses less electricity by operating at 25% less running time which will decrease electrical costs and will contribute to less GHG's. Project completed May 21, 2010.
Village of Teslin	$1,763.85	Project 2008-014 Recreation Complex Energy Efficiency (Phase 1)	Energy efficiency audit of recreation complex completed and recommendations for retrofits made.	Preparatory work to reduce GHGs in future Phase II Project completed October 27, 2008.
Town of Faro	$74,178.39	Project 2009-002 Replace Boiler, Faro Rec Centre	Two boilers from 1972 were replaced by one energy efficient boiler (2,000,000 BTU).	Reduced GHG's. The running time is considerably less and uses less fuel. The Town of Faro has calculated a 10% savings. Project completed March 4, 2010.
Village of Mayo	$496,030.00	Project 2010-006 Village of Mayo Recycling Centre	Constructed a 2000 sq. ft. recycling centre with space for a free store and a fenced area for household hazardous waste.	Reduced GHG's by reducing waste and household hazardous waste going to the landfill. Diverted recyclables from the landfill. Reduced fuel costs by $1,500.00/year by burning less fossil fuels to heat a more energy efficient building. Project completed January 18, 2013.
Town of Faro	$87,466.90	Project 2010-016 Rec Centre Energy Improvements	Re-insulated pipes in the boiler room of the recreation centre. As part of this project 1500 lbs. of asbestos was removed from the old insulated pipes.	Reduced GHG's by insulating pipes. Cleaner air was achieved by removing harmful substances like asbestos. Project completed October 4, 2010.
Town of Faro	$47,890.45	Project 2012-022	6 furnaces were replaced with	Reduced GHG's has resulted. By

		Furnace Replacement in Municipal Buildings	energy efficient ones, 86% to 95% efficiency, in the following buildings, 78 Ogilvie St, pump house #2, ice arena, pump house #1 and the fire hall.	replacing these furnaces Faro has seen a reduction in fuel of 1593 litres and $1,793.00 in costs for an overall cost savings of 22%. Project completed January 30, 2013.
Town of Faro	$21,490.00	Project 2012-027 Phase II Furnace Replacement in Municipal Buildings	2 furnaces were replaced with energy efficient ones, 86% to 95.8% efficiency, in the public works building and another one in the fire hall.	Reduced GHG's has resulted. By replacing these furnaces Faro has seen a reduction in fuel of 1593 litres and $1,793.00 in costs for an overall cost savings of 22%. Project completed March 7, 2013.
Champagne & Aishihik First Nation	$151,737.51	Project 2011-002 Da Ku Administration Building Roof Replacement	The entire roof of this building was replaced using super green construction methods. 8" of spray foam insulation was added to the attic space for an R value of R52, which provided a reduction of thermal bridging and an airtight seal. Metal roofing was used for durability.	Reduced greenhouse gas emissions through improved energy efficiency. Project completed December 5, 2012.
Ross River Dena Council	$218,000.00	Project 2010-023 Public Infrastructure Energy Efficiency Improvements: Laundromat Renovations	Upgrade community owned Laundromat to be more energy efficient, by putting in an energy efficient heating system, repair water system, and upgrade windows and doors and insulation.	Reduced GHG's has resulted through improved energy efficiency. Significant cost savings were made in both heating and energy. Project completed March 4, 2013
COMMUNITY ENERGY SYSTEMS				
City of Whitehorse	$3,000,000	Project 2008-009 Efficiency Upgrades,	Construction of a new 28,000 sq. ft. building (14,000 sq. ft. -	Reduced GHG's through improved energy efficiency.

		fire hall #2	administration & 14,000 sq. ft. – equipment) The building incorporates: solar wall to preheat ventilation air, triple pane windows with 2 Low E coatings, light shelves, exterior sunshades, increased wall & ceiling insulation, daylight & motion sensor lighting controls, reduced overall lighting load of 1.0W/sq. ft., distributed heat pump mechanical system with high efficiency propane fired boilers, low consumption water fixtures, low toxicity finishes, floor drain interceptors in apparatus bay to capture any hydrocarbon leakage from trucks and durable interior & exterior finishes.	Project completed March 7, 2011.
Village of Haines Junction	$300,000.00	Project 2009-033 Arena Ice plant replacement	Installed an ammonia primed ice plant capable of recovering waste heat.	Reduced GHG's by heating other buildings with the waste heat from the ice plant. Project completed November 19, 2010.
Village of Haines Junction	$179,891.58	Project 2010-027 Fire hall Energy Efficiency Improvements	Upgrade the fire hall for energy efficiency by upgrading the walls, fill behind the walls with low density spray foam insulation, add a vapor barrier, and repair the roof.	Reduced GHG's by making energy efficient improvements to the building. Fuel costs dropped significantly between 2008 and 2011 for a savings of $8,349.49. Project completed January 20,

				2011.
Tr'ondek Hwech'in First Nation	$231,568.00	Project 2009-053 Public Infrastructure – Energy Efficiency upgrades: Old Daycare Energy Retrofits	The community owned daycare was renovated to house Health and Social Services. 2 offices would now be housed in 1 building. Energy efficient upgrades were made as follows: New energy efficient windows and exterior doors, insulate with R-8 and put up vapor barrier,300 cubic feet of R20 insulation was replaced in the attic, new mechanical system installed and new HRV.	Reduced GHG's through improved energy efficiency. All staff into one office building instead of 2 reduced energy and heating costs significantly. Project completed December 9, 2011.
Town of Watson Lake	$81,391.68	Project 2010-004 Replace Chiller Unit condenser	A faulty condenser unit was replaced in a recently installed chiller unit with an LSCB-110 Ext 4 evaporative condenser.	Reduced GHG's. The faulty condenser was causing excessive energy demands which have been significantly reduced. Project completed February 23, 2011.

Town of Watson Lake	$91,214.54	Project 2010-036 District heat upgrade and planning	5 new heat exchangers installed, cleaning, flushing, and repairs made to the piping system. New filtration system installed replacing glycol system with soft water unit	Reduced GHG's. Waste heat is provided to the Recreation Centre summer pool and two Yukon Electric residences. Project completed March 14, 2012.
Village of Teslin	$197,400.00	Project 2010-012 Energy Efficiency Improvements made to Arena Mezzanine	Areas were created within the arena that will be heated from waste heat generated by the arena ice plant.	Reduced GHG's. Area is heated from waste heat generated from the arena ice plant. Project completed September

				14, 2011.
First Nation of Nacho Nyak Dun	$535,000.00	Project 2008-011 Central Geo-exchange heating system and central water supply system	Create a geo –exchange heating system capable of providing 250gpm of 8 degree Celsius warm water. System includes supply well, heat exchangers, warm water closed heating loop, circulation pumps, a re- injection well for cooled water and a warm water distribution system to the core building development.	Reduced GHG's. Reduce burning of fossil fuel by heating the Gov't House administration building and the central services building. A savings of approx. 50,000 litres of fuel/yr. Increased water quality and reduced costs for water supply and delivery. Decrease of 8 km water haul distance. Project completed June 6, 2011.
ACTIVE TRANSPORTATION				
City of Whitehorse	$45,722.98	Project 2008-008 Bike Racks & Lockers	Install 20 bicycle racks and 30 bicycle lockers throughout the City of Whitehorse.	Results in cleaner air and reducing GHG's by supporting non- motorized transportation. Project completed October 28, 2008.
City of Whitehorse	$77,292.48	Project 2009-015 Asphalt paths and trail connections	A commuter trail was built in Copper Ridge to connect pedestrian pathways along Hamilton Boulevard at the New Extension, behind Grizzly Circle and Black Bear Lane to North Star Drive. This path is 3 meters wide and 545 meters in length.	Resulted in cleaner air and reducing GHG's by supporting non-motorized transportation. Project completed July 21, 2011.
CAPACITY BUILDING				
Liard First Nation	$87,000	Albert Creek Water Quality Monitoring	Five LFN citizens trained in water sampling techniques and various environmental parameters potentially affecting drinking water quality investigated	Increased local capacity to detect and respond to water quality concerns; preparatory work to ensure cleaner drinking water in the future

City of Whitehorse	$28,492.29	Project 2009-008 Waste composition study	Provided the first waste compositional data for the waste at the Whitehorse landfill site - broken into 60 categories and 4 sectors. Current waste originating in Whitehorse accounts for 9% curbside, 60% ICI, 31% construction and demolition. 6,408 tonnes of waste currently in the landfill & having high diversion potential consists of 5% curbside, 60% ICI, 35% construction & demolition with paper, plastics, metal, organics and wood waste being prime target commodities.	This study allows City to better plan and target waste diversion programs and initiatives to reach 0 waste by 2040. Project completed November 25,2011
City of Whitehorse	$50,000.00	Project 2011-015 Energy Plan Review	Created a 15 year strategic energy plan. This involved energy audits on 23 City facilities, performance benchmarking & organizational assessments.	By implementing this plan the City will see yearly savings of $300,000. Energy costs will be reduced by 12%, water by 16% and GHG's by 384 tons/year. Project completed February 21, 2013.
Dawson City	$53,383.50	Project 2009-041 GUDI Assessment	The GUDI assessment includes: a) a monitoring program to determine the seasonal nature of the hydraulic connection between the water supply and nearby surface water system, b) determine through the data collected the period of time when the wells are most vulnerable to potential impact by	AECOM determined that the City's water is potentially GUDI. As a result Phase 2 and Phase 3 of the GUDI program would be required. (Phase 1 = Initial GUDI screening, Phase 2 =hydraulic connection assessment methodology, Phase 3 = Microscopic particulates analysis)

			surface water, c) designation for the city's water supply wells based on the data and comprehensive field listing including micro-particulate analyses.	Completion of this assessment will ensure the community has access to clean drinking water. Project completed May 18, 2011.
Dawson City	$57,281.38	Project 2009-044 Water Quality Program	Monitor & Evaluate drinking water for corrosivity and other elements. To do this they would: Contract Gartner Lee/AECOM to undertake Water Quality Test #1: Preliminary Corrosivity Assessment Study; completed November 2007 Contract AECOM to undertake Water Quality Test #2: First Flush Sampling - Preliminary Study; completed November 2008 Contract AECOM to undertake Water Quality Test #3: First Flush Sampling; to be conducted in September 2009.	The completion of Dawson's Water Quality Program results in cleaner water for the community. Monitoring water quality allows the City to be aware of any changes in the levels of various elements and minerals in the water supply by providing baseline data to compare now and in the future. The City will be able to act accordingly should these levels become unsafe. The City now has baseline data on corrosivity levels and will be able to monitor and evaluate these levels to determine the extent of impacts on the water distribution system. Community education regarding stagnant and corrosive water and methods to prevent damage and/or unsafe water results in cleaner water as community members learn how best to use their water system to lessen the impacts of corrosion in the system.

				Project completed July 14, 2011.
Watson Lake	$49,368.23	Project 2009-047 Tangible Capital Asset Reporting Implementation	Watson Lake hired a consulting firm to assist with implementation of the Public Sector Accounting Board's (PSAB) 3150 financial reporting for tangible capital assets.	Watson Lake complied with the PSAB requirements for reporting on capital assets and will be able to plan for capital expenditures, capital budgeting, lifecycle planning, infrastructure planning and proactive maintenance of capital assets. Project completed June 24, 2010
Village of Carmacks	$6,309.54	Project 2009-054 Tangible Capital Assets	Carmacks hired a consulting firm to assist with implementation of the Public Sector Accounting Board's (PSAB) 3150 financial reporting for tangible capital assets.	Carmacks complied with the PSAB requirements for reporting on capital assets and will be able to plan for capital expenditures, capital budgeting, lifecycle planning, infrastructure planning and proactive maintenance of capital assets. Project completed August 9, 2012.
Village of Carmacks	$5,000.00	Project 2011-003 Desktop Small Hydro Study	Hired a consultant to determine if there were any potential, small, hydro sites near the Village of Carmacks which might reduce municipal electrical costs. Looking for more environmentally sustainable sources of energy.	It was determined that hydro from other sources would result in higher costs. Project completed January 16, 2012.
Teslin Tlingit Council	$91,000.00	Project 2010-002 Monitoring of a residential fuel spill	On-going monitoring of a fuel spill that occurred in 2008. This monitoring involves program design, test pits and boreholes, monitoring wells and data assessment and training to	This project was undertaken to ensure protection of the water system. One TTC member received training to monitor the monitoring wells. Project completed September

			ensure contamination is contained.	21, 2010.
Village of Teslin	$30,670.72	Project 2010-003 Tangible Capital Asset Reporting	The Village of Teslin hired a consulting firm to assist with implementation of the Public Sector Accounting Board's (PSAB) 3150 financial reporting for tangible capital assets.	The Village of Teslin complied with the PSAB requirements for reporting on capital assets and will be able to plan for capital expenditures, capital budgeting, lifecycle planning, infrastructure planning and proactive maintenance of capital assets. Project completed July 26, 2010.