



The City of Calgary Climate Change Action Plan Target ↓50

***CCME Pollution Prevention Awards
2007 June 15***



THE CITY OF
CALGARY

Environmental & Safety Management
The City of Calgary

Background:

Calgary Climate Change Program

- 1997 Council directed Administration to establish a GHG reduction target
- 1998 GHG emission inventory completed
- 2000 Council established GHG reduction target and initial plan
- 2001 First major initiative - 'Ride the Wind'
- 2004 Climate Change Action Plan adopted
- 2006 Target Minus 50 Plan adopted



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- The initial City of Calgary Corporate Climate Change target was to reduce GHG emissions by 6% below 1990 levels.
- The new target is to reduce emissions by 50% of 1990 levels by 2012.
- Ambitious target enabled by 75% green electricity agreement.

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- Target Minus 50 Plan built on 6 Action Areas:
 1. Building Energy Efficiency
 2. Methane Emission Reduction
 3. Green Power
 4. Green the Fleet
 5. Water Conservation
 6. Deployment of Innovative Technologies

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- Key action area of the Plan was to make a significant commitment to green, renewable electricity.
- Addressing source of electricity, as well, as consumption efficiency, was a recognition that Alberta's electricity sector is the most carbon intensive in Canada (coal & NG 90% of installed capacity).

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- City team created to include major electricity users.
- City's newly created Energy Management Office (EMO) negotiated an innovative 20 year energy supply agreement (ESA) with ENMAX Energy Corporation.
- ESA replaced 8 existing energy contracts, taking The City from 8% green electricity use to 75%.

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- The confluence of 3 factors came into play that enabled The City to make a significant green electricity commitment:
 1. Strong Council support for GHG reduction & environmental sustainability.
 2. Excellent working relationship with ENMAX Energy, a national leader in renewable energy development & marketing.
 3. Proximity to a world class renewable energy supply – the winds of Southern Alberta.

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- Under the new Energy Services Agreement (ESA) with ENMAX, as of January 1, 2007, 75% of corporate electrical energy use is from green sources.
- One of the largest single green power contracts in North America (+260 mm kWh/yr).
- Largest municipal government sector buyer of green electricity in North America.
- Objective is to increase green electricity use to 90% by 2012.

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- ESA directly enabled ENMAX to move forward on the development of the Taber Wind Farm.
- Located 275 km SE of Calgary in the MD of Taber, Alberta.
- \$140 mm investment: 37 wind towers with 80 MW capacity.
- Taber wind farm produces enough energy to power 32,000 homes.



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Opportunity exists to reduce GHG emissions by greater than 50% through:

- Further 'greening' of the corporate vehicle fleet, including biofuels.
- Methane emission reduction/energy generation.



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- Water conservation.
- Additional energy efficiency upgrades to The City's buildings and facilities not subject to the Energy Performance Contracting program.



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- The report also initiates discussion of developing **community** GHG reduction strategies and will align with targets and strategies developed by imagineCALGARY.
- GHG reduction targets and strategies for the community are a key component of reducing the per capita environmental footprint of Calgarians.



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- Air quality is a critical issue linked to community GHG emissions.
- City has initiated the development of a regional airshed group (with CASA).
- Calgary Regional Airshed Zone
 - Collaborating with several stakeholders in the formation of the Calgary Region Airshed Zone with a goal to monitor and take action to improve air quality.