

Corporate and Community Climate Action Planning

Getting to Zero in the **RDN**

Fresh Outlook Foundation
February 26, 2009

Overview

Corporate Climate Action Planning

2007

Inventory and Forecast Emissions

Reduce Emissions Wherever Possible

2008

Carbon Neutral Operations by 2012

Overview

Community Climate Action Planning

Re-Inventory and Forecast Community Emissions

Re-Identify Emissions Reduction Measures



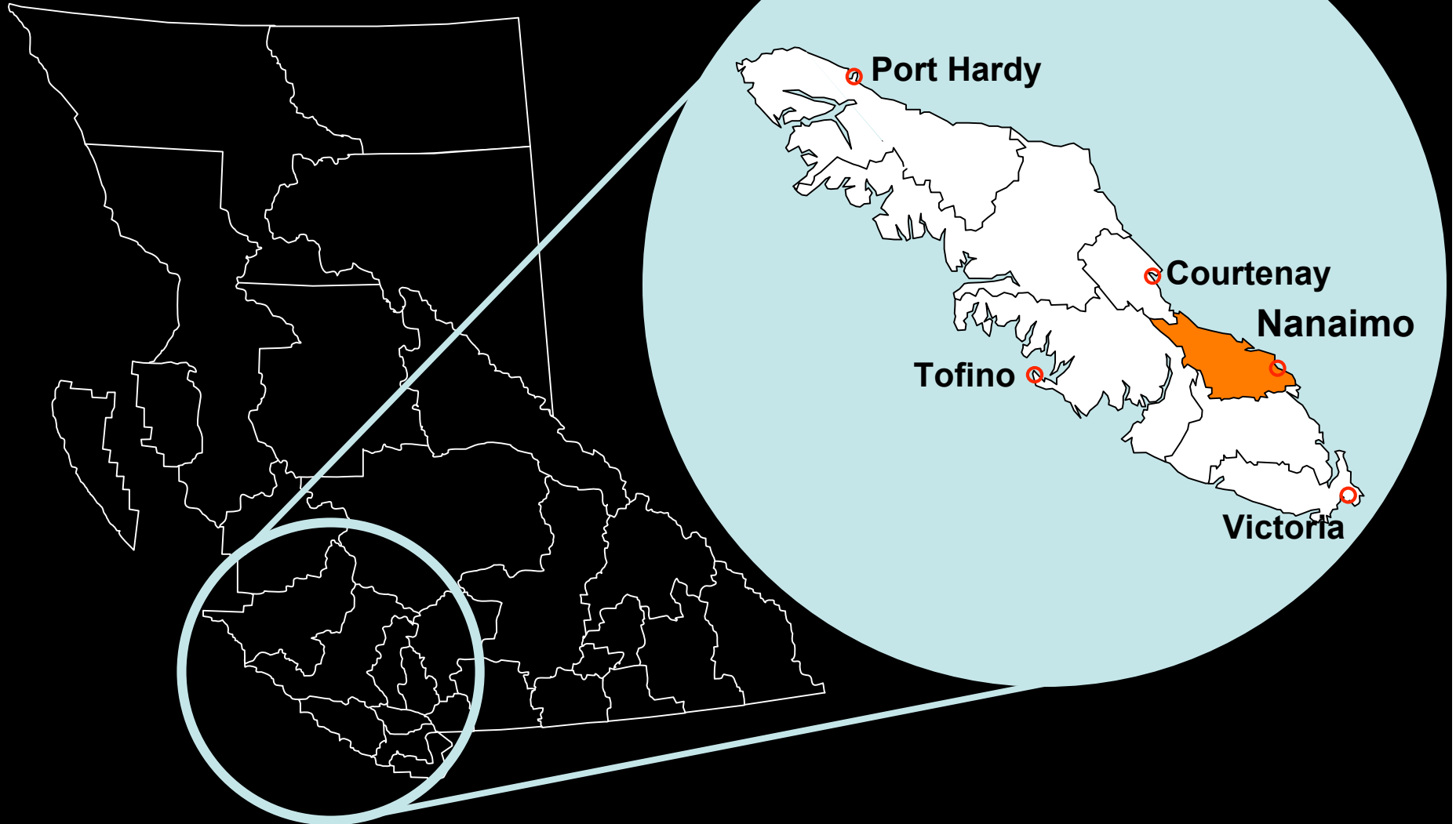
Re-Set Target

Implement Measures

Monitor and Measure Progress

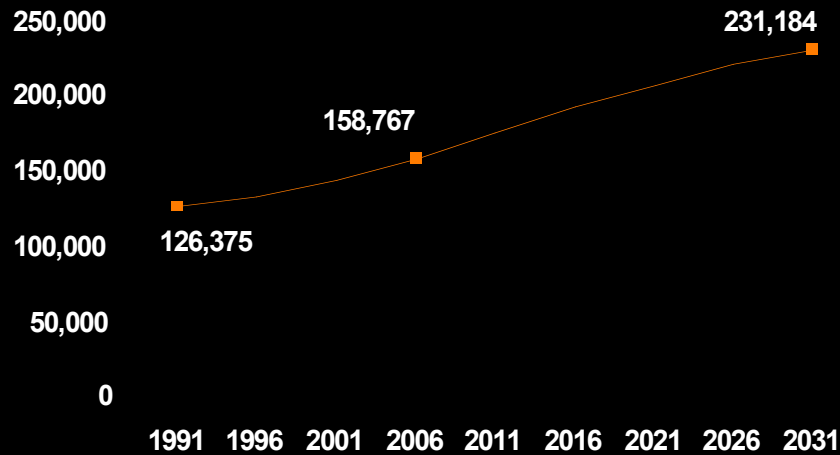
Reporting on Progress

Regional Context



Regional Context

Population Change



Regional Role

Early Adopters (Multiple Consequences)

Bring (Smaller) Municipalities into the Process

Critical Success Factor: Effective Working Relationships

Collaboration = Excellence

Corporate Climate Action

Carbon Neutral Operations (2008)

Climate Action Charter, 5 (a) (i)

In order to contribute to reducing GHG emissions:

Signatory Local Governments agree to develop strategies and take actions to achieve being **carbon neutral in respect of their operations by 2012...**

Define 'Carbon Neutral'

No net increase of atmospheric greenhouse gases (CO₂e) due to the operations of the Regional District of Nanaimo.

No net emissions.

Three Steps to Carbon Neutral Operations

1. Inventory Emissions

2. Reduce Emissions Wherever Possible

3. Purchase Carbon Offsets to Mitigate Remaining Emissions

Result: No net emissions.

1. Inventory Emissions

Key Question:

What emissions is an organization responsible for?

Scope 1: Direct GHG emissions from sources owned or controlled by the organization.

Scope 2: Indirect emissions caused by the purchase of electricity consumed by the organization

Scope 3: Other indirect emissions that are a consequence of an organizations activities, but are from sources neither owned nor controlled by the organization.

Mandatory

Optional

1. Inventory Emissions

What emissions has the **RDN** taken responsible for?

- Buildings:** Emissions from the consumption of electricity and natural gas in 15 RDN buildings.
- Vehicle Fleet:** Gasoline and diesel fuel used for all motorized vehicles owned by the RDN, not including transit buses.
- Water and Wastewater:** Emissions from the electricity and natural gas required to operate four pollution control centres.
- Solid Waste:** Emissions from waste generated by municipal operations.
- Lighting:** Emissions from energy used to operate public lighting.

1. Inventory Emissions

What emissions has the **RDN** taken responsible for?

- Buildings:** 25,100 t CO₂e from the consumption of electricity and natural gas in 15 RDN buildings.
- Vehicle Fleet:** 643,000 t CO₂e from gasoline and diesel fuel used for all motorized vehicles owned by the RDN, not including transit buses. **1,581 t CO₂e in 2004**
- Water and Wastewater:** 233,000 t CO₂e from the electricity and natural gas required to operate four pollution control centres.
- Solid Waste:** 20,300 t CO₂e from waste generated by municipal operations.
- Lighting:** 20,300 t CO₂e from energy used to operate public lighting.

1. Inventory Emissions

What were the energy costs?

Buildings: 259,460 t CO₂e

Vehicle Fleet: 436,902 t CO₂e

Water and Wastewater: 226,702 t CO₂e

Solid Waste: 70 t CO₂e

Lighting: 43,172 t CO₂e

**1,926,235 t CO₂e
in 2004**

1. Inventory Emissions

Are any emissions missing?

Scope 3 emissions. For example:

Supply chain related emissions;

Emissions resulting from business travel;

Staff commute related emissions.

Not mandatory...but

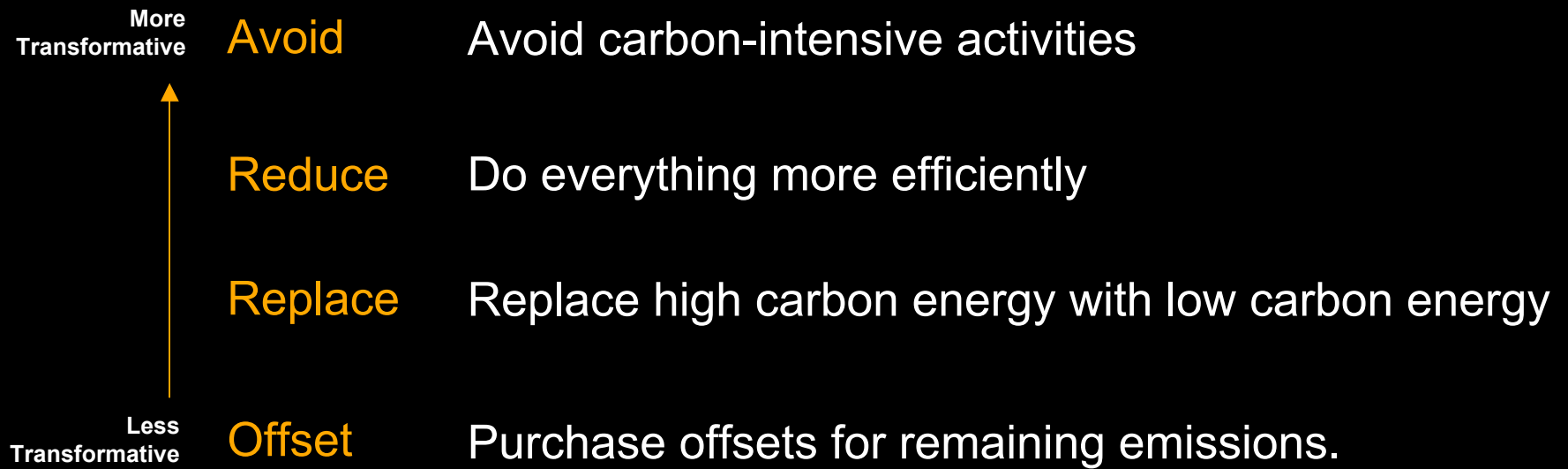
Demonstrate leadership.

Enhance credibility under scrutiny.

Expect to consider Scope 3 emissions in the future.

2. Reduce Wherever Possible

Carbon Management Hierarchy



3. Purchase Offsets

7 Basic Principles of Offsets

1. Within Scope Efforts reduce one or more of the 6 main GHGs. The offsets are accounted for and consistent with BC's reporting on GHG emissions and regulatory reporting requirements.
2. Real GHG reductions derive from a specific and identifiable action associated with a defined project.

3. Purchase Offsets

7 Basic Principles of Offsets

- | | |
|---------------|--|
| 3. Measurable | GHG reductions can be measured in accordance with scientifically accepted standards. |
| 4. Additional | GHG reductions would not have occurred without an offset mechanism. |
| 5. Verifiable | The reductions can be validated and verified with a recognized project plan and reporting protocols. |

3. Purchase Offsets

7 Basic Principles of Offsets

6. Counted
Once

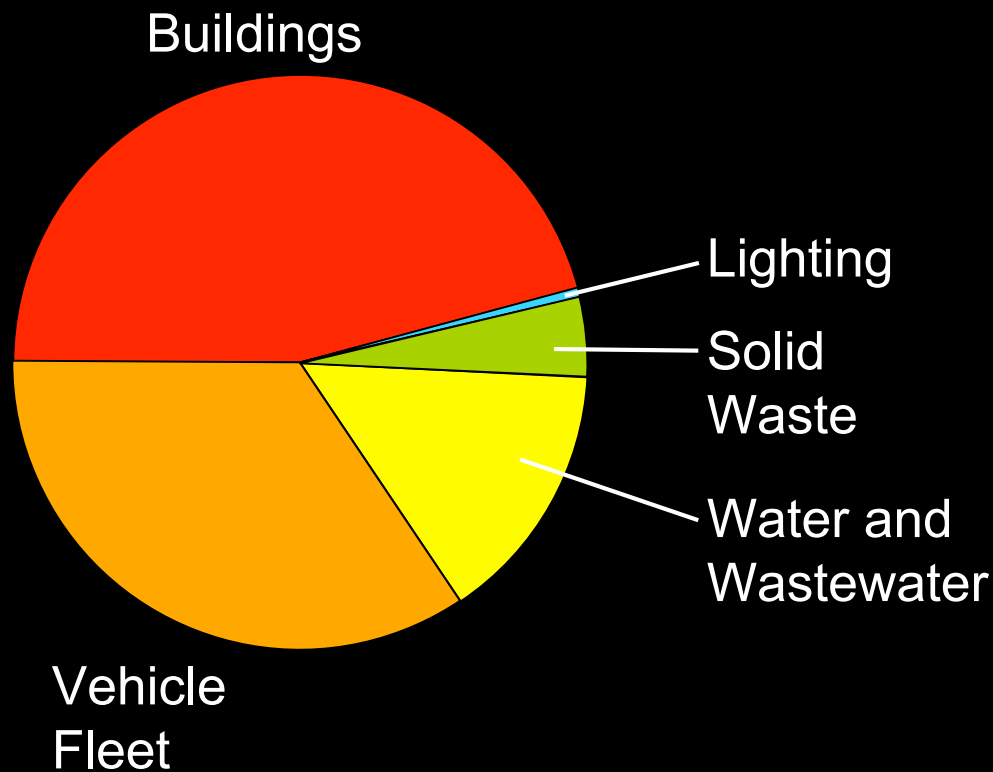
A reduction already recognized through a project validated under the regulations is no longer eligible for an offset.

7. Clear
Ownership

The offset is only valid when it represents an emission reduction 'owned' by the organization using the offset. (Necessitates a third party seller like the Pacific Carbon Trust)

Corporate Emissions Forecast to 2004 - 2012

2004 Corporate Emissions



Sector	CO ₂ e (t)
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Buildings	725
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Vehicle Fleet	543
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Water and Wastewater	233
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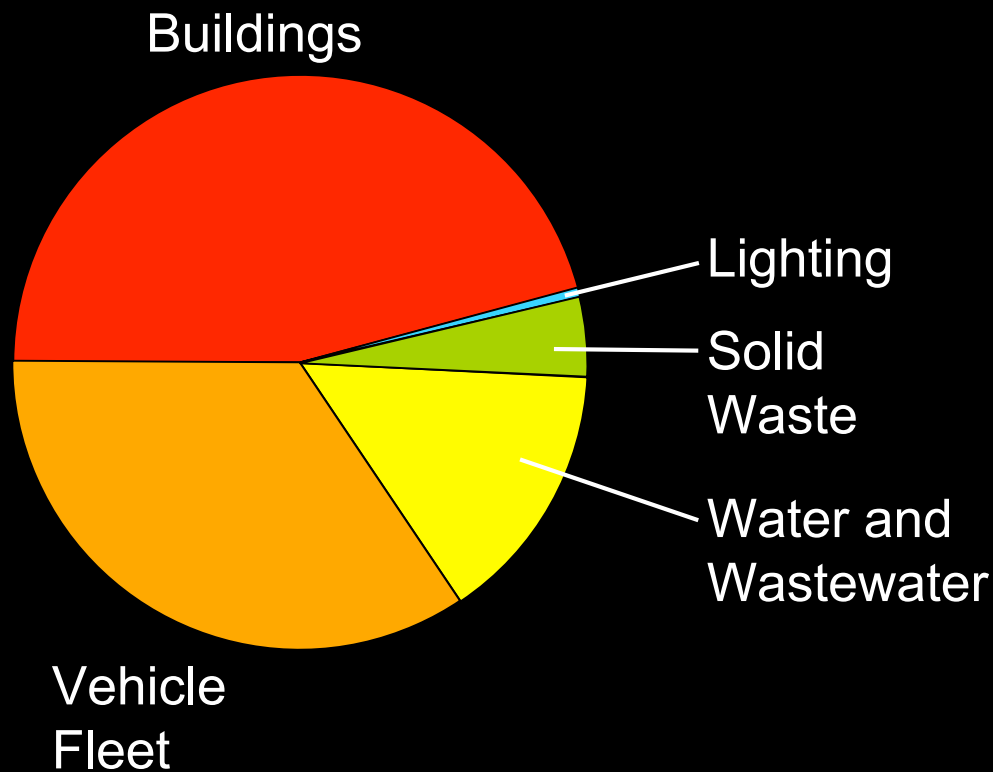
Solid Waste	70
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Lighting	10
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Total	1,581
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Corporate Emissions Forecast to 2012

Sector	CO ₂ e (t)	% increase over 2004	2012 CO ₂ e (t)
Buildings	725	26%	914
Vehicle Fleet	543	20%	652
Water and Wastewater	233	5%	245
Solid Waste	70	9%	76
Lighting	10	10%	11
Total	1,581	20%	1,898

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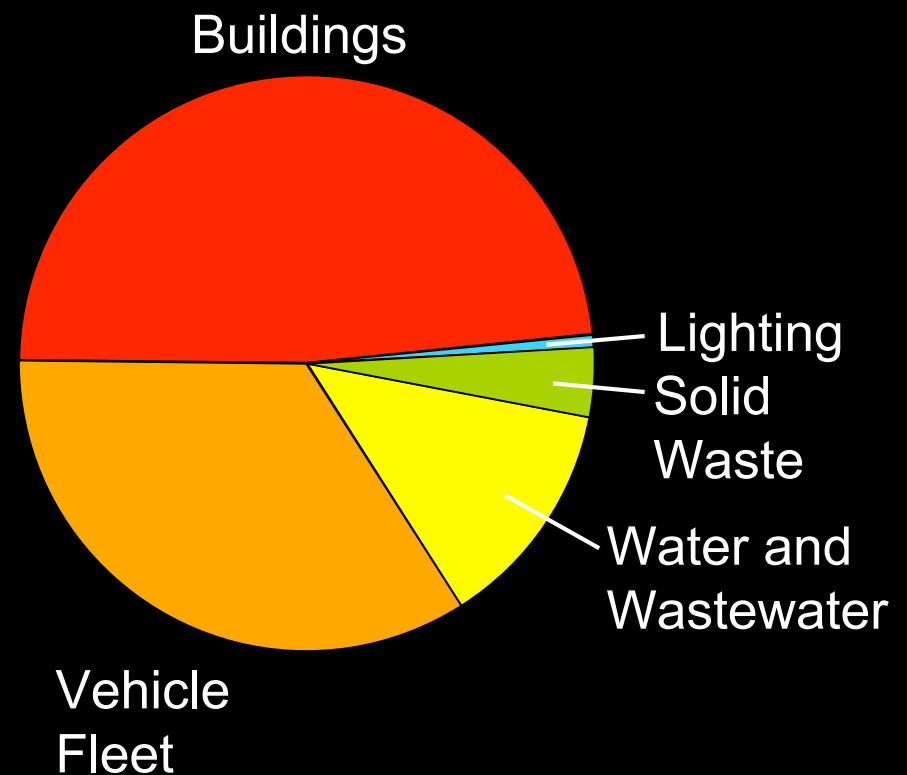
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2012 Corporate Emissions



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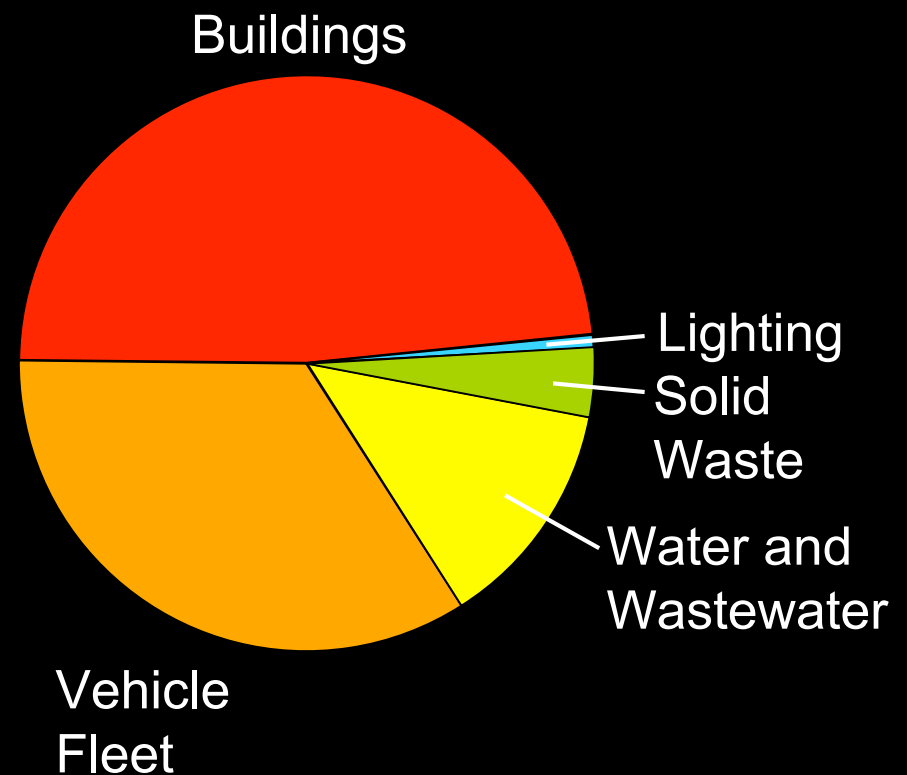
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2012 Corporate Emissions



Climate Action Revenue Incentive Program

Provincial Grant Program for Local Governments

Incentive to sign Climate Action Charter

Grant Amount = Amount paid as Carbon Tax

RDN – Carbon Tax for 2008

(July 1 – December 31) \$22,640.24

Climate Action Revenue Incentive Program

Eligibility Criteria for Local Governments

1. Signatory to the Climate Action Charter **2008**

2. Corporate Climate Change Plan

3. Community Climate Change Plan

4. Updated RGS and OCPs

2009

5. Establish Indicators to Measure Progress
on Reducing Corporate Emissions

6. Measure Performance

7. Publicly Report on Progress

8. Carbon Neutral Operations

2012

Climate Action Revenue Incentive Program

RDN Position

1. Signatory to the Climate Action Charter



2008

2. Corporate Climate Change Plan



3. Community Climate Change Plan



4. Updated RGS and OCPs



2009

5. Establish Indicators to Measure Progress on Reducing Corporate Emissions



6. Measure Performance



7. Publicly Report on Progress



8. Carbon Neutral Operations



2012

Community Climate Action

RDN Process

1. **Staff Champion** (Solid Waste Department)
2. **Inventory Emissions, Forecast to 2012**
3. **Identify Reasonable, Achievable Reduction Measures**
4. **Achievable Measures Establish Target...**

Community Climate Action

Issues

Changing Data

Reasonable and Achievable Measures are not Aggressive

Disheartening Target

Changing Data

Issues

Data is Uncertainty Masquerading as Knowledge

Changing Data = Moving Targets

Paralysis = Inaction

Target

Base Year (2002) Emissions: +/- 625,000 t CO₂e

Forecast Year (2012) Emissions: +/- 890,000 t CO₂e

Business As Usual = 42% increase in emissions

Target

Base Year (2002) Emissions: +/- 625,000 t CO₂e

Forecast Year (2012) Emissions: +/- 890,000 t CO₂e

Potential Reductions (Measures): +/- 185,000 t CO₂e

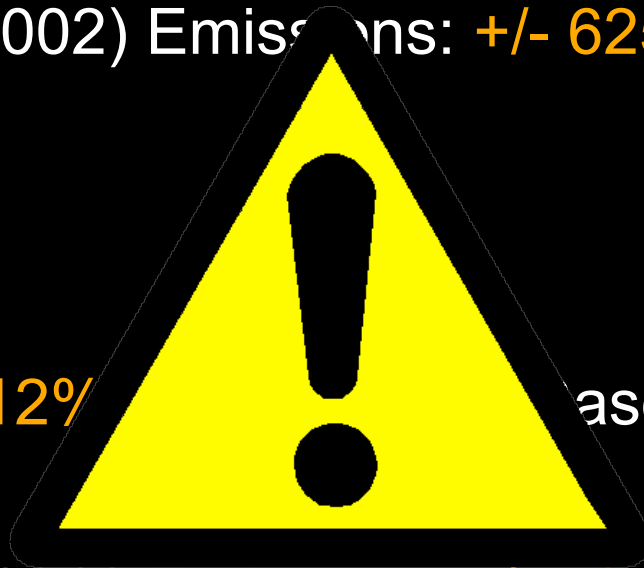
Potential 2012 Emission: +/- 705,000 t CO₂e

Target

Base Year (2002) Emissions: +/- 625,000 t CO₂e

Target = 12% decrease from Base Year

Potential 2012 Emission: +/- 705,000 t CO₂e



Dilemma

Do we set a target that we can't achieve, but might solve the problem?

Do we set a target we think we can achieve, but we know doesn't solve the problem?

Solutions

Identify **Aggressive** Measures

Acknowledge the real **limits** to Local Government action.

Climate action is an overlay for all action.

Regional Districts must foster collaboration.
Do not allow the planning process to **delay** action.

Deep reductions are only achievable **together**.

Collaboration = Excellence.

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Fresh Outlook Foundation

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