

## **Introductions City of Duncan** Phil Kent, Mayor Peter de Verteuil, CAO **Community Carbon Marketplace Cowichan Energy Alternatives Society** Brian Roberts, M.Sc., P.Ag., P.Geo.

#### Community Carbon Marketplace: a pilot with the City of Duncan

- Background
- Process
- Results
- Lessons Learned
- Questions and Discussion

### Background

Public Institutions mandated to reach Carbon Neutrality in 2010 (Part of the Compliance Market)

BC Municipalities that signed Climate Action Charter agreed to become Carbon Neutral by 2012 (Voluntary Market)

## Background

City of Duncan

2007 - Signed Climate Action Charter

2007 – FCM Partners for Climate Protection

Limited ability to be carbon neutral by doing local projects.

## **Cowichan Energy Alternatives**

#### **Core Motivations:**

Energy Security (Community Resilience)

GHG Reductions/Low Carbon Economy

Sustainable "Silver Buckshot" Solutions

alternatives











#### **Current Carbon-Trading Model in BC**

What does the Climate Action Charter Mandate:

- Measure Carbon Footprint
   Take Actions to Reduce Emissions
   C-Neutral Commitment to Balance/Offset Emissions
- . Report Progress

## **Current Carbon-Trading Model in BC**

#### City of Duncan initial focus

Three Options to Balance/Offset Emissions:

- 1. Invest in GCC Supported Project
  - a) Household Organic Waste Diversion b) Energy Efficiency Building Retrofits (non Local Government) c) Solar Hot Water (non Local Government)
  - d) Low Emission Vehicles (Transit, Police, Airports)
- 2. Invest in Alternate Community GHG Reduction
- Purchase Offsets from a Credible Provider

### An Alternative Model: Growing the Local Low Carbon Economy

- . Local Control over Carbon Offsetting \$
- . Benefits Community where \$ originate

. Public sector investment in local energy and emissions reductions strategies and infrastructure to meet long-term community objectives (e.g. OCPs) and reduce need for future offsetting expenditures.

. Accountability & Accessibility to Communities



#### We believe that sustainable solutions can be achieved in a way that supports the local economy and fosters community resilience!

The Community Carbon Marketplace (CCM) is an on-line market where verified carbon credits can be listed for sale and purchased by individuals, corporations and municipalities to offset their carbon footprint. These carbon credits are created through community-based initiatives that reduce GHG emissions and which have been verified by a qualified, independent third party. Funds from the purchase of these carbon credits goes to the organizations and projects that produce them, sustains the CCM and supports ongoing efforts to develop sustainable communities.



**Mission:** To support the development of a sustainable local low carbon economy by directing offsetting dollars to quantifiable, community-based GHG reduction initiatives.

#### **Objectives:**

1) To offer a Community Carbon Marketplace where carbon credits are exchanged to benefit local initiatives. 2) To direct new revenues streams to community initiatives by reducing barriers to accessing the carbon offset market.

3) Keep \$ in community investing in long-term local energy resilience, green jobs and low-carbon econor

## **An Alternative Model: Growing the** Local Low Carbon Economy

Check out this quick Carbon Footprint Calculator and offset your emissions by supporting community sustainability projects!

#### Three Options to Balance/Offset Emissions:

- Invest in GCC Supported Project
- 2. Invest in Alternate Community GHG Reduction Projects
- 3. Purchase Offsets from a Credible Provider



### An Alternative Model: Growing the Local Low Carbon Economy

#### Three Options to Balance/Offset Emissions:

- 1. Invest in GCC Supported Project
- Invest in Alternate Community GHG Reduction
- Projects 3. Purchase Offsets from a Credible Provider

#### How the CCIM Works

- GHG Reduction projects are assessed for Community Carbon Credit eligibility
   Credits eligible as per international protocols
- and project on the CCM 3. Buyers wishing to offset their carbon footprints
- select credits from those listed
- Carbon Credits" that can stimulate new
- projects 5. A fee from each sale contributes to sustaining the CCM
- The model is expandable to communities throughout the Island Coastal area and BC





• City of Duncan – First Municipality to commit to becoming Carbon Neutral through the CCM as part of the pre-launch pilot project

## communitycarbon

Estimated 2012 City of Duncan Carbon Footprint : 280 tonnes CO2e

CCM Pilot Approach: • Purchase all carbon credits from local GHG reduction initiatives – half from existing sources and half from respondents to a Request For Carbon Credits (RFCC)

# communitycarbon marketplace

Actual 2012 City of Duncan Carbon Footprint :

Reduction for Household Organic Waste Composting 156 tonnes CO2e

Carbon Credits Purchased "LOCALLY" through CCM 138 tonnes CO2e



#### **Carbon Footprint Assessments for:**

- Cowichan Community Land Trust
- Cowichan Recyclists
   Cowichan Green Community
   Cowichan Bio-Diesel Co-op
- Greasecycle Vancouver Island Salt Co.
- Integral EcologyIsland Biodiesel Co-op

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Organizatior Name	Dates and Location of Project	Project Details	Carbon Credits Generated
Cowichan Bio-Diesel Co-op	2007-2012, Cowichan Valley	Since 2005, CB-DC has been producing 8100 biodesel and straight vegetable of ISV0) for its many members in the Cowichan Vellay and beyond. The positive impact, in terms of greenhouse gas emissions, that this has had is immense. For approximately every 350, of biodiesel that is abdo, one tonor of GHGs are being prevented from entering the atmosphere. As CB-DC continues to grow, so will this positive change to the local environment.	470
Vancouver Island Salt Co.	January to December 2012, Cobble Hill	Vancouver Island Salt Co. has been contributing to local sustainability since 2010 and has made significant changes in business practices in order to continue to become a leader in the community. By converting the salt bolier from running on fossil diesel to running on SVO has reduced GHG emissions by more than 10 tonnes per week. The project was completed in August 2012 and the CFA has reflected this large decrease in emissions.	141
Cowichan Recyclists	January 2011- December 2012, Based in Duncan	The Cowichan Recyclists are an innovative team dedicated to providing accessible recycling solutions while using the least amount of energy. By avoiding the industry standard of fossil fuelled trucks, and instead relying on emission-free bicycles, the Cowichan Recyclists have successfully prevented GHG emissions from entering the atmosphere.	6
Cowichan Land Trust	2007-2012, Cowichan Bay	This blue carbon project has transplanted over 1700 square meters of eelgrass in the Cowichan Bay Estuary. The eelgrass that is transplanted traps and stores carbon in the aquatic soil. This activity is capable of sequestering approximately 4 tonnes of carbon/arc of transplant/year.	2
Greasecycle Inc.	April 2011 to December 2012, Based in Duncan	Greasecycle is a waste cooking oil collection organization that has some of its operations in Duncan. By recycling waste cooking oil that is collected, Greasecycle is becoming a sustainability deader. A recent carbon reduction project has supplied an even larger emission reduction. Greasecycle has converted its entire fleet to run on either B100 biodiese) or straight vesetable oil SVO1 rather than the industry standard. diesel.	25

## communitycarbon

- 7 CFAs completed with 5 GHG projects shortlisted • Participating organizations gained understanding of the relation between their energy use and
- All organizations listing carbon credits on CCM became carbon neutral in their own operations first
  Ground-swell of community interest from
- organizations, local and regional governments Islands Trust and Town of Ladysmith now meeting their C.A. Charter commitments through CCM



- CCM has great potential to grow to meet demand from Local and Regional Gov't, Non-profits and Businesses Investment of time is necessary to fill knowledge gap (education)- we're kick-starting the local low-carbon economy from scratch!
- Investment \$ to get over an initial start-up "hump" CCM will play an important role filling a gap in the BC carbon market that currently limits
- participation of community initiatives



• For a pilot project, the process was very simple from a staff perspective, Cowichan Energy Alternatives and the Community Carbon Market place have been terrific to work with.



• City of Duncan attempts where ever feasible to support creative local initiatives.

• The Cowichan Valley is very progressive environmentally and in many ways, the City is just trying to keep up with the community.

• There is a groundswell of ideas locally that is just waiting to be tapped and the Community Carbon Marketplace is one way of encouraging that ingenuity.



- Urban Forest Strategy including tree planting program
  Organizational Anti idling policy
  Public Anti-idling bylaw
  No smoking bylaw (parks, playgrounds, City property)
  E-fleet Right sizing vehicles, two hybrid cars, and one Might-E truck
  Installing 4 electronic vehicle charging stations
  Active Transportation Plan moving to implementation
  Integrated Community Sustainability Plan near complete

