Carbon Credits for Communities

An opportunity or responsibility?

Scott Maco
Research & Development Analyst
The Davey Institute
smaco@davey.com
Carbon Accounting

- Background – carbon emissions law in the U.S.
- Registry opportunities
- Examples & eligibility
- Moving towards the future
- What can you do now?
Carbon what?

- Kyoto Protocol
  - Emission caps became law in 2005
  - Reduce carbon by at least 5% below 1990 levels by 2012

- Carbon financial instruments
  - Cap and Trade System (EU ETS)
  - Carbon “credit”

- Registry
  - Allows calculation, tracking, reporting of emissions or storage over time
  - Consistency, transparency, and verification

- Carbon Market
  - Combination of Registry and trading platform (exchange)
  - Metric tons of CO2 equivalent - GWP
So what does this mean for Urban Forestry?

- 4 ways an entity can reduce emissions to become compliant:
  - Reduce point source emissions
  - Use alternative energy sources
  - Purchase credits form another entity
  - Purchase offset credits from sequestration projects

- Forestry project types: afforestation, reforestation, managed forests, conservation projects
U.S. Climate Policy Action (early-2007)
Regional Initiatives

- The Western Climate Initiative (WCI)
- Western Regional Air Partnership
- West Coast Governors’ Global Warming Initiative
- Conference of New England Governors and Eastern Canadian Premiers 2001 Climate Agreement
- Regional Greenhouse Gas Initiative (RGGI)
State Initiatives

- 19 states with GHG reduction targets
- 14 states with laws or considering legislation for GHG reductions
- 16 states participating in regional cap & trade initiatives: WCI (6); RGGI (10)
- 40 states participating in National “Climate Registry”
- 4 states with GHG emission generation standards
- 19 states with active Climate Legislation Commissions
Greenhouse Gas Registries

- Department of Energy 1605(b) program
  - Voluntary
  - Allows urban forestry projects
  - Verification optional

- California Climate Action Registry
  - Voluntary until mandatory caps begin (2012)
  - Urban forestry protocols in developments (4/08)

- Chicago Climate Exchange
  - Voluntary until entry, but binding for participants
  - Urban forestry protocols exist

- Regional Greenhouse Gas initiative
  - Mandatory in 2009
  - Urban Forest projects not specified
Registries Entry

- Membership is legally binding commitment
- GHG emission registry, reduction and trading system
- 2003 – 2010 = pilot market
- Urban Forestry Protocols Exist

- Voluntary & non-binding
- Registry & Reporting protocols = “gold standard”
- 2012 – Mandatory caps begin
- 2020 – CO2 emissions reduced to 1990 levels
- Urban Forestry Protocols in Development (April ’08)
Urban Forestry Offset Project Rules:

- No urban forestry offset project to date
- Entity level offsets encouraged
- Non-member must have insignificant emissions (25,000 mt)
- Project types:
  - Carbon storage offsets only (sequestration)

- No urban forestry offset project to date
- Entity level offsets allowed
- Non-entity projects allowed without size restriction
- Project types:
  - Carbon storage (direct)
  - Tree shading (indirect)
  - Bio-energy
Tenants of Urban Forestry Project Eligibility

- Can I get credit for simply managing my forest?
  - **Additionality**
    - Exceeds/improves upon current management practices
    - Goes beyond “business-as-usual”
    - Not required by any regulatory requirements
  - **Permanence**
    - Perpetual easement dedicated to urban forestry use
    - Ordinances/codes/covenants and enforcement to protect trees
    - Written contracts guaranteeing carbon stock maintenance
  - **Leakage**
    - Activity shifting
    - Describe existing practices (management plan)
Why get involved?

- Offset entity participant emissions
- Revenue
  - Only under CCX currently
  - Cap & Trade Regulation
- Protecting new action
  - Baseline established at time of registry
  - Post-1989 planting eligibility
- Management Efficiency
  - Comprehensive management plans & inventories
- Highlight value of trees as “green” infrastructure
General Process for Registering Project

1. Submit project proposal and/or project questionnaire to Registry
2. Collect baseline information
3. Calculate difference between BAU & Project
4. Obtain independent project verification
5. Register offset credit (annual basis)
6. Receive Carbon Credit for Exchange Trades
National Policy?

Comparison of Economy-wide Climate Change Proposals in 110th Congress 1990-2050

Millions of Metric Tons CO₂ Eq.

- Business As Usual
- Bingaman-Specter draft (With Price Cap)
- Bingaman-Specter draft (No Price Cap)
- McCain-Lieberman
- Kerry-Snowe
- Olver-Gilchrest
- Sanders-Boxer Waxman
- Stabilize at 450-550 ppm

Year

1990 2000 2010 2020 2030 2040 2050

World Resources Institute

Dotted lines indicate extrapolations of Energy Information Administration projections

Modified: May 10, 2007
"The Climate Registry"

- Accurate, Transparent, consistent measurements of greenhouse gases across borders
- Draft framework in 2008
- WRI GHG protocol compatible
What can you do now?

- Document current business practices
- Inventory
  - Sample or complete
  - Data requirements
- Develop sequestration project
  - Functional species selection
- Registry/exchange membership

- Get your city on board!
For more information contact:

Scott Maco
Research & Development Analyst
The Davey Institute
smaco@davey.com
866-853-3749