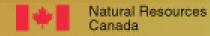
# Incentives to Encourage Afforestation / Reforestation







# Background

- The Government of Canada (GoC) is examining afforestation to derive environmental and economic benefits
- Interested in encouraging A/R through market mechanisms to help achieve its GHG emission reduction targets
- To help support this policy objective, two GoC A/R related initiatives are underway:
  - Feasibility Assessment of Afforestation for Carbon Sequestration (FAACS) initiative
  - Forest 2020 Plantation Demonstration and Assessment (PDA) initiative





## **Incentives Research Overview**



**Purpose:** To provide a review of the various types afforestation incentive mechanisms that have been used domestically and internationally

**Brief background on the research:** In total, 27 countries over six continents were examined, with an emphasis put on cases involving developed countries

### Grouped incentives into five classes:

- 1. Direct Government Assistance / Programs
- 2. Preferential Tax Treatment
- 3. Industry Partnerships and Third-Party Leasing Arrangements
- 4. Market-based Trading
- 5. Non-Traditional Incentive Mechanisms





# Direct Government Assistance / Programs



**Description:** a range of government funded incentive mechanisms that include: direct financial support for growers, providing the transfer of knowledge, and setting government policy to support forestry & forestry related industries

Comprise the majority of "traditional" afforestation incentive mechanisms employed by governments

#### **Pros**

- helps landowners to get beyond hurdle of initial high capital costs (fences, seedlings, etc.)
- allows for targetted funding by the government
- knowledge transfer

#### **Cons**

- plantings on unsuitable land (e.g. Ireland)
- involvement in program for "wrong" reasons
- may result in an excess supply of timber
- approach may not overcome "cultural biases"
- may jeopardize trade agreements (subsidization)
- can be difficult to manage on a large scale
- can create a "dependency cycle"

Loans, Grants or Subsidies

**Technical Assistance and Extension Services** 

**Direct Government Plantings or Provision of Seedlings** 





## **Preferential Tax Treatment**



**Description:** includes the application of lower marginal rates of taxation, favourable capital gains treatments, property tax exemptions, tax holidays and income tax deductibility of costs to encourage afforestation

#### **Pros**

- helps landowners to get beyond hurdle of initial high capital costs (fences, seedlings, etc.)
- allows for targetted funding by the government (e.g. certain income groups or certain equipment)
- can be easier to administer than many payment schemes

#### **Cons**

- plantings on unsuitable land (eg. Ireland)
- involvement in program for "wrong" reasons (tax shelter)
- may result in an excess supply of timber
- may not overcome "cultural biases"
- may jeopardize trade agreements (subsidization)
- may create a dependency cycle
- may decrease tax receipts that could have been reinvested in supporting the industry

#### **Examples**

**Norway Forest Trust Fund** 

Costa Rica





# Industry Partnerships and Third-Party Leasing



**Description:** under these agreements, smallholders produce wood and fibre for private enterprises on a systematic basis

#### **Pros**

- little or no government involvement, therefore low financial cost
- ensures a market exists (as opposed to nonmarket schemes that may ignore market conditions)
- usually includes extension services provided by company or conservation agency
- low initial investment by landowner
- helps companies to increase wood supply

#### **Cons**

- landowner effectively relinquishes control of land, thereby forgoing alternative land uses
- dependent on continued existence of an individual company or organization

Outgrower Schemes
Biomass Power
Conservation Easements





# **Market-based Carbon Trading**



**Description:** a CO2 emitting company (or country) unable to meet anti-pollution targets can buy carbon credits from an under-polluting company or operation

The CO2 emitting company effectively pays forest owners to set aside forest for the purpose of atmospheric carbon mitigation

#### **Pros**

- opportunity to generate income while the trees were growing
- low initial investment by landowner
- permits adjust automatically for inflation and external price shocks
- cost-effective way for companies to reduce emissions
- opportunity to pool land

#### **Cons**

- unresolved issues regarding rules that govern them
- depending on location, marketing of timber products from the planted forest may prove difficult
- have to either re-purchase carbon credits at the time of harvest, or replant the planted forest
- decision on whether or not to harvest will depend on the relative value of timber and carbon at the time
- no guarantee of a market for trees harvested





## **Conclusions**



- Past Programs: Government Program / Direct Assistance seems to be the most popular mechanism used in the past
- Direction: incentive mechanisms seem to be going toward market-based mechanisms (e.g. carbon trading & 3rd party leasing)
- Next Steps: evaluate past and present programs in terms of effectiveness and applicability to Canada
  - Taxation Incentives
  - Incentives for Investment
  - Conservation Easements





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