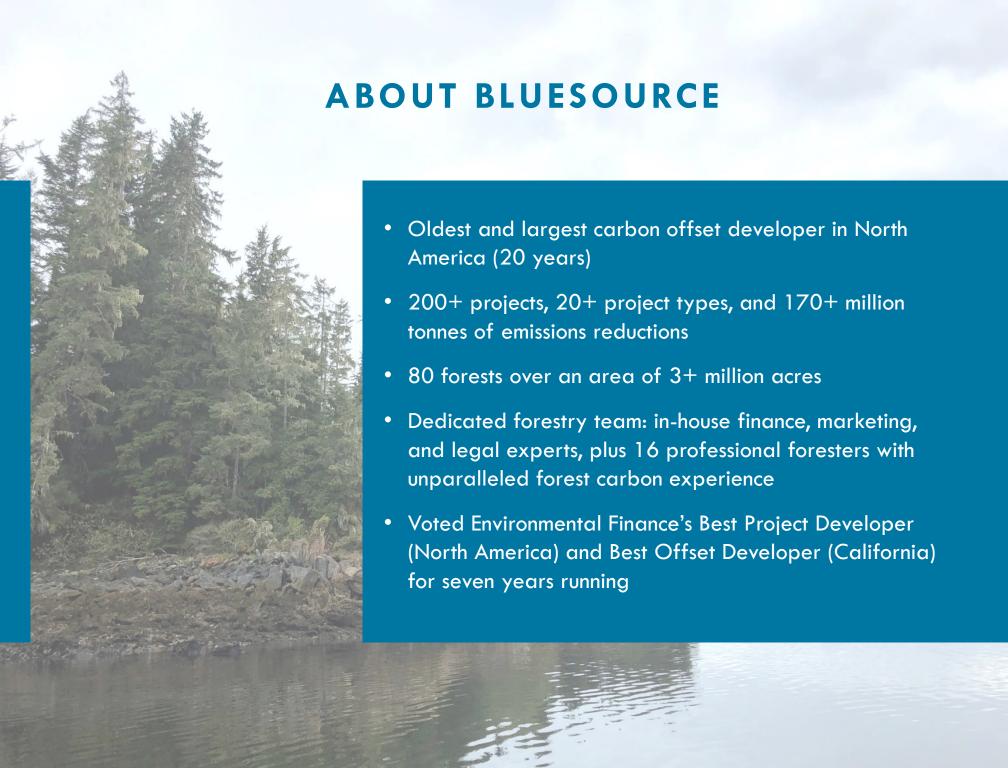




## **CONTENTS**

- I. About Bluesource
- II. Why do we need carbon offsets?
- III. Credit development mechanics
- IV. Who buys carbon offsets? (voluntary vs offset markets)
- V. Land ownership & eligibility requirements
- I. A review of Canada's offset system jurisdictions



## Why Do We Need Carbon Offsets?



Offsets are a critical tool for the world to achieve net-zero by 2050
 UNFCC Paris Agreement Target

 Most organizations and countries cannot eliminate all GHG emissions without the use of offsets – For now.

## Carbon Offset Mechanics?

in soil



How Carbon Sequestration and Offset Credits Work

**Credits Work** 1 tonne of CO<sub>2</sub> = 1 carbon credit 1 acre = 1-3 credits per yearTrees remove CO, from the atmosphere through CO photosynthesis Carbon Plant respiration Credits Landowners earn Corportations credits for carbon purchase credits from stored on their landowners to offset their emmissions property Humification and mineralization of carbon in soil Carbon stored



## FOREST CARBON PROJECT TYPES

Afforestation / Reforestation

**Avoided Conversion** 

Improved Forest

Management (IFM)



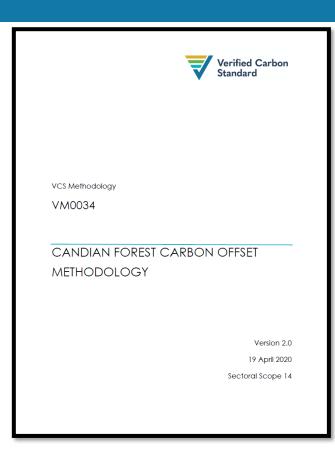


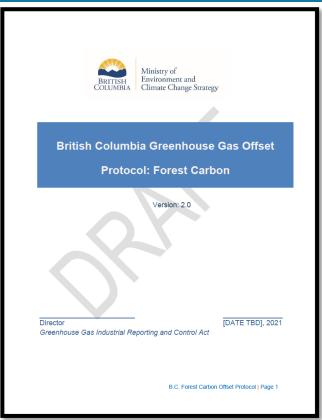


\*Sustainable harvesting is permitted

### How are forest carbon credits calculated in Canada?









- Verified Carbon Standard (VCS) Methodology For use across Canada for voluntary projects
- BC GHG Offset Protocol: Forest Carbon For use in BC for compliance projects
- American Carbon Registry For use across Canada for voluntary projects
- Federal Improved Forest Management Protocol For use in all provinces or territories that don't have
   IFM protocols in place Compliance projects COMING SOON (Summer 2022)



## Where Are Carbon Offset Credits Sold?

### **Compliance Market**

Companies purchase offsets to help meet their legally mandated emissions targets (Cap & Trade)

- Selling to oil and gas, power, and mining companies
- Can only be sold in Canada
- There is a legal requirement for companies regulated in this market to reduce emissions

### **Voluntary Market**

Companies voluntarily choose to purchase offsets to reduce their emissions.

- Selling to large companies such as Netflix, Microsoft, Nike etc. Also selling to small and medium companies
- Can be sold internationally (more buyer options)
- No legal requirement for companies to offset

۶



# Key Market Differences?

### **Voluntary Market**

- A project will generate credits/revenue for 40 years
- No requirement to monitor past year40
- Not regulated by the federal government
- Credits are currently selling at \$15-\$20 per credit
- Generates more credits
- PROJECTS CAN START TODAY

### **Compliance Market**

- A project will generate credits/revenue for 30 years
- Requirement to monitor for 100 years after year 30
- Regulated by the federal government
- Credits are currently selling at \$37-\$42 per credit
- Generates less credits
- PROJECTS CANNOT START TODAY (Waiting on federal government to release protocol)





# Land Ownership & Eligibility

## **Privately Owned Forests**

- Eligible projects require land ownership in fee simple title.
- Indigenous Reserve or Treaty Land
   Entitlement (TLE) lands are eligible
- Minimum forest area of ~5,000 acres to be economically viable as a single project
- Projects can start today

## **Crown Managed Forests**

- Projects on crown lands are ineligible without an Atmospheric Benefit Sharing agreement (ABSA) with the province or territory.
- Timber management licenses do not qualify a project
- Example of this have can be seen in BC (BC government 20% of carbon, FN 80%) – Coastal FNs
- Projects cannot start until ownership of the environmental attribute (carbon) has been determined

## Co-Benefits of a Carbon Project



#### **Jobs**

- Monitoring the forest
- Sustainable forest management
- Logging operations (if choosing to harvest)
- Annual reporting

#### **Education**

- Climate action
- Forest carbon inventory training –
   Bluesource led

#### **Financial**

 Revenue generated from a carbon project can pay to manage the forest in line with traditional values

#### **Biodiversity**

- Forest carbon project would support and maintain biodiversity
- Supports species at risk

#### Clean Air & Water

Forests clean the air and water naturally

#### **Cultural Values**

Communities get to define this

# Options for forest management – Example



'Business as usual' forest management (intensive harvest)	Forest managed for carbon project (sustainable - ½ the amount)
All available merchantable timber is harvested	Harvesting is kept within forest growth limits (harvesting doesn't need to completely stop!)
800,000 m <sup>3</sup> of wood harvested for pulp	400,000 m <sup>3</sup> of wood harvested for pulp
200,000 tonnes of carbon released	100,000 tonnes of carbon released
O carbon credits issued	100,000 carbon credits issued (difference between the intensive and sustainable practices)
\$4m paid for 800,000 m³ of wood \$0 paid for 0 carbon credits = \$4m paid for this option	\$2m paid for 400,000 m³ of wood \$4.2m paid for 100,000 carbon credits (at \$42 per credit) = \$6.2m paid for this option



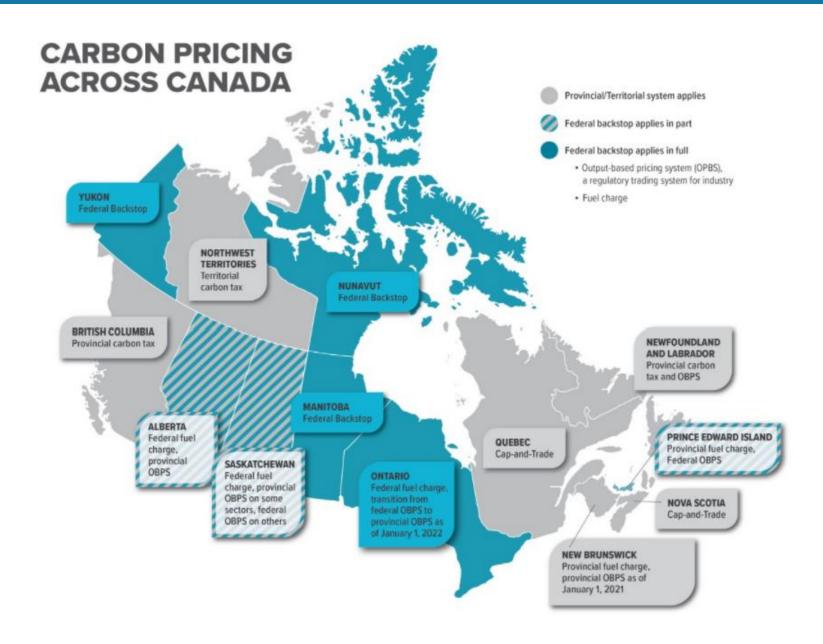
## LANDOWNER OBLIGATIONS

	Monitoring Obligations	
	ACR Voluntary	Compliance
Verification	5	TBD
Inventory	10	TBD
Reporting	Annually	Annually
Monitoring Period	40	100+

Must maintain certification (FSC, SFI, ATFS) for forest management areas

# Canada's Compliance Systems





# **Project Development Process**



