FiniteCarbon

Canadian Institute of Forestry
Institut forestier du Canada

Incredible! Are Forest Carbon Offsets for Real?

David Stevenson, RPF

September 13, 2022

2022 CIF-IFC National Conference

Overview

1. Offsets 101
2. Additionality in Projects
3. Oversight Mechanisms
4. Facts on the Ground

Forest Carbon 101

1. Carbon offsets profess to be **real**, **additional,** and **verifiable**.
2. Forest carbon offset projects are developed using protocols:
   - voluntary registries, or
   - government programs.
3. Protocols = rulebook for calculating # of offset credits
   - define what is considered additional

Credibility is dependent on protocol **stringency** and **application**

Voluntary Registries

American Carbon Registry at WINROCK INTERNATIONAL

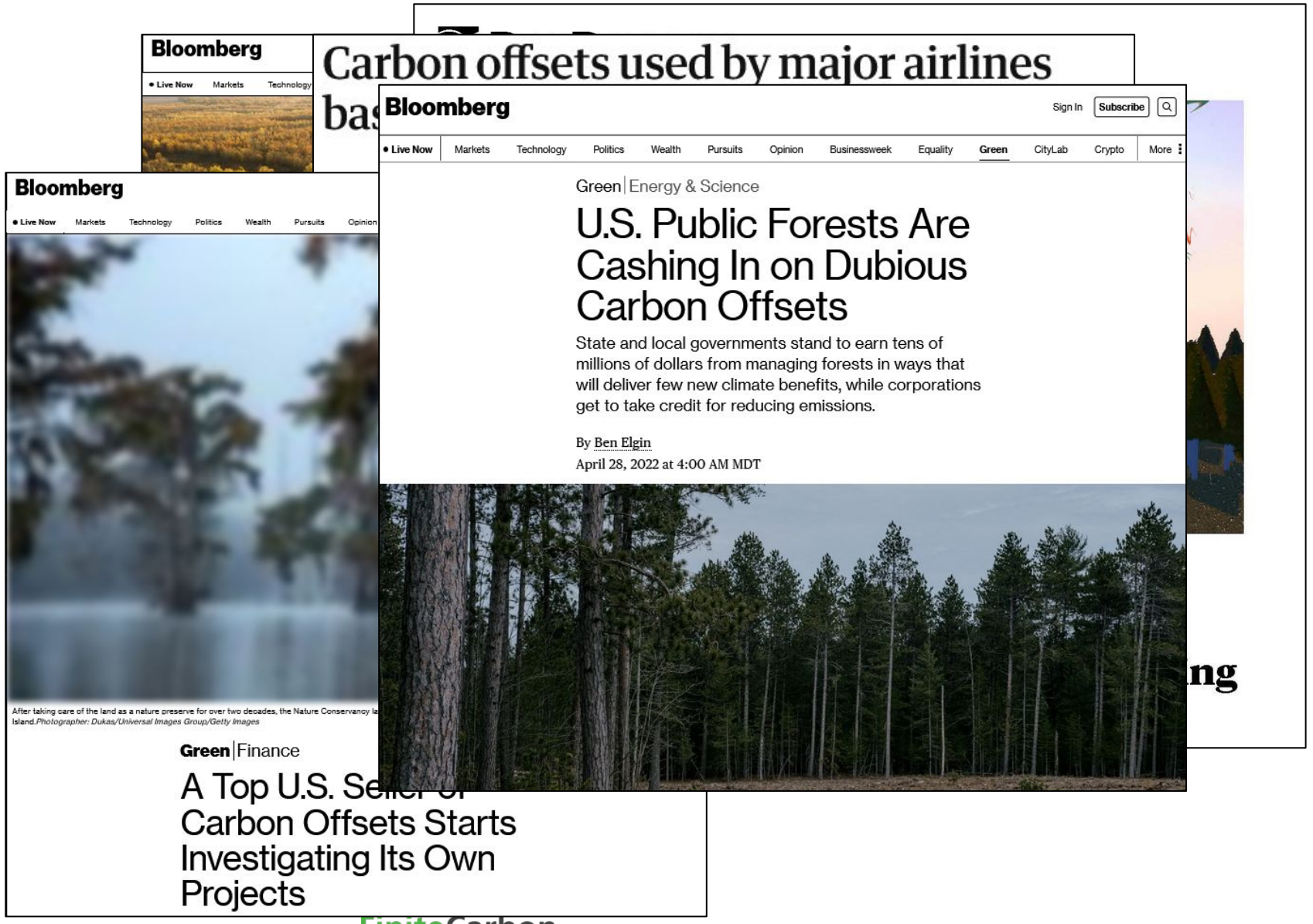
VERRA

Provinces with proposed protocols
(federal protocol will apply elsewhere)

Forest Carbon 101

What could go wrong?

Reputational risk!



Forest Carbon 101

Elements of forest carbon offset protocols that deal with additionality:

1. Leakage
2. Buffer pools
3. Permanence
4. Baselines

Carbon Offsets – Last Week Tonight with John Oliver (S9E21 August 21,2022)

Additionality in Projects

Wouldn't a forest owner just harvest more in a different part of their forest?

"Activity based leakage"

Wouldn't the forestry company just go down the road and cut there instead?

"Market based leakage"

Activity based leakage controlled with certification or FMPs

- Sustainable harvest of landbase controls for activity leakage

Market based leakage is calculated (Murray, 2004)

- % deduction from gross offsets
- dependent on permanence, substitutability, geographic location, markets, etc.
- ACR protocol = 40% deduction; draft BC FCOP = 47%-72% deduction (coast/interior)

Additionality in Projects

What about forest fires? Or insects? Or plough winds?

“Buffer pools”

Buffer pools mitigate risk of involuntary reversals

- % deduction from gross offsets
- Risk types identified and assessed for each project
- Credits put into an account for use in event of reversal
- Avoid use of “buffer tonne arbitrage” (ACR only)
- ACR = 13%-30%; draft BC FCOP up to 51%

Granite Fire - Pelican Narrows, SK, 2017

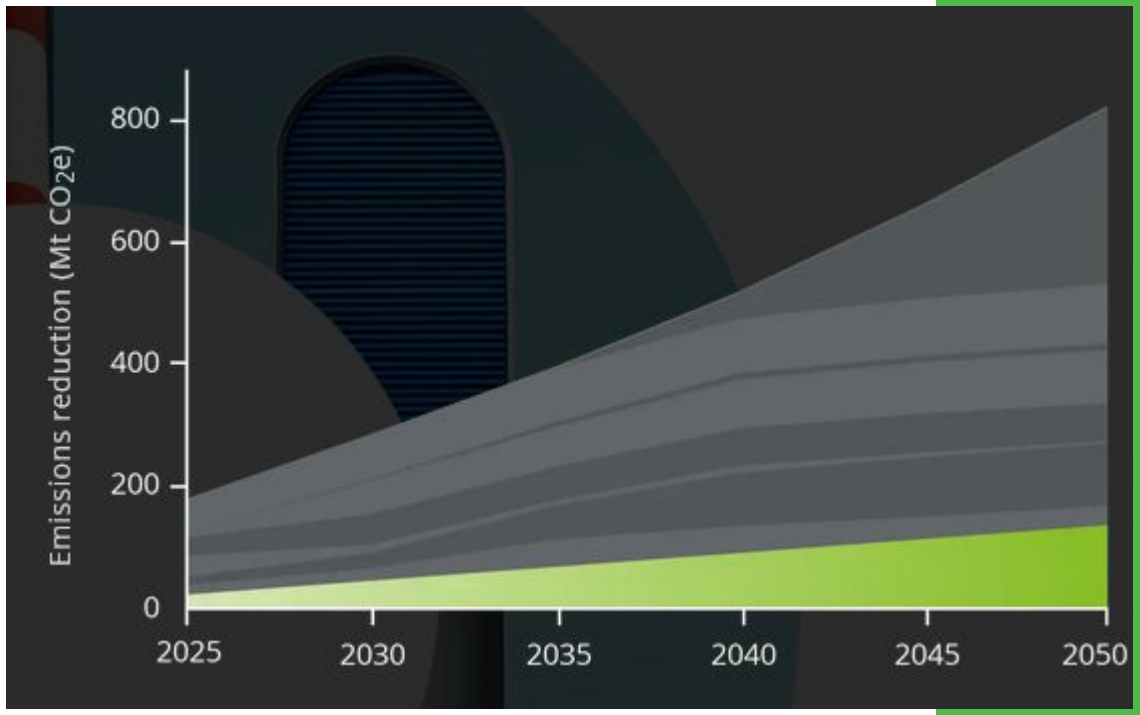
Additionality in Projects

Forest carbon offsets are not permanent so reductions not additional!

Correct, forest carbon offsets are not truly permanent.

Avoiding emissions and carbon sequestration is needed **now** to meet net zero pathways for 2050.

- Forest carbon permanence ≈ 30-200 years
- Bridge to more permanent technological solutions
- Part of a suite of “nature-based solutions”



Contribution of nature-based solutions to potential Net Zero decarbonization pathway How Canada Can Decarbonize by 2050. Deloitte, 2022

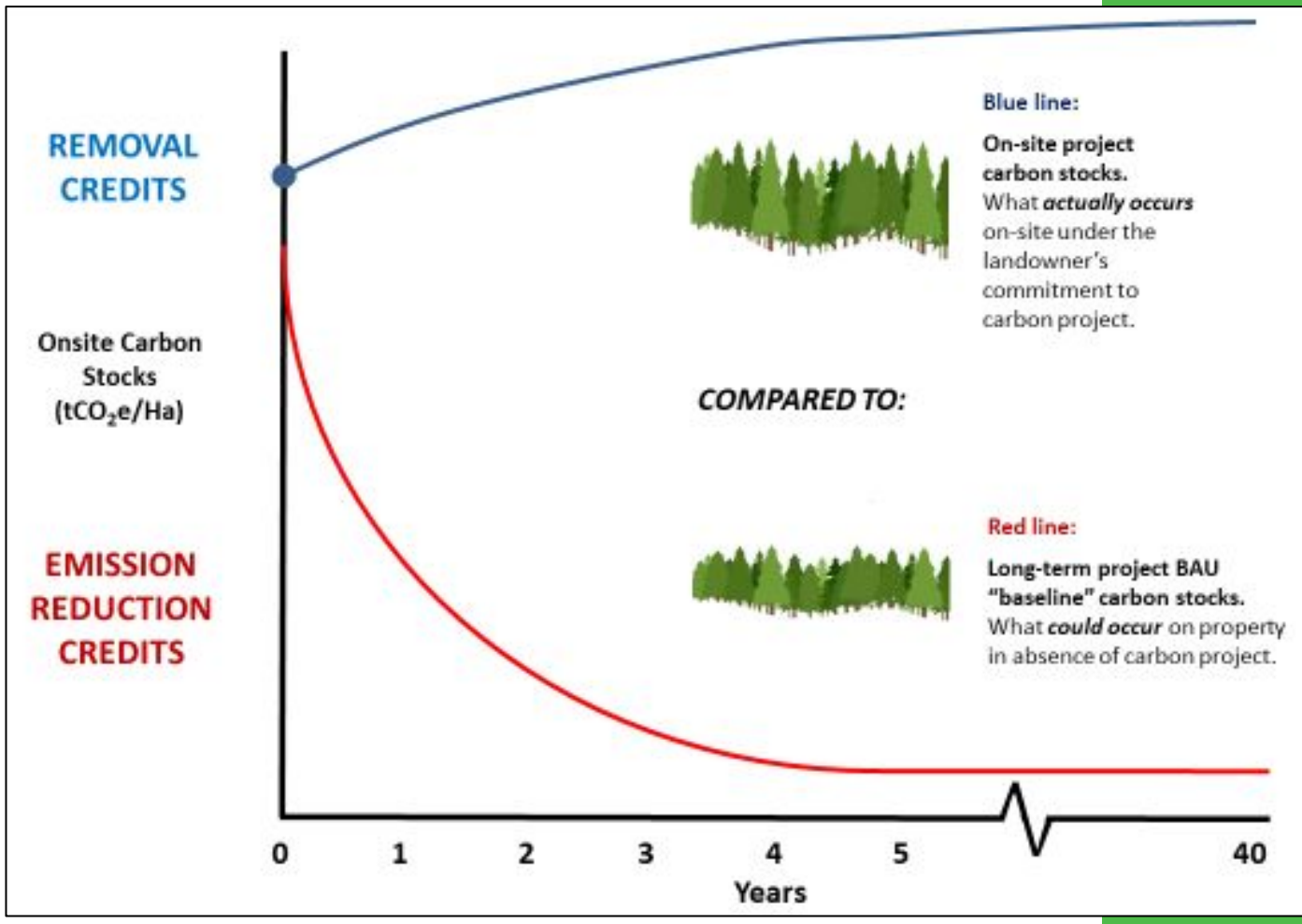
Additionality in Projects

That forest would never have been cut anyway!

Baselines need to be **realistic**.

Ensure baseline modeling is reasonable, justifiable, and verifiable.

- Avoid “aggressive” baseline scenarios
- Careful scrutiny of harvest levels, merchantability, mill capacity, etc.
- Public vs private land baselines fundamentally different (sustainable harvest vs Max NPV)



Oversight

Frauds exist ∴ oversight is essential.

1. Compliance markets have regulatory oversight.
2. Voluntary markets (buyer focused)
   - Registry controls (VERRA, ACR)
   - Project assessments (Sylvera, Pachama)
   - Protocol level assessment (VCMI, ICVCM)
3. Voluntary Markets (landowner focused)
   - Not much to be honest
   - Red flags regarding project developers:
     - Minimal or no experience (web presence)
     - Requires money up front
     - Use of obscure standard

World Wide Carbon LLC

"Shaping Environmental Market Initiatives"

Mark Loewen, director of World Wide Carbon LLC, pleads guilty to defrauding investors in carbon credit scam

Posted on 18 December 2020

By **Chris Lang**

World Wide Carbon LLC was a company registered in Atlanta in the US. From 2013 to 2018, the company claimed to sell investments related to carbon credits. In total seven victims handed over US$1.7 million. On 1 December 2020, in the District Court for the Eastern District of Virginia, Mark H. Loewen, a director of World Wide Carbon, pleaded guilt to conspiracy to commit wire fraud.

Source: https://redd-monitor.org/2020/12/18/mark-loewen-director-of-world-wide-carbon-llc-pleads-guilty-to-defrauding-investors-in-carbon-credit-scam/

Case Study: Finite Carbon

- **93 million offsets** issued & sold.
  - 52M from indigenous owned projects
- **~$500M (USD)** in revenue to Indigenous communities.
- **$800M+** (USD) in revenue to landowners.
- **60 projects** developed in North America.
- Founded in 2009 - offices in PA, OR, FL, and AB.
  - ~50 staff – 24 professional foresters, 7 remote sensing PhDs.

Wall Street Journal, August 24, 2020.

Questions