FiniteCarbon

SFI Participants and the Opportunity for Forest Carbon Revenue

Dylan H. Jenkins
ACF CF

2016 SFI Annual Conference

www.finitecarbon.com

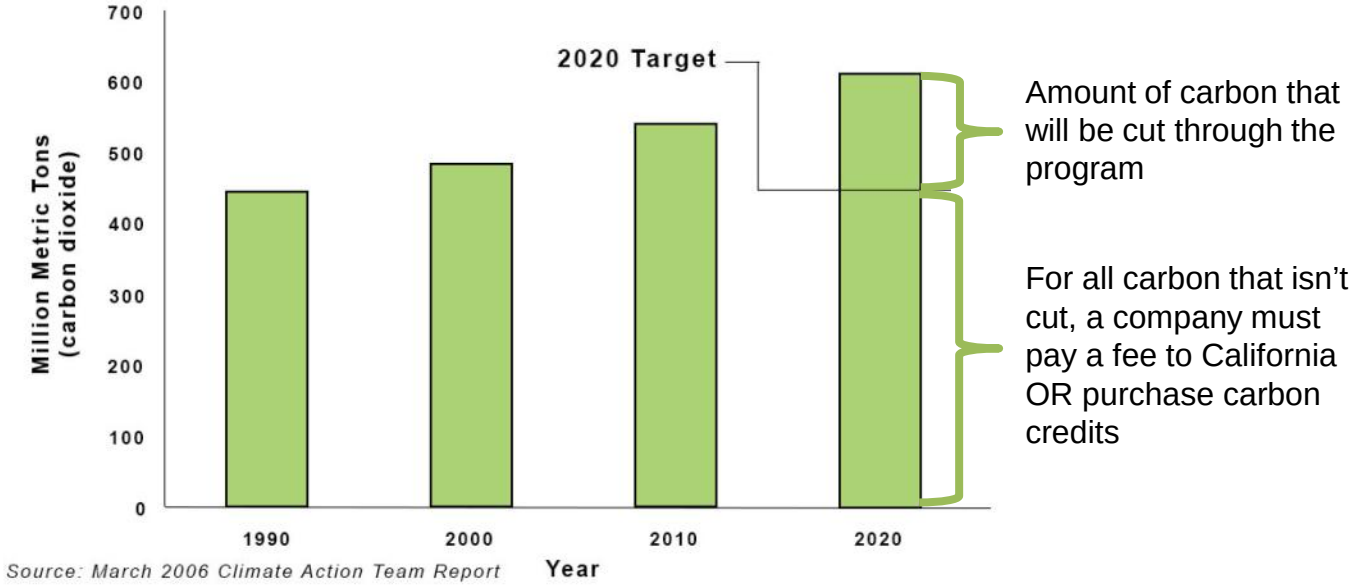
FiniteCarbon

Cap-and-Trade in California

A new (as of January 2013) California law requires companies to cut carbon pollution to 1990 levels by 2020.

600 California facilities required to pollute less and buy carbon permits from California or carbon credits (aka offsets) from forest landowners.

California Business as-usual emissions through 2020

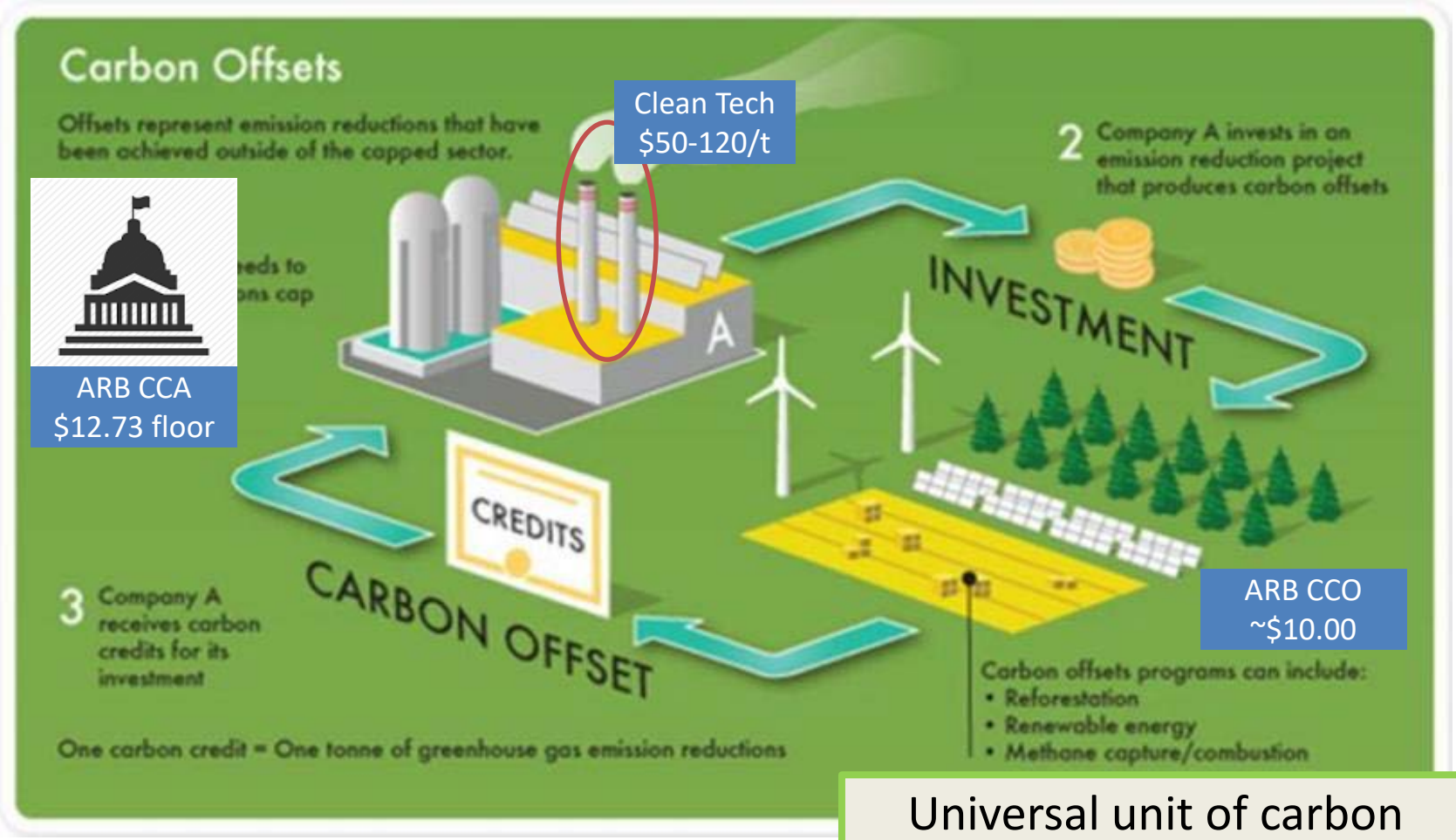


Source: March 2006 Climate Action Team Report

Copyright Finite Carbon 2016

FiniteCarbon

How Does California's Offset Market Work?



Offset use is capped at 8% of entity's total emissions obligation.

Universal unit of carbon trade is the "carbon offset" (aka "credit") = 1 $mtCO_2e$

FiniteCarbon

CA Forest Carbon – a $2 Billion Opportunity

Landowners in lower 48 states and coastal Alaska can access California compliance carbon market.

Region	1st Year	Annual
California/PNW	$800-1200	$20-40
Coastal Alaska	$300-1000	$10-20
Inland West	$200-1000	$10-20
Southeast Hardwood	$200-800	$10-30
Southeast Softwood	$150-200	$10-20
Lake States	$100-400	$5-20
Northeast	$100-250	$5-10

Forest carbon projects have large initial-year values and are significant on a per-acre basis.

Copyright Finite Carbon 2016

FiniteCarbon

California Forest Carbon Offset Projects

Finite Carbon is developing a class-leading **29 Improved Forest Management** projects for forest landowners coast-to-coast. These projects represent over **2 million acres** and **40 million CA compliance offsets** through 2020.

Land Trust and Non-Profit

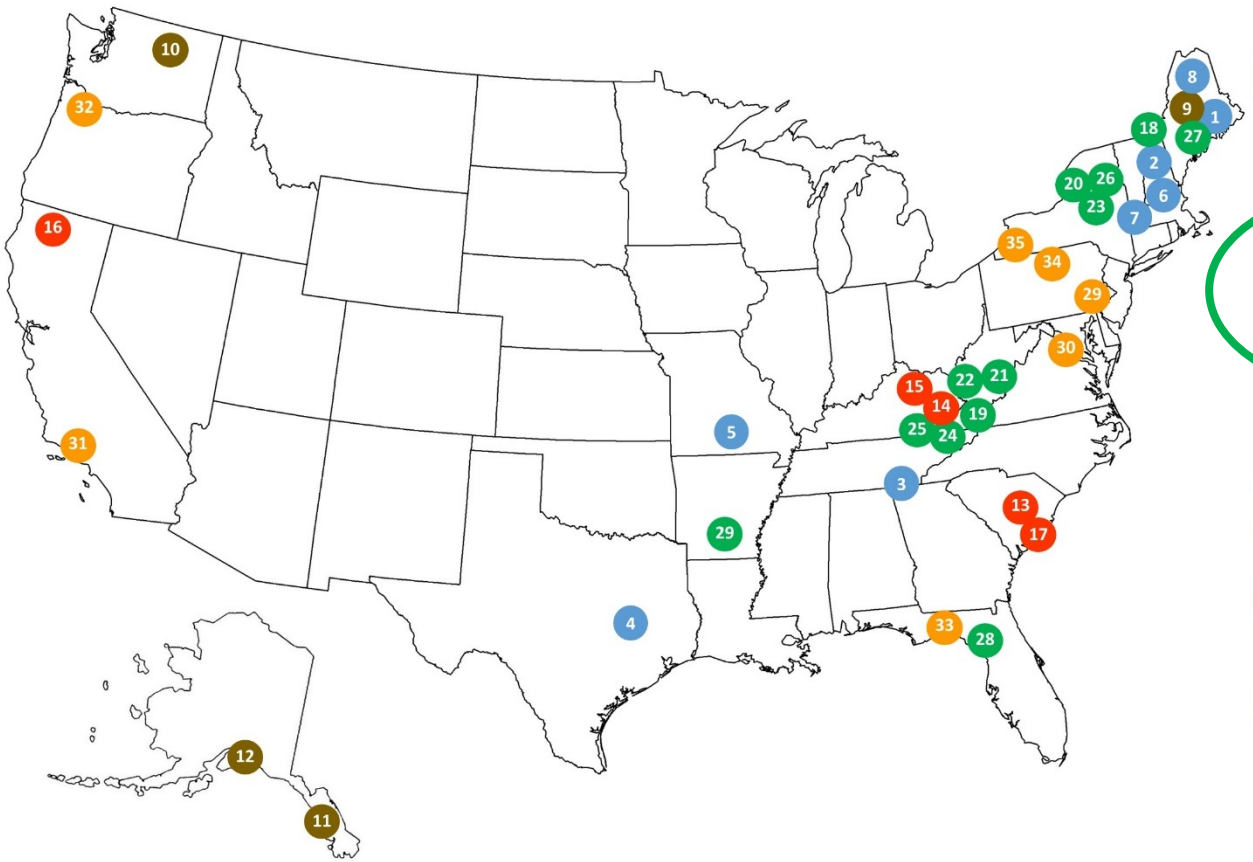
1. Downeast Lakes Land Trust
2. New England Forestry Foundation
3. TN River Gorge Trust
4. Cooks Branch Conservancy
5. United Church of Christ
6. Lakes Region Conservation Trust
7. Mass Audubon
8. Silver Lake

Tribes and Alaska Native Corps

9. Passamaquoddy
10. Colville
11. Sealaska
12. Ahtna

Corporate

13. Norfolk Southern
14. Kentucky River Properties LLC
15. Alma Land Co.
16. Berry Summit LLC
17. BP Cooper River



TIMO and REIT

18. TFG Connecticut Lakes
19. TFG Highlands
20. TFG Chateaugay
21. TFG Buffalo
22. TFG The Timber Co.
23. TFG/Molpus Champion
24. Molpus Little Brimstone
25. Molpus Ataya
26. Molpus Adirondacks
27. Lyme Grand Lake Stream
28. Lyme Cross City
29. Potlatch Moro Big Pine

Finite Carbon Office

29. Philadelphia (HQ)
30. Washington DC
31. Los Angeles
32. Portland
33. Tallahassee
34. Williamsport
35. Cherry Creek

Finite Carbon is a proud member and supporter of the following organizations:

SAF · Forest Stewards Guild putting the forest first · ACF SINCE 1948 · Forest LANDOWNERS · Intertribal Timber Council · Land Trust Alliance Together, conserving the places you love

Copyright Finite Carbon 2016

FiniteCarbon

CA Forest Carbon – a $2 Billion Opportunity

Landowners are already generating significant revenue:

Landowner	Owner Type	State	Acres	~ Market Value ($000,000)	~ Market Value (1st year $/A)
Passamaquoddy	Tribe	ME	99,000	32.0	323
Colville	Tribe	WA	450,000	confidential	
Sealaska	Tribe	AK	132,000	confidential	
Norfolk Southern	Corporate	SC	12,500	2.5	200
Finite Carbon	Corporate	CA	2,300	2.1	913
Downeast Lakes LT	Land Trust	ME	20,000	1.9	95
TN River Gorge Trust	Land Trust	TN	5,600	2.7	482
NE Forest Foundation	Land Trust	NH	2,100	0.6	286
UCC Shannondale	Church	MO	3,900	1.2	308
Lyme Timber	TIMO	ME	22,000	5.0	227
The Forestland Group	TIMO	NH	146,000	10.4	71
Molpus Woodlands	TIMO	NY	103,000	3.0	29
Potlatch	REIT	AR	16,000	2.0	125

Over five million acres of US forestland has been submitted to ARB as carbon projects for California's program.

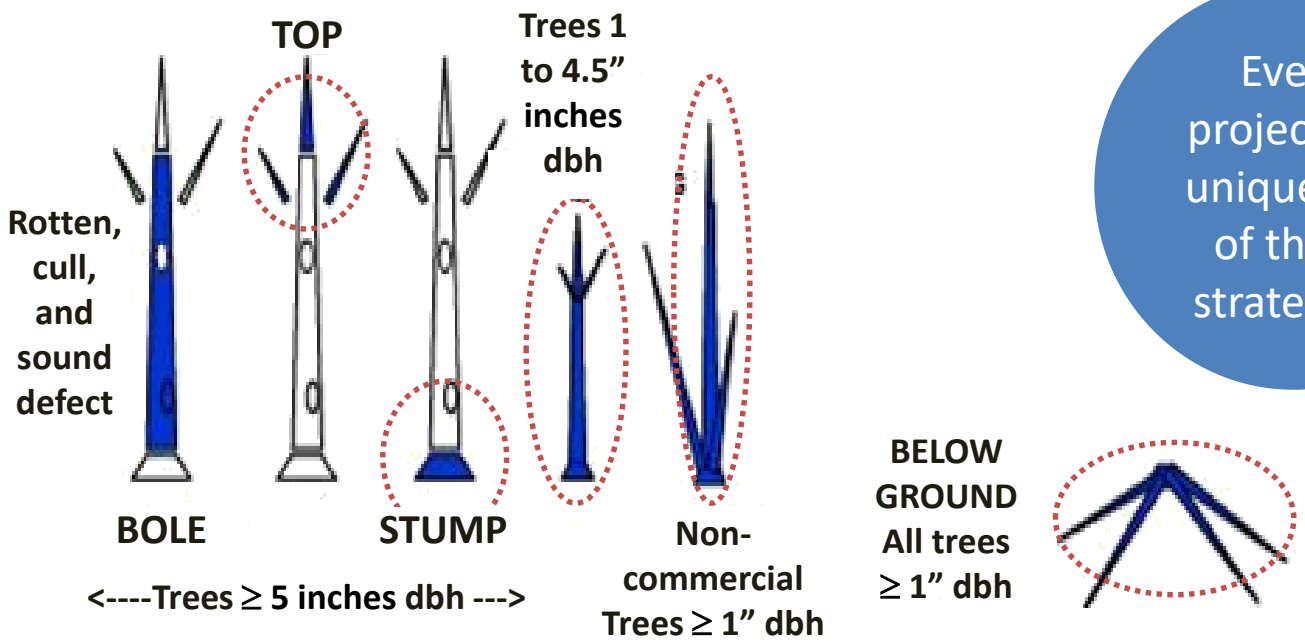
Copyright Finite Carbon 2016

FiniteCarbon

Carbon Asset Integration Strategies

UNTAPPED ASSET CLASS

Gains on non-merch portions of trees, stands, and forest.



Every project is a unique mix of these strategies.

SPECIAL LANDS

Gains on lightly and unmanaged stands and tracts.

MARKET OPTIMIZATION

Revenues from growth optimized by leverage of market conditions from carbon and traditional wood products.

Copyright Finite Carbon 2014

FiniteCarbon

Landowner Commitments

"Golden Rule" Harvest <= Growth

Natural forest management

Even-aged harvest < 40 acres

SFI, FSC, ATFS or state/fed approved plan

Audits

- Harvest updates + desk review (~annual)
- Field verify (every 6 years)

Re-inventory (every 6 to 12 years)

Endowment to cover these costs

100 years

Limited waiver of sovereign immunity

BIA Section 81 review letter

Lower 48 only

Copyright Finite Carbon 2016

FiniteCarbon

Project Development Cycle

~12+ month project development process:

= development costs + risk (Finite Carbon/buyer)
+ long term O&M costs (Landowner)

Development and O&M cost and complexity increasing

Copyright Finite Carbon 2016

FiniteCarbon

Why Landowners Consider Carbon Projects

Stewardship

- New cash flow on conservatively managed working forests
- Largely in line with mission and current forest practices
- Income for stewardship costs

Conservation Capital

- Forestland acquisition
- Leverage traditional funding to advance economic development
- NR/forestry jobs; ed. scholarships

Copyright Finite Carbon 2016

FiniteCarbon

Market Outlook

MICRO

Development process extremely complex. 12-18 mo process; Revenue >2020 not guaranteed.

Extraordinary program expenses. Costs = $120k+ for smallest projects; exceed $500k for v. large projects + development risk.

Small landowners (<5,000 acres) effectively blocked from participating in program.

Significant new + additional revenue stream for aligned landowners.

MACRO

Demand from California emitters far exceeds supply. Only 45 million of the possible 200 million offsets have been registered.

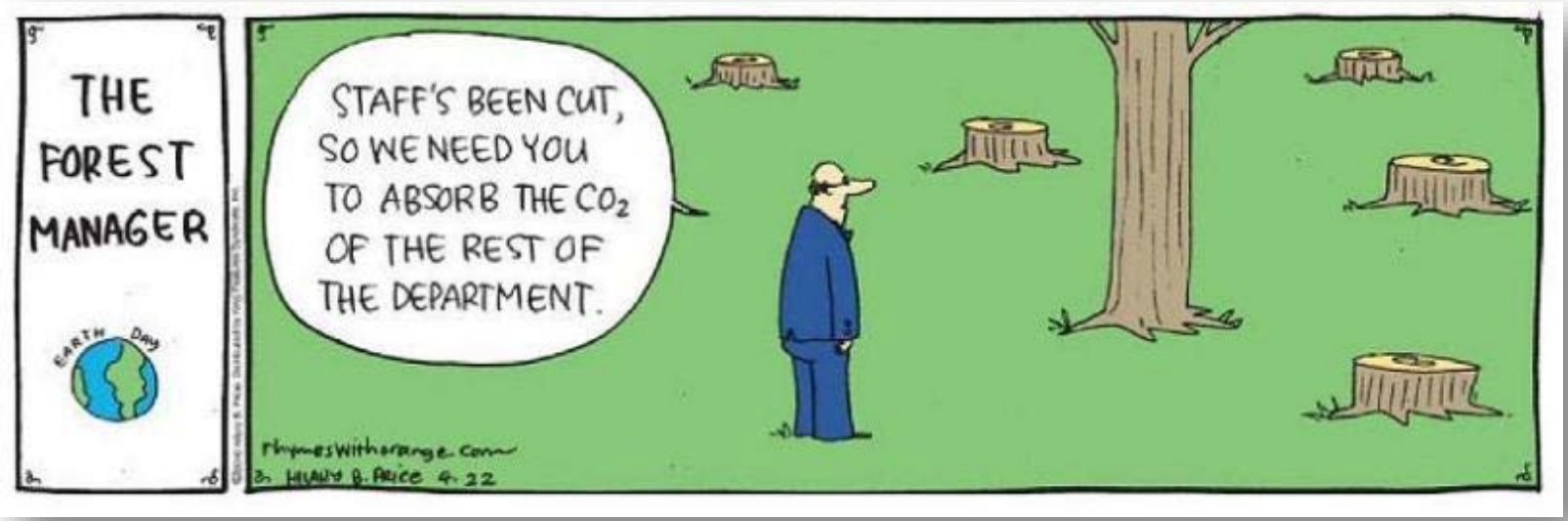
Canada: QBC + ONT, part of the WCI = increased demand and low supply. Quebec = 500k offsets to date and emitters buy US credits.

2030 GHG reduction goal established but role of C&T/offset program beyond 2020 unknown.

If 2020+, then 200M tons ($2B+) additional demand.

Copyright Finite Carbon 2016

Thank you!



Dylan H. Jenkins, ACF CF

VP, Portfolio Development
(570) 321-9090
djenkins@finitecarbon.com

www.finitecarbon.com

Copyright Finite Carbon 2016