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The Forest Health - Human Health Initiative



**Forest Health
Human Health**

*Linking landowners, carbon markets, and health care
to conserve and sustainably manage family forests.*



Presented by:
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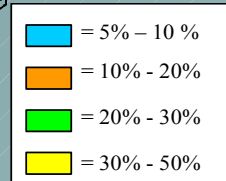


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*% of NIPF acreage in the state owned
by landowners who are 75 years of age or older*

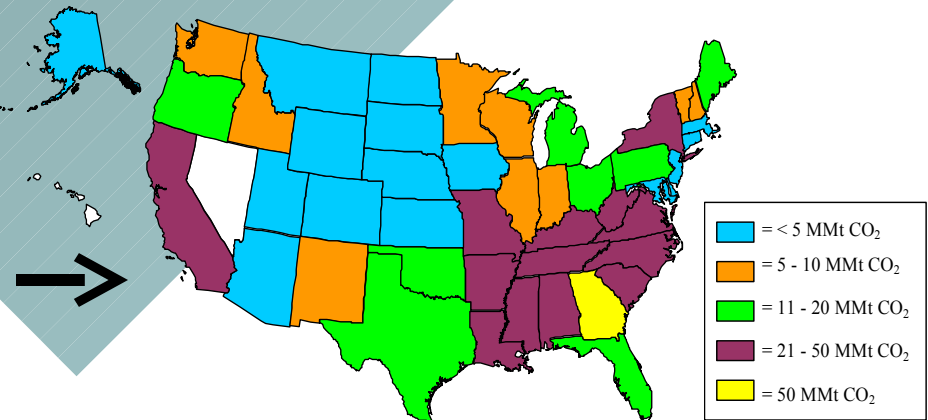
~ 6,000 acres of family forests lost everyday in US

% of NIPF acreage owned by
landowners 75 years and older



*Loss of MMt CO₂ storage if 50% of forestland owned by
landowners 75 years of age or older was sold for non-forest use*

Loss of stored carbon if 50% of acres
owned by 75+ year old landowners sold
to non-forest use

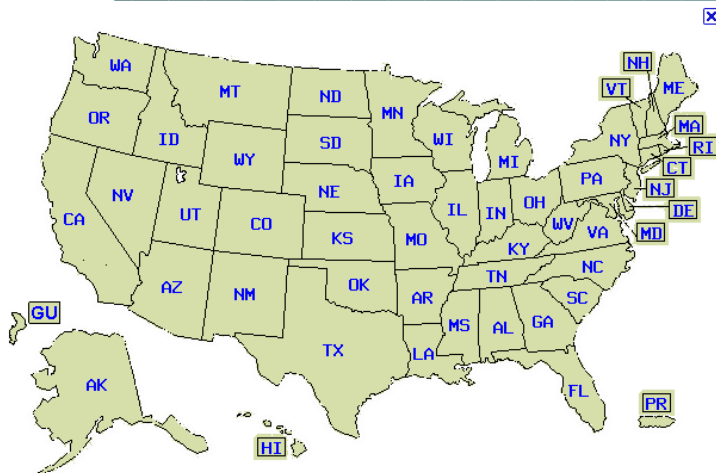




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Starting in 2007, the Pinchot Institute:

- Began research work looking at family forestland owners and their offspring.
- By 2010 – we had conducted over ***1,000 in-depth interviews*** with landowners and their offspring across the US.
- *What we discovered surprised us ...*



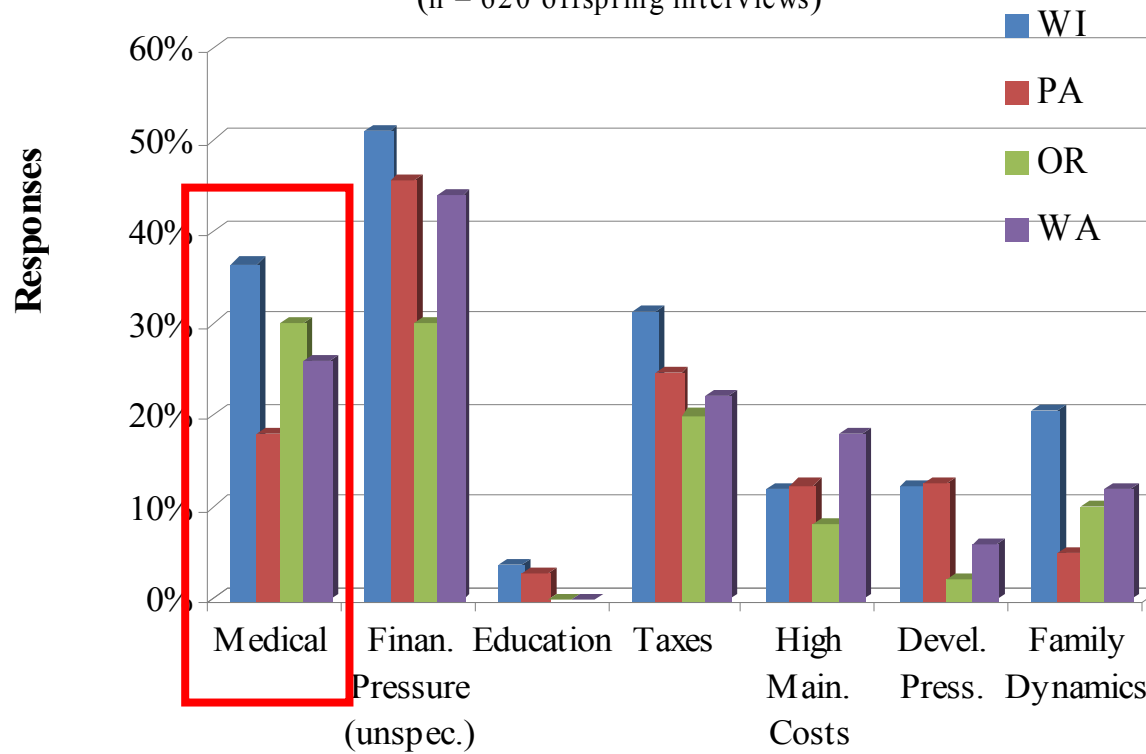
Landowners interviews
Landowners and offspring interviews



2007-2010 Offspring Interview Results:

What would force you to sell forestland?

(n = 620 offspring interviews)





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2007-2010 Offspring Interview Results:

Important or very important to help keep forestland
(n = 620 offspring interviews)





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Is it possible to link *carbon banking*
to *health care payments*?



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In 2010 . . . The Pinchot Institute introduced the **Forest Health-Human Health Initiative** . . .

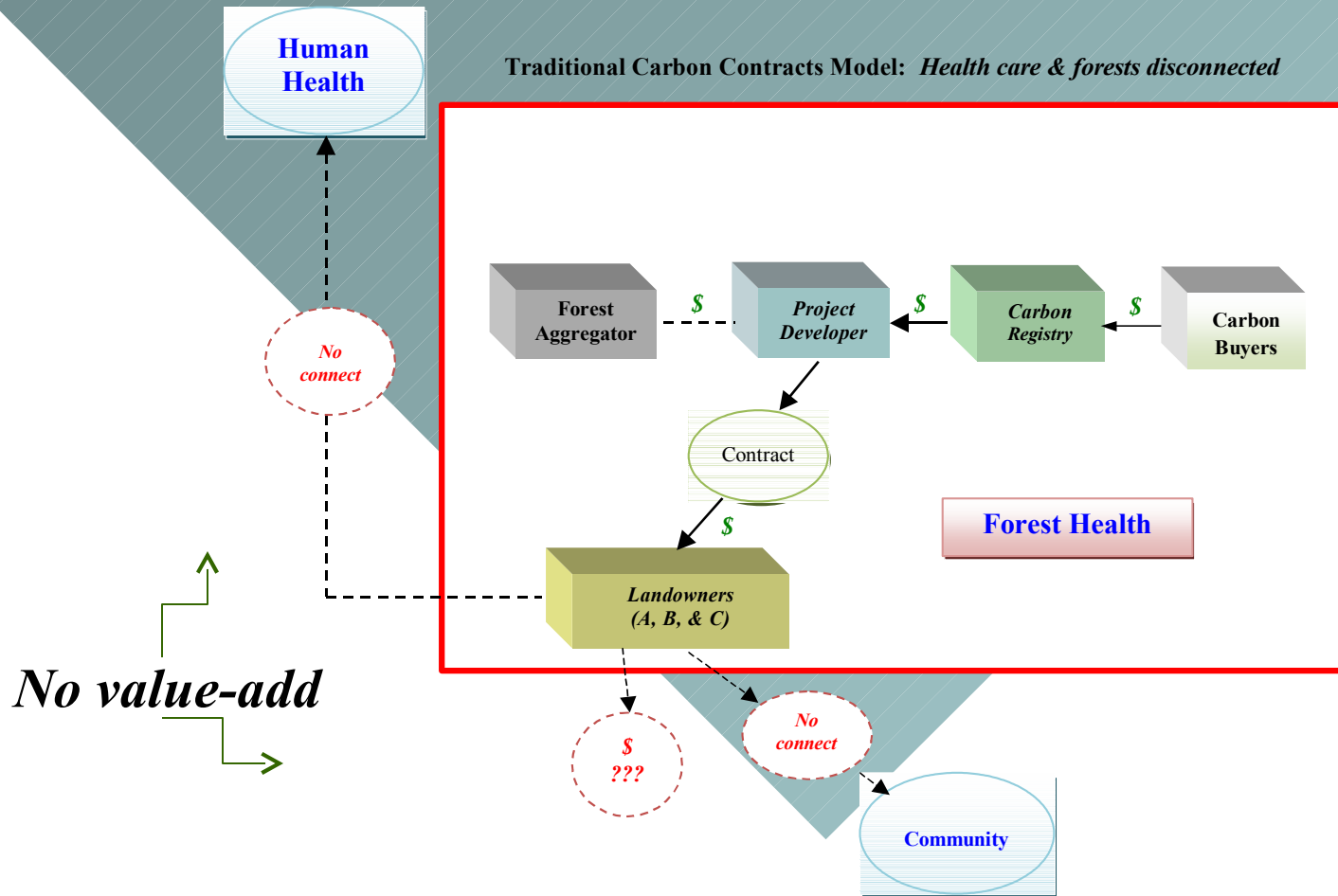
Based on 'value-added' health care business proposition at three levels:

- Carbon buyer
- Forestland owner
- Rural forest community

Selling carbon alone may not be enough

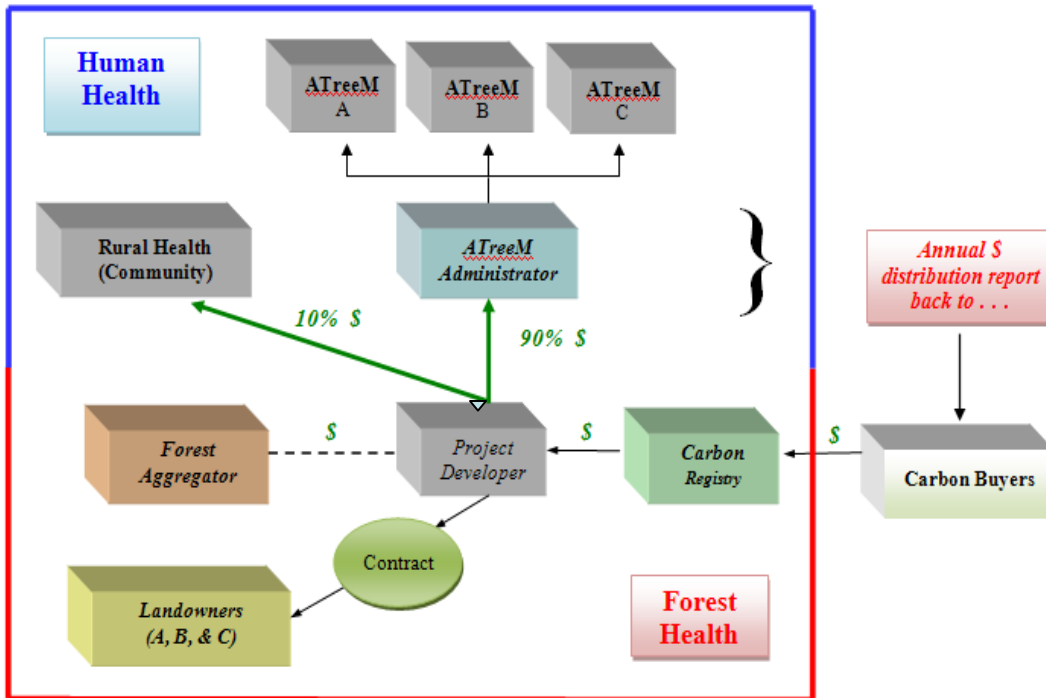


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Forest Health Human Health Model: *Direct link between health care & forests*



Value-add at all levels



All 20 years of payments from carbon buyers go direct to health care accounts.

90% of payments go to landowner
ATreeM Card (*value-add to*
landowner).

10% of payments goes direct to health care in rural community. *(value-add to community)*.

Quantification of payments to social value (health care) for carbon buyer (*value-add to carbon buyer*).



Value-Added Carbon Proposition

Carbon buyer:

- No payments to landowner.
- All payments to health care accounts.
- Annual quantification of payments to health care accounts for global investor recognition.

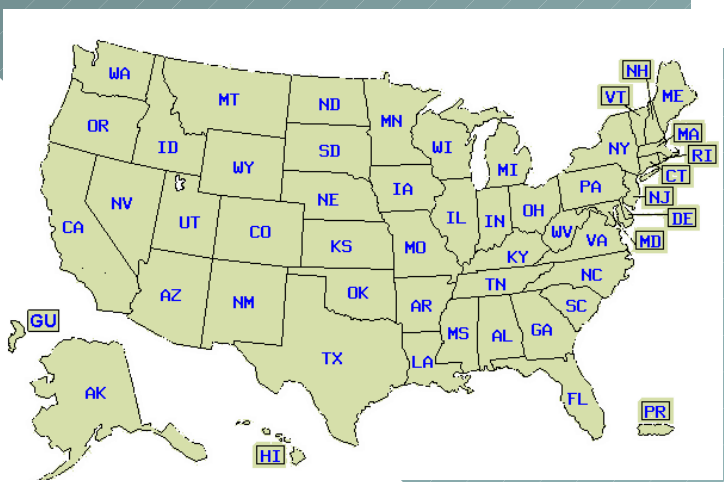
Forestland Owner:

- Long-term income stream for family health care.
- No insurance policy required.
- Non-taxable income status.

Rural Forest Community:

- Long-term income stream for community health care (physician training; virtual technology; home medical services; hospital CCO services)

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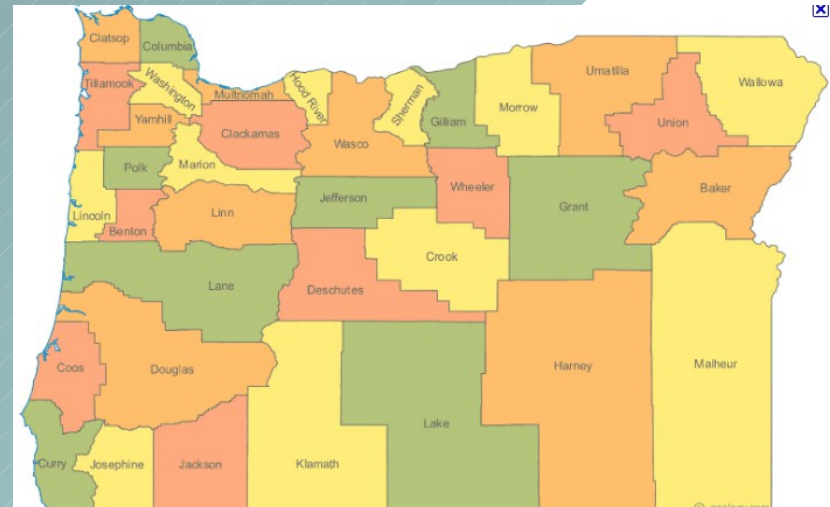


Columbia County, Oregon

Wisconsin

North Carolina

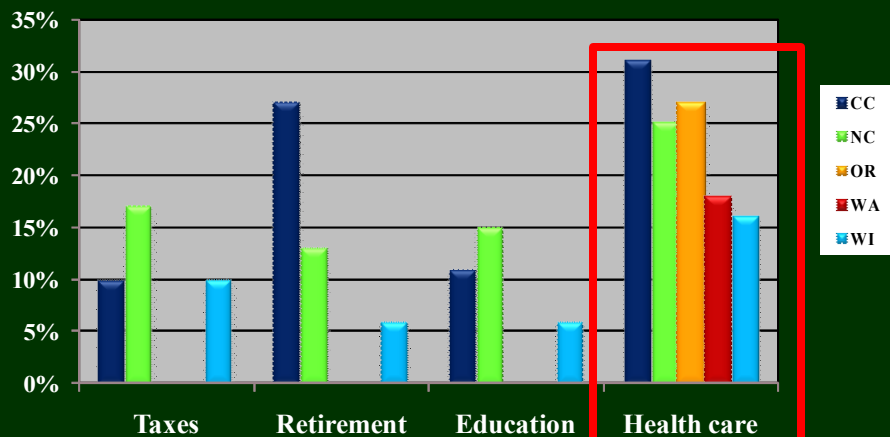
- **2011**: landowner and offspring interviews now focused on *forest ownership, health care costs, and interest in carbon payment to health care product*.
- Interviews conducted in Columbia County, North Carolina, and Wisconsin
- 450 interviews completed





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FH-HH 2010-2011 Survey Results: *Landowner*
How likely to accelerate the sale of timber to pay for...
(% who rated likely or very likely)



% of *landowners* who said it was likely or very likely to ...

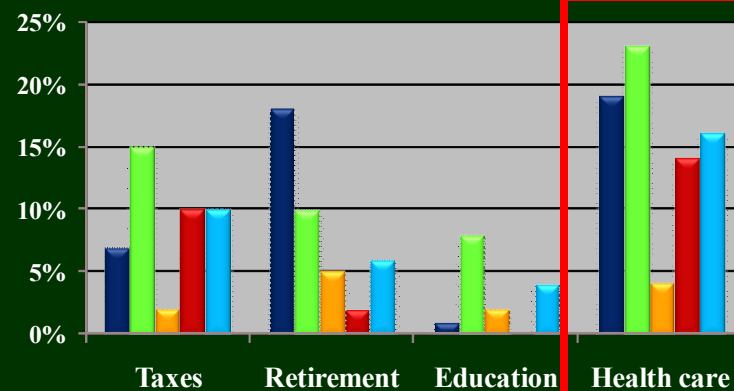
increase harvest to pay for ...



sell family forestland to pay for ...



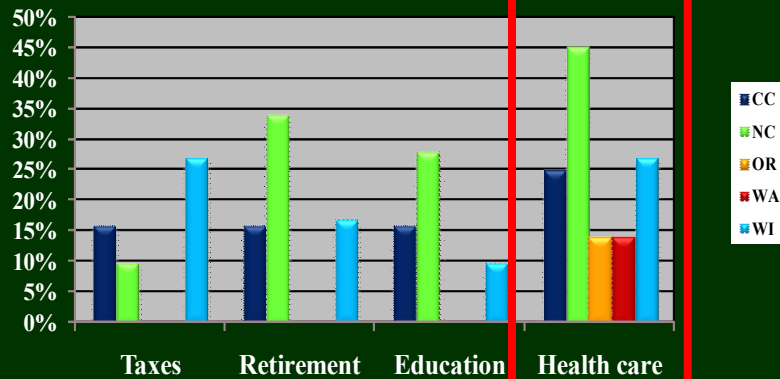
FH-HH 2010-2011 Survey Results: *Landowner*
How likely to sell forestland to pay for...
(% who rated likely or very likely)





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FH-HH 2010-2011 Survey Results: *Offspring*
How likely to accelerate the sale of timber to pay for...
(% who rated likely or very likely)



sell family forestland to pay
for ...

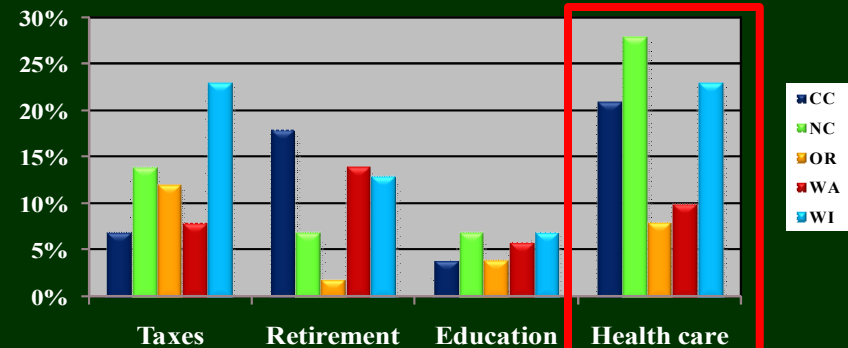


% of *offspring* who said it was
likely or very likely to ...

increase harvest to pay for ...



FH-HH 2010-2011 Survey Results: *Offspring*
How likely to sell forestland to pay for...
(% who rated likely or very likely)





We also learned a few other important things:

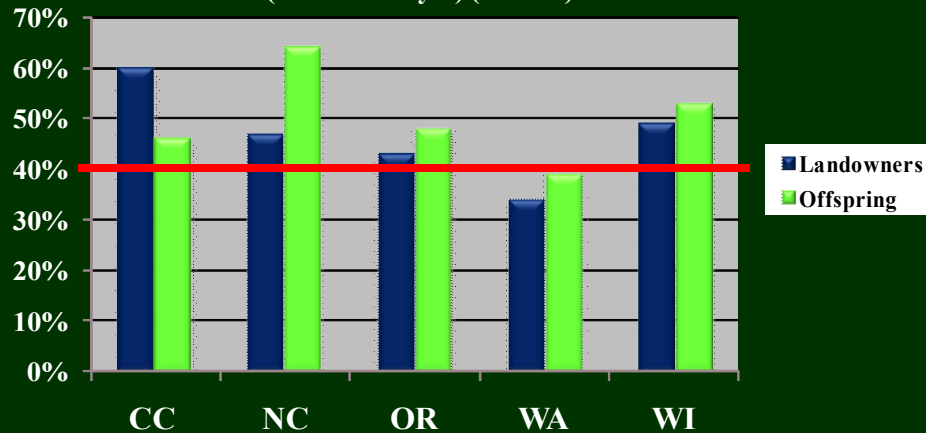
- *For a high percentage, only high-deductible insurance policies available to them (\$5,000 or more per year). As a result . . .*
- *Underinsured: 40% landowners; 60% offspring*
- *\$5,000 in out-of-pocket expenses for health care: 47% landowners; 54% offspring*
- *No long term care insurance: 70% landowners; 80% offspring*



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Interested in participating in a carbon payment to health care contract?

FH-HH 2011 Survey Results: *Landowners & Offspring*
Interested or very interested in a carbon payment to health care program?
(% who said yes) (n = 450)

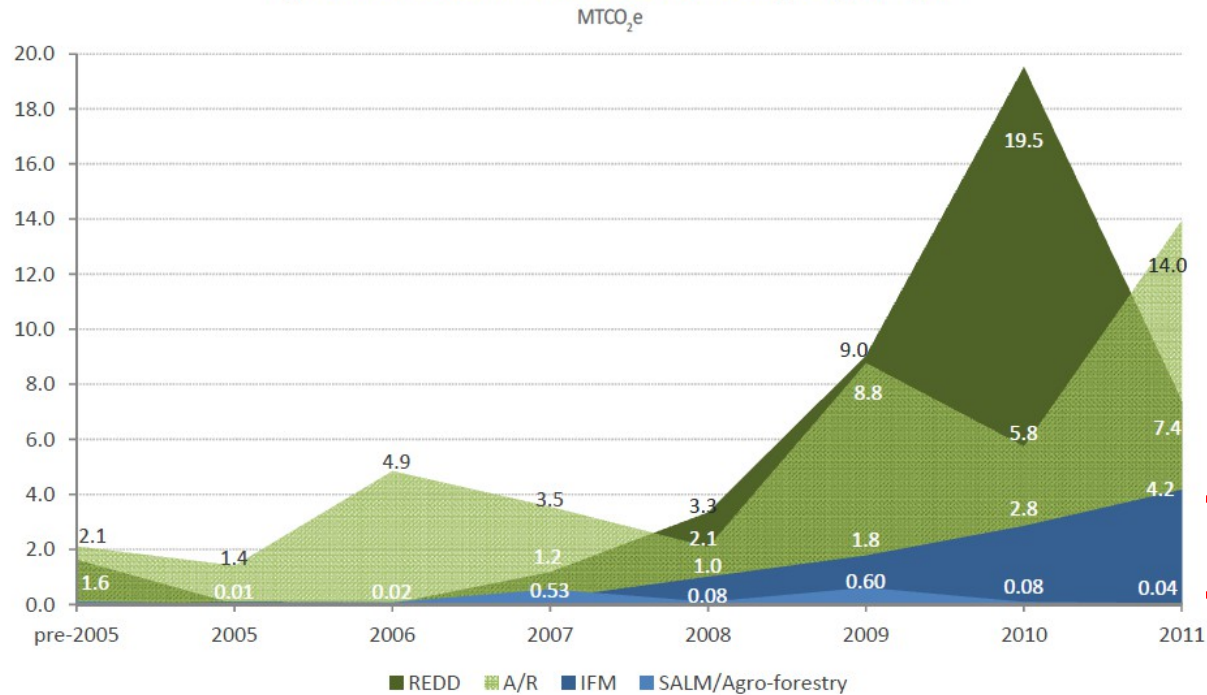


... but minimum of \$1,000/yr. to ATreeM card required



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Figure 18: Historical Transacted Volume by Project Type



Source: Ecosystem Marketplace. Notes: Based on 603 observations in 2011; 731 total historical observations.



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Table 21: North America: Transacted Forest Carbon Credit Types and Buyers, All Markets 2011

TOP TRANSACTED FOREST CARBON CREDIT TYPES, 2011					
Project Type		Project Stage		Standard Use	
IFM	52%	Issued	70%	ACR	29%
A/R	32%	Undergoing Validation	25%	ISO 14064	20%
Other	16%	Verified	3%	VCS	18%
TOP FOREST CARBON CREDIT BUYER TYPES, 2011					
Buyer Locations		Buyer Sectors		Buyer Motivations	
North America	80%	Energy	34%	CSR	39%
Europe	20%	Transportation (air, rail, etc.)	27%	Compliance/ Pre-compliance	24%
		Government	18%	Investment	12%

Source: Ecosystem Marketplace. Notes: Percent values are based on the volumes associated with individual questions, not including an "other" response.



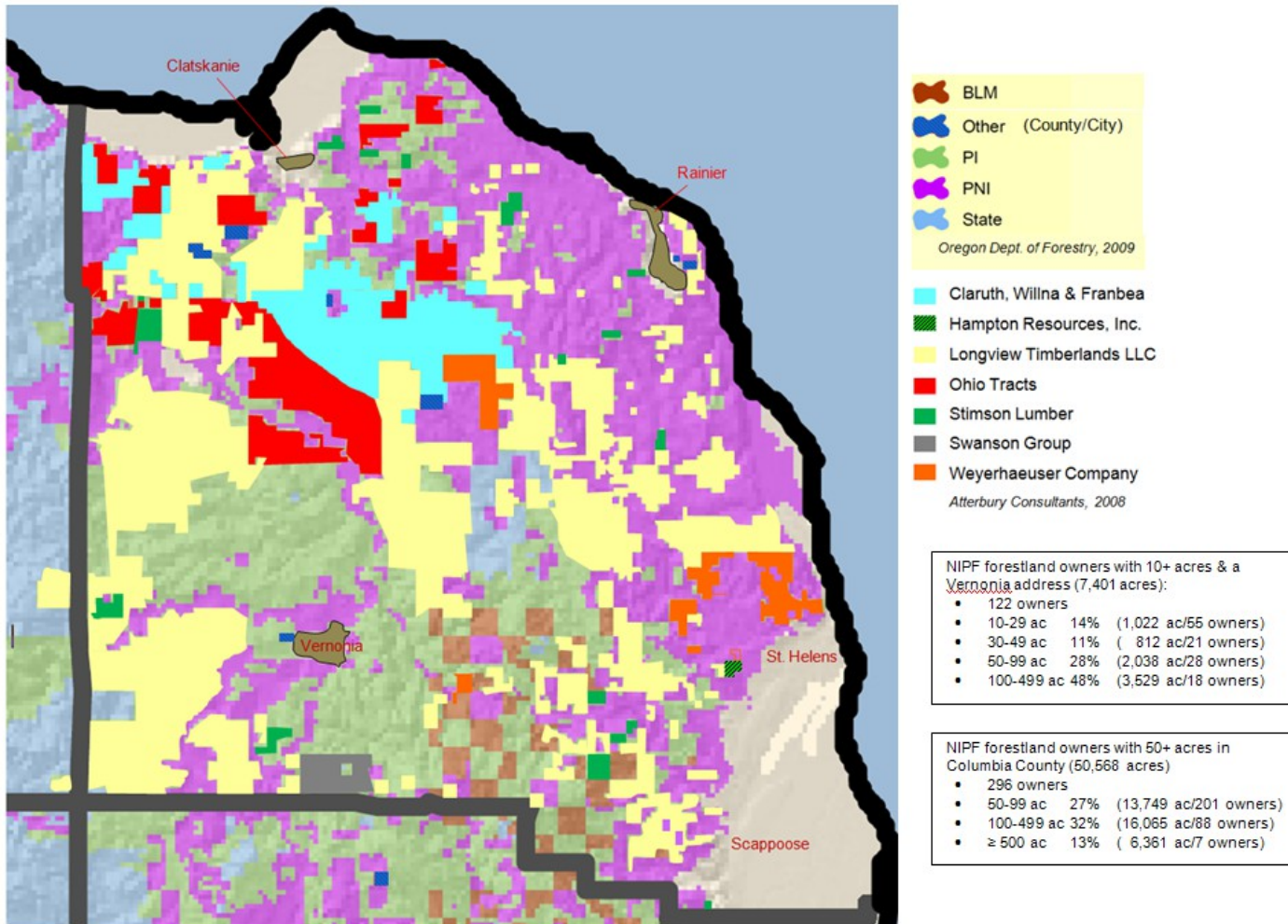
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Improved Forest Management (IFM selling at highest price: ~ \$13/MtCO₂e)

Type	Description
REDD (90% of acreage; 29% of CO ₂ e volume)	Reduced Emissions from Deforestation and Forest Degradation (\$8.50/MtCO ₂ e)
AF (5% of acreage; 55% of volume)	Afforestation/Reforestation (\$6.30/MtCO ₂ e)
IFM (5% of acreage; 16 % of volume)	Improved Forest Management (\$12.70/MtCO ₂ e)
AgF (<1% of acreage; <1 % of volume)	Agroforestry



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For landowners who own:	Annual ATreeM card deposit for landowners where carbon is sold at:	
	@ \$8.50/Mtco ₂	@ \$10/Mtco ₂
569 acres (n=1)	\$11,182	\$13,437
280-320 acres (n=4)	from \$2,858 to \$9,228	from \$3,522 to \$10,998
70-120 acres (n=2)	from \$1,118 to \$1,313	from \$1,350 to \$1,608

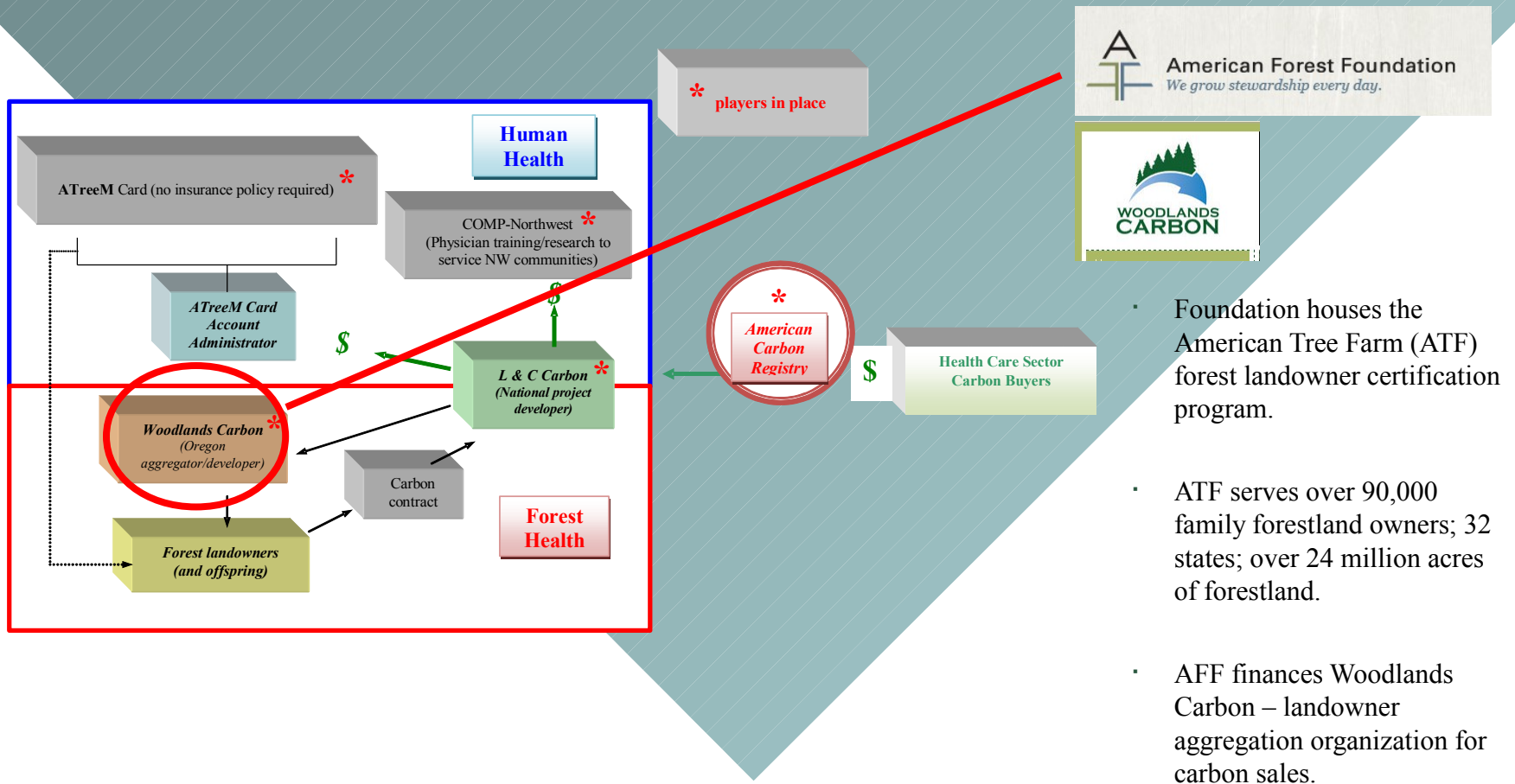


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Partnerships currently formed to take next steps . . .

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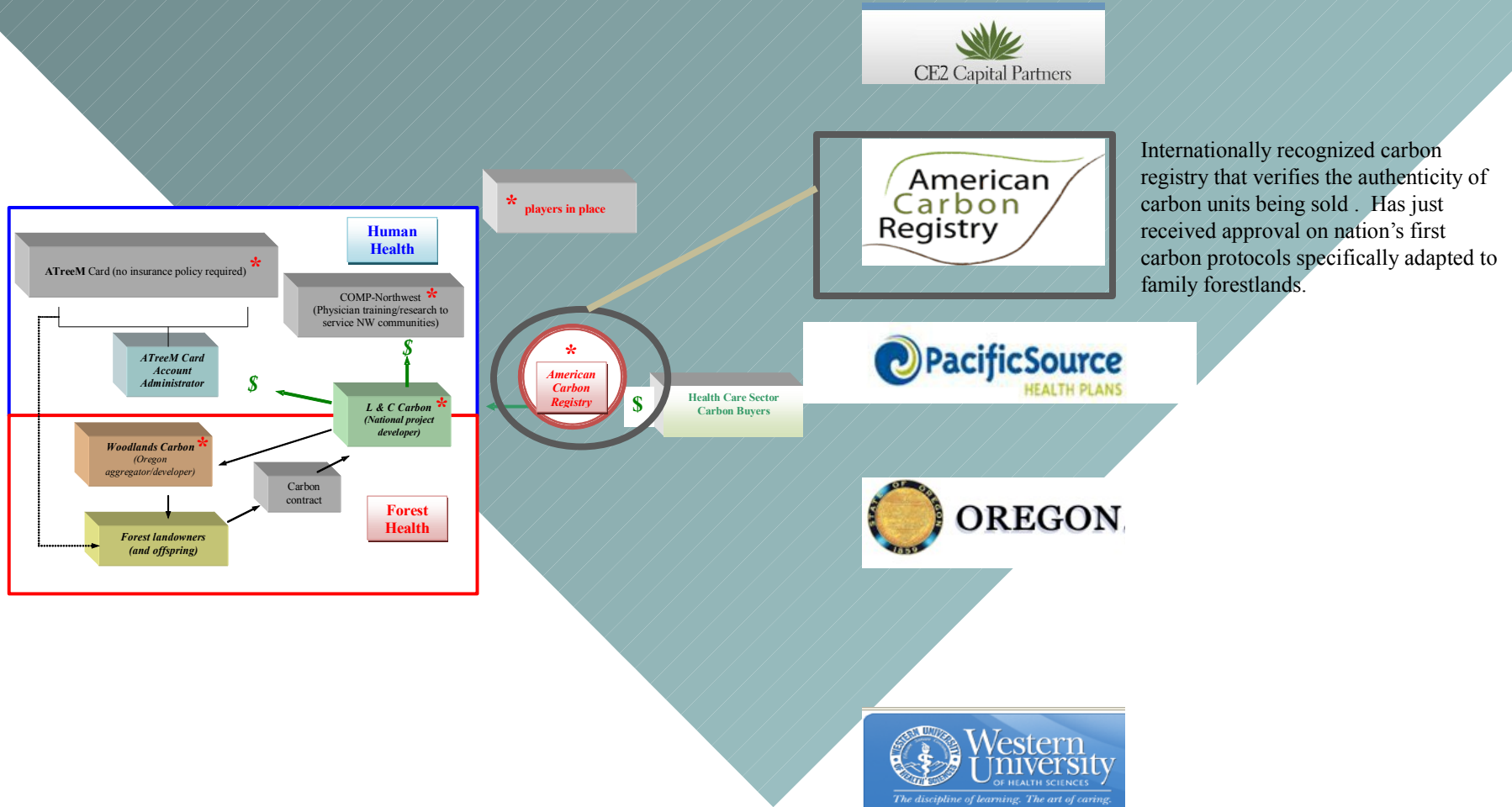


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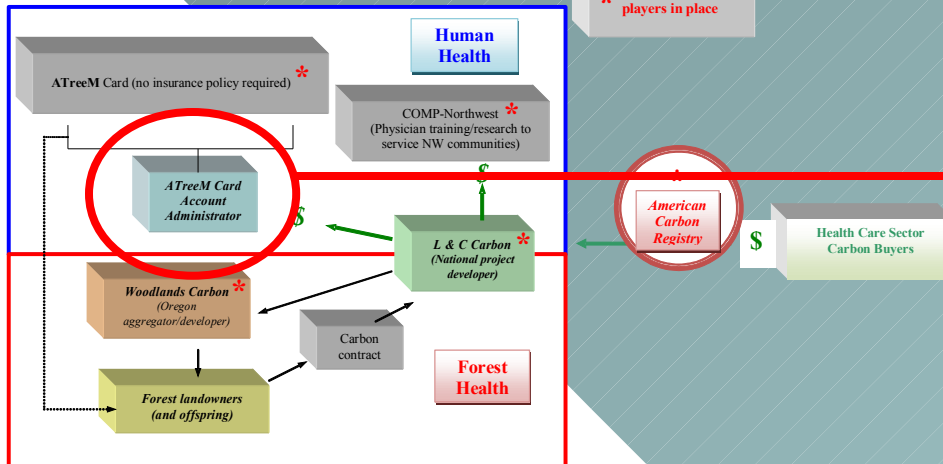


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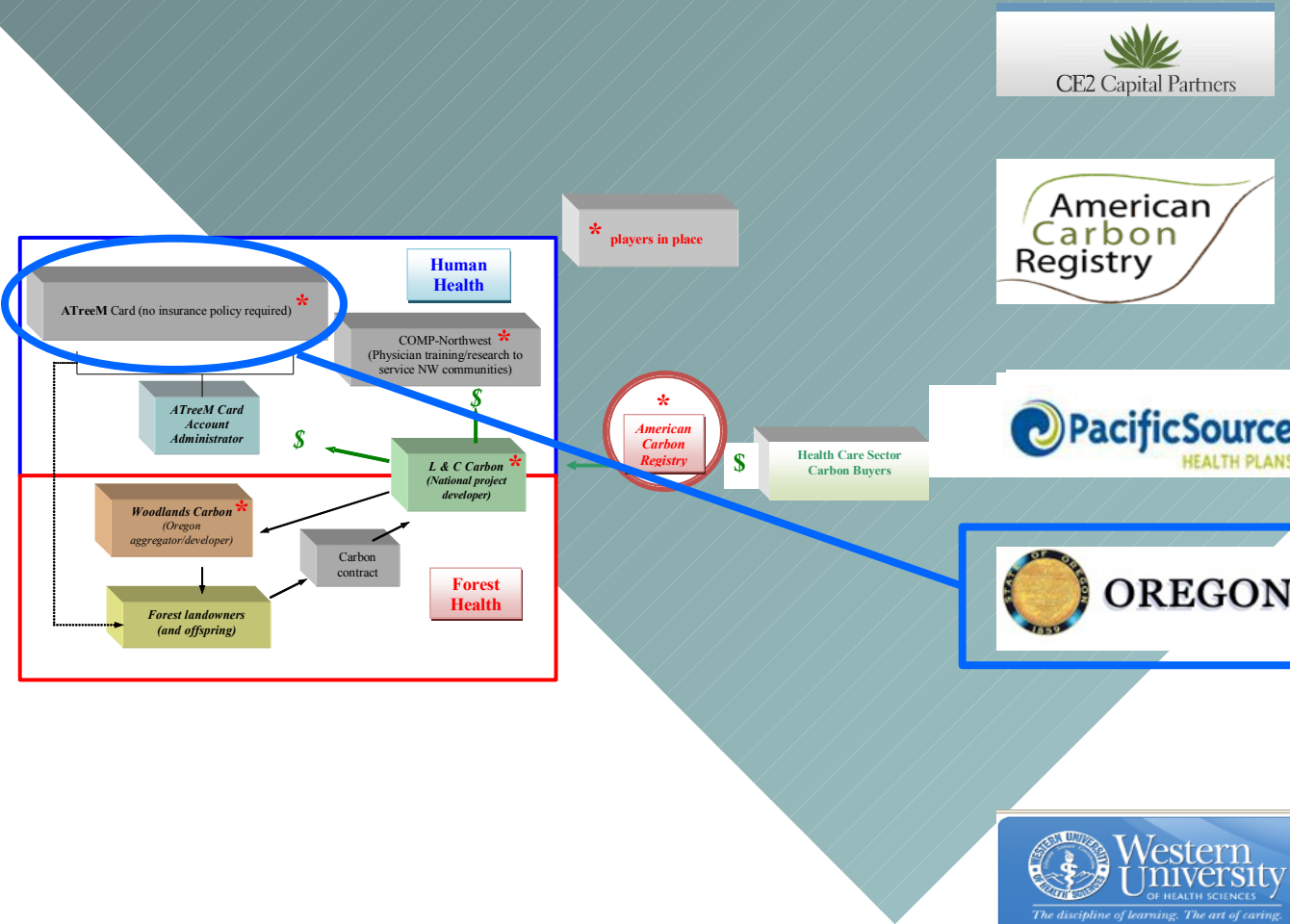


PacificSource just selected as national administrator of ATreeM card.





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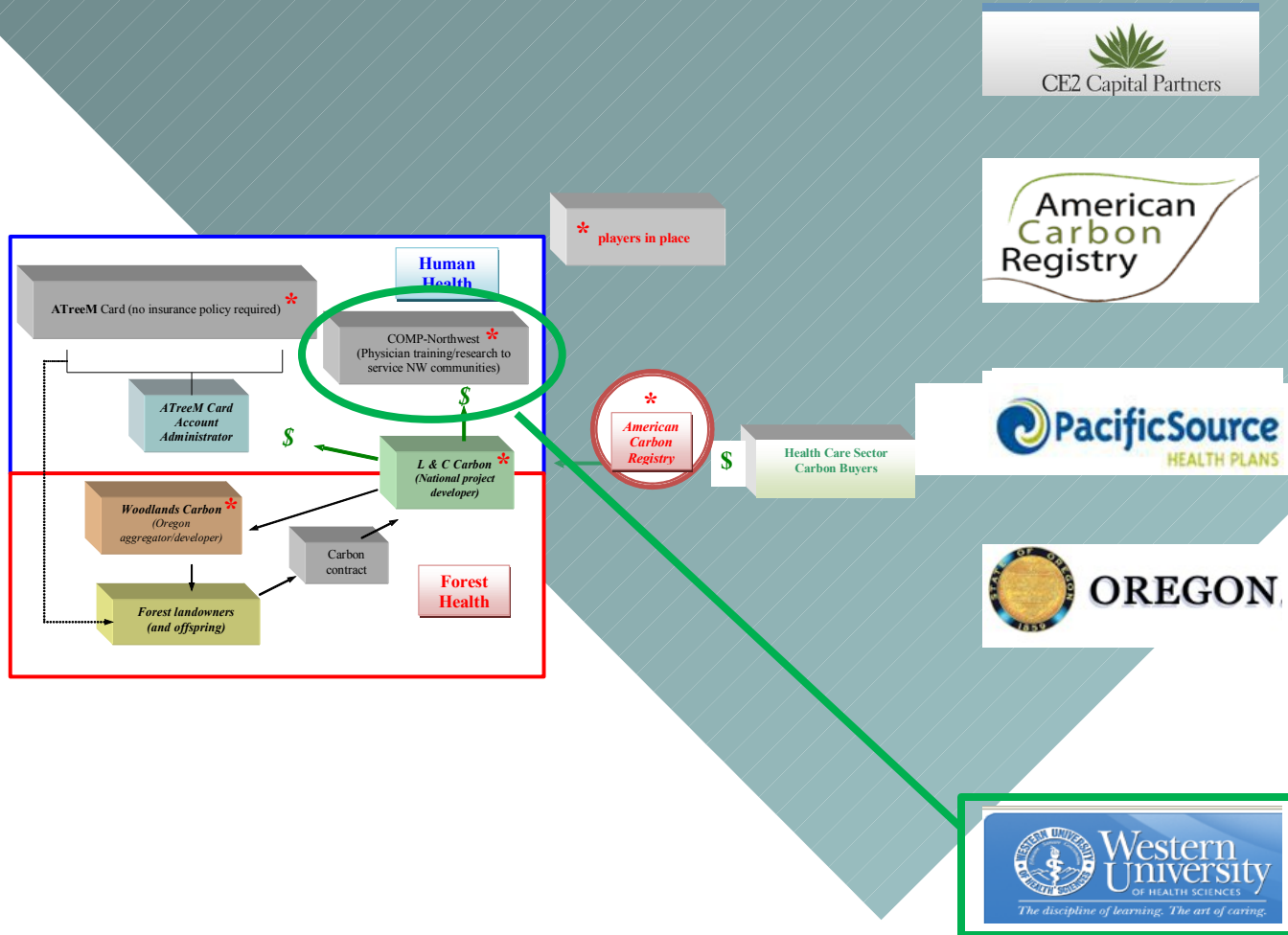


Oregon Department of Forestry first in the nation to look at securing carbon contracts on state forestlands.

Legislative action in process to secure non-tax income status for ATreeM card.



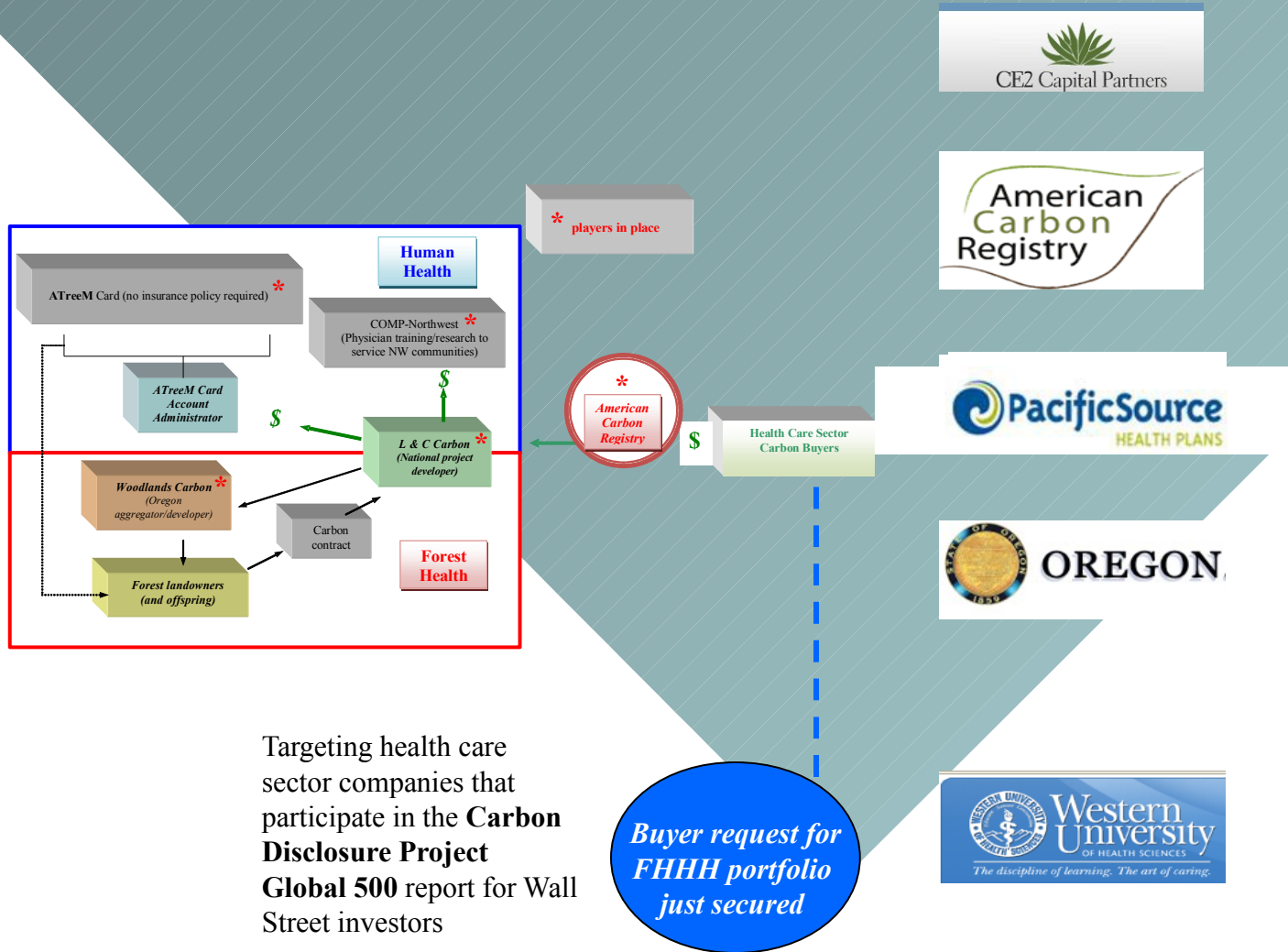
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COMP-Northwest just opened in Oregon. Committed to training NW students to become physicians to service NW communities. 10% of FHHH payment goes to student scholarship fund. FHHH students get 1st priority placement



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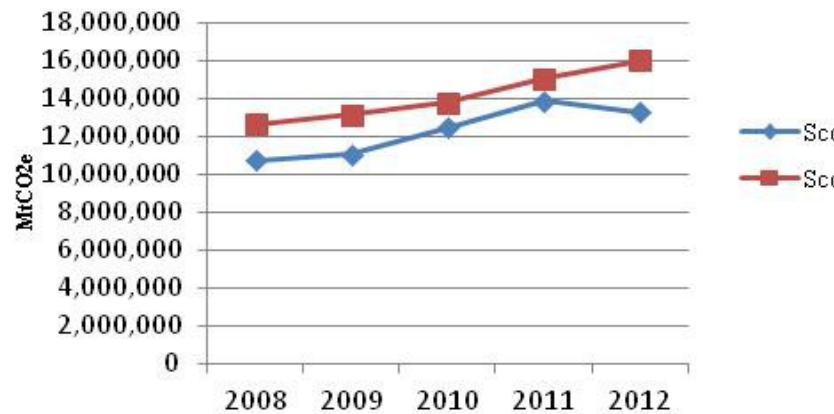
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Wall Street Carbon Disclosure Project (CDP) Report Card

(722 investors with \$87 trillion in assets now use CDP for company investment decisions)

Health care sector carbon footprint increasing, and investors are taking note.

CDP Health Care Sector Performance 2008-2012
Consistent increase in emissions: 29 companies; 70% from US



US Companies Reporting: (red = emissions increase)

Abbot
Aetna
Allergan
Amgen
Baxter Int'l
Becton
Biogen
Bristol Meyer
Celgene
Eli Lilly
Gilead Sciences
Johnson & Johnson
Medco Health Sciences
Medtronic
Merck & Co
Pfizer
United Health Group
Wellpoint



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<http://www.pinchot.org/gp/FHHHI>

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