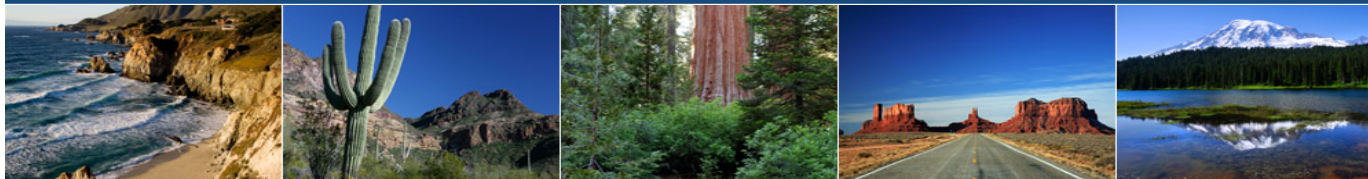


Western Climate Initiative



Design Recommendations and Offset Features

EPRI GHG Offsets Workshop #3
November 20, 2008
Hotel Monaco, Washington DC

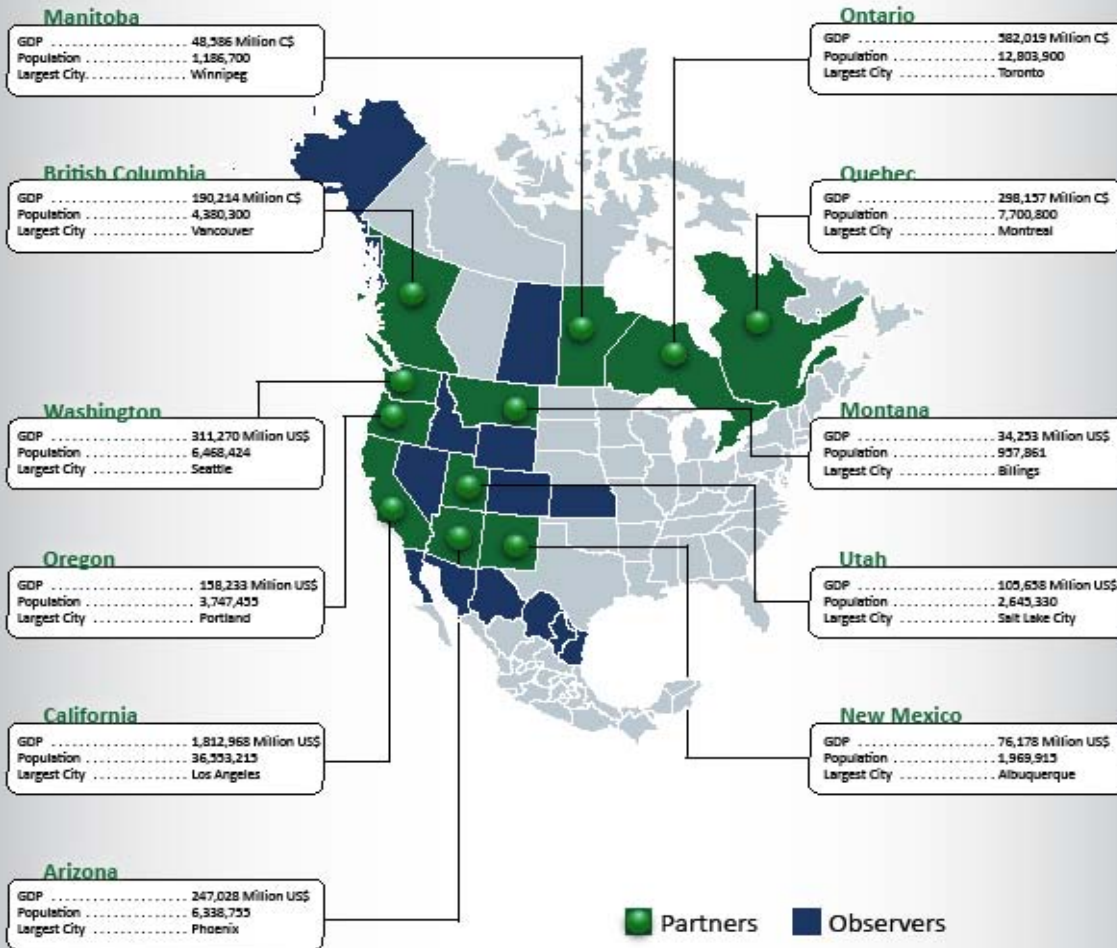
Michael Lazarus
Stockholm Environment Institute – US





- Independent, international research institute
 - Sweden, UK (York and Oxford), Thailand, Estonia, and US (Boston, Davis, Seattle)
- Climate change and energy research, modeling, policy analysis, and capacity building
- Research on offsets policy and methodologies since the late 1990s
- CDM Methodology Panel (2002-7)
- Advisor to WCI

Western Climate Initiative



WCI OBSERVERS		
CANADA	UNITED STATES	MEXICO
Saskatchewan	Alaska	Baja California
	Colorado	Chihuahua
	Idaho	Coahuila
	Kansas	Nuevo Leon
	Nevada	Sonora
	Wyoming	Tamaulipas

Milestones

- Feb 2007 - Agreement
- Aug 2007 - Set regional emissions goal: 15% below 2005 by 2020
- Sept 2008 - Design recommendations for regional cap-and-trade system
- Jan 2012 – Program Start: Electricity, large ind/comm sources
- Jan 2015 – Transportation, RCI fuels in

All figures for 2007
 Source for US data: US Census Bureau and US Bureau of Economic Analysis
 Source for Canadian data: Statistics Canada

WCI Cap and Allocation

- Emission Caps
 - 2012: best estimate of expected emissions
 - 2020: to achieve goal (15% below 2005 levels)
- Jurisdictional discretion on allocation and additional auction
 - Minimum auction: 10% in 2012, 25% in 2020
 - Portion of allowance value to be used for EE/RE, RD&D, adaptation, and ERs in agriculture, forestry, other uncapped sources

Other WCI Features

- Compliance flexibility
 - Offsets, and allowances from other cap and trade systems (up to 49% of emission reductions)
 - Banking (no borrowing), Early Reduction Allowances, Three-year compliance periods
- Regional organization
 - Will coordinate review/adoption of offset protocols and review/issuance of offsets credits
 - States and provinces retain authority

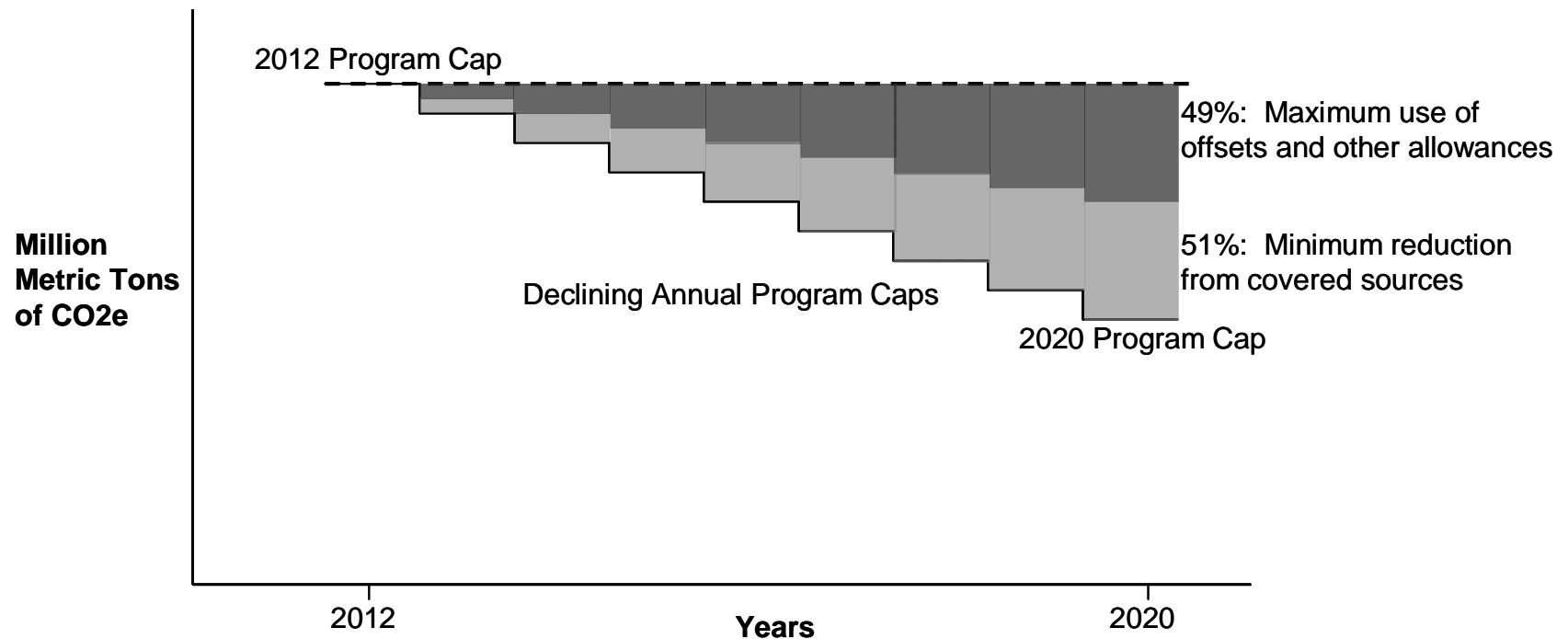
Offset Program Design

- WCI will approve/certify offsets
 - Real, surplus/additional, verifiable, permanent...
 - Priority consideration: forestry, agriculture, waste
 - Develop new, or use/adapt existing, protocols
- Projects within WCI encouraged
 - Projects throughout US, Canada, Mexico if rigor similar
- No offsets from sources once covered by WCI program

Offset Program Design (2)

- Offsets from developing countries (CERs) eligible
 - May use added criteria to ensure similar rigor
- Up to 49% of 2012-2020 reductions
 - Complementarity rationale
 - Includes allowances from other programs
 - Jurisdiction may choose a lower limit
 - WCI offsets “encouraged”; no preference among project locations

WCI Offset Limit



- How limit will be applied to be determined
 - Demand limit, supply limit, or hybrid
 - WCI-wide or within jurisdictions
 - Across or within compliance periods

WCI Offset Project Types

- Priorities for consideration
 - Ag soil sequestration
 - Ag manure management
 - Afforestation/reforestation
 - Forest management
 - Forest preservation/conservation
 - Forest products
 - Landfill gas
 - Wastewater management
- Process to consider other project types and protocols

WCI Economic Modeling

- Possible to meet regional goal with overall modest cost savings
- Complementary policies may provide half of needed emission reductions
- Offsets and banking reduce allowance prices

Cap-and-Trade and Sensitivity Scenarios

Case	GHG Emission (MMTCO ₂ E)	Offsets Used (MMTCO ₂ E)	Allowance Price (2007 \$)	Change in Fuel Expenditures (\$M/Yr)	Potential Allowance Value (\$M/Yr)	Total Costs (Savings) (\$M/Yr)
Reference Case	992.8	--	--	--	--	--
Cap-and-Trade Policy Cases						
Broad Scope, No Offsets	859.2	--	\$63	(32,296)	39,516	(23,525)
Broad Scope, With Offsets	877.9	31.8	\$24	(31,012)	15,150	(22,080)
Narrow Scope, With Offsets	847.8	18.2	\$71	(22,794)	16,092	(11,422)
Sensitivity Cases						
High Price	833.3	12.7	\$18	(42,736)	10,521	(30,514)
Low Price	857.0	34.1	\$56	(22,598)	35,642	(16,245)
High Natural Gas Price	865.4	26.6	\$20	(6,525)	12,434	7,880
<p>Fuel Expenditures and Total Costs (Savings) are changes from Reference Case values. Potential Allowance Value calculated as emissions times allowance price. Total Costs (Savings) do not include costs of VMT Reduction programs, Energy Efficiency programs, nor Potential Allowance Value.</p>						

WCI offsets: Work ahead



- Approach to additionality, baselines, permanence, etc.
- Requirements for registration, validation, verification, certification, and issuance...
- Protocol review and adaptation/development
- Implementation of offset limit
- Further offset modeling (possible)
- Criteria for offsets and allowances outside WCI

For more information on WCI:

<http://www.westernclimateinitiative.org>

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