



Presentation to EPRI GHG Emissions Offset Policy Dialogue Workshop #3

Review and Comparison of Design Elements in Existing and Proposed GHG Offset Programs

November 2008

Rob Youngman
Director of Economic Analysis
Natsource LLC

Some new thinking from Natsource.
More growth. Less pollution.



Overview

- About Natsource
- Eligible Activities
- Additionality, Baselines and Measurement of Emission Reductions
- Quantitative Limitations on Offset Use
- Qualitative Limitations on Offset Use
- Other Provisions



About Natsource

- Leading private sector greenhouse gas (GHG) asset manager with significant policy and commercial expertise
- Approximately \$1 billion of assets under management for compliance clients and investment clients as of October 2008
- New Energy Finance recognized Natsource as the largest buyer of contracted carbon credits in the world with over 100 million contracted from Clean Development Mechanism (CDM) and Joint Implementation (JI)
- Staff participated in the development of the first GHG offset program and the Kyoto offset mechanisms and arranged some of the first and largest trades in these markets
- Natsource offers integrated services in GHG and environmental markets
 - Asset Management Services
 - Origination and Structuring Services
 - Advisory and Research Services
- Headquartered in New York with global footprint
 - Offices in Calgary, London, Ottawa, Panama City, Tokyo and Washington, D.C.



Eligible Activities

CDM

- No restrictions
- Over 100 approved baseline and monitoring methodologies
- Project-by-project approach for approval
 - Methodologies proposed with projects
 - Some effort to consolidate methodologies



Eligible Activities

	RGGI	WCI	Lieberman-Warner	Dingell - Boucher
<i>Landfill Methane</i>	X	X		X
<i>Coal Mine Methane</i>				X
<i>Wastewater management</i>		X		Maybe
<i>Manure Management</i>	X		X	X
<i>Ag Soil Sequestration</i>		X	X	Maybe
<i>Afforestation</i>	X	X	X	X
<i>Reforestation</i>		X	X	X
<i>Ag Soil Management</i>		X	X	Maybe
<i>Land Use Change</i>				Maybe
<i>Forest Management</i>		X	X	Maybe
<i>Avoided Deforestation</i>		X		Maybe
<i>SF₆ Emission Reductions</i>	X			
<i>End use Efficiency</i>	X			



Additionality, Baselines and Measurement of Emission Reductions

Clean Development Mechanism (CDM)	<ul style="list-style-type: none"> • Additionality demonstrated through: <ol style="list-style-type: none"> 1a) Financial additionality test; OR 1b) Barrier test; AND 2) Common practice test • Additionality and baselines determined on case-by-case, project-specific basis
Regional Greenhouse Gas Initiative (RGGI)	<ul style="list-style-type: none"> • Additionality addressed in eligibility requirements, which include performance standards • Baselines are project-specific, with detailed calculation guidance
Lieberman-Warner bill (S. 3036, America's Climate Security Act of 2007)	<ul style="list-style-type: none"> • Additionality determination will include project-specific financial additionality test • Other tests <i>could</i> include standardized approaches (e.g. performance benchmarks) • No indication of position on use of standardized baselines • Requires estimates of GHG fluxes on comparable land or facilities • Sequestration projects must develop a dynamic baseline based on emissions on comparable land
Dingell-Boucher draft climate change legislation	<ul style="list-style-type: none"> • Calls for EPA to develop standardized methodologies (e.g. performance threshold) for determining additionality • Position on use of standardized baselines unclear
Western Climate Initiative	<ul style="list-style-type: none"> • Protocols will be “standardized to the extent possible and make use of (or adapt if needed), existing protocols as appropriate” • Protocols to be developed prior to start of program in 2012

Quantitative Limits on Offset Use

	Domestic Offsets	International Offsets	International Allowances
CDM	“Supplemental” to domestic action, no firm limits. Often interpreted as 50% of Kyoto obligation.		
RGGI	3.3% of emissions 5% if rolling average 12-month CO2 allowance price reaches \$7 10% if rolling average price reaches \$10		
WCI	49% of total emission reductions in 2012-20		
Lieberman-Warner	15% of emissions cap	15% of emissions cap – 5% project-based – 10% forestry	Unused portion of limits on domestic and international offsets
Dingell –Boucher			Unlimited
2013-2017:	5% of emissions		
2018-2020:	15% of emissions		
2021-2024:	15% of emissions	15% of emissions	
From 2025:	20% of emissions	15% of emissions	



Qualitative Limits on Offset Use

Clean Development Mechanism	<ul style="list-style-type: none"> • No nuclear • EU ETS - sustainability criteria for large hydro (>20MW capacity), excludes LULUCF
Regional Greenhouse Gas Initiative (RGGI)	<ul style="list-style-type: none"> • At \$10/tonne, EU Allowances and CDM and JI credits become eligible • Projects must be initiated after December 20, 2005 • MOU must be in place for non-RGGI states
Lieberman-Warner bill (S. 3036)	<ul style="list-style-type: none"> • Projects must commence operations after offset regulations are promulgated • International offsets must meet requirements comparable to domestic offsets • Disallows projects at facilities that compete directly with a U.S. facility • Countries hosting international forestry activities must meet requirements (baseline data, institutional and technical capacity, emission reductions for forestry sector)
Dingell-Boucher draft climate change legislation	<ul style="list-style-type: none"> • Offset credits for reductions occurring after regulations are promulgated, from projects starting: 1) before 2006; or 2) after 2008 but before promulgation of regulations • Projects starting after 2001 but before bill enactment may be eligible for early action allowances • International allowances from programs of comparable stringency • International offsets must meet comparable stringency requirements • International offsets from HFC destruction projects not eligible • Requirements for countries hosting international forestry activities
Western Climate Initiative	<ul style="list-style-type: none"> • Offsets projects anywhere in U.S., Canada and Mexico; must have comparably rigorous oversight, validation, verification, and enforcement • International offsets and allowances must meet rigorous criteria to be developed on additionality and ability of WCI to enforce and verify reductions • No offsets from developed country projects involving sources that within WCI would be covered under cap-and-trade

Other Key Provisions

Clean Development Mechanism (CDM)	<ul style="list-style-type: none"> • Review process involves multiple approvals at different stages • Precedents in regulatory decision-making not binding • Decision-making often not transparent • Crediting period - option to choose renewable 7-year period or non-renewable 10-year period
Regional Greenhouse Gas Initiative	<ul style="list-style-type: none"> • Reversal risk - standardized 10% discount on offset credits or replacement insurance • Crediting period is ten years (20 for afforestation) and may be renewed.
Lieberman-Warner bill (S. 3036)	<ul style="list-style-type: none"> • Reversal risk – methodologies to be developed, could involve a reserve pool • “Exaggerated proportional discount that increases relative to uncertainty” (re: monitoring, quantification, additionality, leakage) in sequestration projects • Crediting period to be determined by EPA Administrator. • Methodologies to be tested by 3 expert teams, rejected if estimates differ by >10%
Dingell-Boucher draft climate change legislation	<ul style="list-style-type: none"> • Conservative discount factors for sequestration projects to account for uncertainty in measurement, additionality, leakage and permanence • Crediting period between 5 and 10 years, renewable; forestry period is 20 years.
WCI	NA



For additional information:

Rob Youngman

ryoungman@natsource.com

v. +1 202 496 1423



www.natsource.com