Managing Offset Risk: Golden Offsets, Offset Insurance and Other Measures to Address Invalidation & Buyer Liability

Special Topics Webinar
June 20th, 2013
10:00-11:30 am
Legal Disclaimer:

Much of this presentation is based on the Climate Action Reserve’s understanding of the California Cap and Trade Regulation. As the implementation of the Regulation is the responsibility of the California Air Resources Board, you should be aware that anything presented here may be interpreted or applied differently by the Board.

Moreover, this presentation does not constitute legal advice. Information presented here should be regarded as guidance and does not have a legally binding effect.
Agenda

10:00  Welcome and Introductions  
      Scott Hernandez, Climate Action Reserve

10:05  Buyer Liability & Offset Invalidation  
      JP Brisson, Latham & Watkins

10:20  The View from the Market  
      Jackie Ferlita, Element Markets

10:35  Risk Mitigation in Project Development  
      Patrick Pfeiffer, EOS Climate

10:50  Offset Insurance in California  
      Julian Richardson, Parhelion Underwriting, Ltd.

11:15  Question & Answer
Introduction

CLIMATE ACTION RESERVE
Background: The Reserve

North American carbon offsets program;
  – formerly California Climate Action Registry (CCAR)

What We Do

1. Develop High Quality Standards
2. Operate a Transparent Registry System
3. Accredited OPR for California Cap-and-Trade

Registry Services for California C&T
Cap-and-Trade in California

• Assembly Bill 32 passed in 2006, cap-and-trade regulation adopted in October 2011

• Program begins Jan 1, 2013 and runs through 2020
  – Divided into three compliance periods
  – Narrow scope for 1st period, broad scope beginning Jan 1, 2015

• Compliance Instruments:
  – **Allowances**: State issued permits to emit 1mtCO$_2$$_e$
  – **Offsets**: can be used in place of allowances on a limited basis
Reserve’s Role as OPR

- Accredited by ARB as an Offset Project Registry (OPR)
- OPRs support ARB in the implementation of the cap and trade program by reviewing projects and issuing Early Action Offset Credits and Registry Offset Credits
- **Only** ARB can issue CCOs/ARBOCs

**OPR Registry Services:**
- Provide Guidance on Protocols & Regulation
- Listing projects
- Conflict of Interest Assessment
- Review of Verification Documents
- Issuance of ROCs
- Project Audits
Does it matter where your offset credits come from?

• YES! In a system with invalidation risk and buyer liability, compliance buyers need to understand what they are buying.
  – Buyers need to conduct due diligence on the OPO, verifier and OPR.

• The careful work of the OPR in scrutinizing projects helps to protect buyers from invalidation risk.

• Today’s presentations will demonstrate ways the market is responding to reduce exposure to invalidation risk.
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Managing Offset Risk

Climate Action Reserve
Special Topic Seminar

Thursday, June 20, 2013

JP Brisson
Mike Dreibelbis
Grounds for Invalidation – Section 95985(c)

- **Overstatement** by more than five percent
  - GHG Reductions/Removals was overstated by more than 5 percent
  - Affects a quantity of ARBOCs equal to the overstatement

- **Non-compliance** with laws and regulations
  - “not in accordance” with all “local, state and national environmental health and safety regulations” during the applicable Reporting Period
  - Affects all ARBOCs for the applicable Reporting Period

- **Double Issuance**
  - If different ARBOCs have been issued for the same GHG reductions or removals in another program.
  - ARB will invalidate all ARBOCs for the applicable Reporting Period

- **Not Grounds for Invalidation**
  - Revision to Protocol
  - Reversal
Invalidation Process

• **Initial Determination**
  • With the reason for determination

• **Notification to Applicable Parties**
  • Current holders and entities that have retired ARBOCs
  • offset project operator and, for forestry projects, the forest owner

• **Opportunity to submit “additional information”**
  • 25 calendar days
  • ARB may request information

• **Final Determination**
  • 30 days from receipt of all necessary information
Consequences of Invalidation

- **Suspension of Transfers.** ARB will suspend all transfers of ARBOCs subject to an initial invalidation determination.

- **Removal.** ARB removes ARBOCs invalidated prior to retirement from the holding or compliance account where they reside at the time of invalidation.

- **Replacement.** ARBOCs that have been retired prior to invalidation are subject to a replacement obligation. ARB Regulations and Guidance do not address what happens if Forest Owner is unable to replace ARBOCs:
  - **Forestry:** Forest Owner must replace invalidated ARBOCs within six months of final invalidation determination.
  - **Non-sequestration:** Retiring entity must replace invalidated ARBOCs within six months of final invalidation determination.
Addressing Invalidation Risk

• **Double Verification.** Statute of Limitations on invalidation can be reduced from eight years to three years (or three reporting periods)
  - ODS: re-verification of the original OPDR must take place within three years of ARBOCs issuance
  - Forest, Urban Forest, and Livestock: a subsequent OPDR from the same project must be verified by a different offset verification body within years of issuance

• **Retirement.** Retirement can be used to shift the invalidation from the holder to the Forest Owner
  - Annual retirement
  - Retirement of specific ARBOCs?
  - Early retirement?
Addressing Invalidation Risk

- Due diligence
- Contractual protections
  - Representations and Warranties to track invalidation provision
  - Breach
    - Indemnification
- Choice of Registry
- Insurance product
About Latham & Watkins LLP

- 2,100 attorneys; 32 offices; 14 countries
- 600 attorneys and 6 offices in California
- 130 full-time environmental attorneys – largest team of any firm
- Most significant cap-and-trade program experience of any firm
  - Registered lobbyist for advocacy with ARB and State legislature
  - Represent industry coalition in offset lawsuit
  - Commented on every ARB rulemaking to date
  - Successfully closed more than 20 structured offset and allowances transactions
  - Prepared standard trading documentation for two US investment banks and one large emitter
  - Represented clients in violation self-disclosures, market monitor information requests and enforcement actions
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California’s Cap-and-Trade
Golden Offsets & Offset Structures

June 20, 2013

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Launched in 2005, Element Markets has become the leading marketer and asset manager of environmental commodities in the U.S.

- Leading marketer of environmental commodities with a focus on emissions, GHG, renewable energy (energy and transportation credits), and biomethane
- Transacted over $1.4 billion in environmental commodities since inception
- Currently provides environmental asset management services for over 8,000 MW
- Strong presence in the California markets with over 30 years of CA expertise on staff
- Extensive expertise in the major North American GHG market, including RGGI, GHG offsets, and AB 32
- Currently managing over 2.3 million tons CO$_2$e covered under Cap-and-Trade

### Marketing

<table>
<thead>
<tr>
<th>Emissions Credits</th>
<th>Renewable Energy Credits</th>
<th>Greenhouse Gas Credits</th>
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<tbody>
<tr>
<td>• Active in regional and federal emissions markets</td>
<td>• Active in all compliance and voluntary REC markets in North America</td>
<td>• Active in the US and Canadian GHG markets</td>
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<tr>
<td>• Portfolio includes NOx, SO$<em>2$, PM$</em>{10}$, VOC, and CO positions</td>
<td>• Transacted over 19 million RECs</td>
<td>• Offset project developer managing 18 carbon offset projects</td>
</tr>
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<td>• Transacted 20 million tonnes of GHG credits</td>
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SAMPLE - HOW TO TRANSACT IN THE SECONDARY MARKET

1. EM and Client Discuss Procurement Strategies
2. Client Requests Market Quote from EM
3. EM Surveys Market
4. EM Executes in Market
5. Client Makes Decision to Purchase
6. EM Provides Quotes to Client with Delivery and Payment Terms
7. EM sends Client Confirmation
8. EM delivers Allowances/Offsets per Terms of Confirmation
9. Client pays EM per terms of confirmation
AB 32 OFFSET STRUCTURES – SELLERS ASSUME RISK

Golden California Carbon Offsets (CCO): AB 32 Guaranteed Offsets for 2013 Delivery

Structure 1:
• Delivery in December 2013
• Seller will replace offset with allowance if invalidated
• Program must be in force and offsets must be usable for compliance at time of delivery
• ~ $12.25 an offset

Structure 2:
• Same terms as above except seller will provide replacement offset if invalidated
• ~ $11.75 an offset

Third Party Insurance (Developing)
• Insured for 3 years
• Financial settlement at current price of allowance or average of two brokers quotes
• Not linked to agreement between buyer of offset and seller of offset
• ~$1/offset premium cost
AB 32 OFFSET STRUCTURES – BUYERS ASSUME RISK

Early Action Offset Credits (EAOCs): Issued by Early Action Offset Programs - CAR
- Offsets from one of the 4 ARB-eligible CAR protocols
- Offsets bear re-verification risk by CARB
- Buyer liability risk
- Currently valued at ~$9.00/ tonne

ARB Offset Credits (ARBOCs): AB32 Offsets for 2013 Delivery - CCO₃
- ARBOCs are offsets issued by CARB
- Falls under the 8% of allowable offset usage limit
- Buyer invalidation liability risk continues for 3 years
- Currently valued at ~$11.00/ tonne

ARB Offset Credits (ARBOCs): AB32 Offsets for 2013 Delivery - CCO₈
- Same terms as above except 8 years of invalidation risk versus 3 years
- Currently valued at ~$10.25/ tonne
THANK YOU AND CONTACT INFORMATION

Jackie Ferlita, Director
Element Markets, LLC
15541 Commerce Lane
Huntington Beach, CA 92649
Office: 714-397-5508
jferlita@elementmarkets.com
www.elementmarkets.com

• “US Emissions House of the Year - 2010” by Energy Risk

Energy Risk Environmental Rankings
• #1 U.S. Regional Greenhouse Gas Dealer
• #1 U.S. Voluntary GHG Credit Dealer
• #2 Renewable Energy Credit Dealer
• #1 NOx & SO2 Dealer

Environmental Finance Magazine
• Best Trading Company in North American Renewable Energy
• Runner-Up, Best Trading Company of North American GHG Markets (California)
• Best Trading NOx & SO2 Company Emission Credits

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Creating the Strongest Offset Possible
What is Golden?

Invalidation

Delivery

Golden CCOs
Reclaimed ODS is **reused** in older equipment, and ultimately leaked.

**BUSINESS AS USUAL**

- **USE**
- **RECLAIM**
- **RECYCLE**

**ODS OFFSET**

Reclaimed ODS is destroyed, creating a **verifiable** and **permanent emission reduction**. **EOS Climate** is recognized as a **pioneer** of ODS destruction in carbon markets.
Project Case Study

Appliance Demanufacturer → EPA Certified Reclaimer → Clean Harbors Environmental Services, AR.
Invalidation Risk

- Administrative error
  - Diligent work
  - Quality verification

- ODS ineligibility
  - Programs not projects
  - Deep vetting

- Regulatory non-compliance
  - Partners not vendors
  - Contractual commitments
Steps to Golden

- Strongest Product Under law
- Proven track record production
- Proven track record of delivery
- Selling “Spot”
- Selling 3 year-old CCO(3)
Questions

Patrick Pfeiffer
Patrick@EOSClimate.com
415.992.4270
310.650.2331
www.eosclimate.com
Parhelion ARBOC Invalidation Insurance

Climate Action Reserve

20th June 2013
Summary Information

- Invalidation Risk Creates an Uncertain Asset
- Unattractive to Many Buyers
- Impossible for Investor Owner Utilities
- Sellers Unable to Retain Risk
- Price Differential Between Offsets Where the Invalidation Risk Remains with the Buyer ('Buyer Liability') and those where the risk is transferred to another party ('Seller or other Third Party Liability').
Invalidation Insurance

The **Insured Risks** are the reasons for invalidation as set out in section 95985(c) of the California Cap & Trade Program Regulations being:

- The Offset Project Data Report contains errors that overstate the amount of GHG reductions or GHG removal of enhancements by more than five per cent;
- The offset project activity and implementation of the offset project was not in accordance with all local, state, or national environmental and health and safety regulations during the Reporting Period for which the ARB Offset Credit was issued; or
- ARB determines that offset credits have been issued in any other voluntary or mandatory program within the same offset project boundary and for the same Reporting Period in which ARB Offset Credits were issued for GHG reductions and GHG removal enhancements.
## Policy Summary

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<thead>
<tr>
<th><strong>Insured:</strong></th>
<th>Project</th>
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<tr>
<td><strong>Loss Payee:</strong></td>
<td>Owner of the ARBOCs are time of Invalidation</td>
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<tr>
<td><strong>Period:</strong></td>
<td>3 Years from Issuance</td>
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<td><strong>Policy Limit:</strong></td>
<td>As required (Typically US$30-50 per ARBOC)</td>
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<td><strong>Basis of Indemnity:</strong></td>
<td>Market Price at date of Invalidation or Cost of Replacement for Equivalent Compliance Instrument</td>
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<tr>
<td><strong>Form of Indemnity:</strong></td>
<td>Cash Settlement but will consider Physical Settlement</td>
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<tr>
<td><strong>Security:</strong></td>
<td>A+ (S&amp;P)</td>
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<td>Key Terms:</td>
<td>No Limit on Trading</td>
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<td>----------------------------------------------------------</td>
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<td></td>
<td>Re-verification required</td>
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<td>Obligation to Minimise Loss</td>
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<td>Obligation to Notify Insurers</td>
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<td>Law &amp; Jurisdiction:</td>
<td>California</td>
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<td>Key Exclusions:</td>
<td>1st Party Fraud</td>
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Thank You
Julian Richardson
JHR@Parhelion.co.uk
Questions?

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