

# Carbon Offsets and Green-e Certification

The market for emissions reductions

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# Outline: Things to Come

1. **Intro to CRS and Green-e**
2. What is an offset?
3. Offset projects
4. The voluntary market
5. Certification standards
6. RECs vs. offsets

# Center for Resource Solutions

- CRS is a U.S. 501.c.3 NGO
- Established in 1997
- Focus on environmental issues, renewable energy and energy efficiency policy
- Encourage consumers and businesses to buy renewable energy
- Set the recognized standards of excellence
- We work in the US and internationally (China SEP)

*CRS creates policy and market solutions to advance sustainable energy.*

# Center for Resource Solutions



**Green-e Energy:** Launched in 1997 to provide consumer protection for the green power markets in North America.

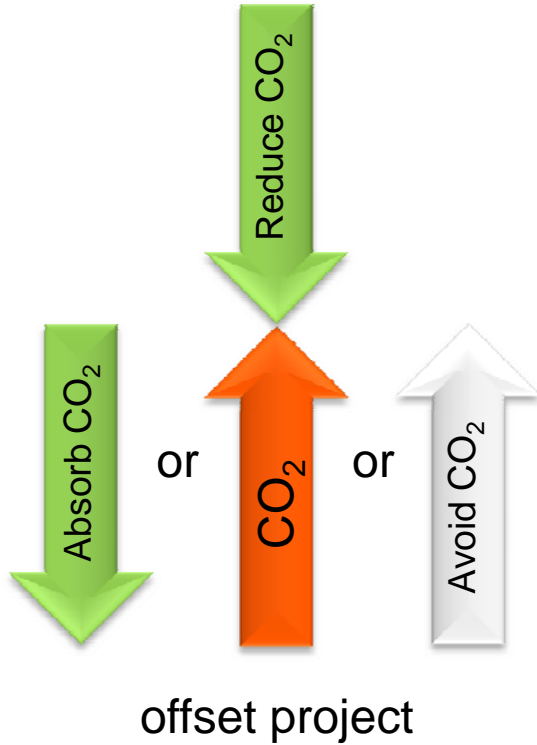
**Green-e Marketplace:** Launched in 2005 to verify green power claims made by companies purchasing renewable energy for their operations.

**Green-e Climate:** Launched in 2008 to provide consumer protection for the carbon offset market.

# Carbon Offsets

- A **carbon offset** represents a specific quantity of greenhouse gas (GHG) emission reductions (i.e. a ton of carbon dioxide absorbed or avoided) from a project-based activity, which is purchased in order to negate or diminish the impact of the recipient's GHG emissions.
- When you purchase an offset, you alone have the right to all associated **claims** about the environmental benefits it embodies.
- An offset is to be regarded as real **environmental commodity**, not a donation or investment in a future project.

# Offset Sources



Renewable energy  
Energy efficiency  
Agriculture/forestry/land use  
Methane destruction  
Industrial gas destruction

# Quality

- Permanent** Must last in perpetuity, the emission reduction cannot be reversed.
- Additional** Must be spurred by the carbon market, “beyond business as usual” several tests.
- Verified** Must result from projects who performance can be readily monitored and verified.
- Enforceable** Must be backed by contracts or legal instruments that define their creation and ensure exclusive ownership.
- Real** Must represent actual emission reductions that are not artifacts of incomplete or technically flawed accounting.

# Compliance Markets

## Meeting mandatory mitigation obligations with offsets

Clean development mechanism (CDM) – the international compliance market

- Developed countries can help meet their kyoto targets by purchasing certified emission reductions (CERs)
- Administered by the UNFCCC Secretariat, the CDM Executive Board
- 1,792 registered projects
- Vast majority of projects in China, India, and Brazil
- 2008 transactions: 389 million tonnes CO<sub>2</sub>-e, worth \$6.5 billion

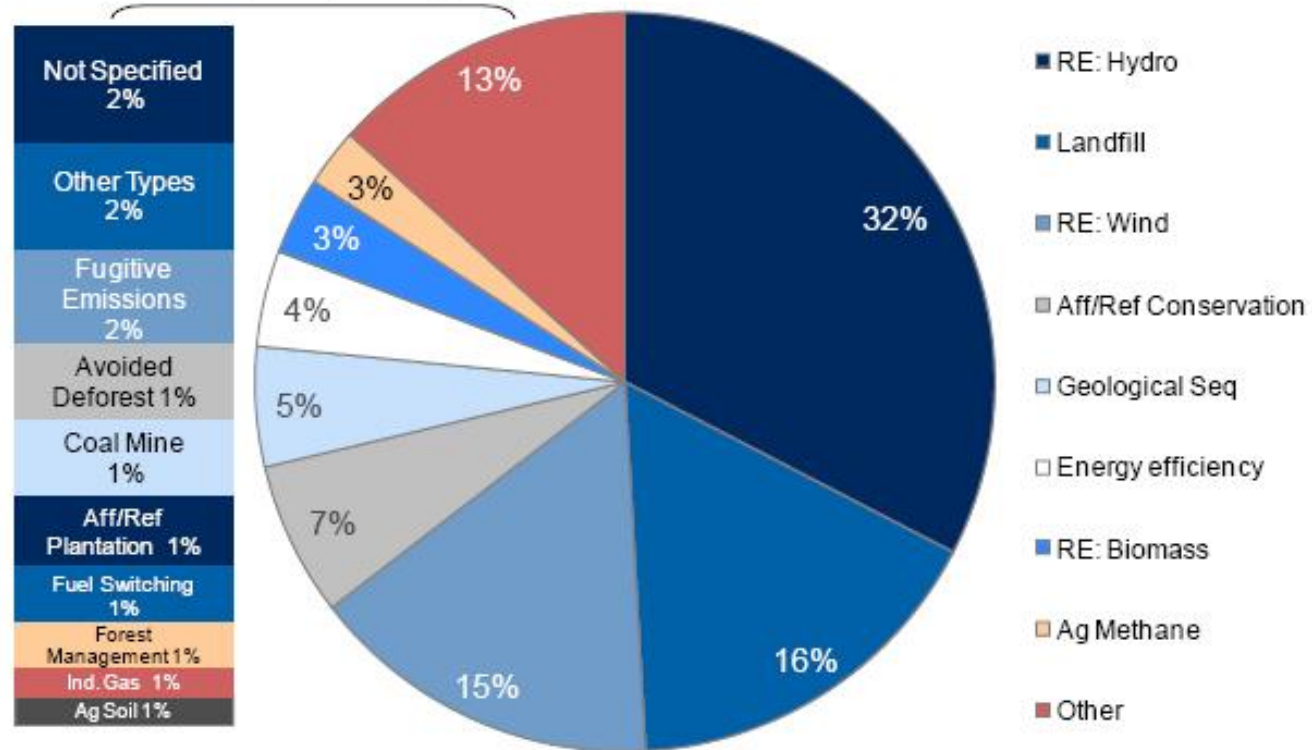
# The Voluntary Market

## Global market for emission reductions to meet voluntary demand

- Different places where trading takes place – exchanges vs. over the counter (OTC)
- Different commodity names
- Global market
- total value in 2008: \$705 million
- total volume in 2008: 123 million tonnes CO<sub>2</sub>-e

# Voluntary Market

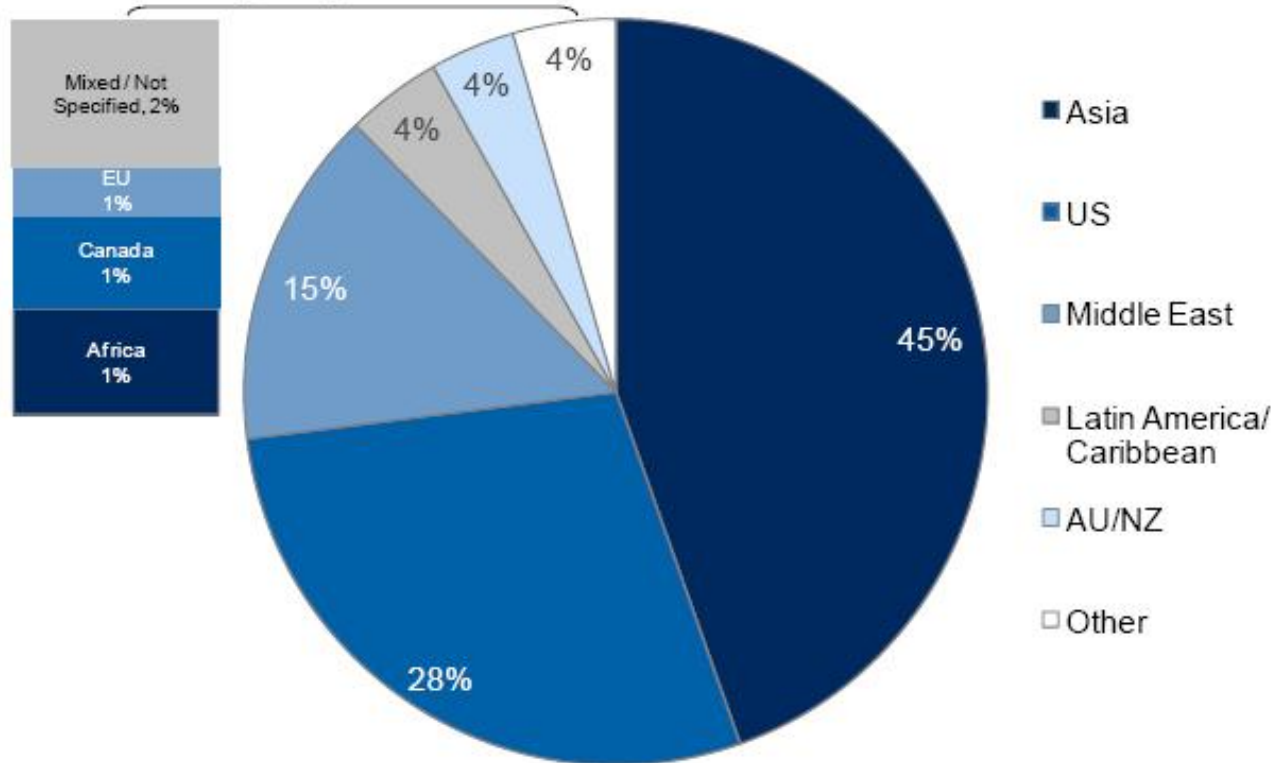
Transaction Volume by Project Type, OTC 2008



Source: Ecosystem Marketplace, New Carbon Finance.

# Voluntary Market

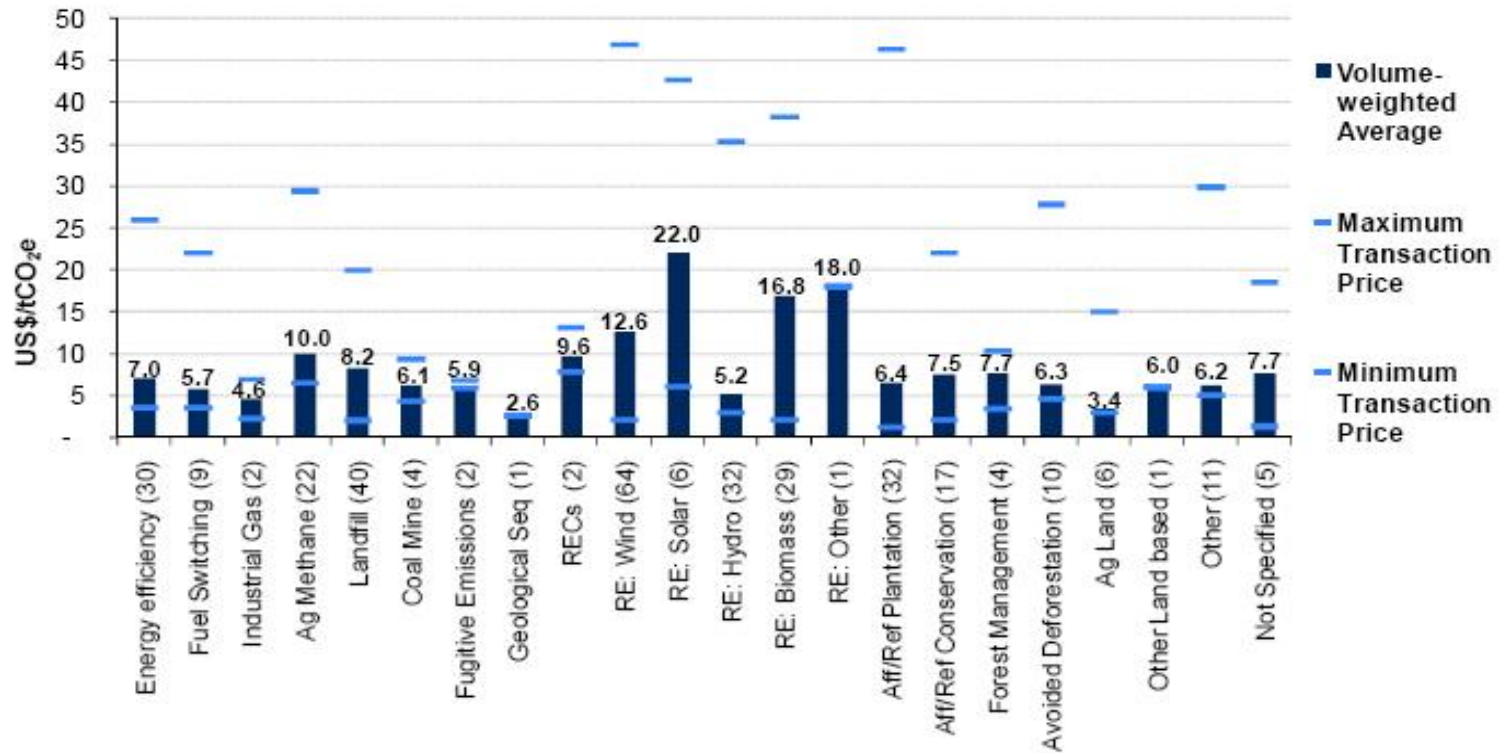
Transaction Volume by Project Location, OTC 2008



Source: Ecosystem Marketplace, New Carbon Finance.

# Voluntary Market

**Credit Price Ranges and Averages by Project Type, OTC 2008**

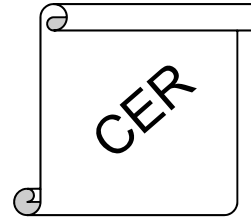


Source: Ecosystem Marketplace, New Carbon Finance.

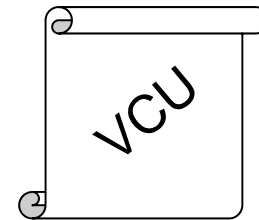
Note: Numbers within parentheses indicate number of observations.

# Project Certification

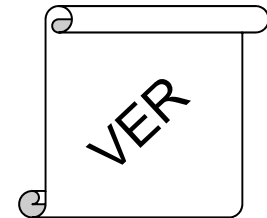
the CDM



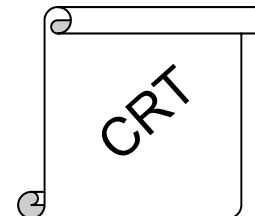
Voluntary Carbon Standard



Gold Standard

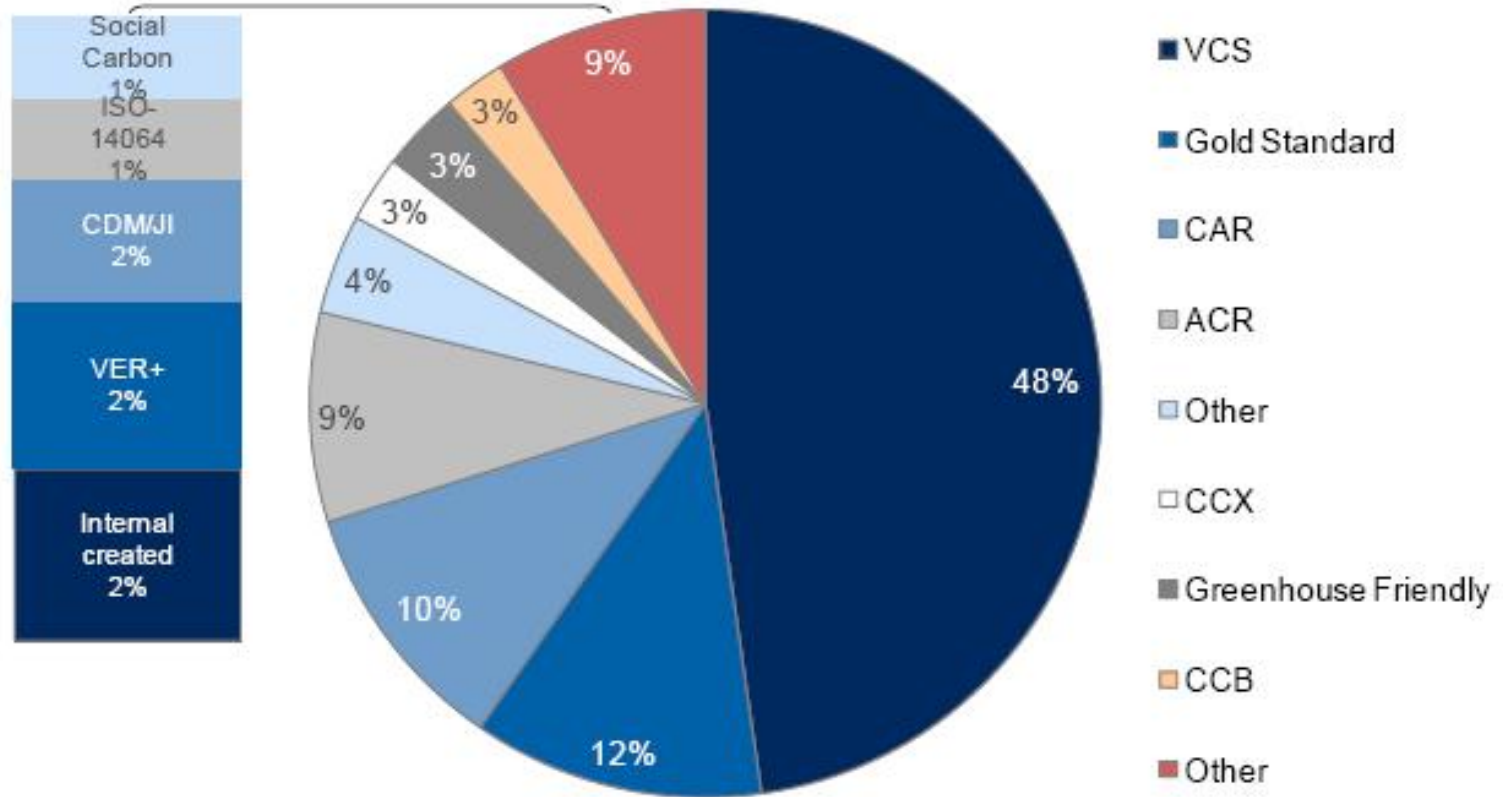


Climate Action Reserve



# Project Certification

Standard Utilization, OTC 2008



Source: Ecosystem Marketplace, New Carbon Finance.

# Offset Certification – Consumer Protection

## The Path of a Green-e Climate Certified Offset

How Green-e Climate certification works, from project to consumer



**1** **The Project.** A greenhouse gas emission reduction (offset) project, such as renewable energy, energy efficiency, methane capture, or forestry.

Projects must be certified by a **Green-e Climate Endorsed Partner.** These Endorsed Partners verify that the greenhouse gas emission reduction (offset) projects meet stringent criteria.



**2** **The Seller.** A company buys the offsets produced from the project, and packages them together into a product that is then sold to consumers.

**Green-e Climate Certified Offsets** are real, permanent reductions from “additional” projects. Consumers are guaranteed that a seller’s supply of offsets equals their sales, and that their advertising is accurate.



**3** **The Consumer.** Buys a Green-e Climate Certified offset to balance their own greenhouse gas footprint.



# Offset Certification – Consumer Protection

## Product Name **Product Content Label**

<b>Project Type</b>	<b>Project Certification</b>	<b>Project Location</b>	<b>% of Product*</b>
Energy Efficiency	<a href="#">Gold Standard</a>	Mexico	20%
Landfill Gas Capture	<a href="#">Voluntary Carbon Standard</a>	Tanzania	40%
Renewable Energy	<a href="#">Green-e Climate</a>	United States	20%
Digester Gas	<a href="#">Clean Development Mechanism</a>	China	20%

The emission reductions supplied were created in:

2007-2008



**Green-e Climate** is an independent certification program for greenhouse gas emission reductions (offsets) sold on the voluntary market. It provides a way to identify products that meet the program's high environmental and consumer-protection standards. For more information on Green-e Climate certification requirements, or to find certified products, see [www.green-e.org](http://www.green-e.org) or call 888-63-GREEN.

\*The percentages listed are prospective. Actual figures may vary. For more information on how much they can vary see *Price, Terms & Conditions*.

# Offset Certification – Consumer Protection



# Climate

- Consumer protection program for greenhouse gas emission reductions.
- Certifies “offset” products sold at retail level.
- Standard and program developed through advisory group and stakeholder processes.
- Currently 10 marketers participating.
- 135,000 tons certified in 2008.

# RECs vs. Offsets

REC – all the ‘green’ attributes, expressed in energy unit (MWh)

Offset – just the carbon attribute, as a ton of CO<sub>2</sub> reduction

- A REC is NOT an offset – RECs transcend carbon, offsets transcend renewable energy.
- But a renewable energy project can be an offset project, i.e. generate offsets...if it meets additionality requirements.
- RECs and offsets cannot both be produced for the same MWh of generation...it's one or the other.

# CONTACT

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