

# **Greenhouse-Gas Offsets**

## **A Failed and Unfixable Concept**

**By Laurie Williams and Allan Zabel**

## Speaking Out as Parents, Citizens and a Married Couple **Education and Work Experience**

- Laurie - B.A. Yale University, J.D. UC Berkeley
- Allan – B.A. UC Santa Cruz, J.D. UC Berkeley
- Environmental Enforcement Attorneys for 20+ years at US EPA Region IX, San Francisco
- Allan has worked for over 20 years on Cap-and-Trade and Offset issues.

### Disclaimer –

Our presentation is based on our personal opinions only and does not reflect US EPA or U.S. government position

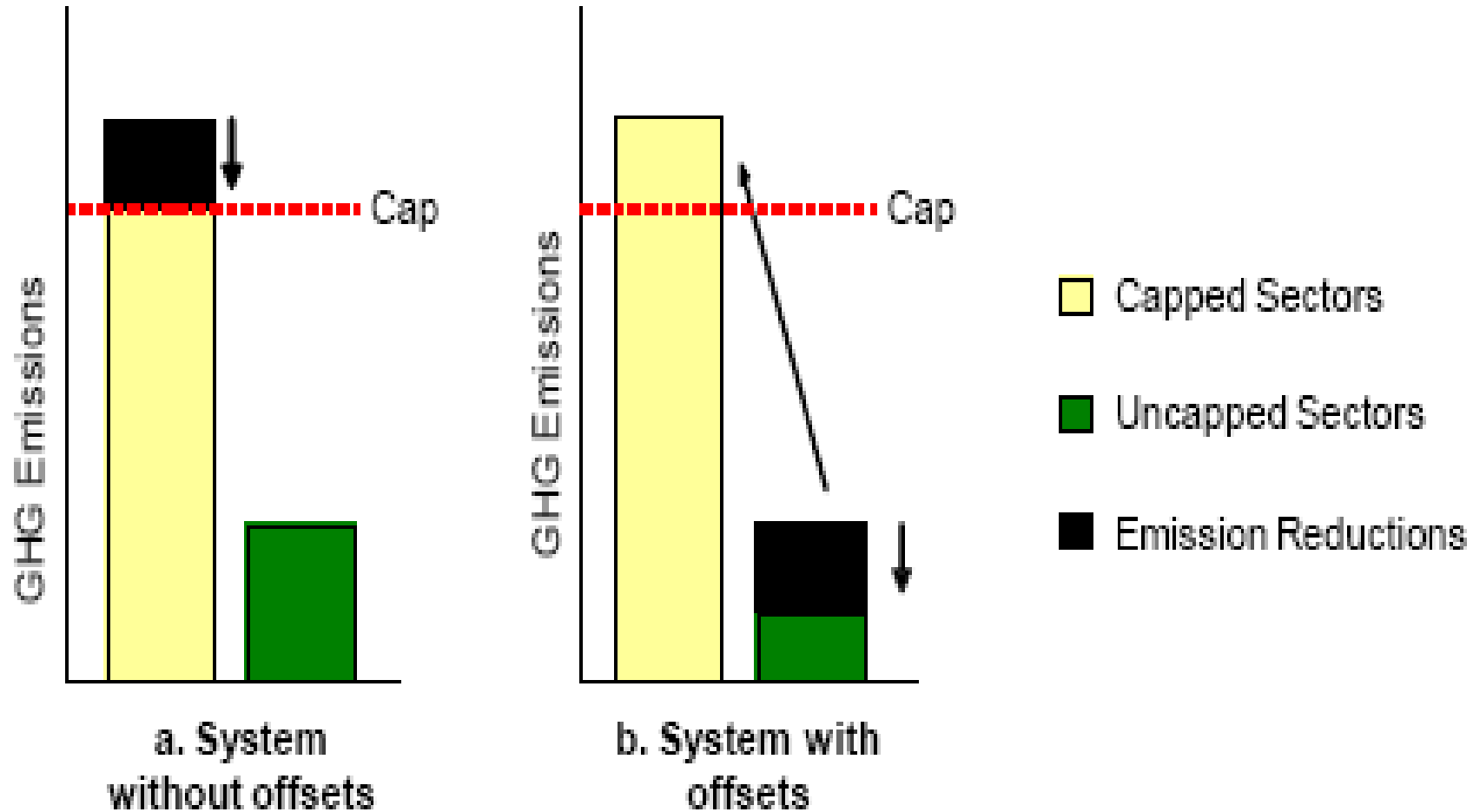
Our personal opinions are also presented on our website:  
[www.carbonfees.org](http://www.carbonfees.org)



# What are GHG Offsets?

- **Greenhouse Gas Offsets are a unique application of offsets**
- **Emission Reductions outside the Capped Sectors**
- **Legislation or Program defines the type of offsets and the percentage of allowances for which they can be substituted.**

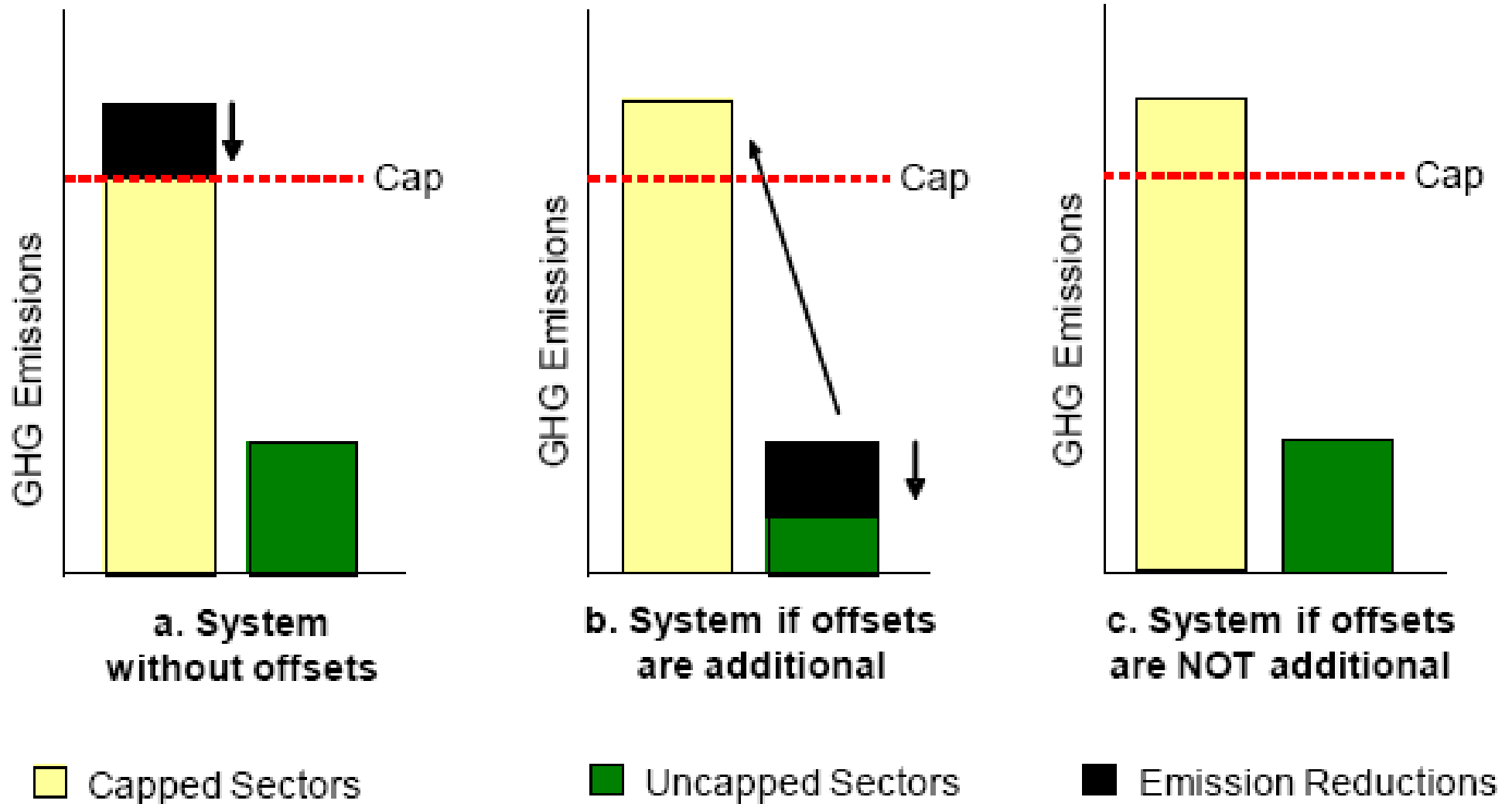
# Offsets – Ideal - Equivalent to Reductions in Capped Sectors



# What is Additionality? & Why is it Critical to Integrity?

- Reductions are required to be:
  - Beyond what is legally required, and
  - “Beyond business-as-usual”
- Without additionality – project may represent business-as-usual
- Phony accounting – integrity is lost.

# If Offsets are not Additional



# Role of Offsets in Proposed Legislation and Regional Programs

- Waxman Markey & Kerry Boxer – GHG offsets  
- all required reductions for almost 20 years
- RGGI – the only currently operating U.S. regional program, GHG offsets can be used for almost all required reductions
- Other Regional Programs proposing to use GHG offsets (California AB32, Western Climate Initiative, Midwest Climate Initiative)

# The Unfixable Problems With GHG Offsets

## Four Overlapping Problems

1. Shifting Economic Activity
2. Perverse Incentive to Keep Polluting Activity Legal
3. “Beyond Business-as-Usual” is Unknowable and Unverifiable
4. Complexity/Subjectivity/Lack of Enforceability

# Carbon Offsets: Forestry Preservation Example

## 1. Shifting Economic Activity



# Bonus for What You Would Have Done Anyway



# A Different Forest is Cut

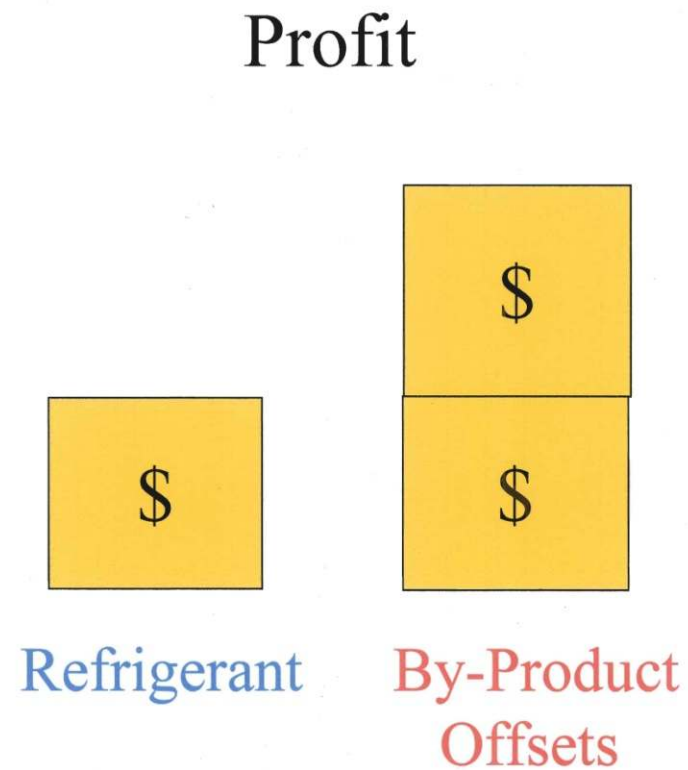


# Refrigerant By-Product Offset Example

## 2. Perverse Incentive to Keep Legal



# Carbon Offset is Twice as Profitable As Refrigerant



# Perverse Incentives in Refrigerant Example

- 1. Keep Polluting Legal** - Incentive to keep the damaging activity legal – so that it will be additional.
- 2. Make More Pollution** - Incentive to create additional greenhouse gases, including unneeded refrigerant, in order to make money on the by-product offsets.
- 3. Keep Approving Offset** – even when you find fraud – can't shut off the money machine

### **3. “Beyond Business-as-Usual” is Unknowable and Unverifiable**

- Two approaches to determining whether an offset project is beyond “business-as-usual”
  - Performance Standard based upon use of “significantly better than average” technology (EPA Climate Leaders)
  - Analysis of whether the project would have been profitable if not for the offset payment (used in CDM and RGGI)

# Beyond Business-as-Usual

## 2. Technology or Performance Standard

- EPA Climate Leaders Program Approach:
  - Beyond Business-as-Usual
  - Significantly Better than Average

Example: Commercial Boilers – Upgrades or new equipment that met an efficiency standard that was within the top 20% of commercial boilers in use between 1990 and 2003 (August 2008 Protocol).

# Beyond Business-as-Usual

## 2. Profitability Analysis

- Claim – Project Certifiers can establish whether the project would not be profitable without the offset payment
- Reason this cannot be accurately determined: Price volatility of both offsets and other relevant parameters (costs of fuel, etc.)

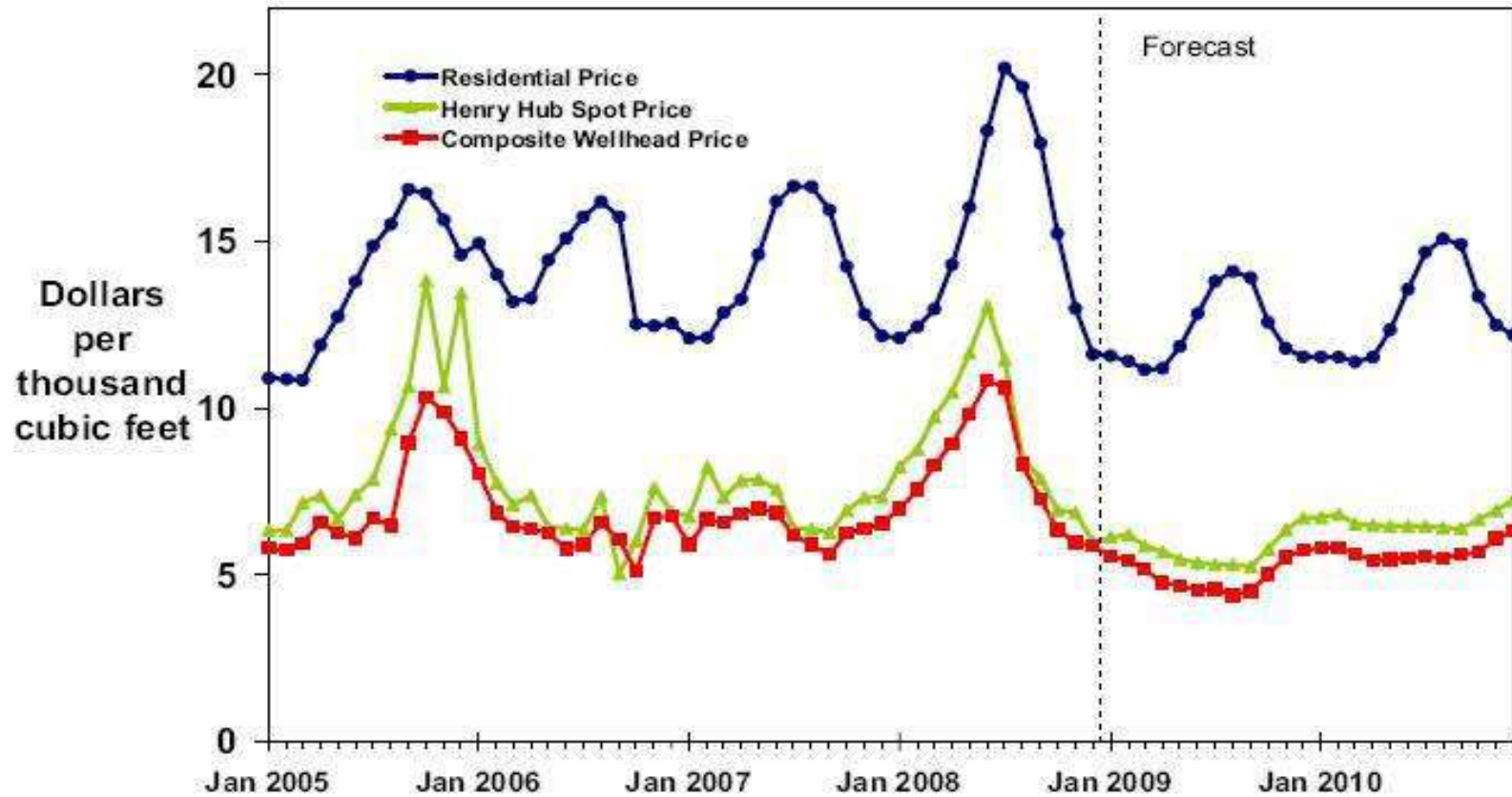
# THE IMPACT OF PRICE VOLATILITY – 1. Offset Prices



# THE IMPACT OF PRICE VOLATILITY:

## 2. Other Relevant Parameters e.g. Fuel Costs

### Natural Gas Prices



## 4. Complexity and Subjectivity – Lack of Enforceability

- Complexity – emissions factors, detailed but estimated
- Subjectivity – whether a boiler is “retired early,”
- Lack of Enforceability – No enforceable standard, just “judgment calls”

# Research by Barbara Haya re Validators/Certifiers

- Validators, tasked with auditing CDM additionality claims, believe that current additionality testing procedures are subjective and can be manipulated, with many “knobs you can turn.” Several validators suggested ways to lessen the manipulation, but did not believe that it is possible to prevent it.
- <http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/05/er09-01.pdf>  
**Measuring Emissions Against an Alternative Future: Fundamental Flaws in the Structure of the Kyoto Protocol’s Clean Development Mechanism**

# Summary of Greenhouse Gas Offsets

## An Interactive Set of Problems

- **Additionality**
  - “Beyond Business-As-Usual” is Unverifiable
  - Activity Shifting - Leakage
  - Perverse Incentive to keep polluting activity legal
  - Complexity and Subjectivity
- **No enforceable standards**
- **Certifiers can't fix these inherent flaws. See July 2010 Whistleblower Paper at [www.carbonfees.org](http://www.carbonfees.org)**