

Carbon Finance and Markets



Forward-Looking Statements

- This presentation includes forward-looking statements that reflect Bunge's current views with respect to future events, financial performance and industry conditions.
- These forward-looking statements are subject to various risks and uncertainties. Bunge has provided additional information in its reports on file with the SEC concerning factors that could cause actual results to differ materially from those contained in this presentation and encourages you to review these factors.

A Leading Global Agribusiness & Food Company

Key Facts

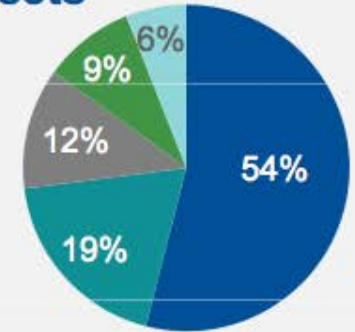
Revenue: **\$46 Billion**

Employees: **~32,000**

Facilities: **~400**

Countries of Operations: **30+**

Average Net Operating Assets



Agribusiness



- A global leader in oilseed processing
- A global leader in grain and oilseed marketing

Sugar & Bioenergy



- 21 mmt sugarcane milling capacity producing sugar, ethanol and electricity
- #2 in global trade and distribution

Food & Ingredients



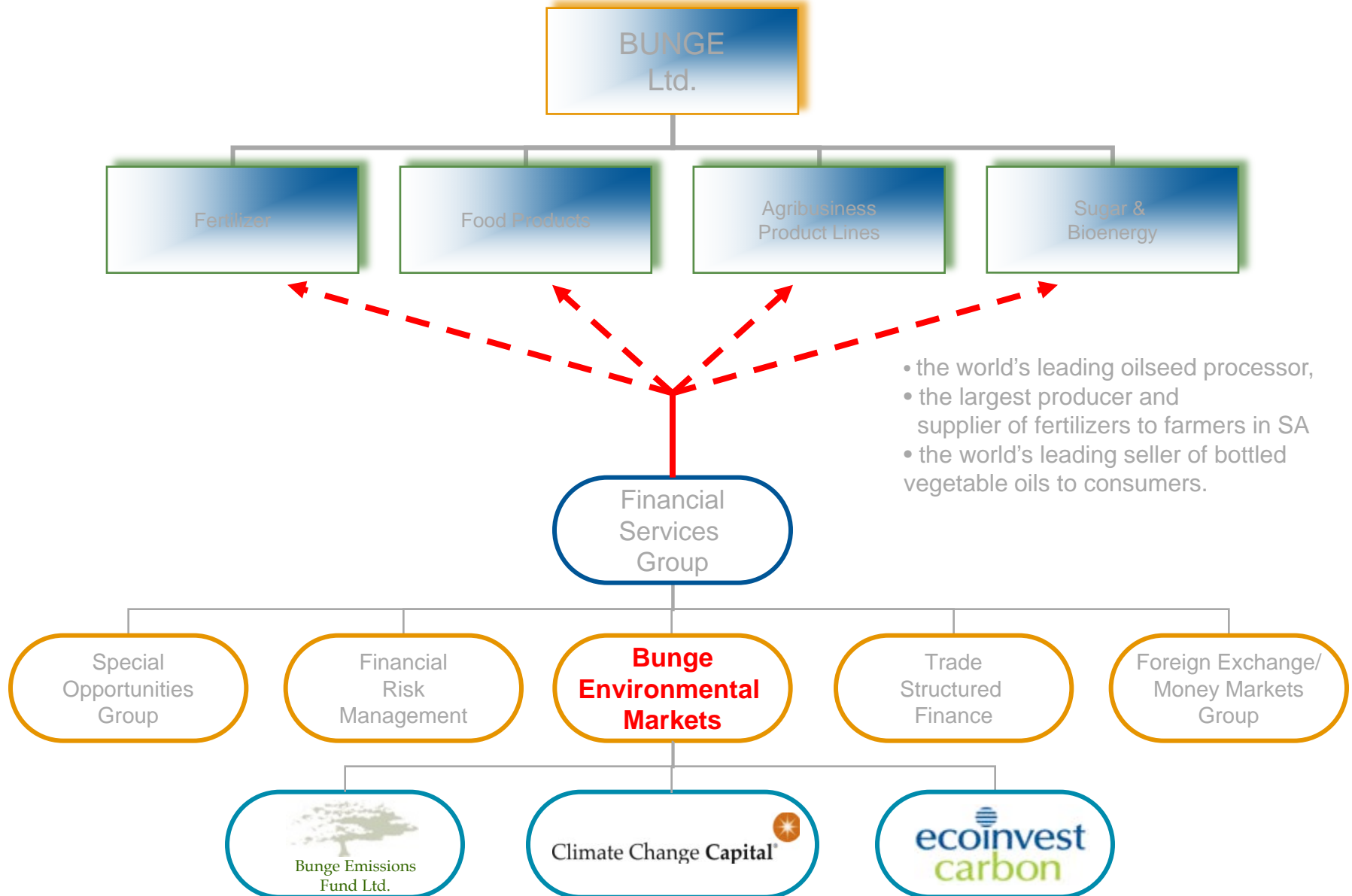
- Leading producer of oils, margarines & industrial fats in the Americas and Europe
- Growing oils position in Asia
- Leading corn and wheat miller in the Americas

Fertilizer



- Fertilizer operations in Brazil, Argentina and the U.S.
- Joint venture with OCP in Morocco

Bunge Environmental Markets



Content

- The Price and Cost of Carbon
- How does Carbon Trading work?
- The Global Carbon Markets
- Voluntary Carbon Markets
- From Idea to tradable Asset: The Carbon Project Cycle
- Example: Southern Africa Carbon Facility
- Primary vs. secondary carbon credits
- Financing using carbon
- Trading carbon
- Selling carbon
- Are carbon credits still a useful tool?
- Outlook

The Price of Carbon

ICE EUA and CER closing prices (€/t)

Delivery	EUA	+/-	CER	+/-	Diff*
Spot	4.72	-0.14	0.60	0.00	4.12
Dec-13	4.80	-0.08	0.58	-0.02	4.22
Dec-14	4.92	-0.09	0.50	-0.04	4.42
Dec-15	5.11	-0.11	N/A	N/A	N/A
Dec-16	5.35	-0.20	N/A	N/A	N/A

“The price of carbon will not hit pre-crisis levels before 2030”

EU Commission Draft report, as quoted in Point Carbon 9 October 2013

The Cost of Carbon

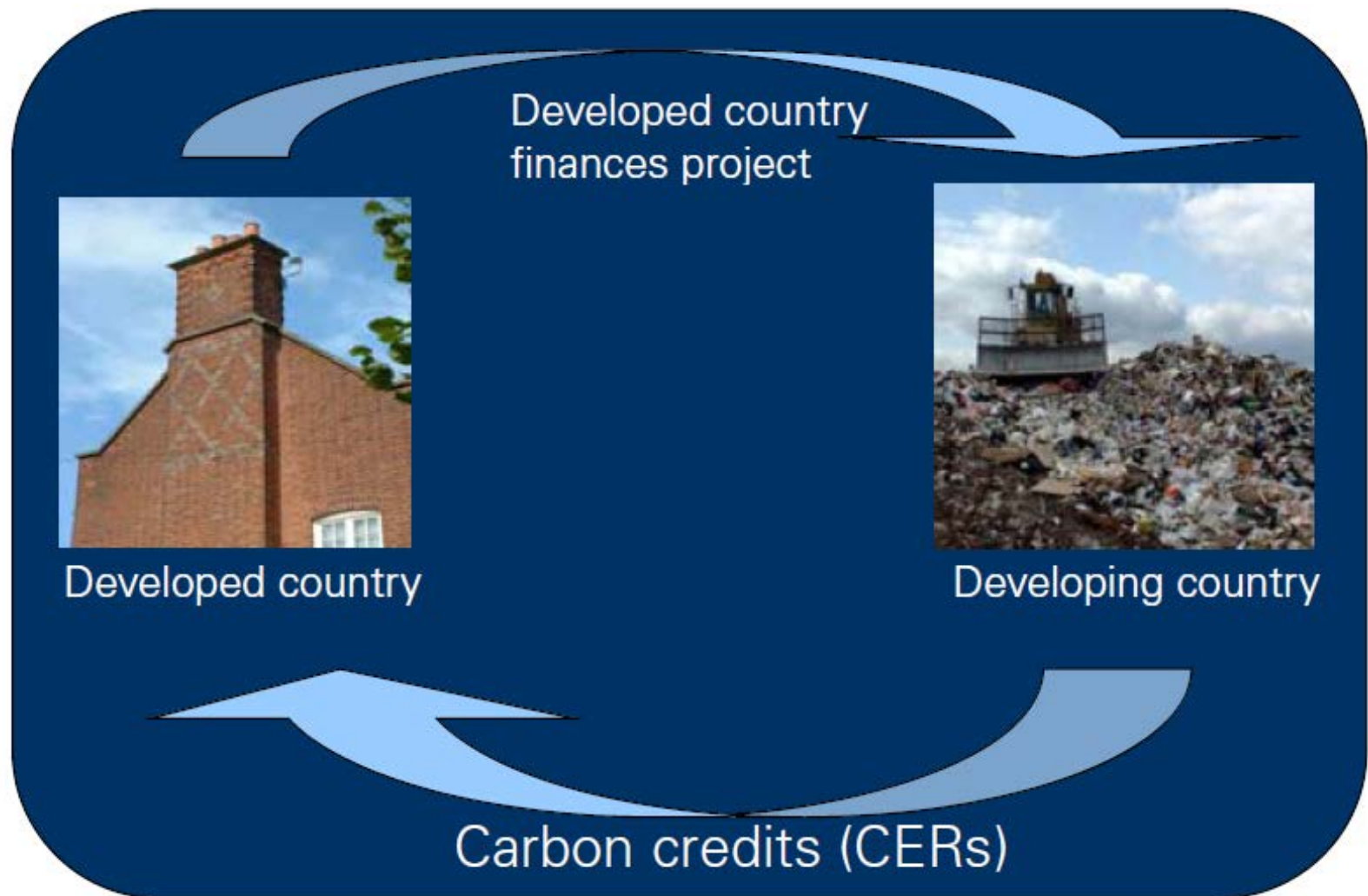
Cost Factors:

- Project Documentation
- Surveys, baseline data
- 3rd party validation & verification
- monitoring
- (UN fees)

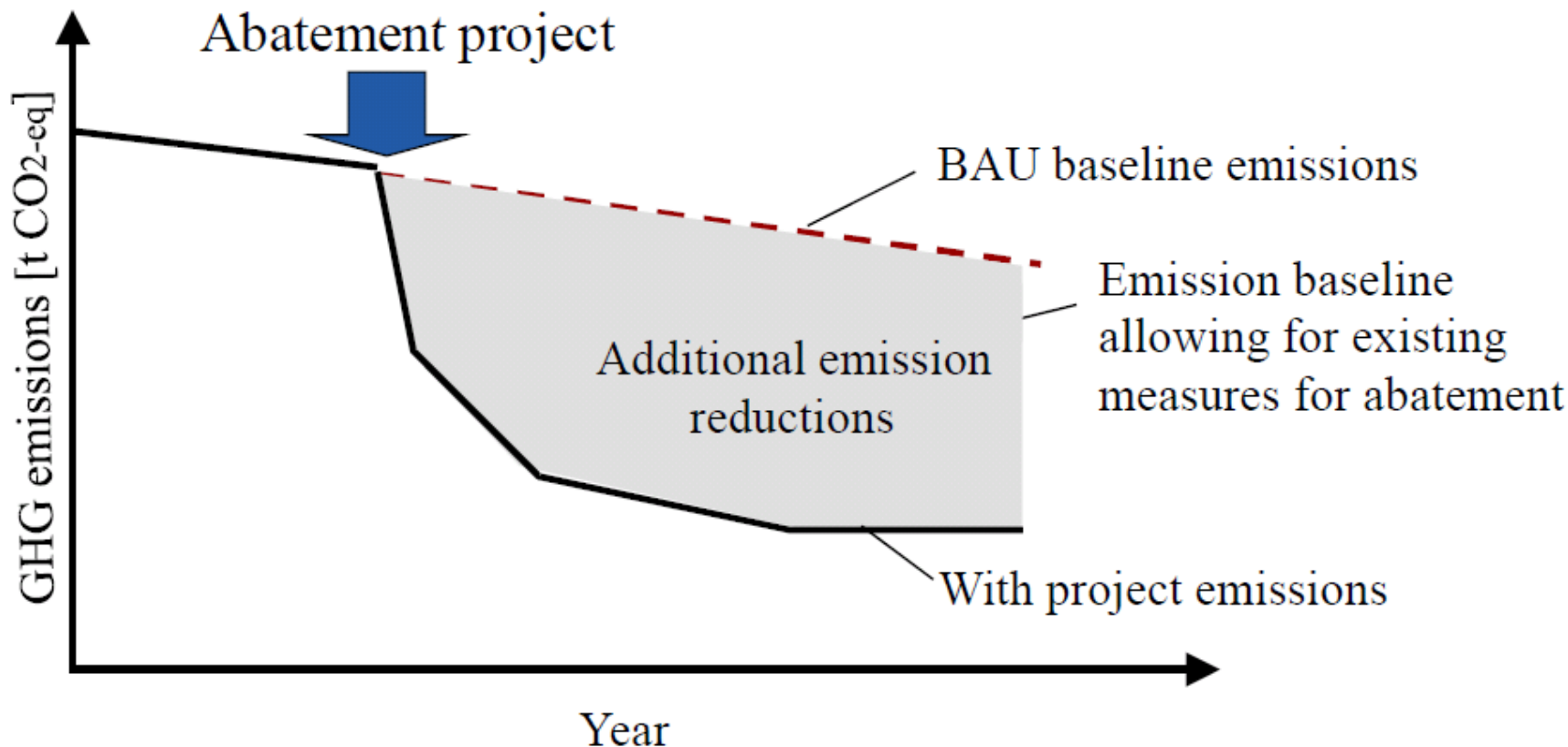
Cost / ton = 0.62 EUR

(standard project; annual verification; 50'000 t verified)

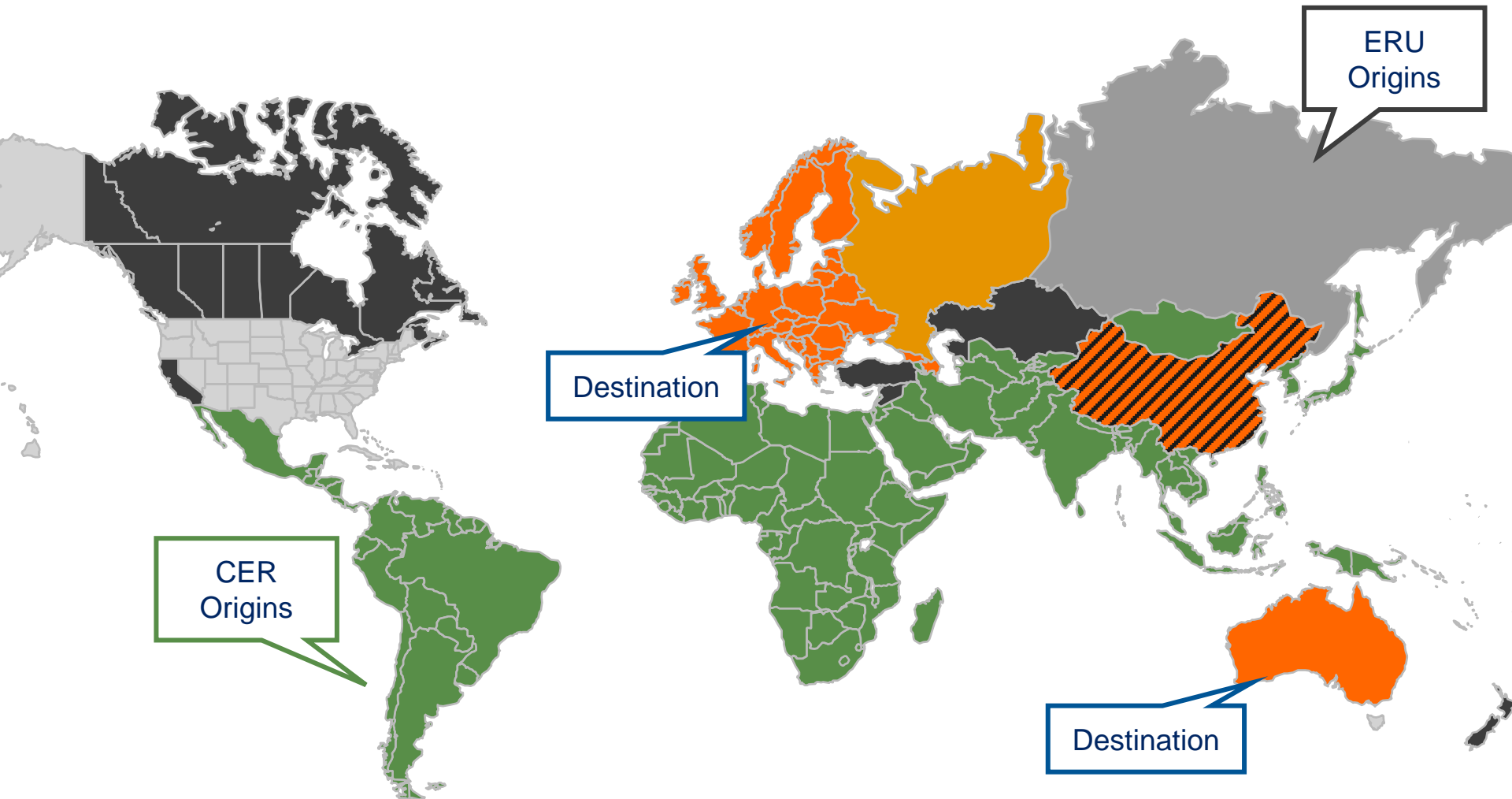
The Principles of International Emissions Trading



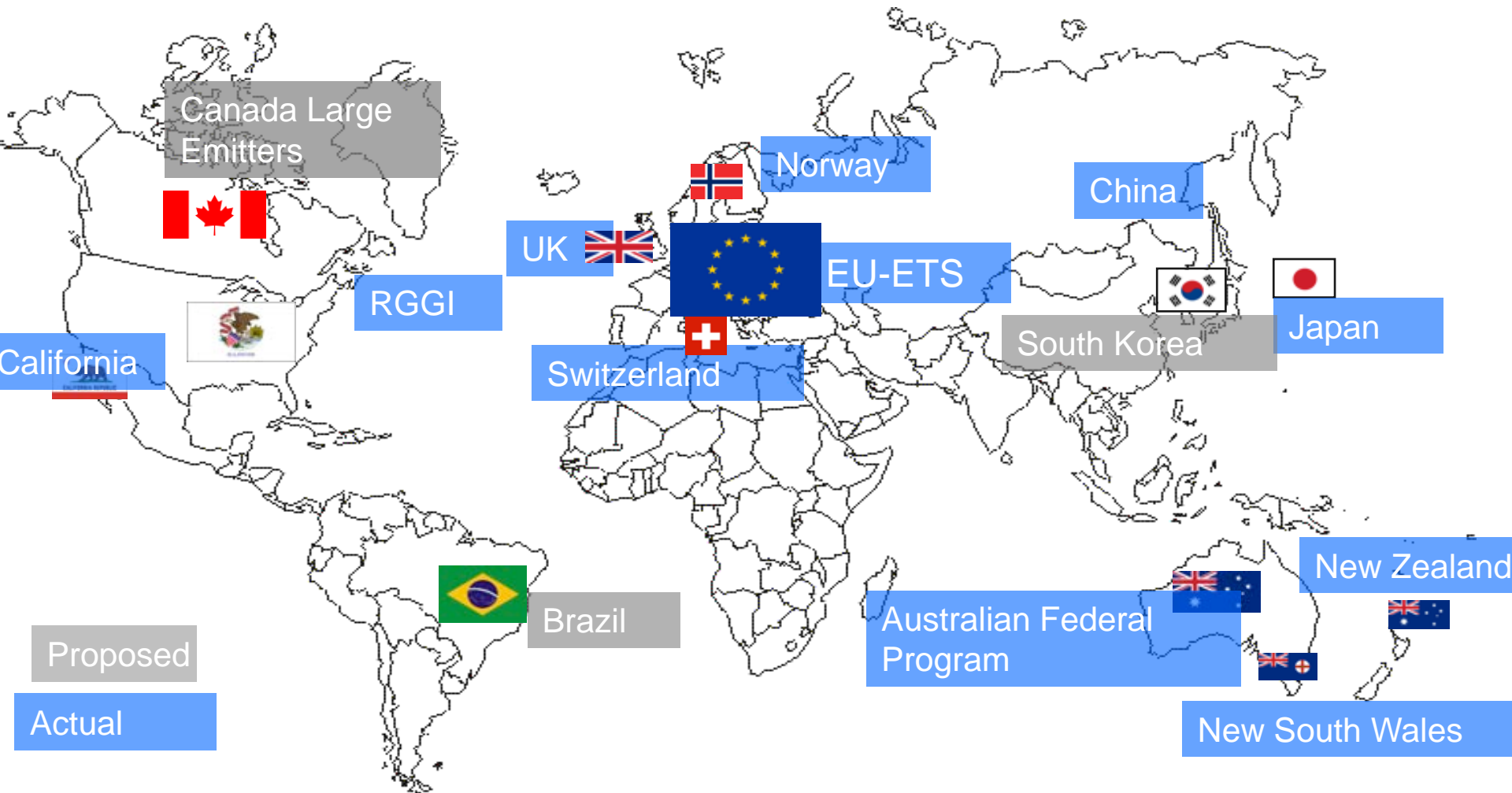
The Principles of Emissions Trading



The Principles of Emissions Trading



Global Carbon Markets



Voluntary Carbon Markets

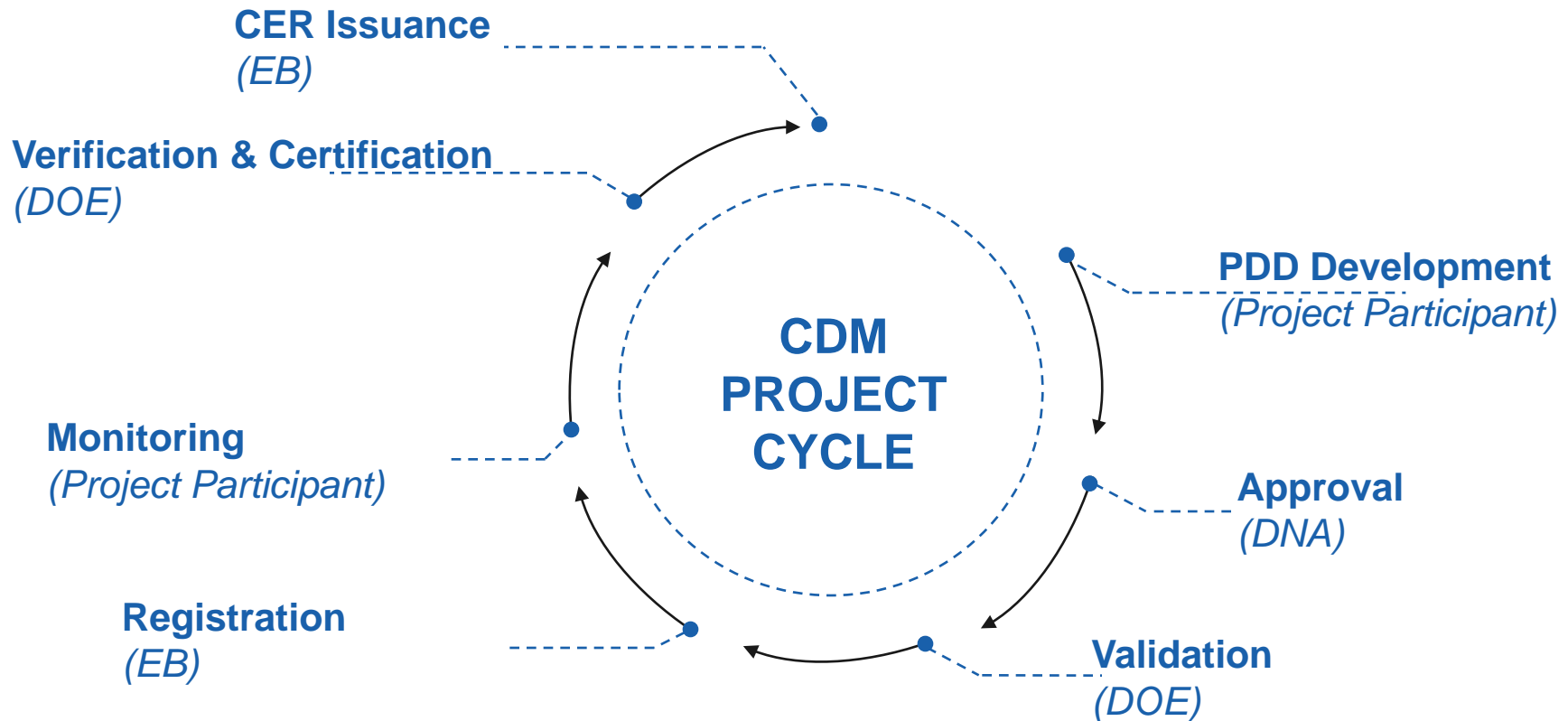
Key Characteristics:

- Unregulated by governments
- Intransparent
- Illiquid – not a commodity market!
- Interesting...

Dominant Standards:



(CDM) Project Cycle



The value of a project's carbon credit increase the further ahead in the cycle it is.

Example: The Southern Africa Carbon Facility



Key Challenges: Time, capacity, cost.

Primary vs. secondary carbon credits

Primary carbon credits:

- **Before** issuance
- Not a commodity
- Risky – depend on the project
- The domain of project owners and developers

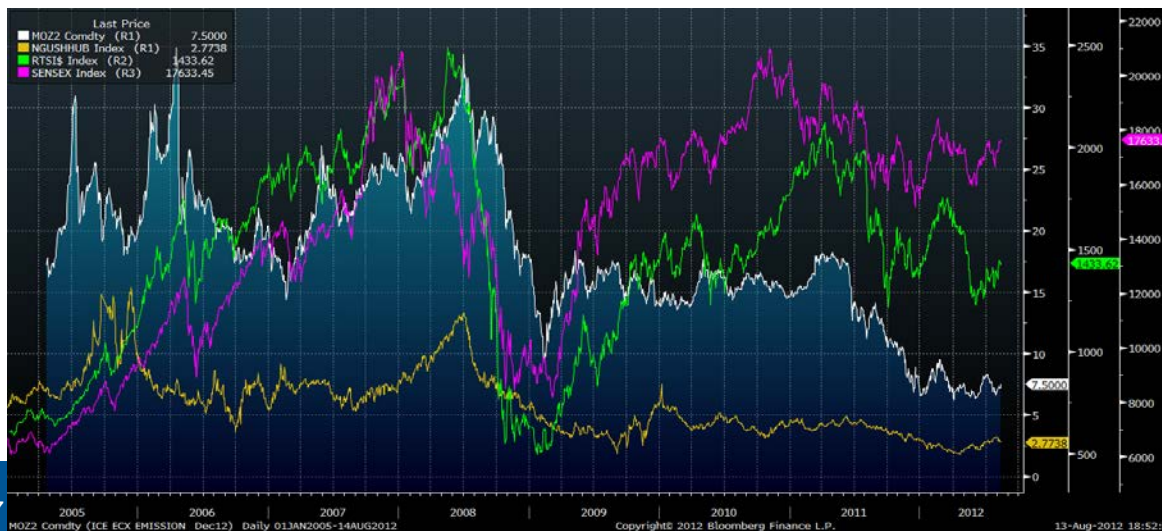
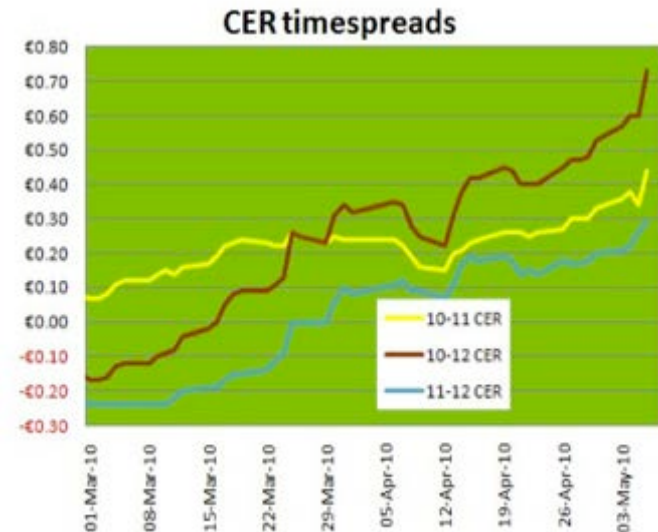
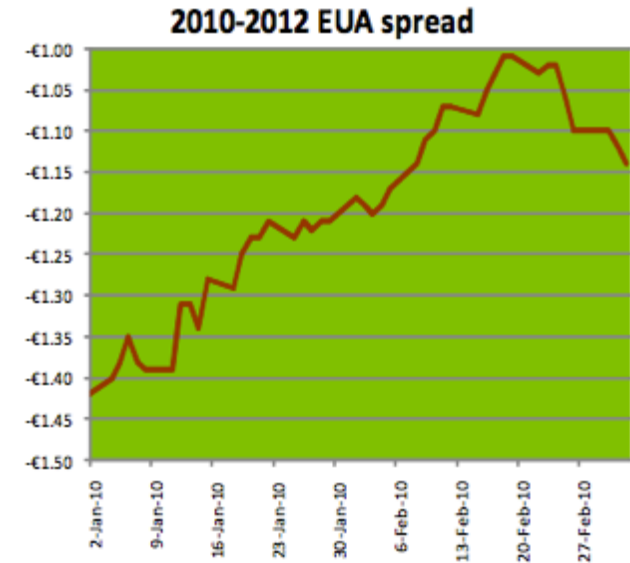
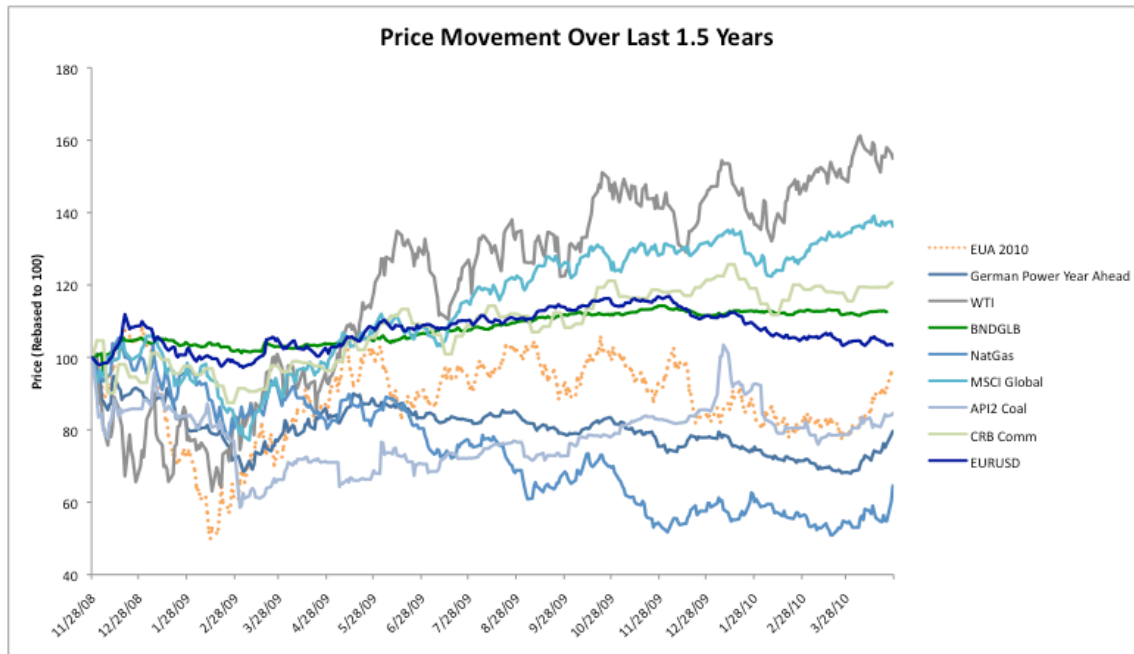
Secondary carbon credits:

- **After** issuance
- Fungible → commodity
- (almost) no risk
- The domain of brokers, traders and buyers

Financing using carbon

- Carbon is a revenue stream
 - Sole revenue vs. critical income vs. “nice-to-have”
- Financing against future carbon flows:
 - Risk → Discount
 - Debt or Equity
 - Prepayments: Buyer takes the risk → large discount
 - Payment on Delivery: Seller takes the risk → smaller discount
 - Typically mixed variants:
 - PoD with offtake commitment (fixed vs. floating)
 - Cost coverage (recuperation?)
 - Floors & Caps

Trading Carbon



Selling Carbon

Today's carbon markets are decommoditised

- Price Supporting Buyer programmes: Sweden, NEFCO, Ci-Dev, ...
- Voluntary market

➔ higher transaction costs, lower volumes

- Retreat of financial institutions ➔ fewer financing solutions
- Piecemeal selling is expensive
- “it's the project”: different preferences for different project types
- Intransparent pricing: Don't believe what you hear!
- Bad news for the climate – still (potentially) good news for projects

Outlook and Conclusions

Not all is lost:

- No joy without demand – the supply is fixed!
- NMM, Sectoral CDM, BCM, GCF, ... - the way to scale or a distraction?
- Good project will always find a buyer
- Volume is still in demand
- Fragmented markets - linking opportunities
- Climate Change is **real**
- Measuring & Monitoring carbon = optionality

Carbon Finance was overrated, today, it is underrated.