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Environmental Markets

- *Objective:* To achieve a better environment at least cost
- Examples of environmental problems
 - Climate change
 - Acid rain
 - Soil and river salinity
 - Over fishing

Environmental Markets

- Why do environmental problems exist?
 - Environment is a public good
 - Externalities exist
 - A market failure exists
- Government intervention justified

Environmental Markets

Public Goods

“A good that, even if it is being consumed by one person, is still available for consumption by others”

- Atmosphere/Clean Air
- Rivers
- National Parks

Environmental Markets

Externalities

“Actions by one person or firm that affect the welfare of others without any action on the part of those affected”

- Loud music
- Air pollution
- Water pollution

Environmental Markets

Market Failure

Failure of the free market to price certain goods or outputs

- Sub-optimal resource allocation results
- e.g. Clean air
- *Answer:* Government intervention

Environmental Markets

Government intervention

To achieve a socially optimal level of public good (where $MSC=MSB$)

- Internalise externalities
- Policy approaches
 - Command & Control (Regulations, Standards)
 - Market Based (Taxes, Emissions trading)

Environmental Markets

Market mechanisms

- Taxes
- Baseline & Credit
- Cap & Trade
 - US Sulfur Dioxide market
 - Kyoto Protocol
- SFE Carbon trading market

Carbon Trading Market

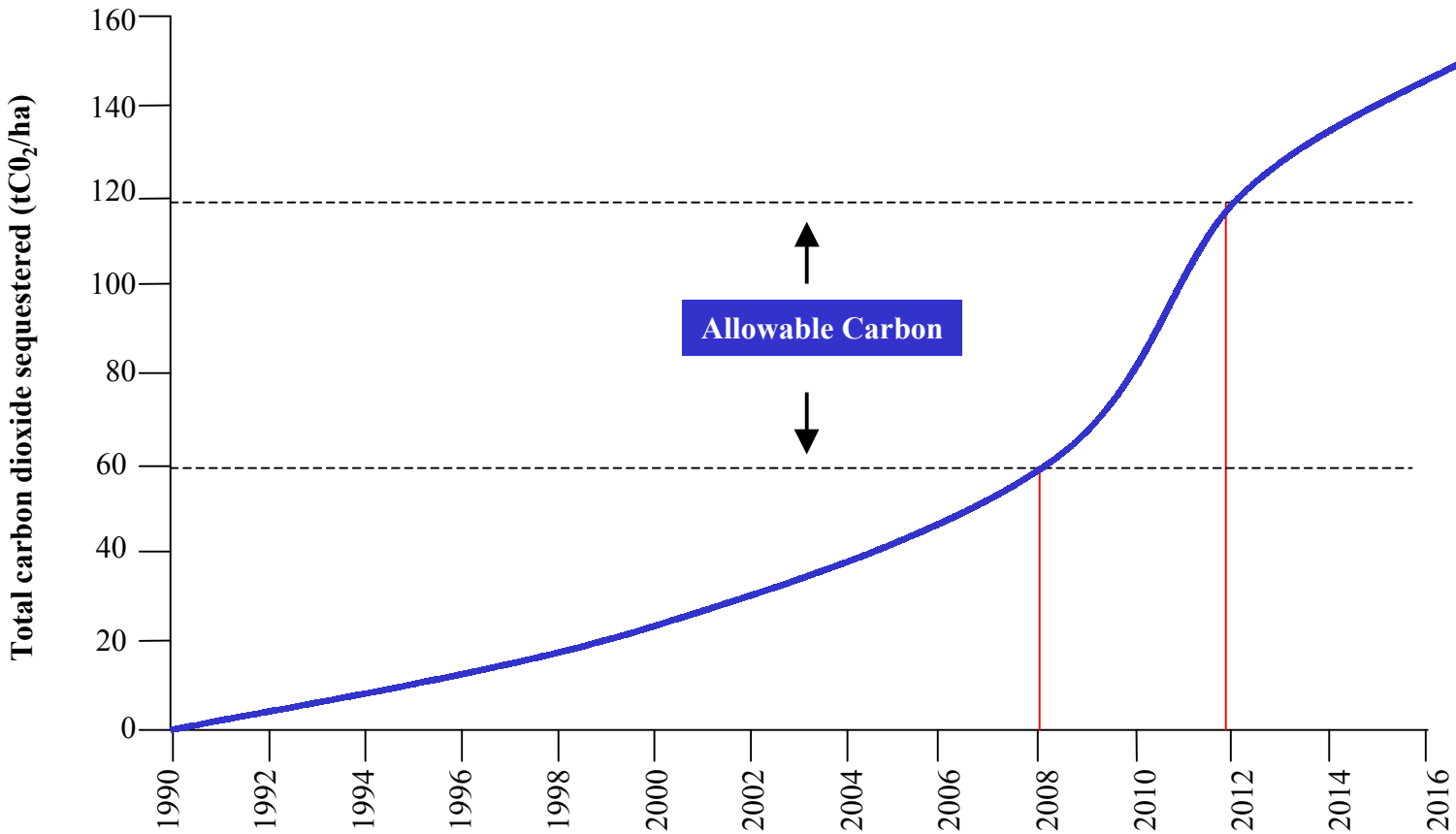
- The Kyoto Protocol
- Greenhouse targets set
- Emissions trading to meet targets
 - Articles 3.3, 3.4, 6, 12 & 17
- What are potential implications
 - Costs, trade impacts, competitiveness, investment decisions, lending risk, equity valuations etc.

Carbon Trading Market

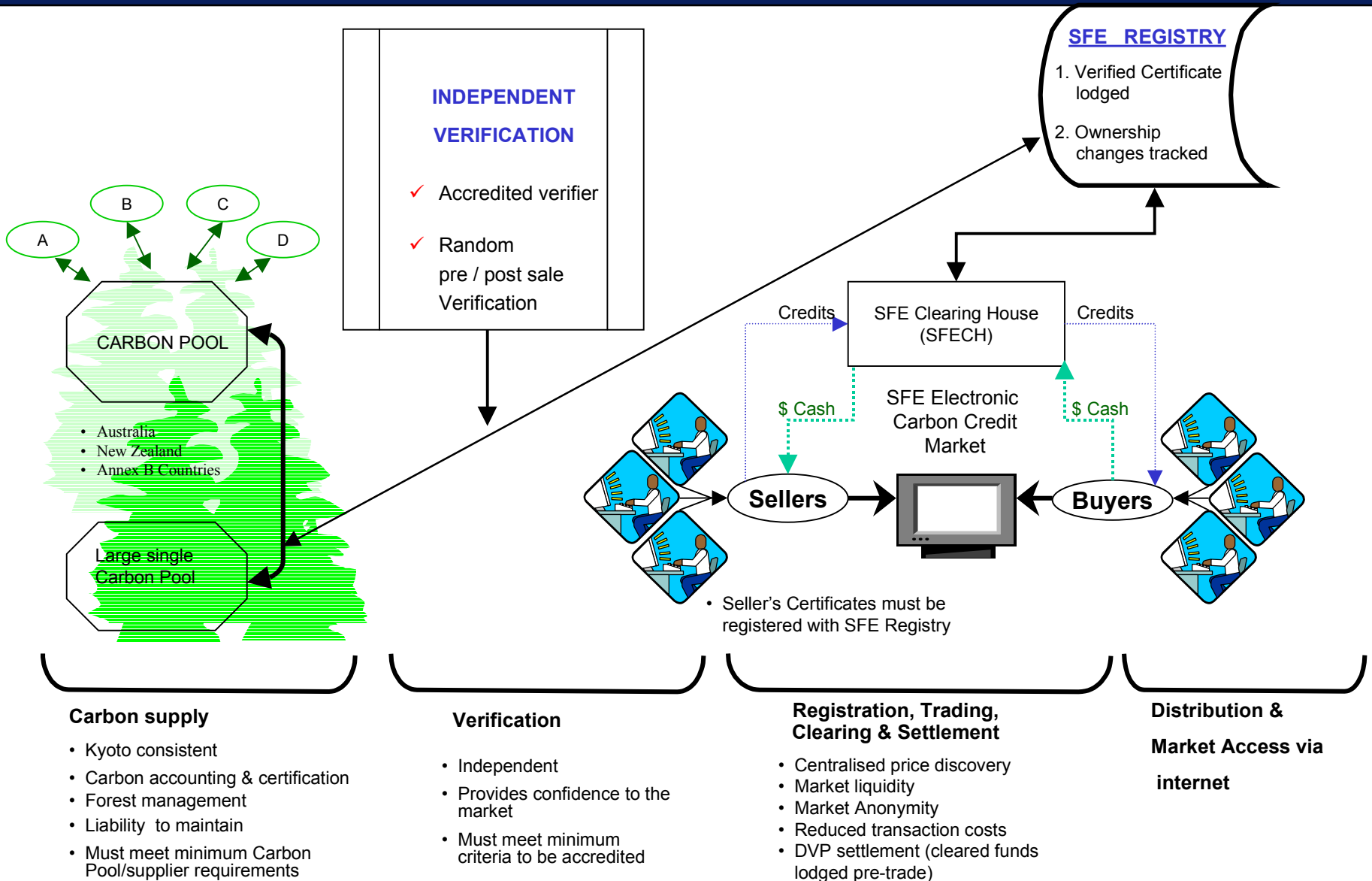
- A market for carbon exists
 - examples
- Kyoto risk management wanted
- SFE to launch carbon market
 - in carbon sink credits
- There are risks & benefits

Kyoto Protocol Article 3.3

Figure A: Sequestered carbon dioxide allowable under the Kyoto Protocol



Carbon Trading Market



Benefits & Risks

- There are risks
- Reduce cost of meeting Kyoto
 - sinks are only part of the answer
- Other environmental benefits
- Price discovery
- Risk management

Related web sites

www.sfe.com.au

www.aetf.net.au

www.carbontrading.com.au