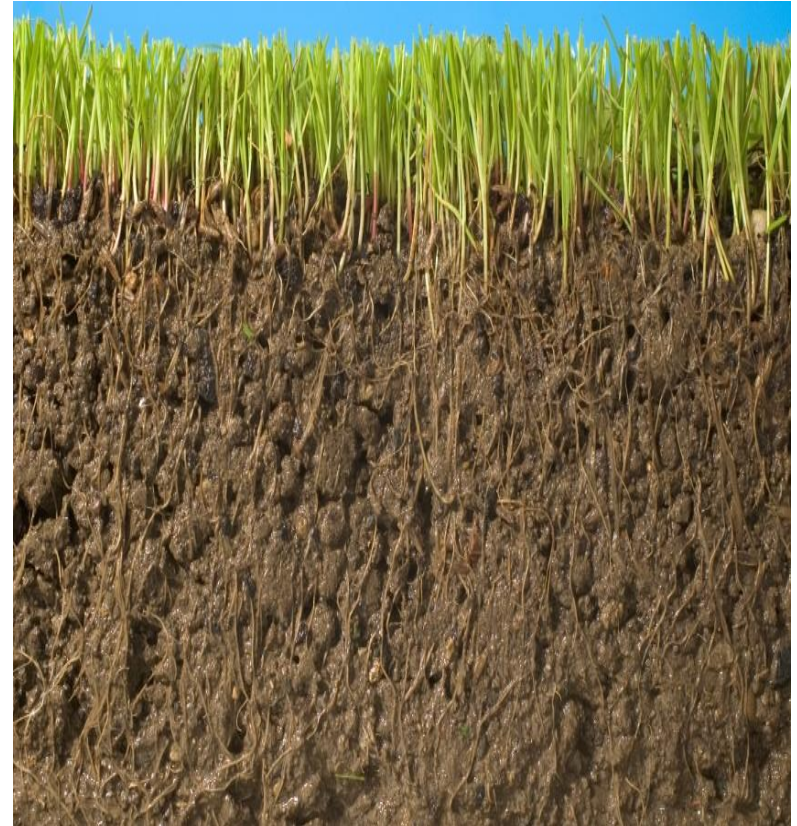


# Trading carbon into agriculture

Making it happen!

# Key messages!!

- Carbon Farming Initiative presents opportunities for low cost abatement.
- Transaction costs are likely to be high eroding the benefits of the scheme.
- Pooling could reduce transaction costs and increase market efficiency.



# Outline

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- Emissions offsets and the Carbon Farming Initiative;
- Opportunities for abatement in the agricultural sector;
- Transaction costs and uncertainty;
- Offset pooling as a potential solution; and
- Key considerations for policy makers.

# What are emissions offsets?

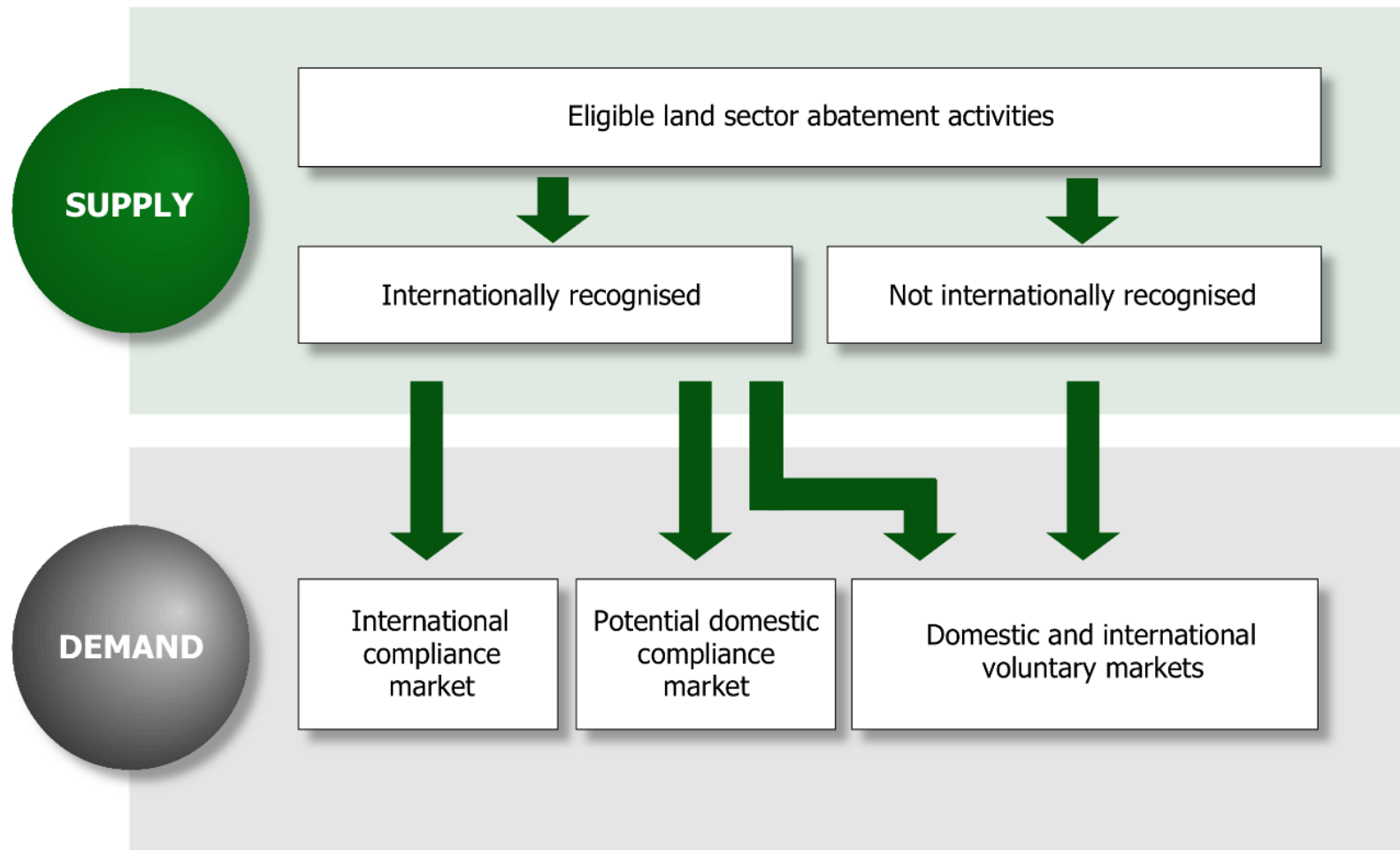
Permits are generated through sequestration or carbon abatement activities.

Once verified, that credit can be traded in international and domestic markets.



Source:<http://baloocartoonblog>

# Carbon Farming Initiative will establish a market for agricultural offsets.



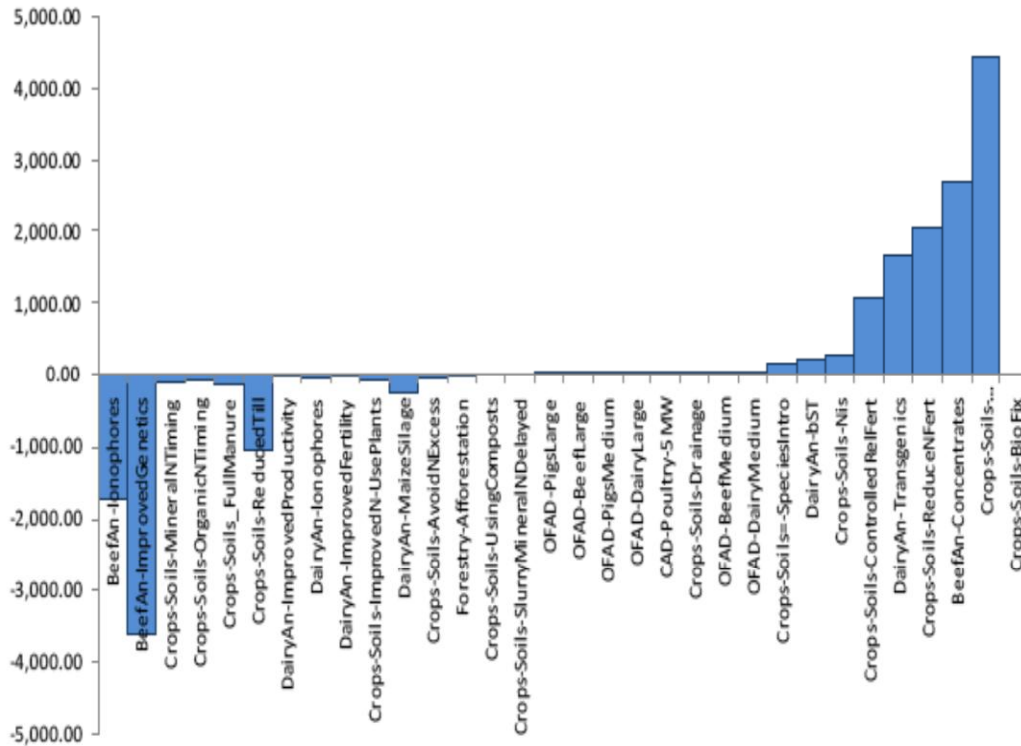
Source: DCCE 2010

# Outline

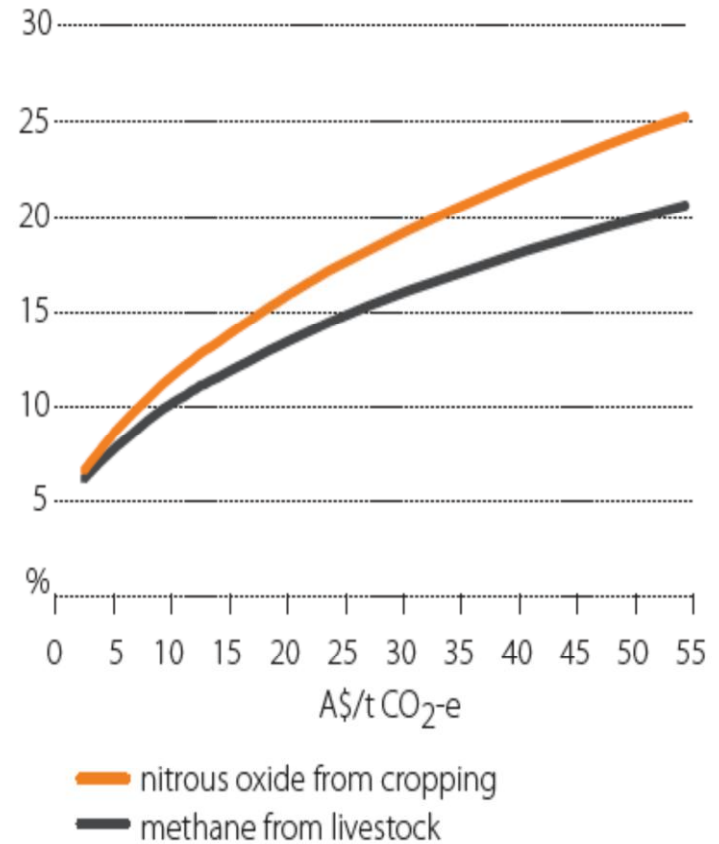
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- Emissions offsets and the Carbon Farming Initiative;
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# Many opportunities for low cost abatement with in Agricultural sector.



Source: Moran et al in Campbell and Barber 2009

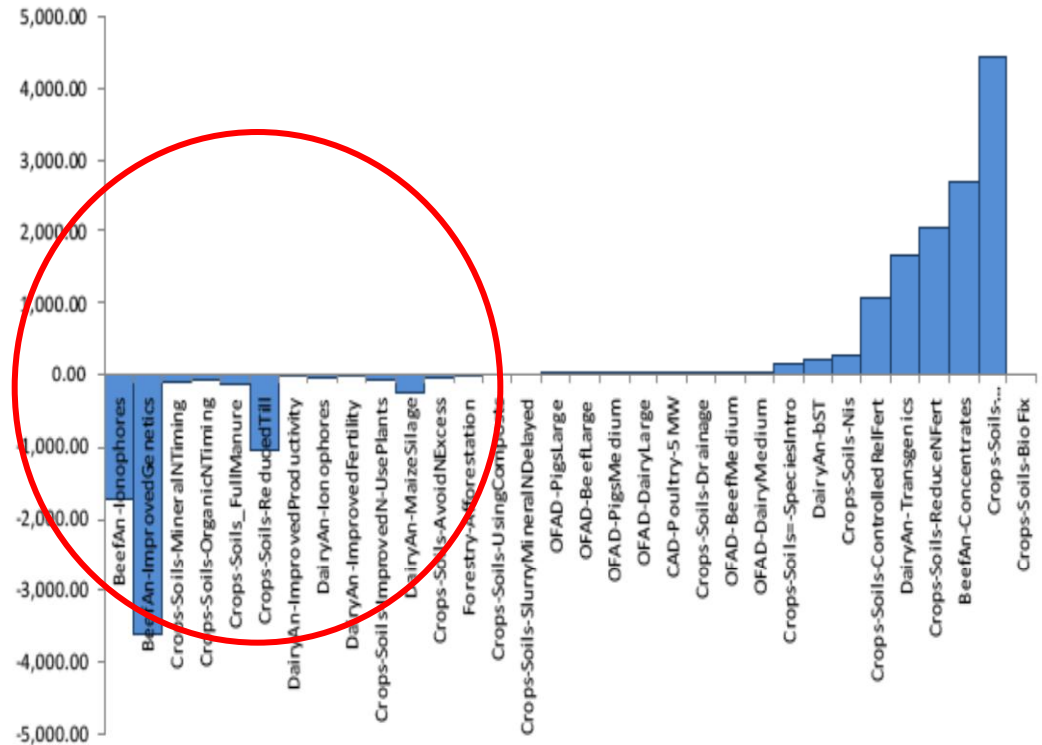


Source: Ford et al 2009

# Determining the additionality of no regrets opportunities

**Additional?**

Only if the introduction of a carbon price changes management decisions.



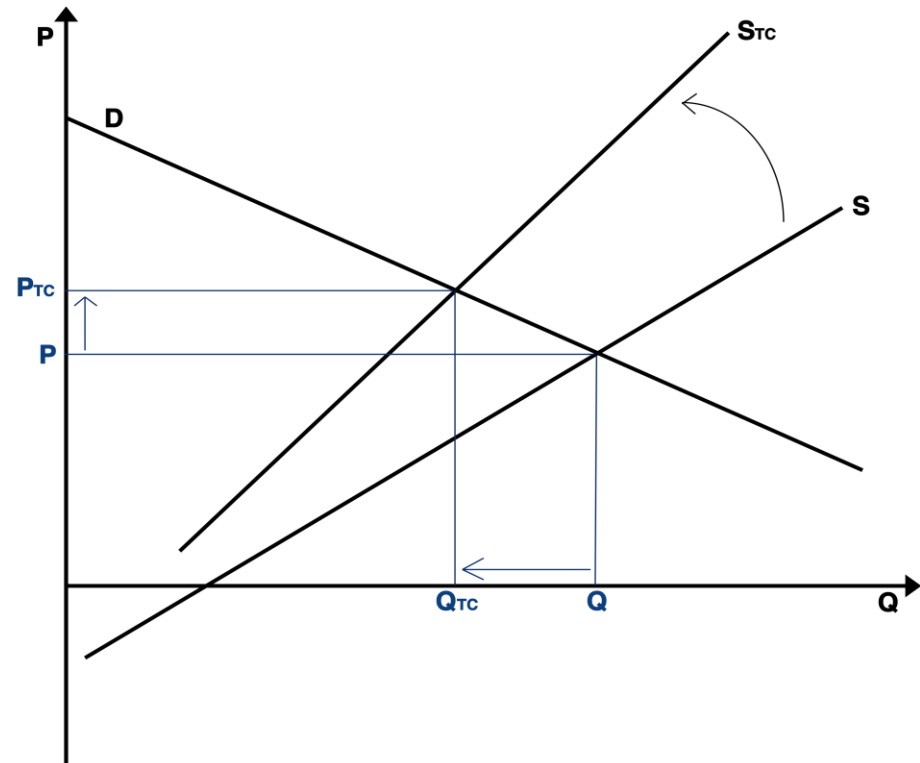
# Outline

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- Emissions offsets and the Carbon Farming Initiative;
- Opportunities for abatement in the agricultural sector;
- **Transaction costs and uncertainty;**
- Offset pooling as a potential solution; and
- Key considerations for policy makers.

# Transaction costs are likely to be high, eroding the offset market

- Producer costs of participation
- Setting baselines and assessing additionality
- Monitoring and enforcement

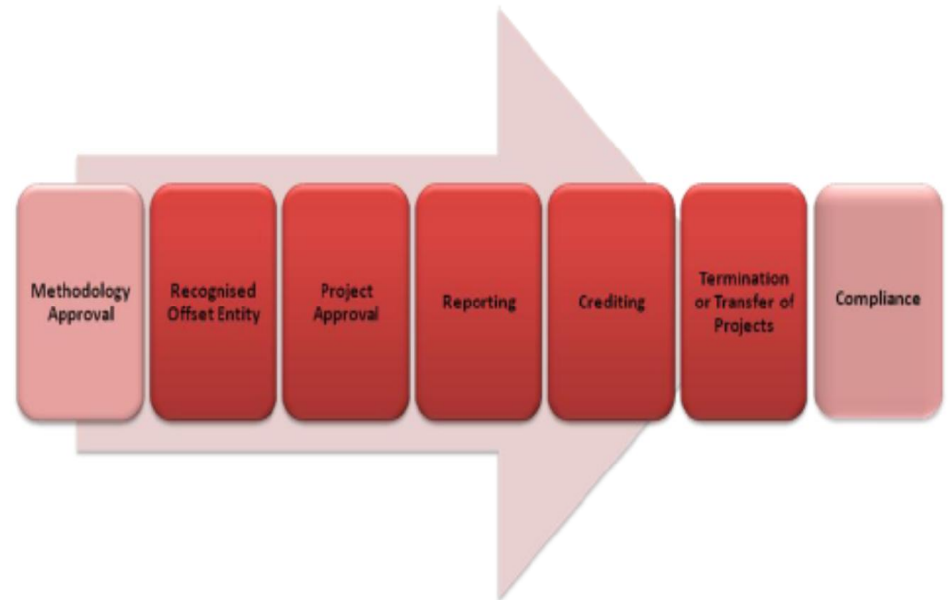


Source: Allen Consulting Group, 2011

# The costs of offset participation: producer transaction costs

1. Methodological selection/approval
2. Register as an offset entity
3. Project approval
4. Reporting
5. Crediting
6. Market transactions
7. Compliance

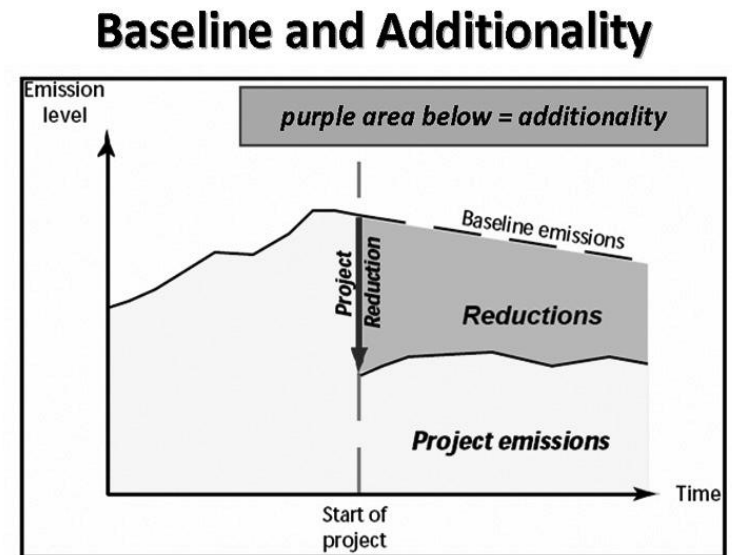
## Pathway to credit emission reduction offsets



Source: DCCE 2010

# Setting baselines and assessing additionality can be expensive.

- Setting baselines is complex
- The CFI requires a lot of baselines:
  - Different abatement activities
  - Different industries
  - Different regions



Source: [www.animalagteam.msu.edu](http://www.animalagteam.msu.edu)

# Monitoring and enforcement costs

- Compliance can not be assumed.
- Monitoring will be very expensive.
  - Estimates of the cost of monitoring and verification of individual agricultural abatement projects are as high as C\$18.56 (Fulton et al. 2005).
- Non-compliance is a substantial risk and could erode confidence in the market.



Source:<http://fbadventures.wordpress.com>

# The cost of uncertainty

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- Uncertainty regarding estimation techniques
- Trading ratios and discount rates
- What about the upside?



# Outline

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- Emissions offsets and the Carbon Farming Initiative;
- Opportunities for abatement in the agricultural sector;
- Transaction costs and uncertainty;
- Offset pooling as a potential solution; and
- Key considerations for policy makers.

# Offset pools can reduce transaction costs and increase incentives for market participation.

- Reducing transaction costs
- Opportunities for co-regulation
- Diversification and managing uncertainty



Source:<http://www.wea.gov.au>

# Key considerations for policy makers

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- Transaction costs are likely to be high.
- Scheme must be involved to reduce transaction costs and maximise incentives.
- Offset pooling could provide a solution.
- Further research is required.