

Carbon Offset Management Strategies and Best Practices Forecasting, Selection, Optimisation

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Resource Intelligence is a professional consultancy delivering carbon measurement, reporting and industrial offsets project services.

Carbon Intelligence is a verification service in markets which allow private verifiers.

Carbon Intelligence

Know the Facts

about your carbon position
about your regulatory position
about carbon trading.

Be Intelligent

in your response to the
challenges and opportunities
that carbon reporting and
emissions trading bring.

Resource Intelligence _ _ _ _ .

Carbon Intelligence _ _ _ _ .

Carbon Intelligence

了解

您碳方面的情况

您在法律规定方面的情况

碳交易方面的情况

在碳排放报告与碳排放交易规定带来的挑战与机会面前，我们帮助您有智慧地应对

Presentation based on industrials

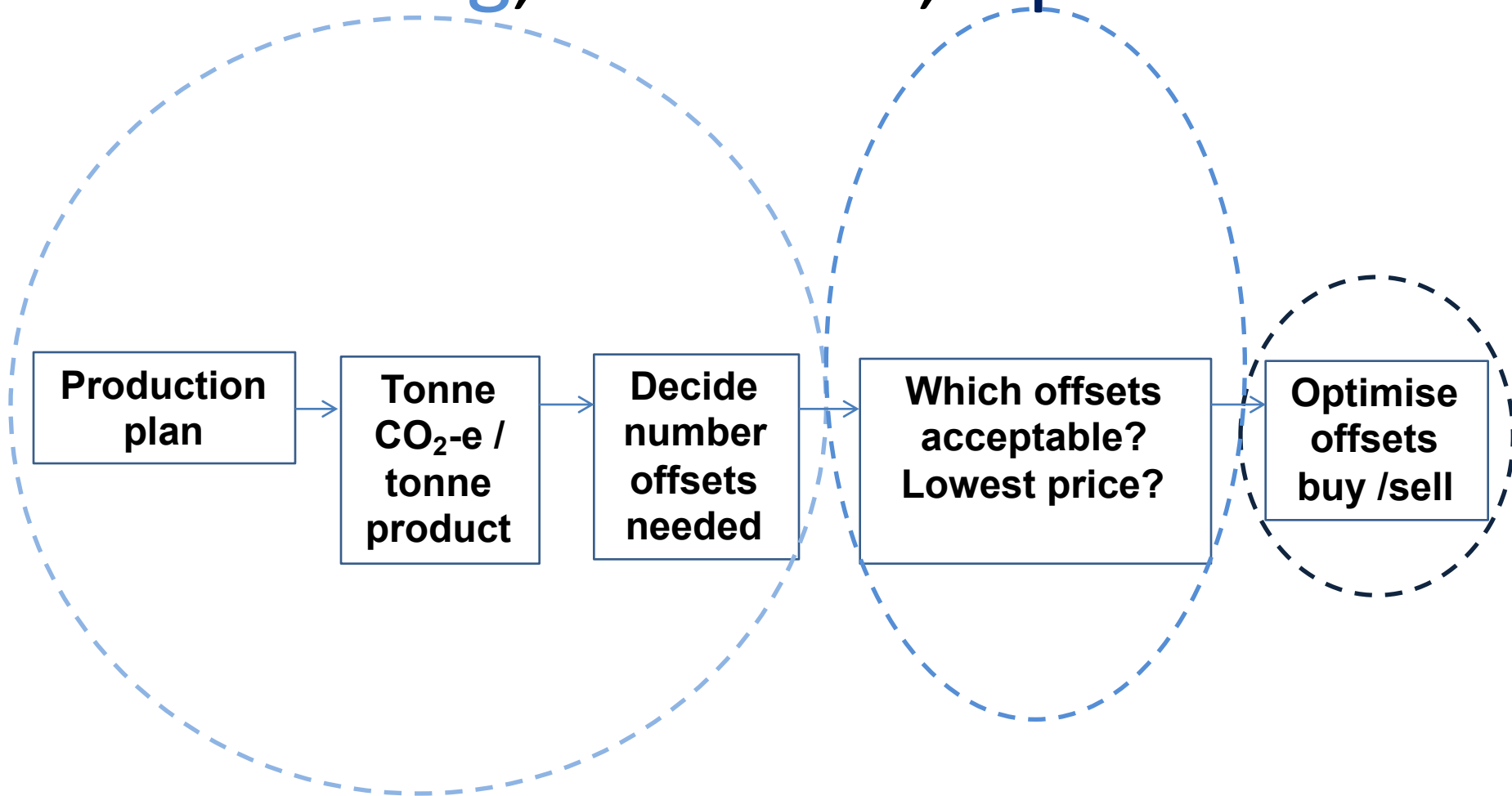
- Metals – CITIC Pacific, Glencore, Newcrest, Barrack, Gold Fields
- Oil & Gas – AGL, Air Liquide, Chevron, Exxon, Transocean
- Power – Stanwell
- Telecommunications – Telstra
- Nuclear – ANSTO, Beverley Uranium (General Atomics)
- Chemicals - BASF
- Coal and Steel – Anglo American. Caledon Coal (Guangdong Rising Assets Management), ICC
- Food – Wilmar, Penrice Soda (solvay)
- Transport – Boeing, Cobham Aviation, Queensland Rail
- Water – SA Water, SunWater

Upstream Offsets

- Resource Intelligence is the largest industrial offsets advisor and development partner in Australia (approximately 70% of national project volume).
- Carbon Intelligence is a verifier of land based offsets in Australia.

Offsets Management

Forecasting, Selection, Optimisation

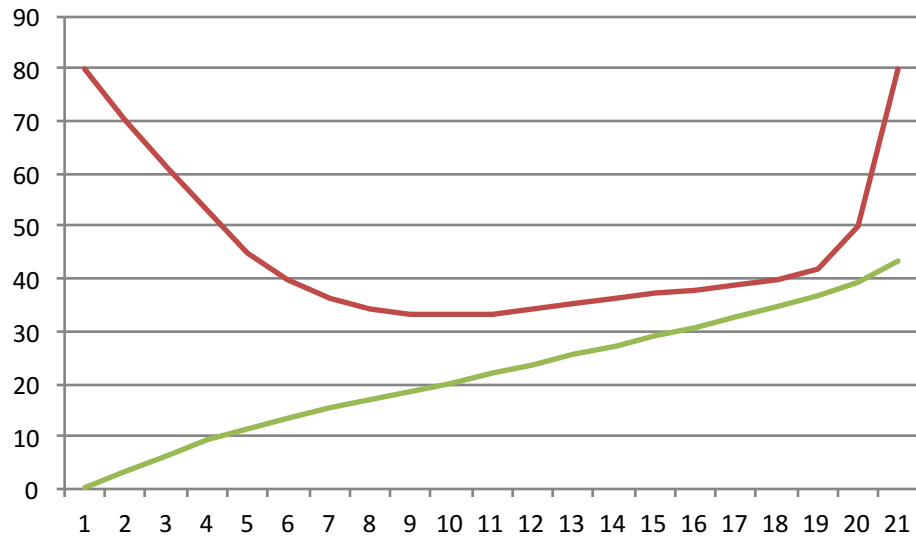


Why the number of offsets needed is a probability curve

- Tonne CO₂-e / tonne product is a U shaped curve.
- Plant management will reduce tonne CO₂-e / tonne product once a price is established by changing air/fuel mix before combustion, reducing uncombusted venting of methane, etc.
- Reporting boundary – how aggressive was the Measurement and Reporting approach, how much risk of increase during Verification.
- Measurement Method (Tier) – reduce reported emissions by selecting a higher order method, for example using instrument analysis not assumed calorific values and emissions factors. May be voluntary or regulator imposed.

tonne CO₂-e / tonne production

tonne
CO₂-e /
tonne
product

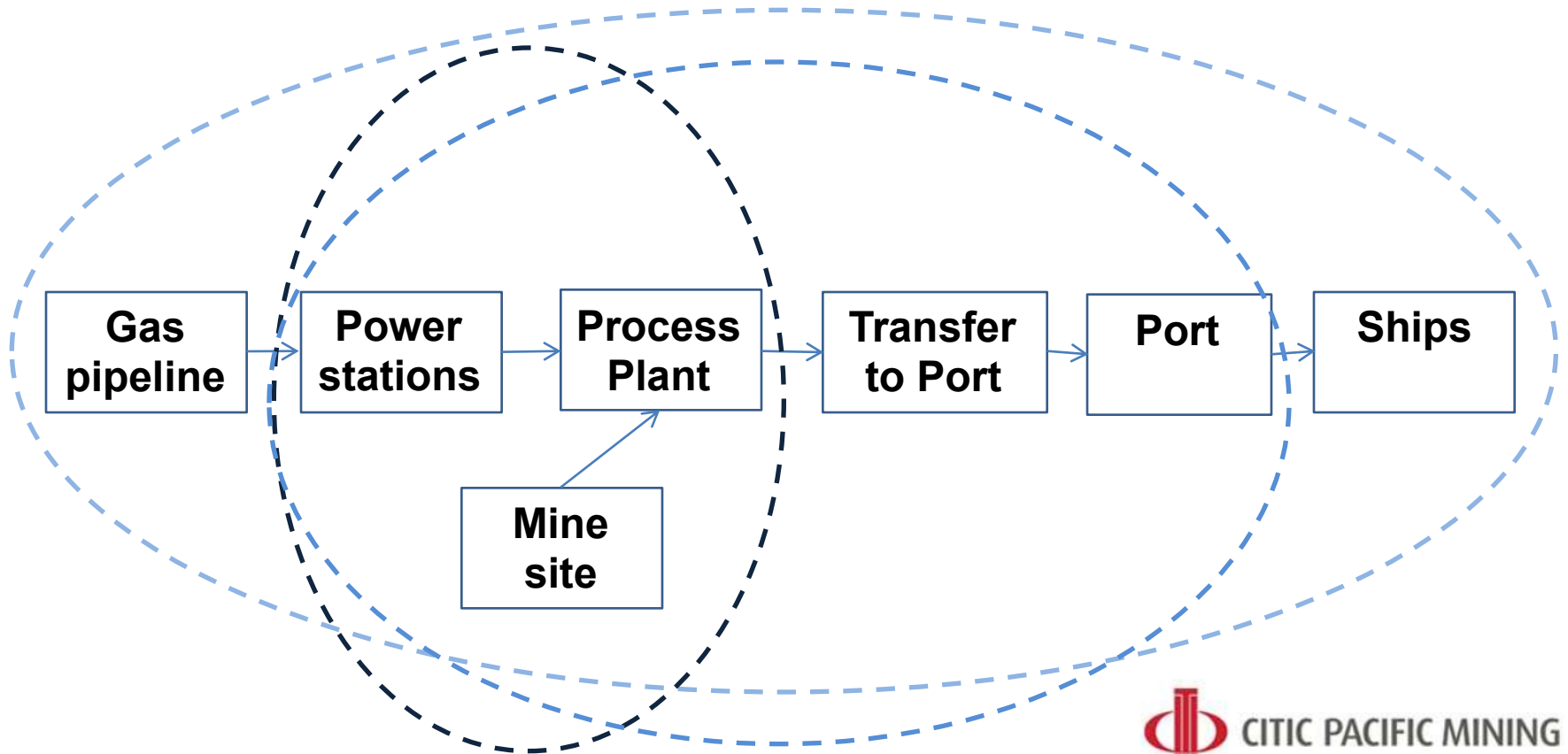


Marginal

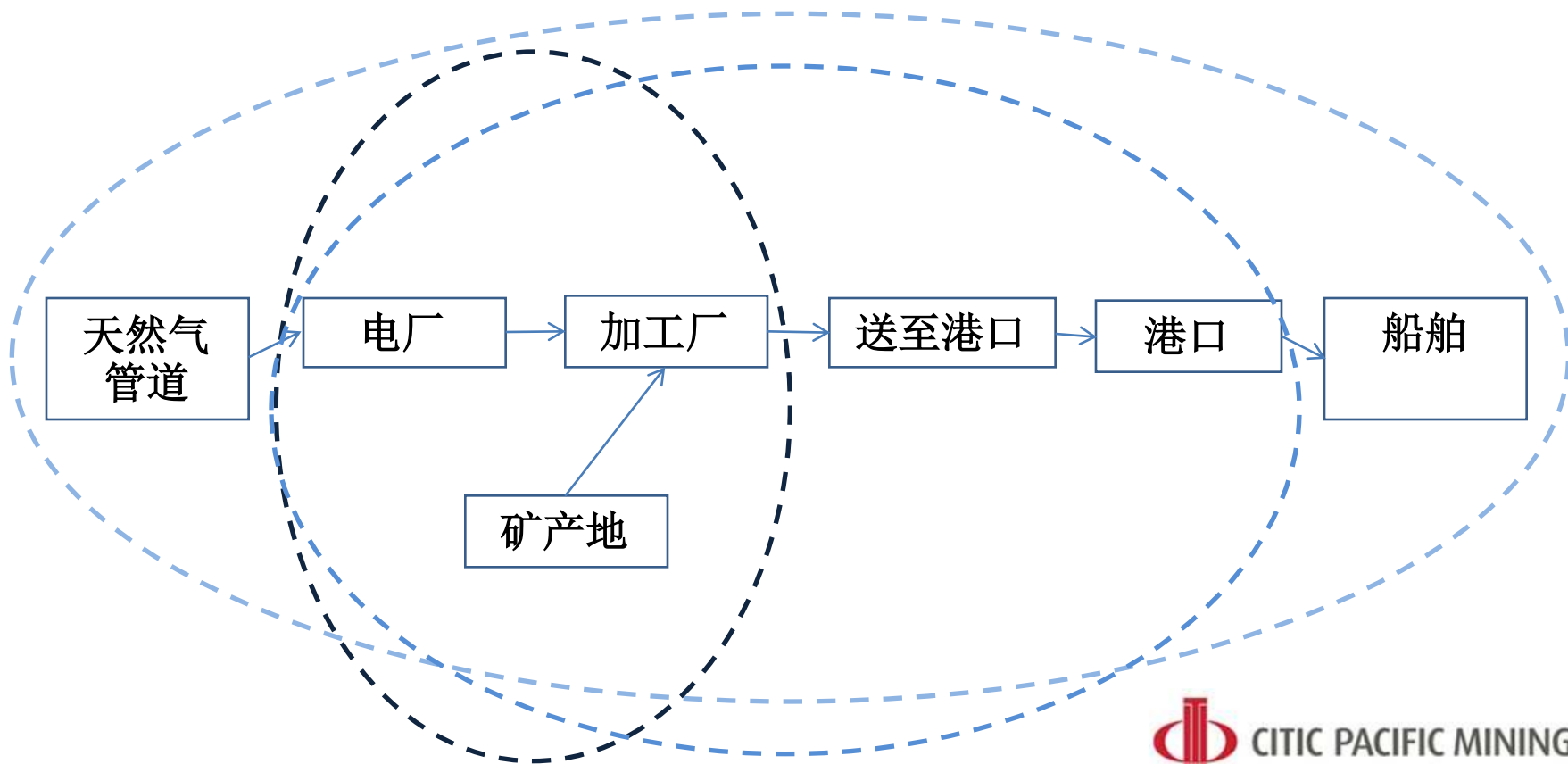
Cumulative

tonne
production

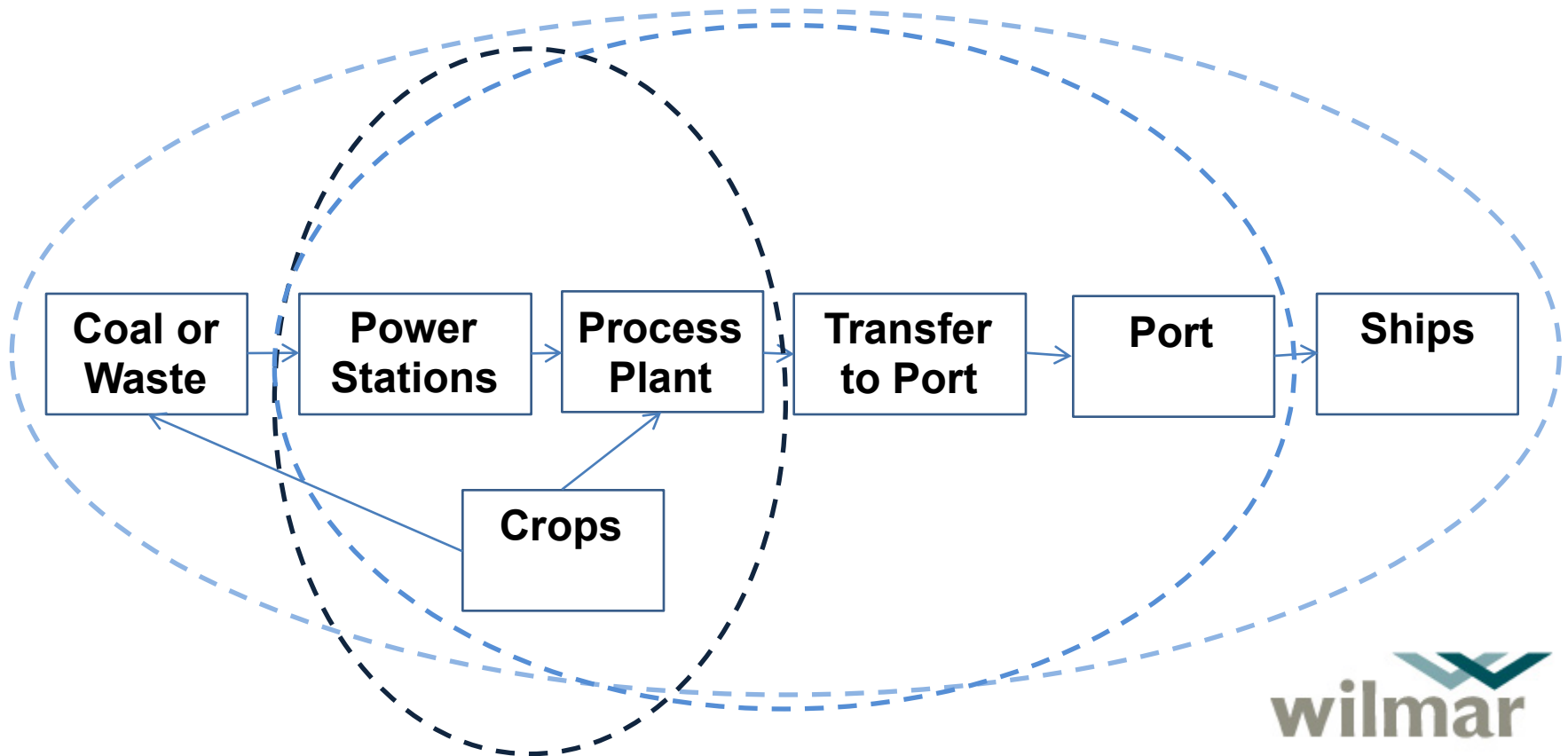
Reporting boundary example showing complexity



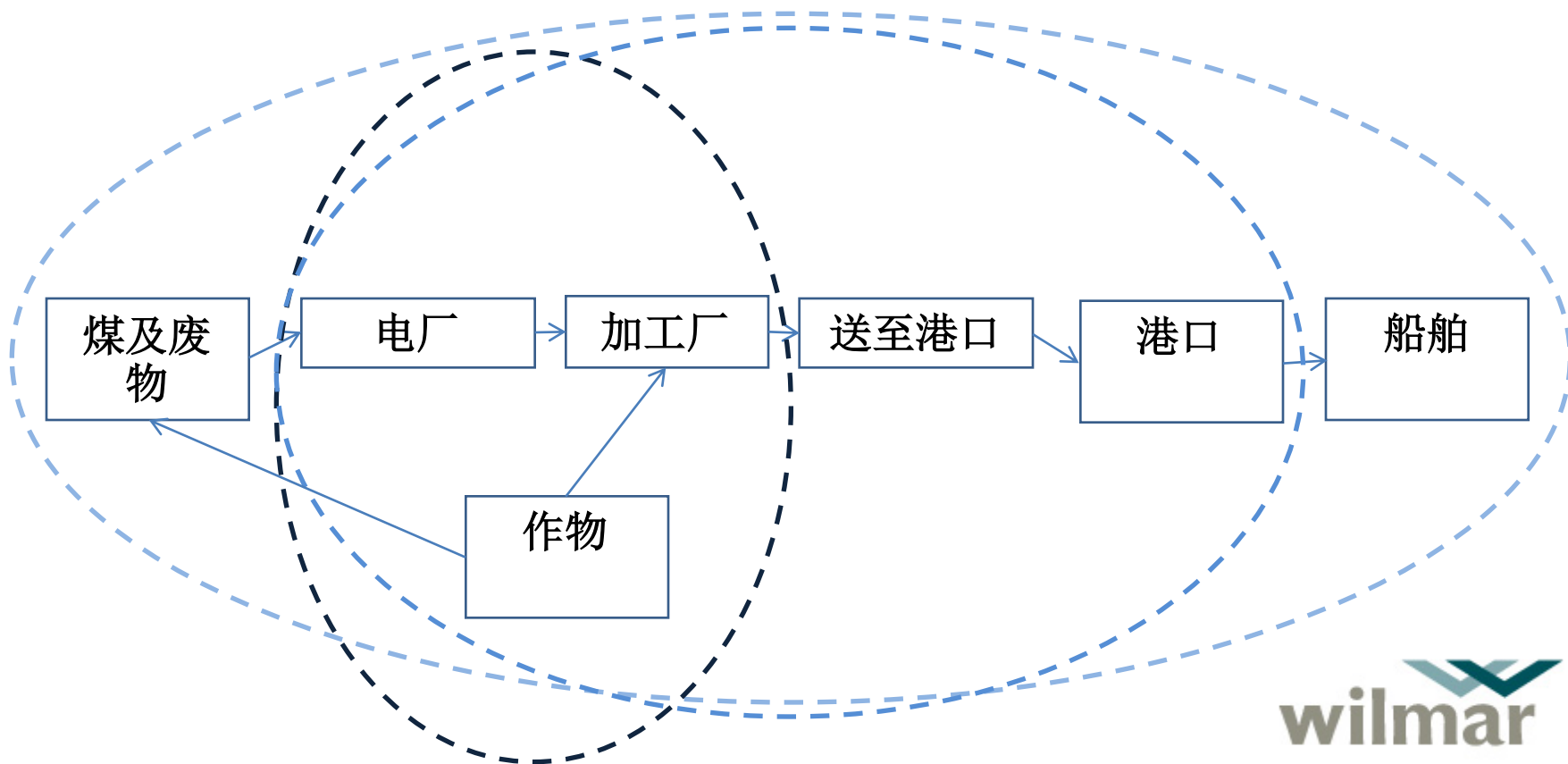
举例说明复杂性



Reporting boundary example showing complexity

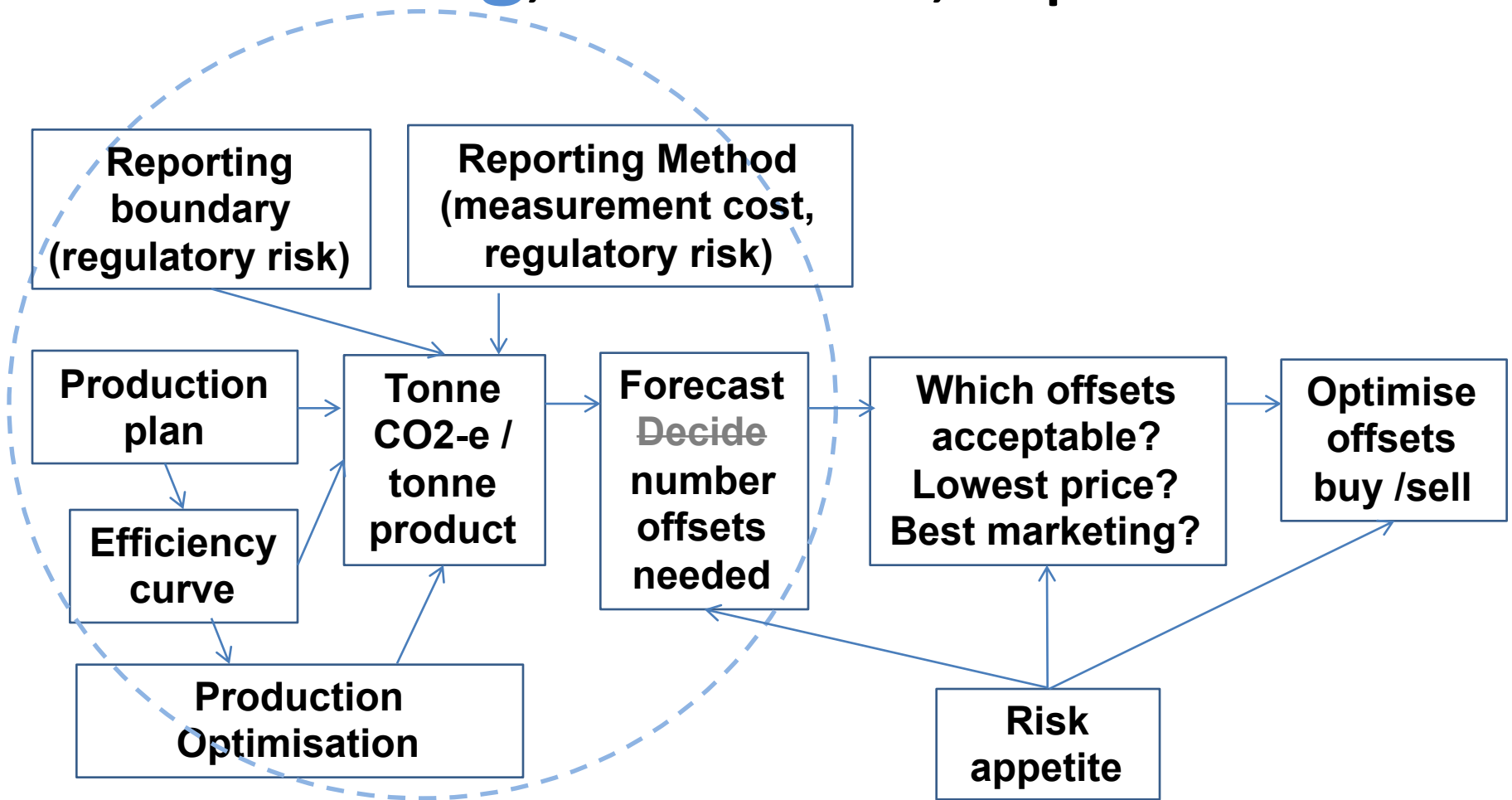


举例说明复杂性



Offsets Management

Forecasting, Selection, Optimisation



Why do some industrial emitters not buy the lowest cost units?

- Buy local generated offsets
 - A large coal fired electricity generator buys offsets from projects near discharges from its flue stacks.
 - A regional government owned water operation buys in the same state/province as the operation.
- Buy credits with a perceived marketing benefit
 - Forestry units consistently popular even if 10 x more expensive, especially with industries which use paper. Hydro and other clean technology units also popular.
 - Global building products manufacturer buy African clean water units – healthy children.

Why do some industrial operators not buy the lowest cost units?

Sustainable Deployment



Type: Water Purification

Location: Kenya, Africa

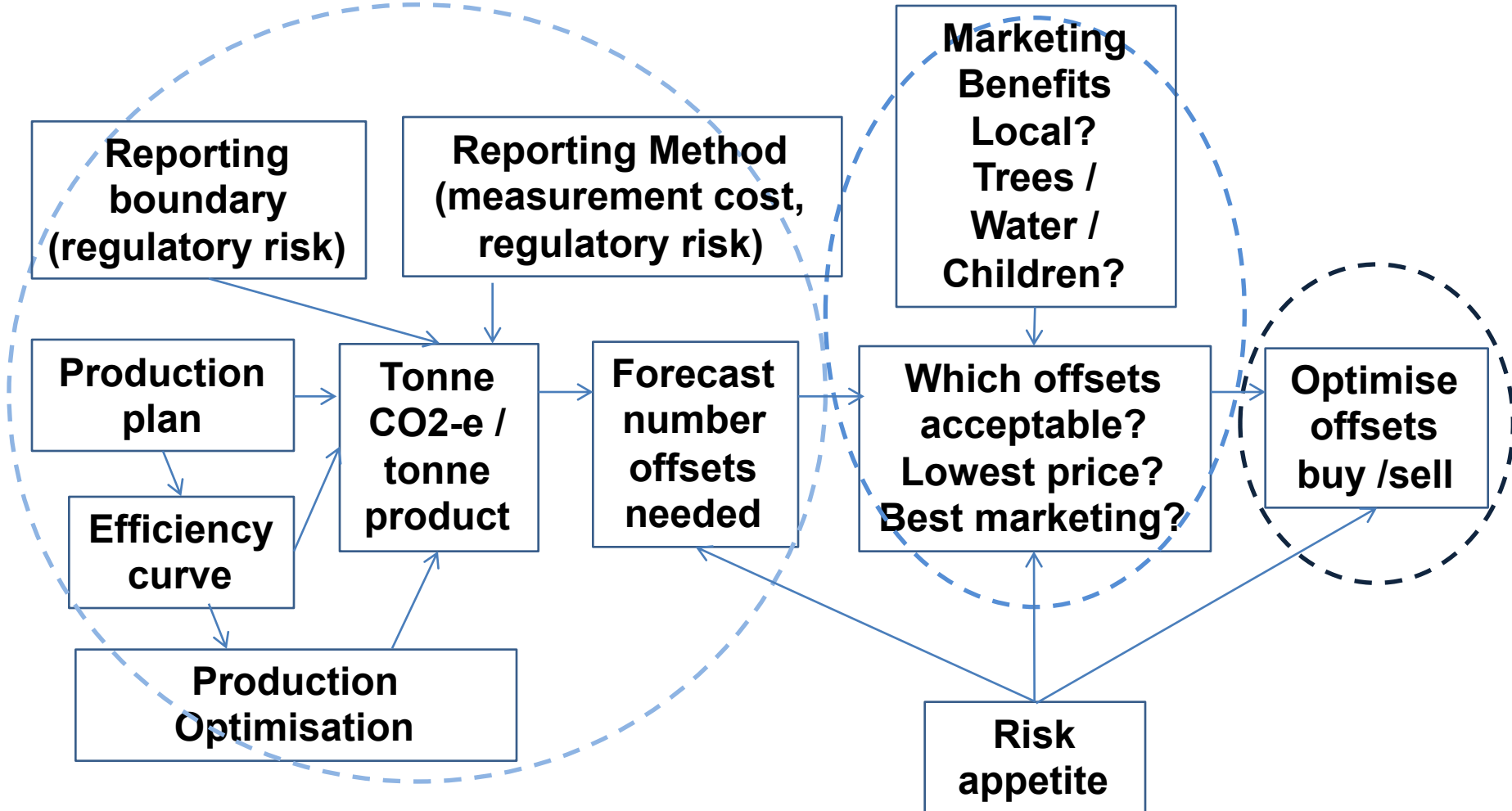
Standard: Gold Standard VER

Reference: GS 886

Est. Reductions: 2,073,328 tCO₂e per year

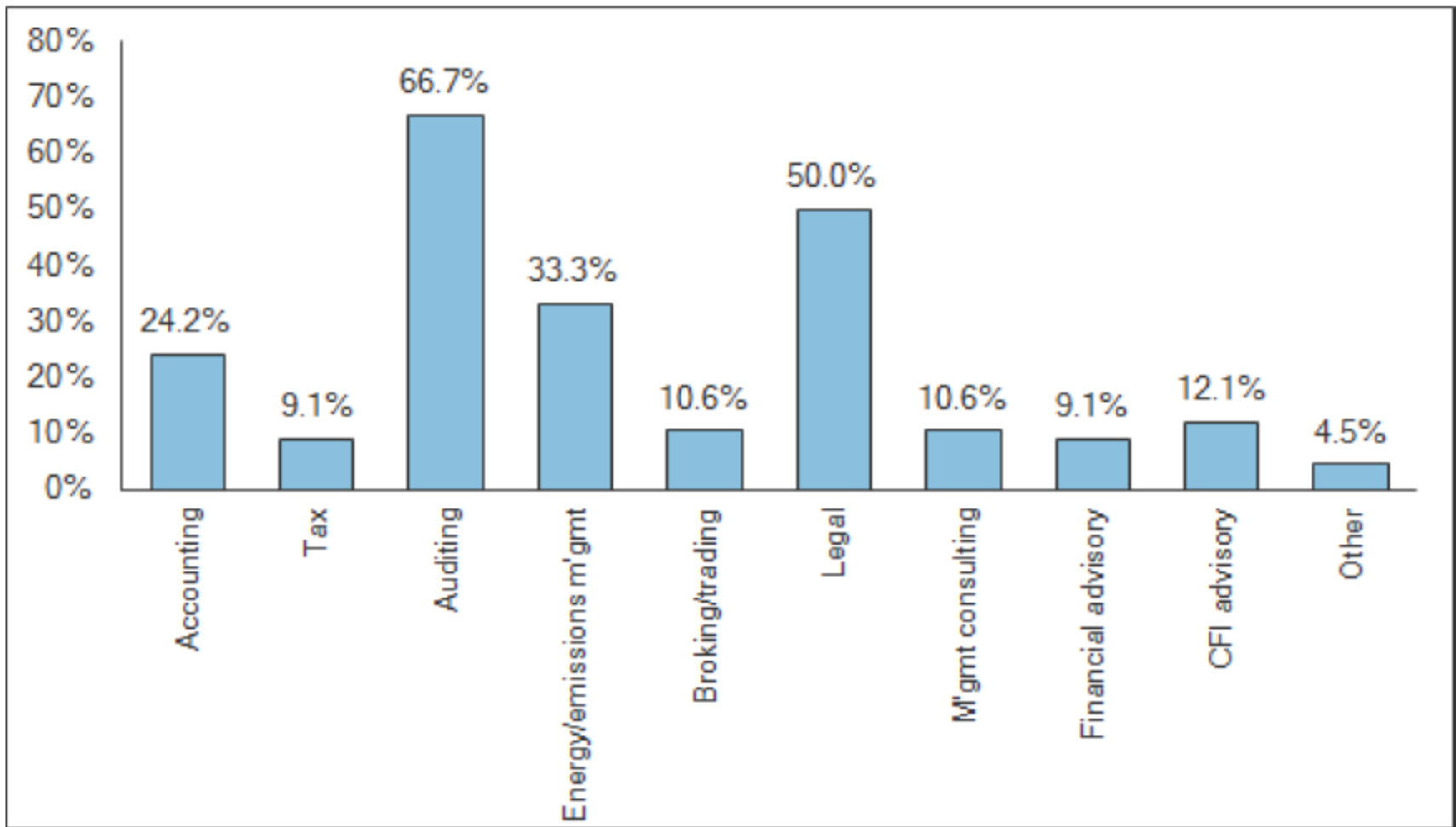
Offsets Management

Forecasting, Selection, Optimisation



The need for professional skills

- Understanding the carbon offsets options for a company requires a mix of professional skills
 - process engineering,
 - accounting,
 - legal,
 - audit, audit,
 - marketing,
- all with carbon expertise.



External professional skills used during the introduction of carbon reporting and payment in Australia



CARBON MARKET INSTITUTE

Quantifying the support needed.

- All of the major companies are captured by the carbon schemes. Early movers will be able to minimise costs and improve their competitive position within their industry.
- In Australia 300 liable entities spent average AUD\$0.5-1 million (CNY¥3-6 million) each. California similar.
- Seven trading schemes already operating in China cover about 2,000 companies; a national scheme would cover more than 10,000 companies. Each of those companies must get ready for the mandatory reporting and the carbon trading schemes... no matter if they are state owned or private companies.

What value will they add?

- Those carbon professionals will:
 - Help determine what must be reported and how it should be measured.
 - Build systems for companies so they can calculate and report their carbon emissions.
 - Find the opportunities for companies to capitalise from the new carbon schemes compared to their competitors.

Acknowledgments

Data and information in this presentation thanks to:

Resource Intelligence



Carbon Intelligence



Carbon Market Institute



International Emissions Training Association



Australian Institute of Environmental Accounting



Thank You

Questions?

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