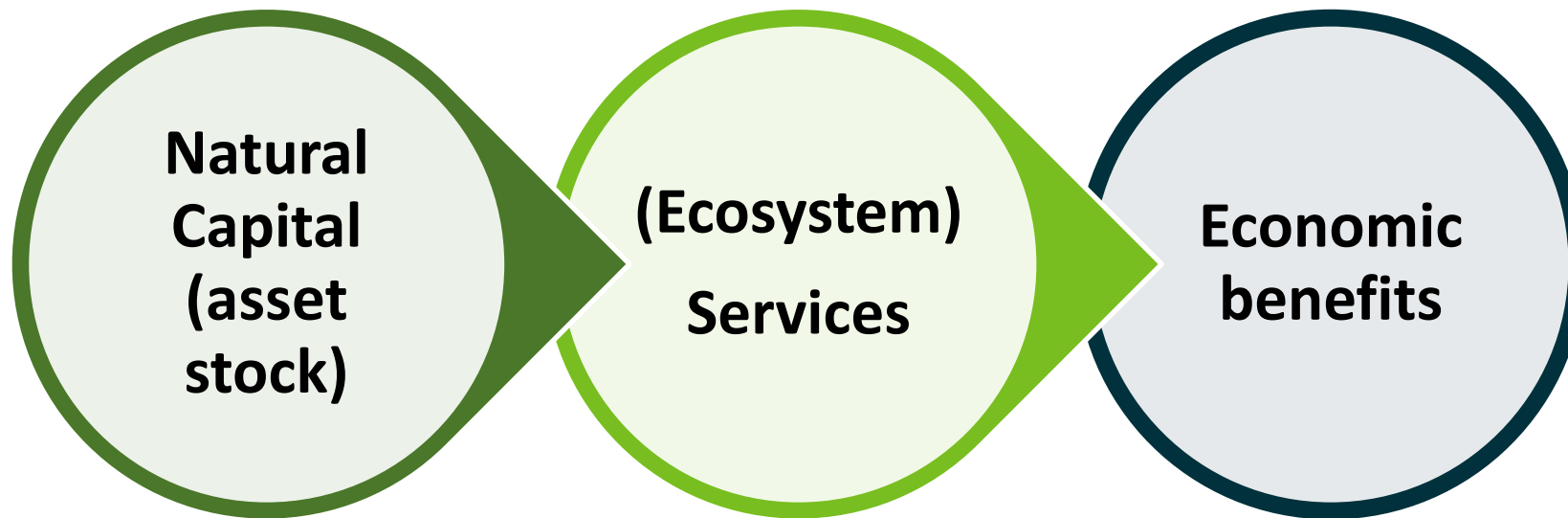


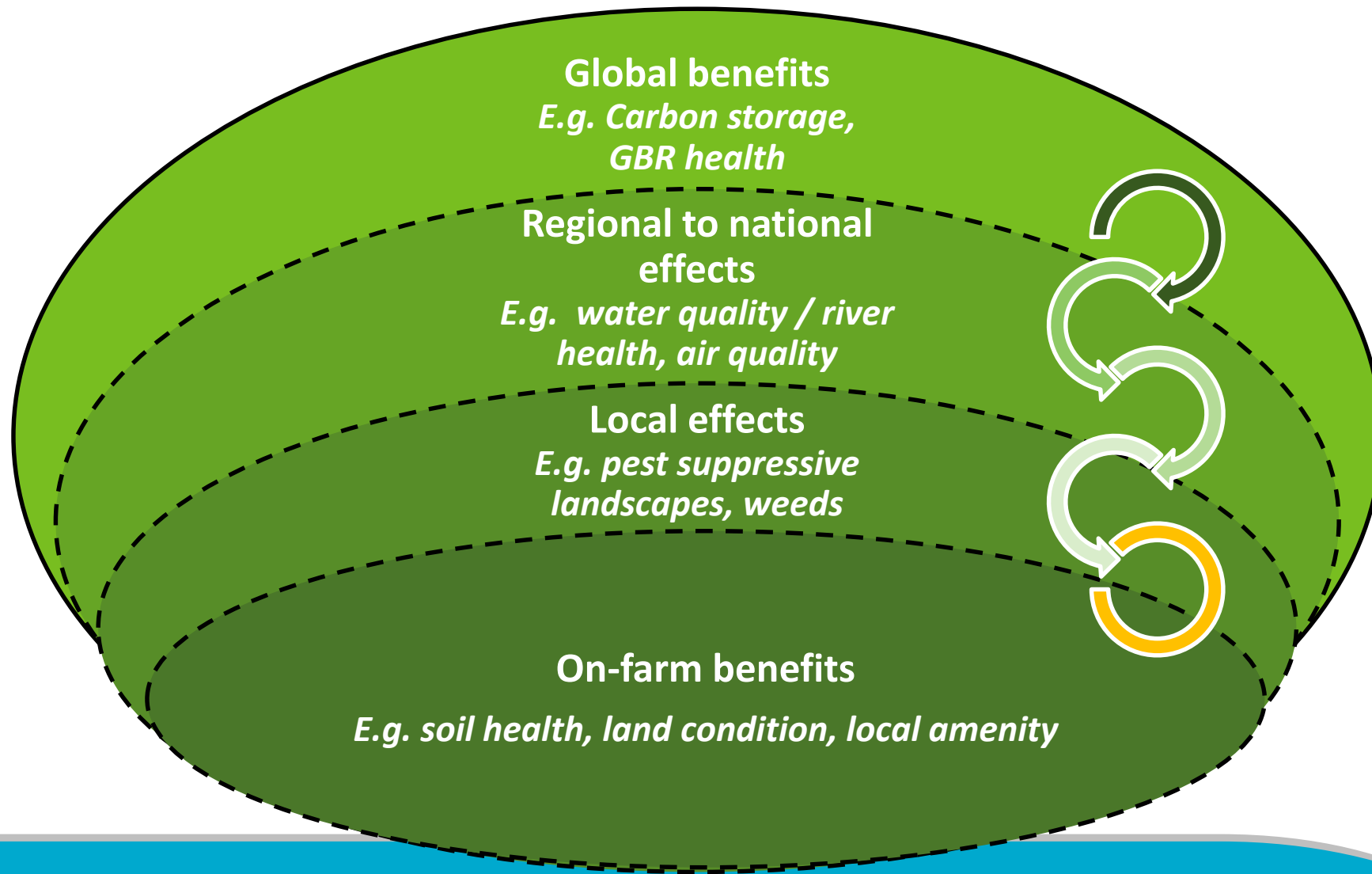


Natural Capital on farms: *Who benefits – who pays?*

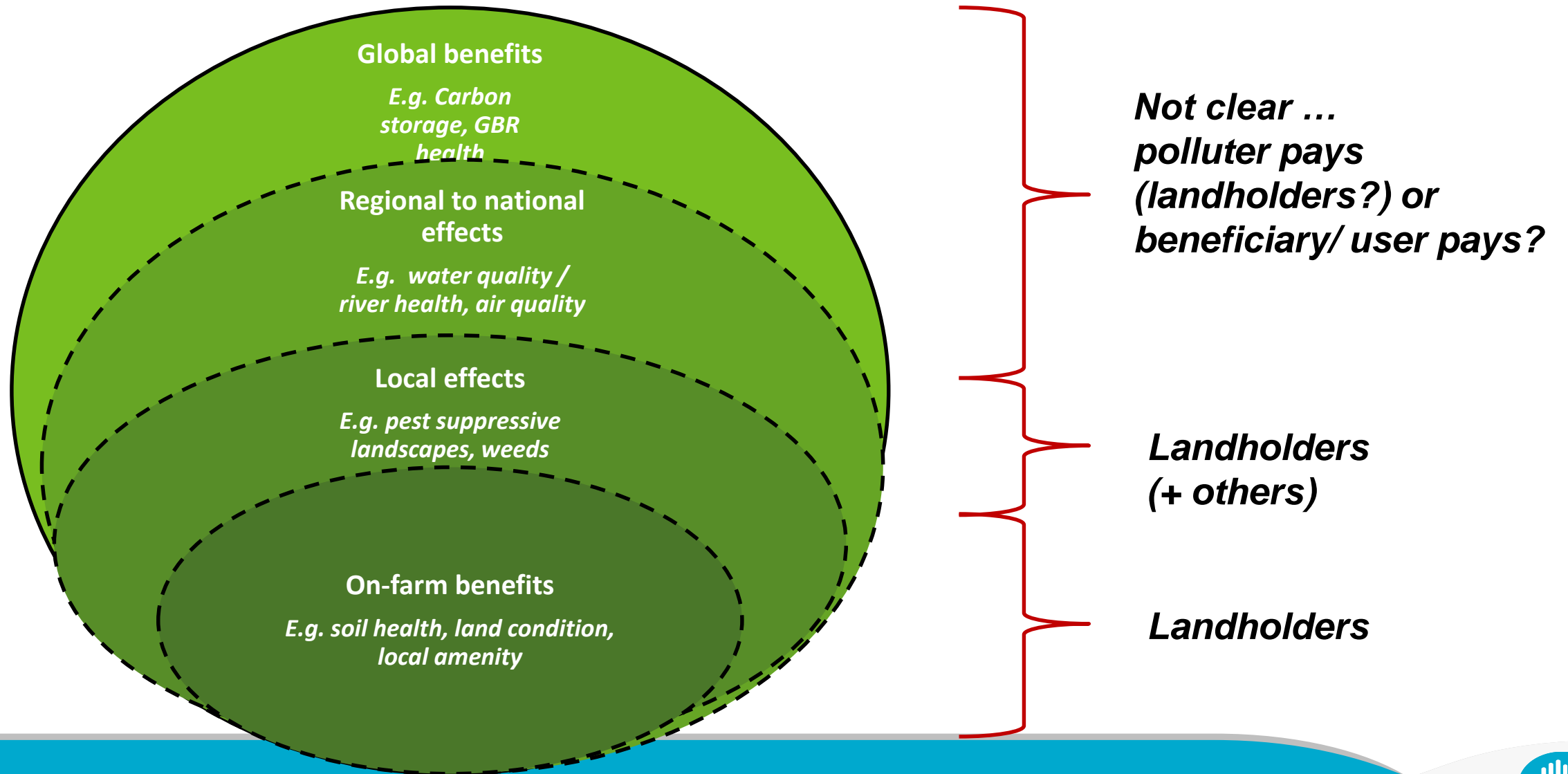
Dr Stuart Whitten



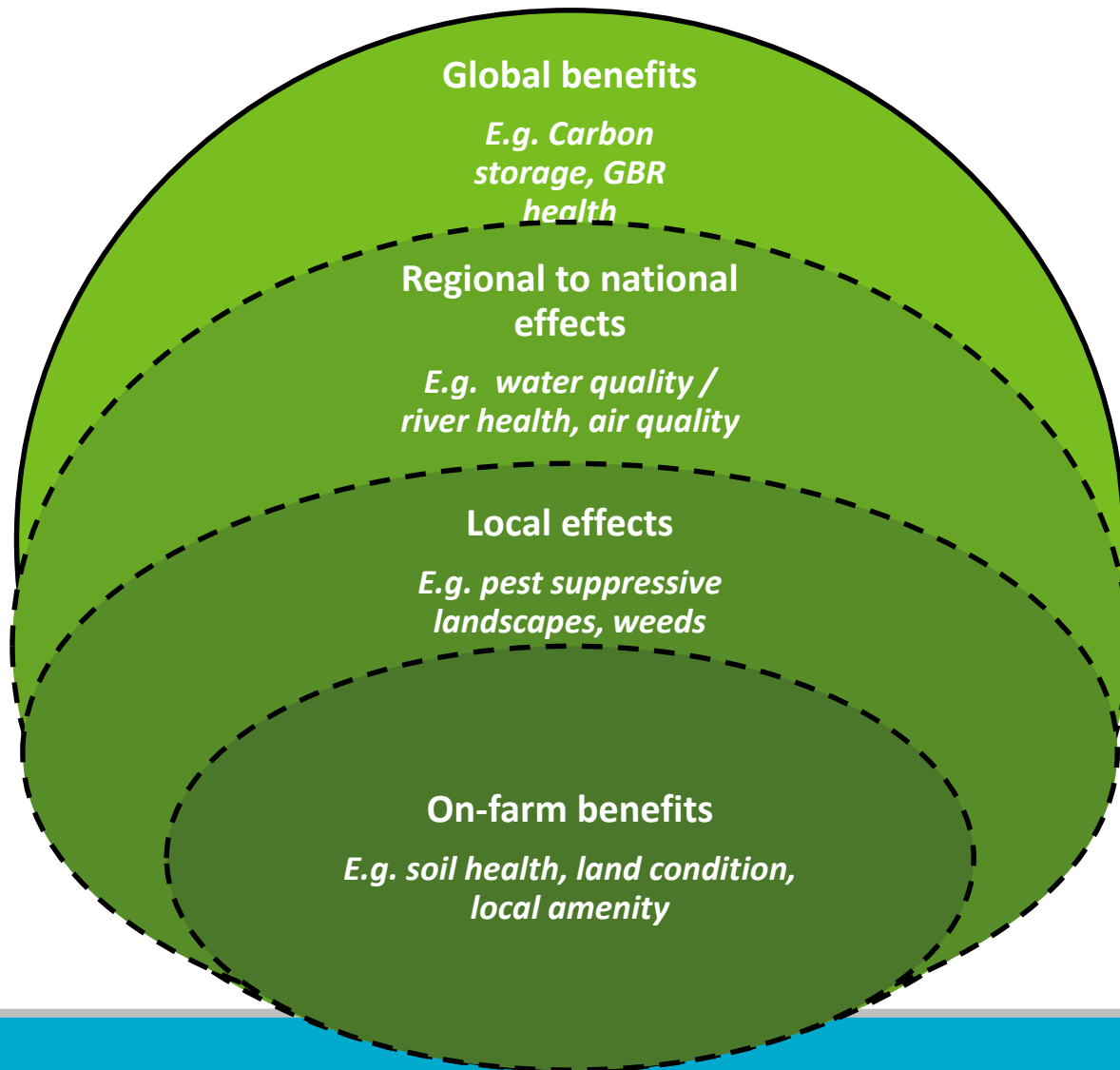
Who benefits from natural capital on farms?



Who should pay?



Existing markets?



- **Carbon (some)**
- **Water quality (Reef Credits, HRST, others)**
- **Biodiversity (offsets & tenders)**

???

Variable ...

- **Production ok**
- **Asset condition improving**

Making Natural Capital “fungible”

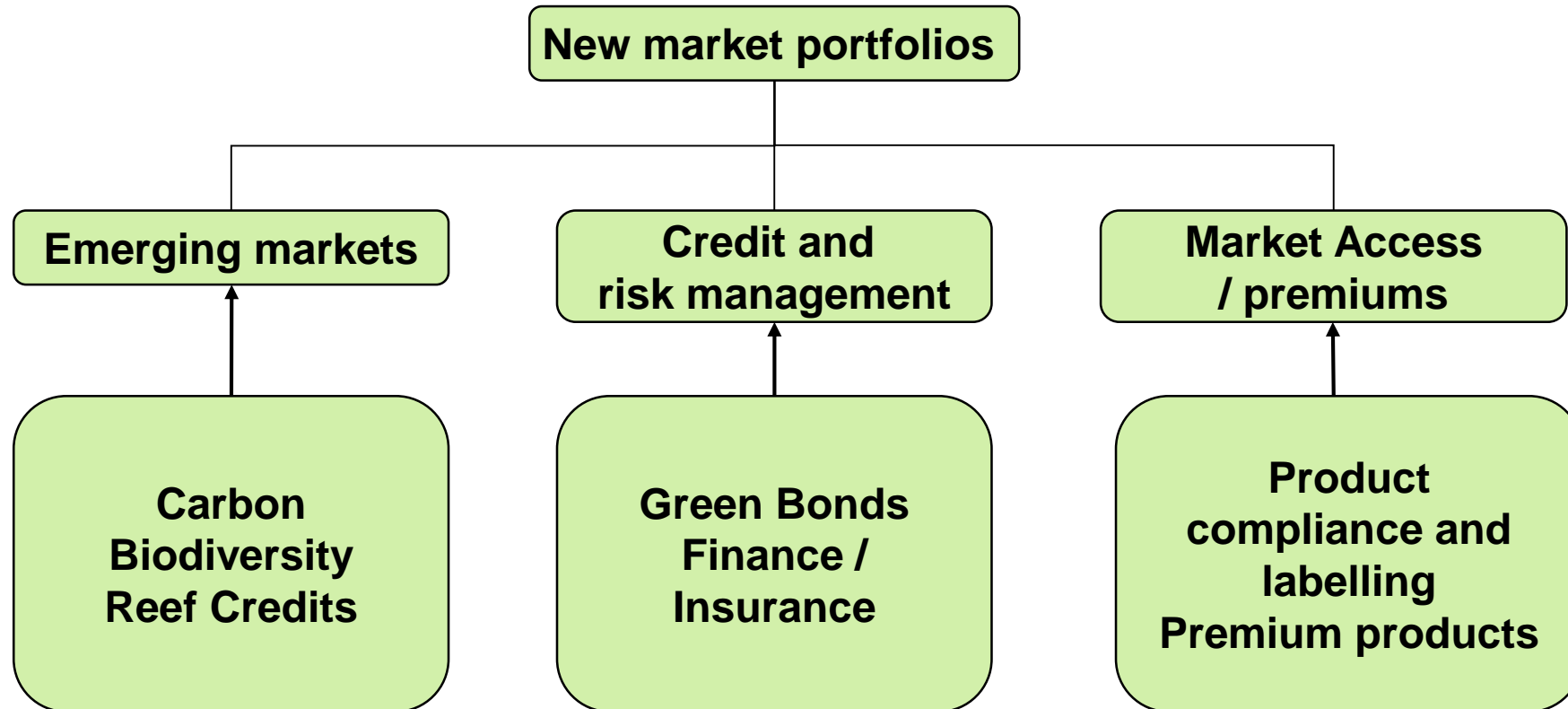
Measurement requirements: A well crafted approach to defining and quantifying NC assets and/or benefit flows:

- Relates benefits and values to source (at least assumed)
- Relevant to management at different scales
- Low cost and widely applicable / transferable
- Necessary for trades in a market (an exchange metric)

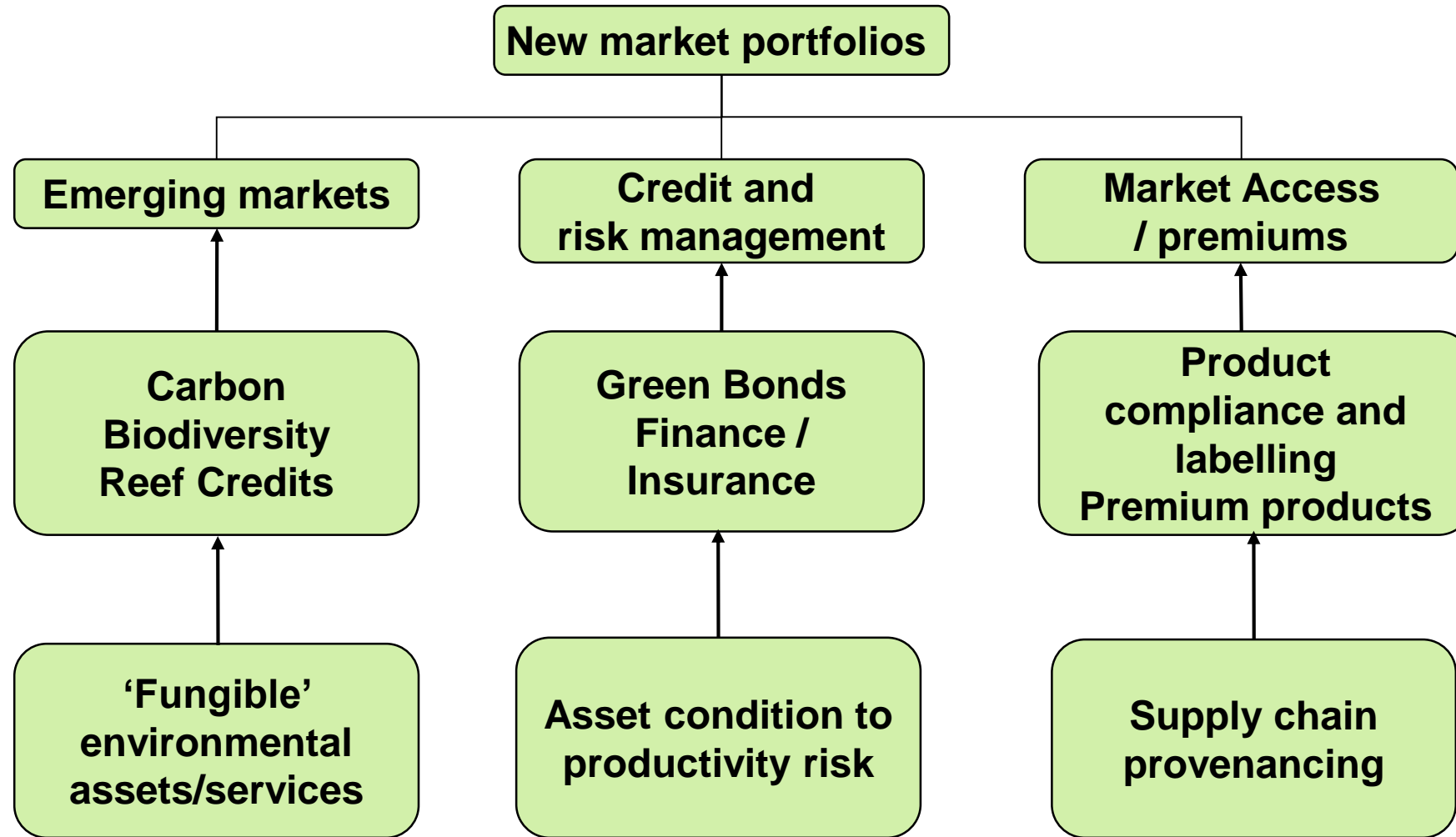
Generally the measurement (metric & process) should ideally be:

- A. Robust
- B. Repeatable
- C. Replicable
- D. Transferable
- E. Ratio-scale comparable / uniform ordinal scale

Emerging opportunities ...



Information supporting markets ...

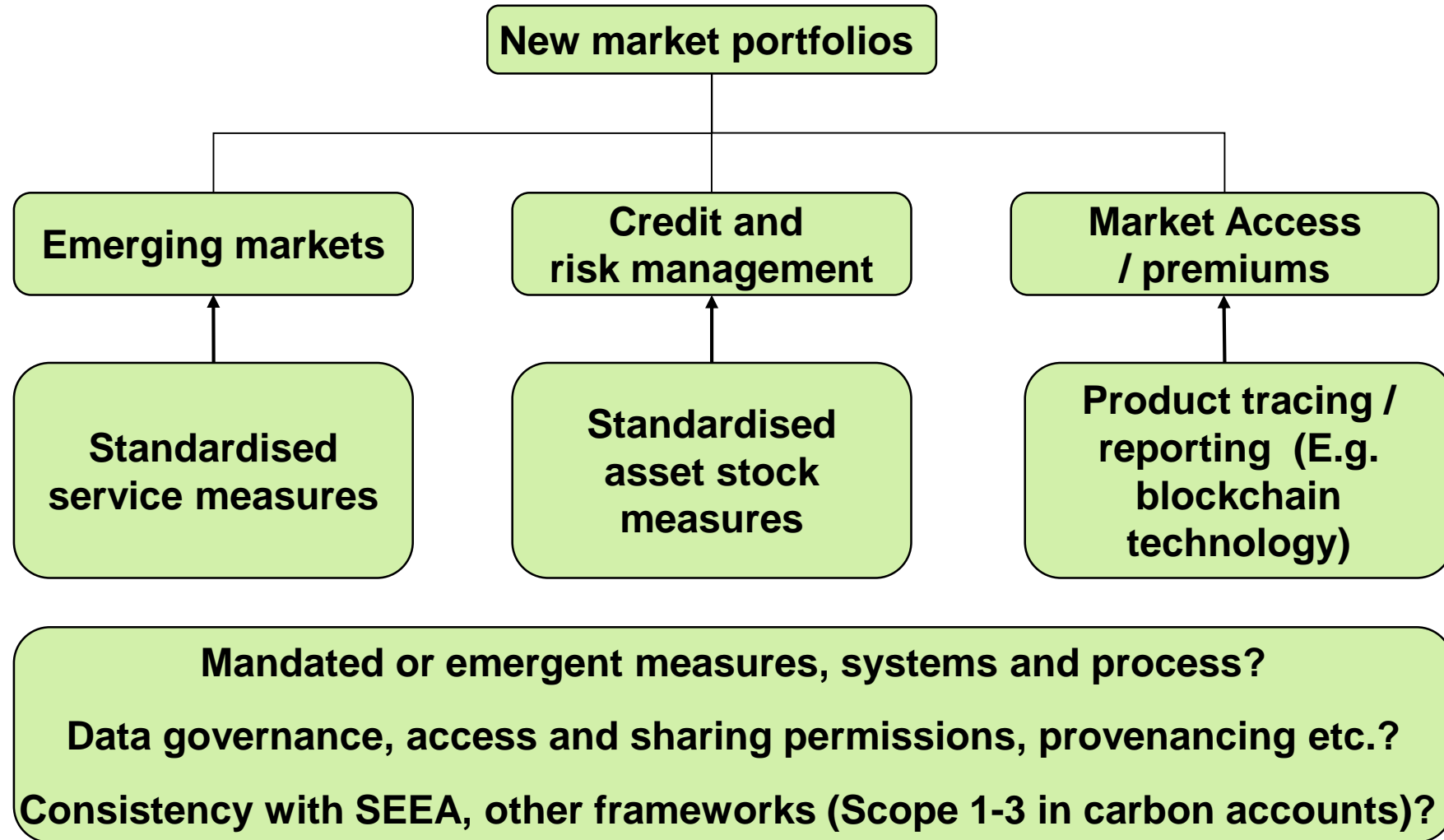


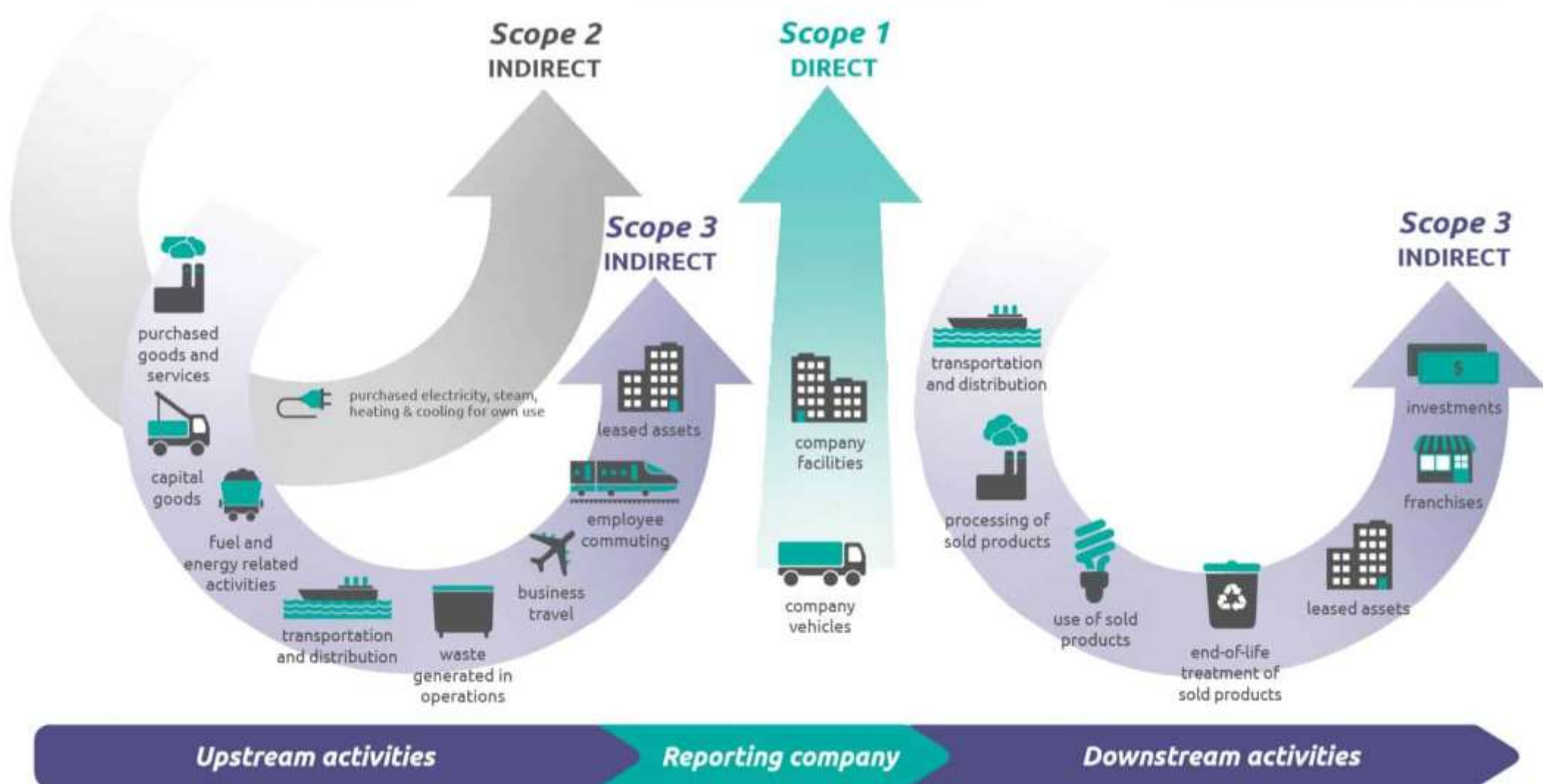
Four reasons we are interested in markets:

1. Placing positive incentives on desired outcomes
 - A focus on outcomes rather than process or inputs
2. Flexibility in individual responses
 - Selection by farmers of the response that best suit them / their enterprise
3. Encouraging cheapest effective change
 - Maximises profitability / minimises cost
4. In combination these can drive innovation
 - New and better ways to secure the future for farmers

Together these drive the “gains from trade”.

Knowledge needs ...





Dr Stuart Whitten
Senior Principal Research Economist
Sustainability Pathways
CSIRO Land and Water

Phone: +61 2 6246 4359

Email: stuart.whitten@csiro.au

Web: people.csiro.au/W/S/Stuart-Whitten