

Measuring the impact of wool production

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**MAKE THE
LABEL COUNT**

www.iwto.org

Does livestock agriculture provide eco services?



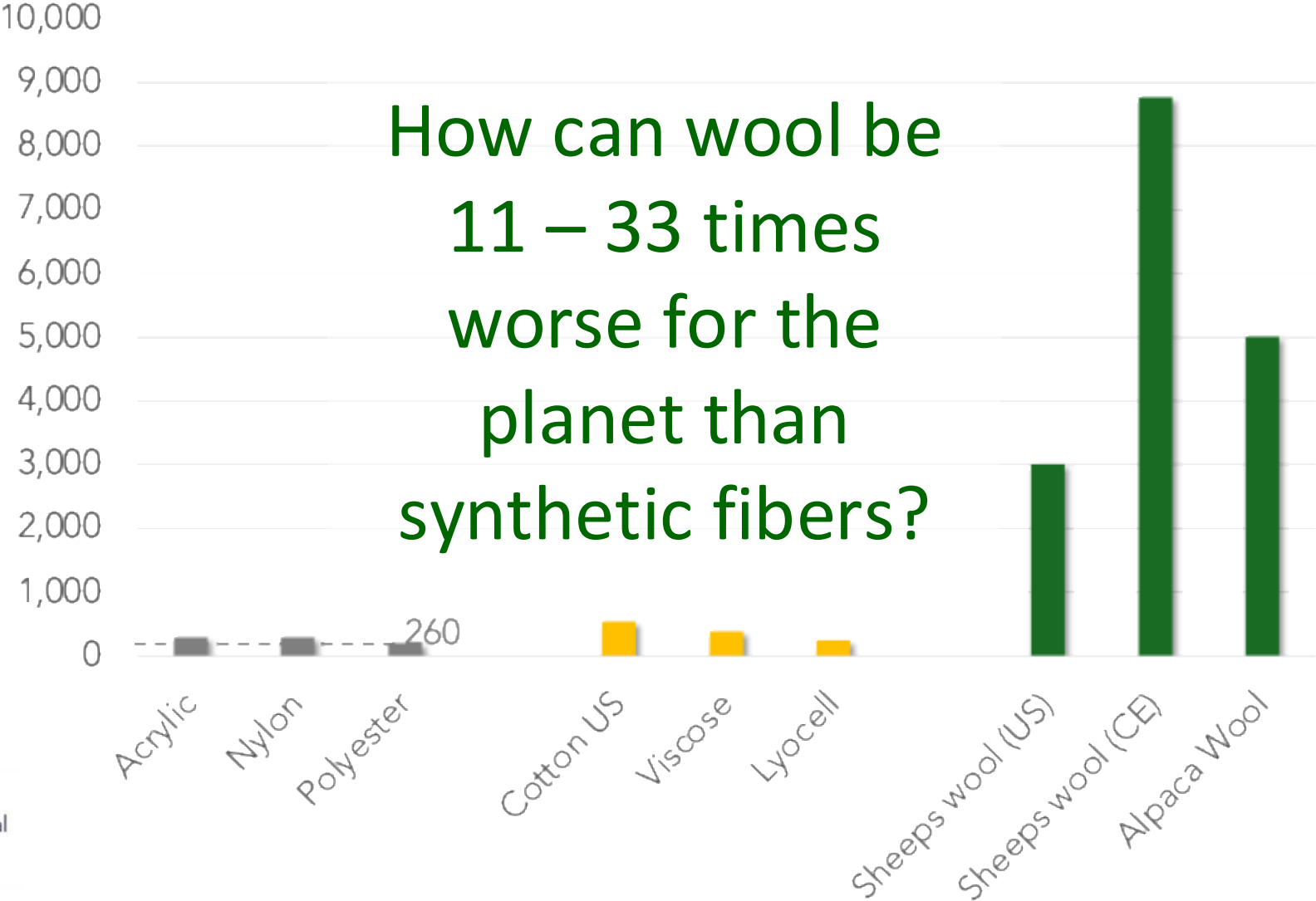
... or does it only generate damage?



Damage accounting – good business for some

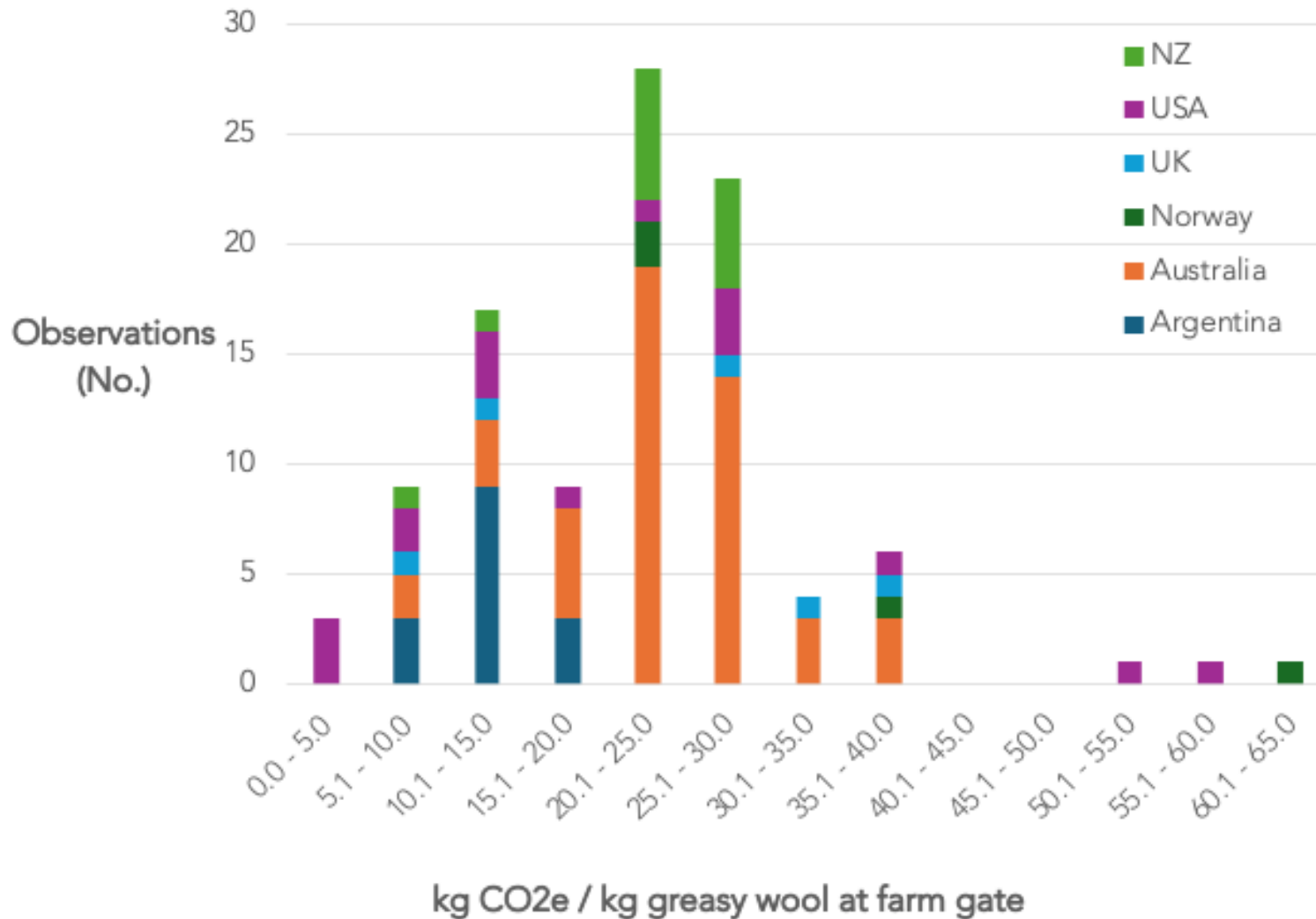
EU-PEF v3.1 Environmental damage score per lb

How can wool be
11 – 33 times
worse for the
planet than
synthetic fibers?



The carbon 'currency' has a blindspot

GhG Emission intensity of greasy wool at farm gate
(102 observations from 14 published studies)



IPCC & Kyoto generated a new currency – CO₂e units

These focus on **emissions** and require 'permanent' **removals**

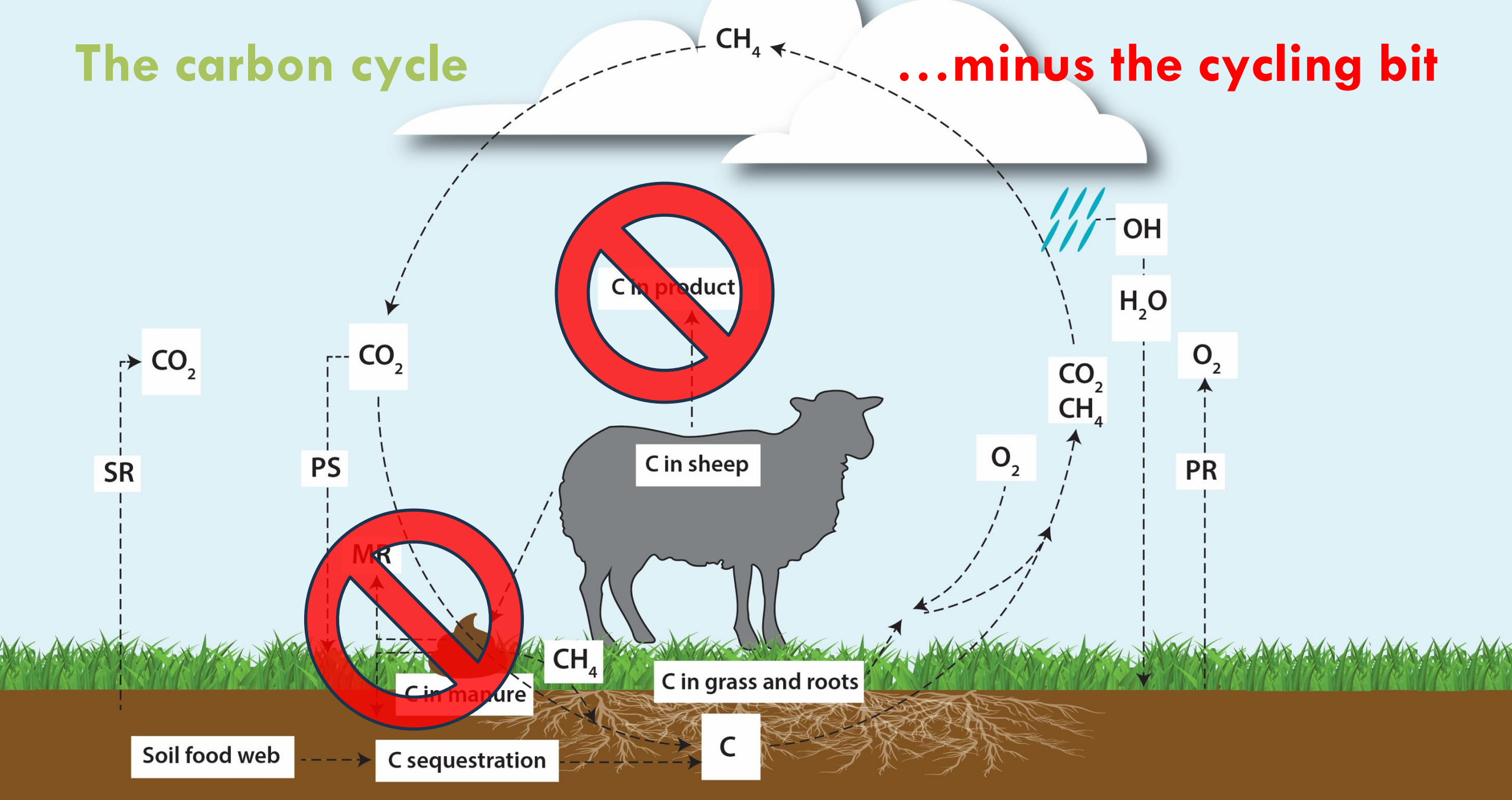
LCA typically adopt these IPCC-based rules for GhG accounting

System biology & carbon recycling (biogenesis) is devalued or ignored

Existing good farm practices which sequester carbon don't count, since 'business as usual'

The carbon cycle

...minus the cycling bit



SR = Soil respiration; PR = Plant respiration; PS = Photosynthesis; OH = Hydroxyl oxidation; MR = Manure respiration

The LCA and PEF have a paradigm problem



The Old Paradigm

Don't distinguish fossil or bio-carbons

Count all emissions as if new and permanent, any only count permanent (biologically inert) removals

Only count biogenic content in products if permanently stored

Reference Standards:

ISO14040:2006, ISO14044:2006
PAS 2050:2011

VS.

The New Paradigm

Differentiate fossil and bio-carbons

Account for ALL carbon flows, determine materiality, define emissions as 'withdrawals' of varying permanence

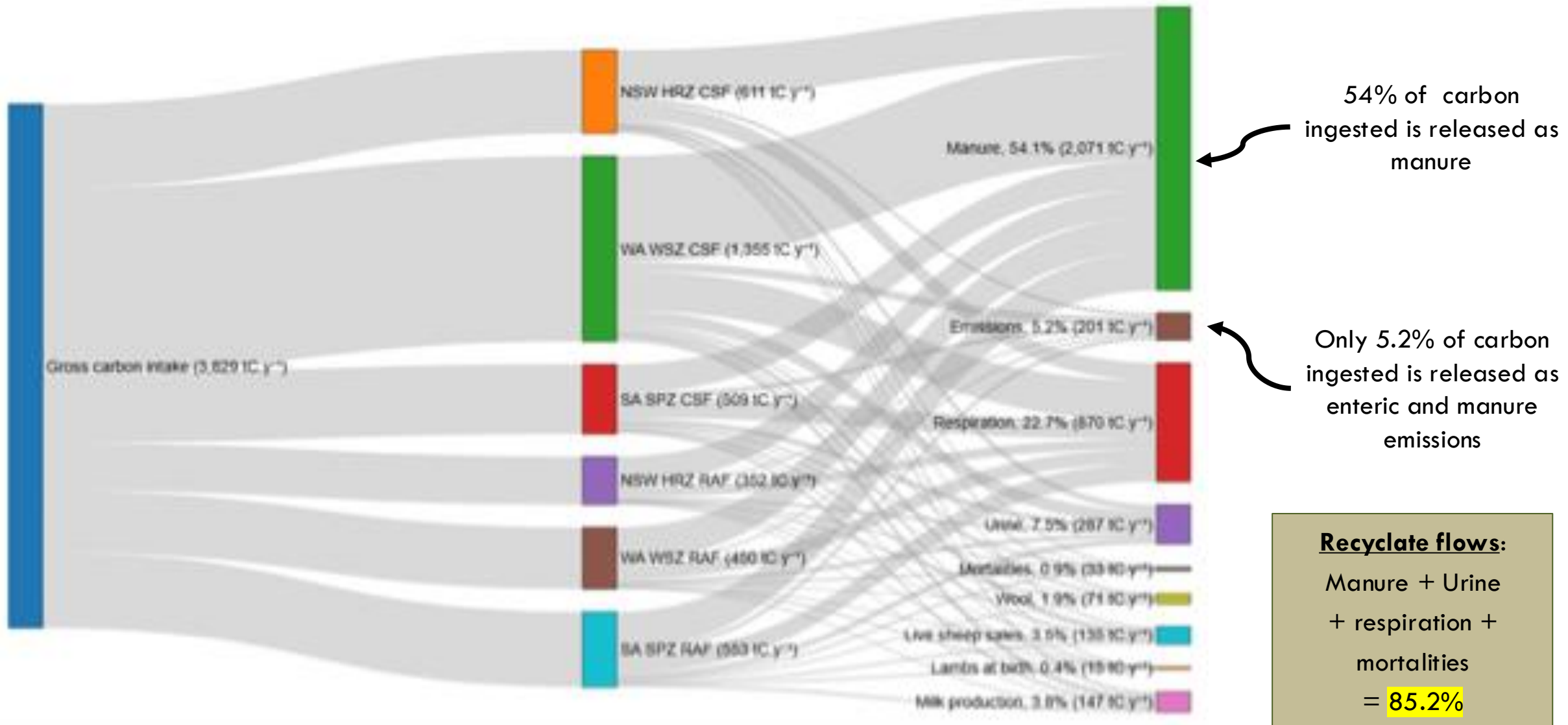
Calculate and report biogenic content in intermediate products separately

Reference Standards:

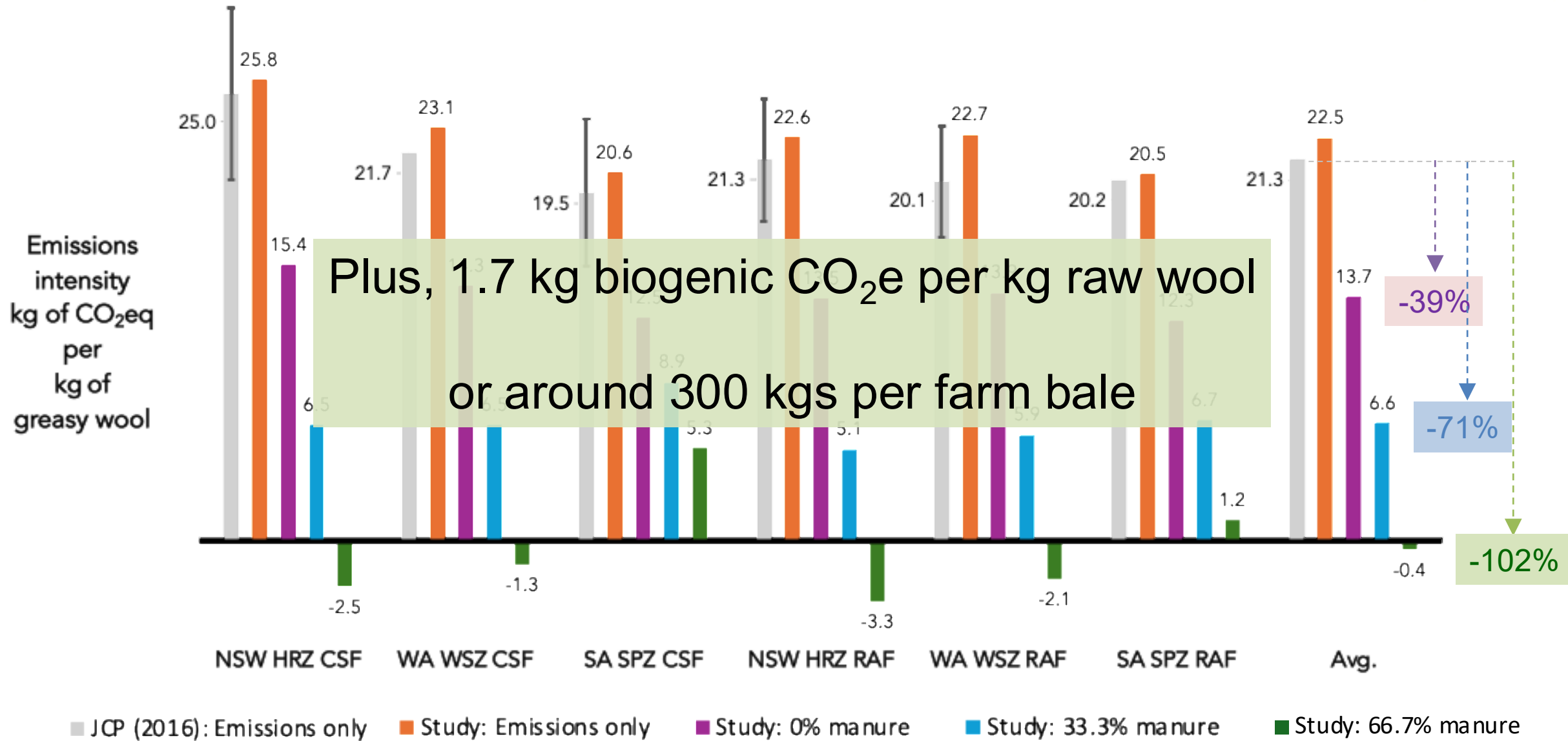
EN16575:2014, EN16760:2016,
ISO14067-2018, EN18027:2025



Paper 1: Mapping carbon flows across & within farms



Biogenic flows can dramatically lower emission intensity



Global case studies are underway



 10 farms

 3 farms

- Initial paper (6 published cases)
- Completed commercial case studies
- In-progress or planned

 6 farms

 5 farms

 4 farms

 6 farms

Partnerships with other sectors, including Dairy, Leather, underway

Strategic implications



For Policy-makers

- Recognise clear & present risks of PEF-sanctioned greenwashing
 - Encourage balanced scorecard reporting (+/-) and bio-accounting
-



For Brands & Sourcing

- Seek and report biogenic content, and product biodegradability
 - Prioritize farms that maximise soil health, manure retention, and biodiversity
-



For Product Designers

- Choose life-fibers (high biogenic content)
 - Design for biodegradability, re-use, recycling (insulation)
-



For agricultural industries & organisations

- See this as an overdue opportunity, move quickly to measure and report
- Collaborate across sectors and communicate.



Thank you!

