

Photo: Carl Davies, CSIRO



www.csiro.au

Water footprint as part of a “footprint family”

Sustainable Agriculture Flagship

Brad Ridoutt

WULCA, SETAC Europe, Sunday May 12, 2013

National Research
FLAGSHIPS



So many footprints...what do they mean?

Emission footprint Food to energy footprint Work environmental footprint
ecological footprint Social footprint Grazing land footprint Economic footprint
Corruption footprint Environmental footprint Climate footprint Job footprint
water footprint
Online social footprint GHG footprint CO2 footprint
carbon footprint Forest footprint Financial footprint
nitrogen footprint Water pollution footprint GWP footprint
Waste footprint Land use footprint Water availability footprint
Methane footprint Chemical footprint Water scarcity footprint
Biodiversity footprint Exergy footprint
Blue water footprint Human rights footprint Water stress footprint
Phosphorus footprint Human footprint
Green water footprint Fishing grounds footprint Energy footprint
Wind energy footprint Crop land footprint Nuclear energy footprint
Grey water footprint
Solar energy footprint Built-up land footprint Renewable energy footprint
Fossil energy footprint Agricultural land footprint
Health footprint Land footprint Poverty footprint

If our vision is “A world where life cycle approaches are mainstreamed”...
...guidance on defining and developing LCA-based footprints is needed

- Footprints are the means of communicating LCA information to the mainstream: i.e. remote and non-technical audience
- Footprints not grounded in LCA are problematic:
 - Environmental relevance?
 - Double counting
 - How to make sense of multiple footprints
 - Results may contradict LCA
- Footprints are not just new names for existing impact category indicators
- Universal footprint definition needed
 - Differentiation from typical life cycle impact category indicators
 - Guidance to support evolution of coherent footprint indicators in support of our vision
- Risks of not acting
- Reference: Ridoutt and Pfister 2013 *Towards an integrated family of footprint indicators*. *Journal of Industrial Ecology* (DOI: 10.1111/jiec.12026)

Brad Ridoutt

Principal Research Scientist

Phone: +61 3 9545 2159

Email: brad.ridoutt@csiro.au

web: www.csiro.au/org/SAF-overview.html

www.csiro.au

Thank you

Contact Us

Phone: 1300 363 400 or +61 3 9545 2176

Email: Enquiries@csiro.au **Web:** www.csiro.au

National Research
FLAGSHIPS

