

Standardisation: Synergies and conflicts between global, regional and sectorial standards - example PEF and OEF

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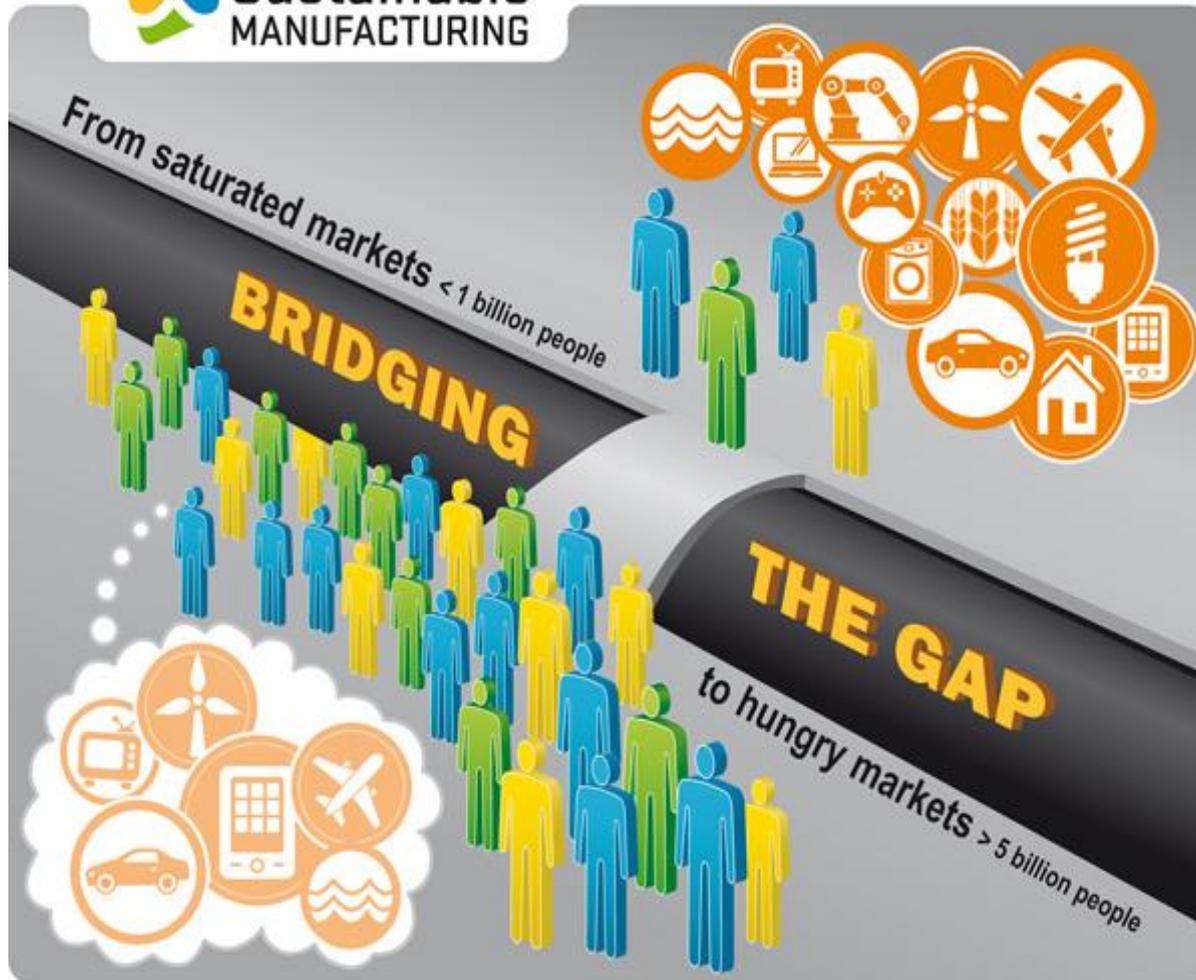


1. Motivation
2. International Standards
3. PEF and OEF
4. Summary and conclusion

The Challenge



Sustainable prosperity for everybody?!



Challenge:

How to design and manufacture products that increase human well-being globally within the limits of resource availability?

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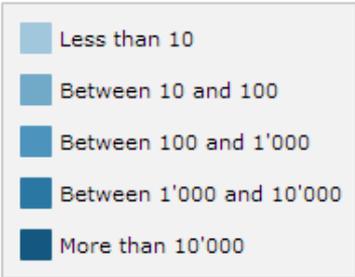
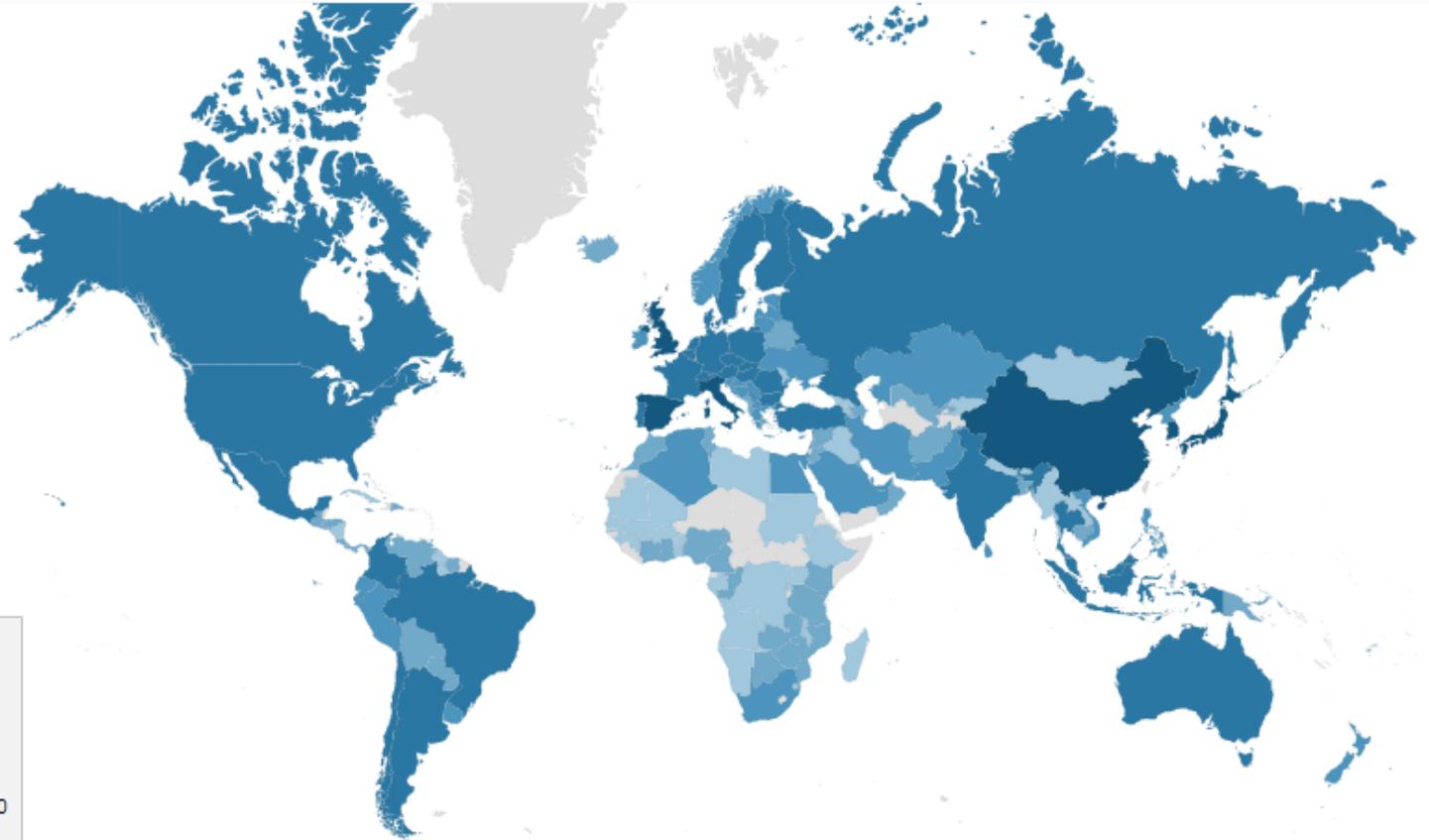
- International Organization for Standardization (ISO) is the world's largest developer of international standards and was founded 1947.
- Whatever the country, whatever the language, it is always ISO (from the Greek “isos” - equal).
- ISO is a network of national standards bodies of 161 countries - including > 100 developing.
- ISO has liaisons with over 700 international and regional organizations including UNEP and FAO.
- **ISO represents 98% of world GDP and 97% of world population.**



World distribution of ISO 14001 certificates in 2012

300.000 organizations

167 countries



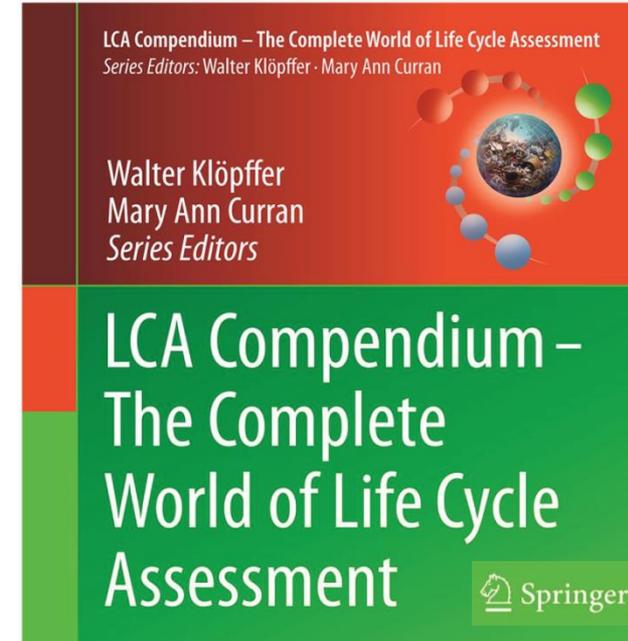


Chapter 3 The International Standards as the Constitution of Life Cycle Assessment: The ISO 14040 Series and its Offspring

Matthias Finkbeiner

Based on these classical LCA standards 'new' approaches were developed recently which have led to some spin-off-standards. They cover issues like the:

- **'single-issue-LCAs'** like carbon footprinting (ISO 14067) or water footprinting (ISO 14046),
- **'beyond environment-LCAs'** like life cycle costing, social LCA and eco-efficiency assessments (ISO 14045) or even life cycle sustainability assessments,
- **'beyond product-LCAs'** like scope 3 type LCAs of organisations (ISO 14072) or sector-based IO-LCAs and
- **'beyond quantification-LCAs'** like type III environmental product declarations (ISO 14025) or other types of environmental labels and claims.





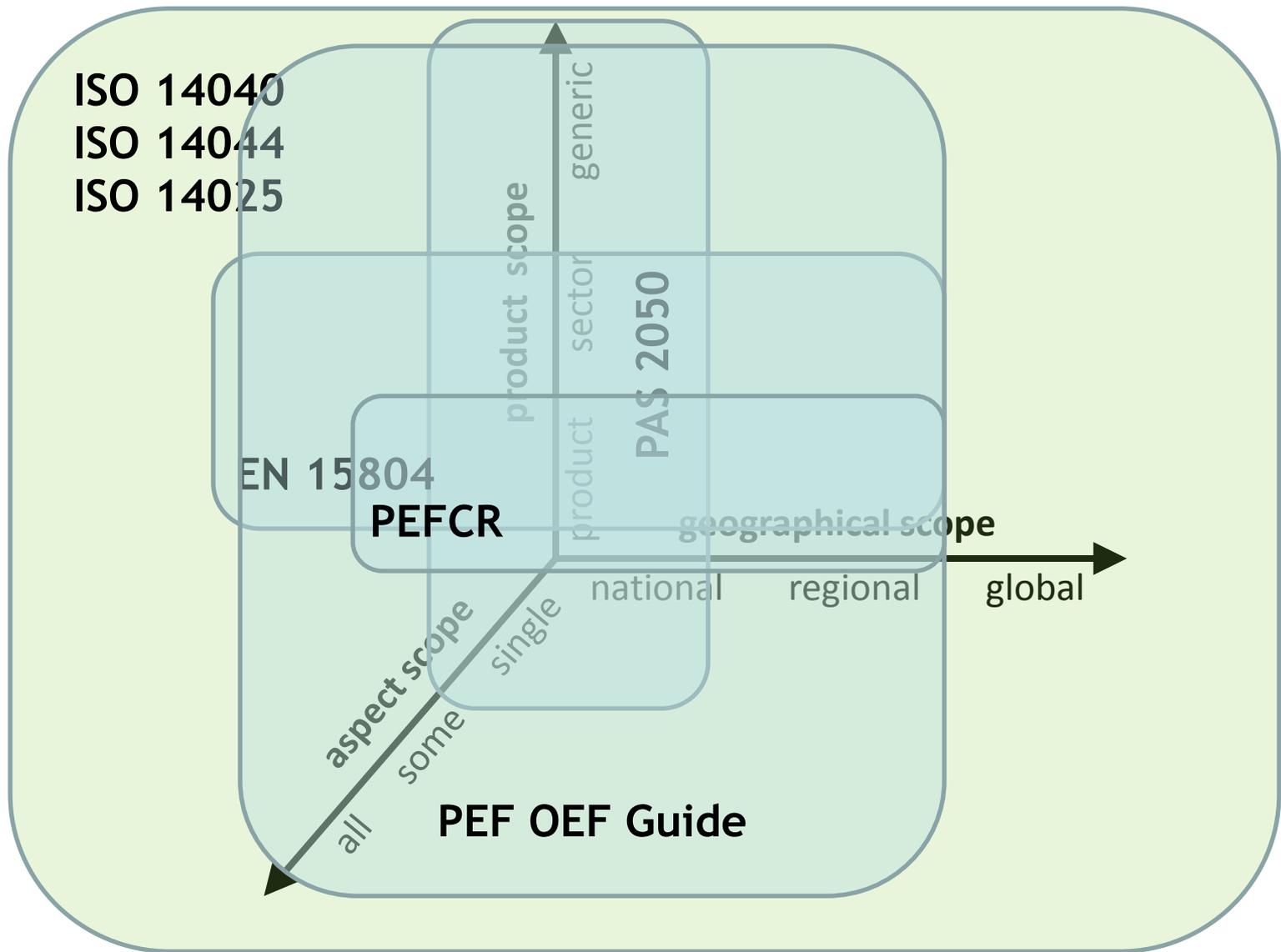
- Second generation - last revision dealt with 1900 comments, which were consensually resolved.
- project completed with unanimous vote, i.e. there is full global stakeholder consensus on ISO 14040 and ISO14044!
- All related, relevant standardization activities basically follow them.
(unfortunately, EU's PEF/OEF do not!)
- While the standards are sometimes criticized by some stakeholders (especially from academia) for not being specific enough on certain issues, they do represent the global consensus on those methodological features for which such a consensus exists.
- More specific stipulations on, e.g. allocation procedures or a default set of impact categories, might be desired by some stakeholders, but there is no global stakeholder consensus on it.
- It makes no sense to blame the standards for this, as it is the natural result of the very democratic procedure to develop an ISO standard.



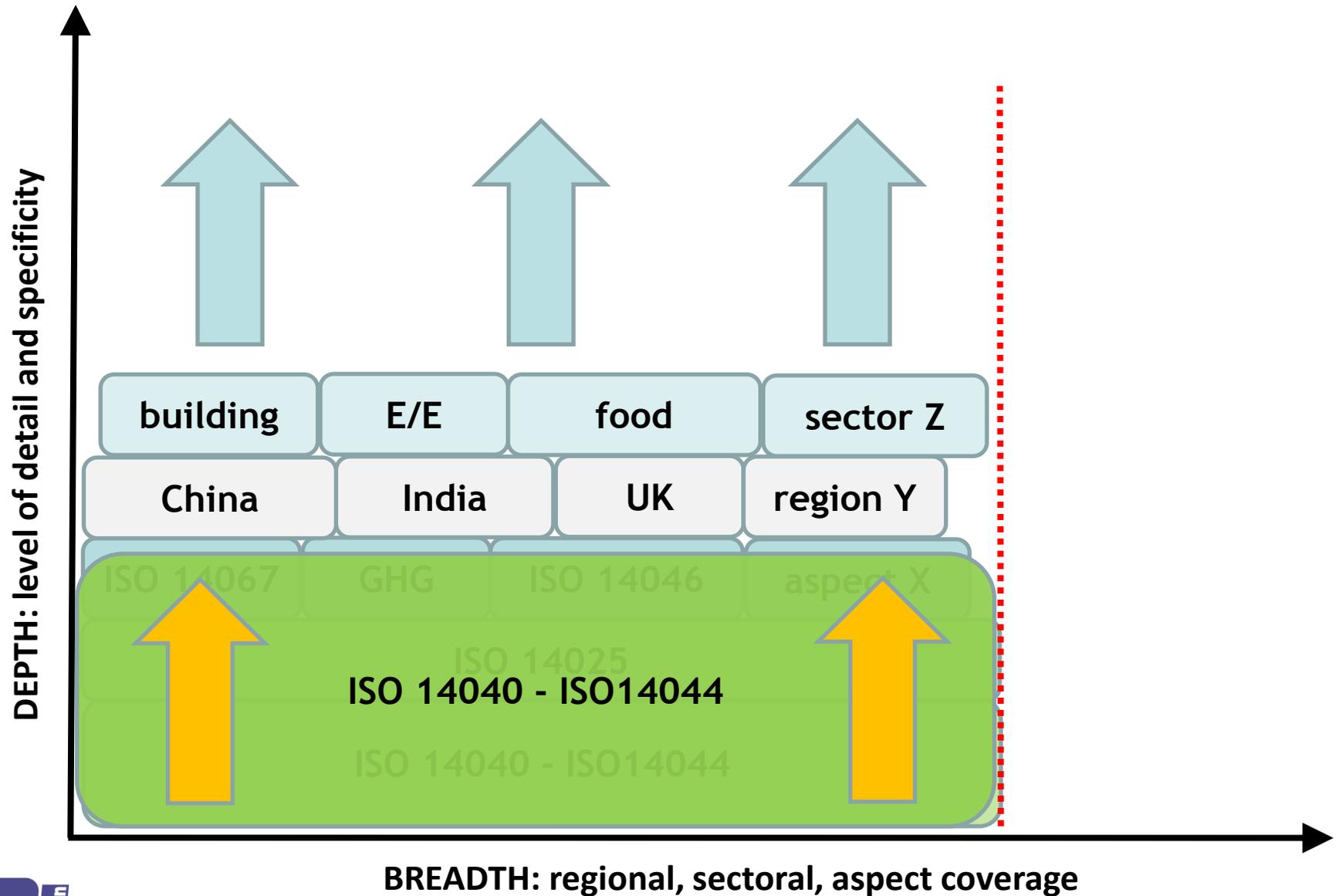
- “The [ISO] work [] is crucial for international trade.”
- “If, at the technical level, countries speak a different language, then [market access] opportunities disappear.”
- “In fact, it is the very reason that [...] key WTO Agreements explicitly urge regulators to base their measures on relevant international standards to avoid unnecessary barriers to trade.
- These Agreements go as far as to say that measures that are based on relevant international standards are assumed to be in compliance with WTO rules.”

Pascal Lamy
Ex-Director General
WTO
New Delhi
(2011)

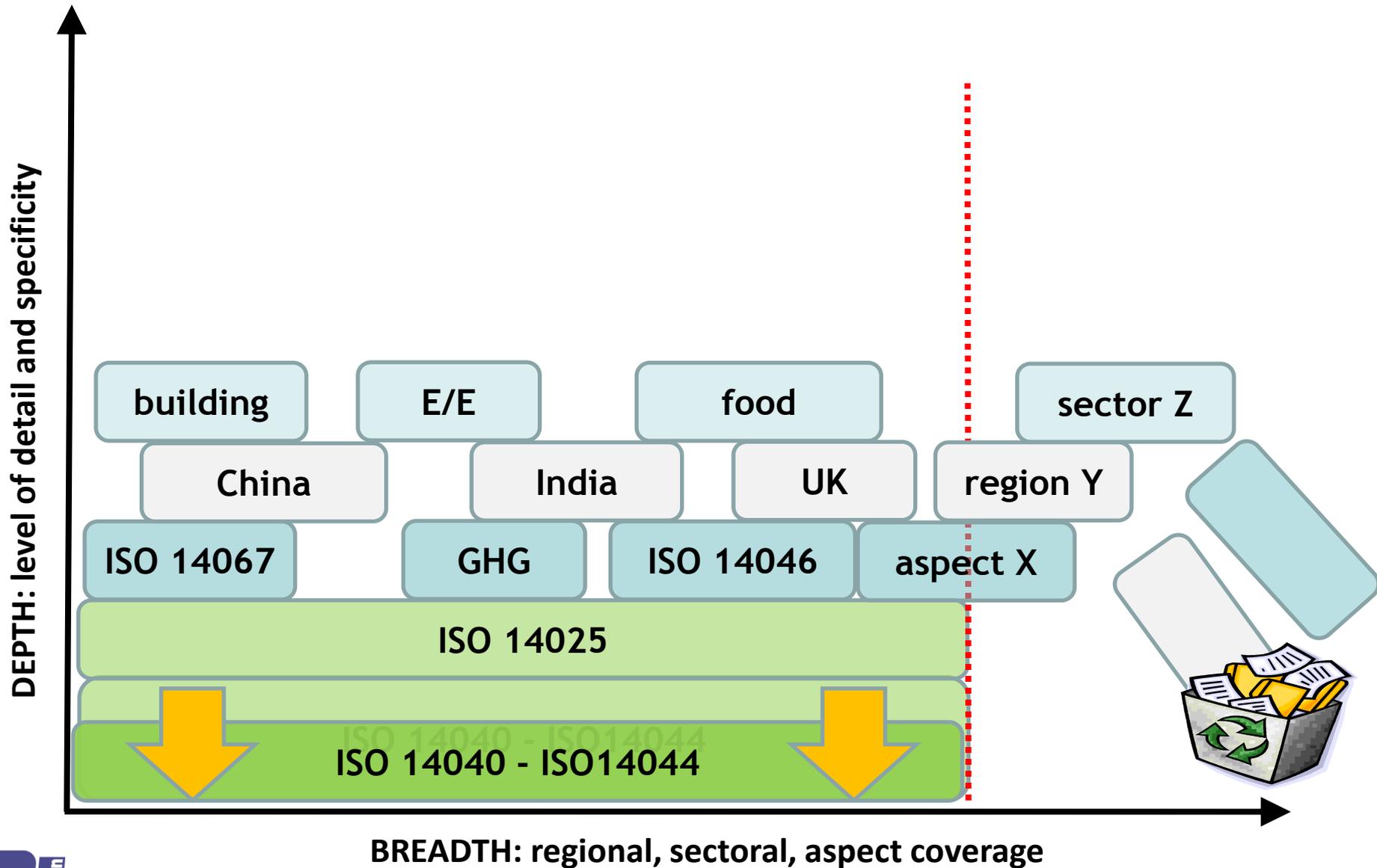
Relation between global, generic and national/regional, sector and aspect specific standards



Synergies between global, generic and national/regional, sector and aspect specific standards



Conflicts between global, generic and national/regional, sector and aspect specific standards





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EDITORIAL

Product environmental footprint—breakthrough or breakdown for policy implementation of life cycle assessment?

Matthias Finkbeiner



17th January 2014

Position paper

by

Technische Universität Berlin - Department of Environmental Technology - Chair of Sustainable Engineering

on behalf of

The German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety
The German Federal Environment Agency

- ...
 - PEF/ OEF need to commit to conformity with international standards, especially ISO 14040/44. Building harmonization on the solid foundation of ISO 14040/44 may work; harmonization against ISO 14040/44 will lead to proliferation, confusion and mistrust.
- ...
 - PEF/ OEF need to refrain from adding unrealistic requirements, burden and cost to LCA application for business and SMEs without adding value, e.g. by the data quality assessment scheme and the restriction of cut-offs.
- ...
 - PEF/ OEF need to refrain from the approach to fix a certain set of value choices as solution for achieving comparability. These “pseudo-solutions” (e.g. recycling allocation, weighting, product classification) do not even achieve full reproducibility. PEF/ OEF may support comparisons, but cannot replace the responsibility of any user to make its own informed choice.
- ...

Harmonization and comparability: by simply fixing value choices?

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Harmonization and comparability: by removing uncertainty with fixing the „truth“?

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Harmonization level and LCA quality of current pilots is not yet any better than existing good practice!



- All pilots use more than the required 2 (or 3)-digit CPA/NACE code: mostly 4-digit code (e.g. Paper, Pipes), also 5-digit codes (T-Shirt) or 6-digit codes (Detergents). Some pilots introduce several subgroups, one pilot (Non-leather-shoes) defines an own product category.
- Non-leather shoes are defined as having “less than 49% of the upper made of leather” → remember the salad cartoon!
- The treatment of life cycle stages is inconsistent. Some pilots fix the use phase for all products (e.g. Detergents, T-Shirt) which means, that all products have the same burden while other pilots take into account the specific use phase performance of products (e.g. Batteries). Some pilots include the “hot water” in the use phase (e.g. Detergents, T-Shirts) others do not (e.g. Pipes).
- The representative products are defined in completely different ways.
- So far, none of the newly developed PEFCR parts represents a significant improvement over existing PCRs based on existing international standards. There is more piecemeal than harmonization and the scientific or technical quality is not higher, sometimes lower than existing LCA practice.



- **HOPE:** EU as saver with PEF/OEF as the universal remedy for the poor and flexible LCA standards?
- **RISK:** PEF/OEF as just another example of over the top EU bureaucracy, of how standards proliferate and as an alibi to lower global consensus?



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- ISO 14040/44 are the constitution of LCA and should therefore be respected and protected by everyone.
- There are synergies with national, regional, aspect and sector specific standards as long as they are not in conflict with the constitution of LCA.
- There are trade-offs between the level of detail of harmonization and the amount of stakeholders that support it.
- We do not need an LCA „dictatorship“ of the one and only „right“ way to do it as there are many ways for decent and effective use of LCA. LCA is a tool („useful or not“), not a religion („good or bad“)!
- Continuous improvement by LCA implementation of different actors in all parts of the world and for a variety of applications is more important than polishing the sophistication level at the communication tip of the ‚iceberg‘ (of the rich)!
- There is no scientific truth for value choices! Reality is complex, not LCA!
- Fixing value choices/realities does not support comparability and relevance, just reproducibility. Making it ‚simple‘, means making it subjective and biased!



- We are half a billion people in the EU and there are 3 billion in BRIC.
 - EU emits 1000 million tons of GHG per year, China soon 10000 million tons.
- achieving a 5% impact reduction there helps more than 30% or 50% over here!

Thank you!

"Our world has enough for each person's need,
but not for his greed."

Mahatma Gandhi



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