



FC-Hy Guide

Training Course

**29 September 2011,
Bologna**



***Research Centre
E. Clementel***

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Time	Topic	Content
9.00	Registration	Delegate package with: - Tag name - list of participants and instructors - Guidance document - Paper and pen - Attendance certificate
9.30	Welcome, goal and scope of the day	Description of the project FC-HyGuide, its relations with LCA standards and FCH JU calls.
9.45	The ILCD Handbook and Data Network	Brief introduction and general overview
10.00	FC Hy Guide documents and annexes	Brief description of the Guidance Document "Performing Life Cycle Assessment for Hydrogen and Fuel cell technology", its content and annexes
11.00	Coffee break	
11.20	Application of the FC Guide (Guidance Document for Fuel Cells): examples	Examples of how to meet the provisions of the Guidance Document for Fuel Cells. Interactive session with work in groups. Plenary discussion
13.15	Lunch in ENEA's cafeteria	



<i>Time</i>	<i>Topic</i>	<i>Content</i>
14.00	Hydrogen case study	Examples of how to meet the provisions of the Guidance Document for Hydrogen production.
15.30	Data collection template	Guided tour
16.00	Coffee break	
16.20	ILCD editor for the preparation of ILCD compliant data sets	Guided tour
16.40	Wrap up and Questions & Answers	
17.00	Closure	

- **Our goals:**
 - Introducing the FC-HyGuide project and the (almost) final version of the guidance document (not approved yet by the EC)
 - Provide you with a sort of road map of the FC-HyGuide document and annexes, which has to be used for all upcoming LCA activities within the FCH JU
 - Enable a correct and effective use of the developed documents and support tools (templates and examples)
- **Our Expectations:**
 - Comments, questions and discussions → Strong interaction
 - Constructive feedback.
- **Agenda is indicative** as we will adapt the lessons to your reactions

The problem addressed

- The Fuel Cells and Hydrogen Joint Undertaking (FCH-JU):
 - *“Sustainability is a key driver of the FCH JU activities and it is necessary to assess the new developments towards these goals. **Life Cycle Assessment will therefore be applied throughout the FCH JU on a programme level.**”*
- However, the main critics addressed to LCA are:
 - **Weak comparability** among different studies on the same product
 - **Complexity** of the method, which hampers its applicability in the industrial context.

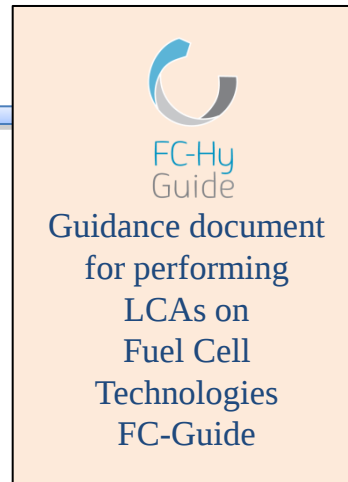
- ISO standards leave a high degree of freedom to practitioners: **subjectivity** linked to some methodological choices (e.g. allocation, system boundary definition, modelling, etc.)
- ILCD Handbook (HB) addresses this question, providing **guidance** on all the LCA process, from the definition of the Decision Context, to specific requirements for review process
- However, ILCD HB is necessarily still **generic** as it applies to all possible sectors, technologies, decision contexts, LCA applications

- LCA is necessarily a **complex method**, as in a generic life cycle system many parameters can affect the final results
- However, when a sufficient **knowledge** of a specific product/technology/system is available, the practitioner can **focus** her/his efforts on the real **relevant aspects** of the life cycle
- This is the only possible way to reduce the complexity of an LCA study, keeping a sufficient **scientific robustness** to the results (**relevance** of results):

“less and correct”

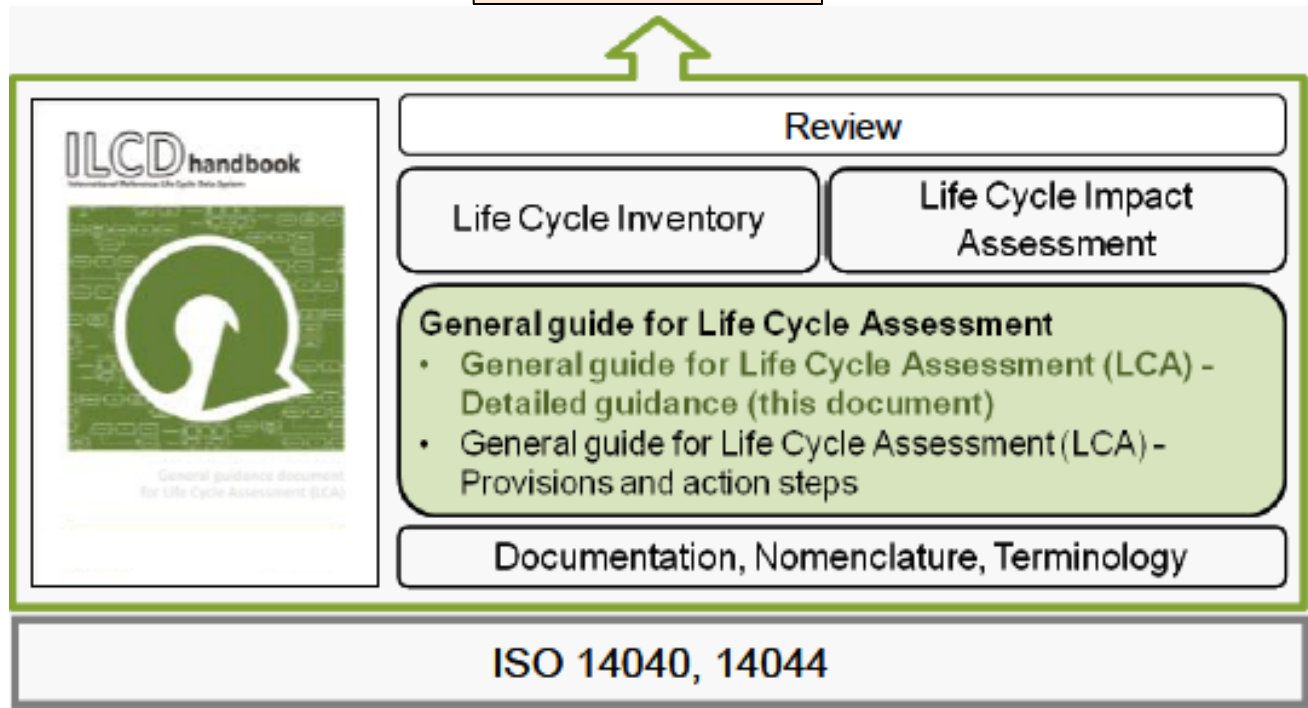
Third tier of harmonisation

3rd tier



Specific guidance for a
product group.

2nd tier



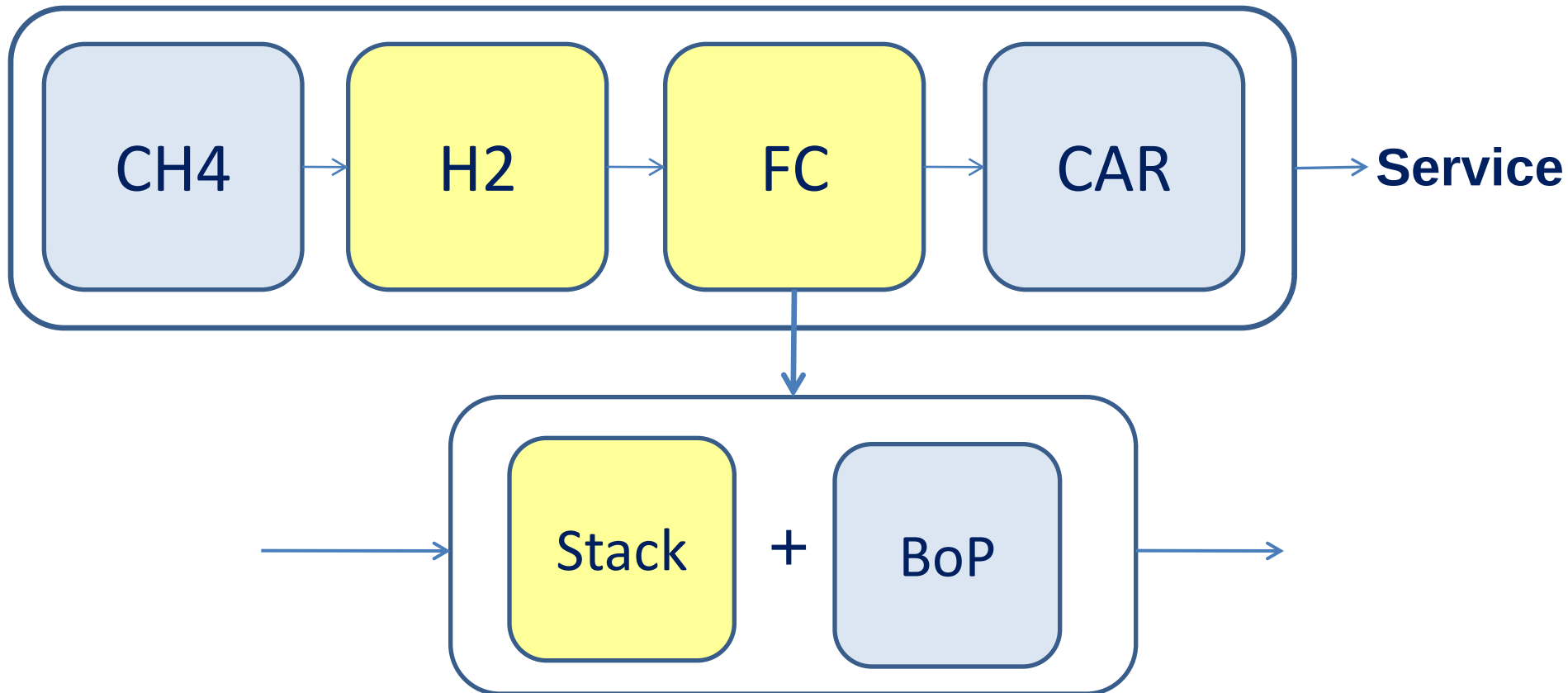
Provisions
depending on the
decision context
and application

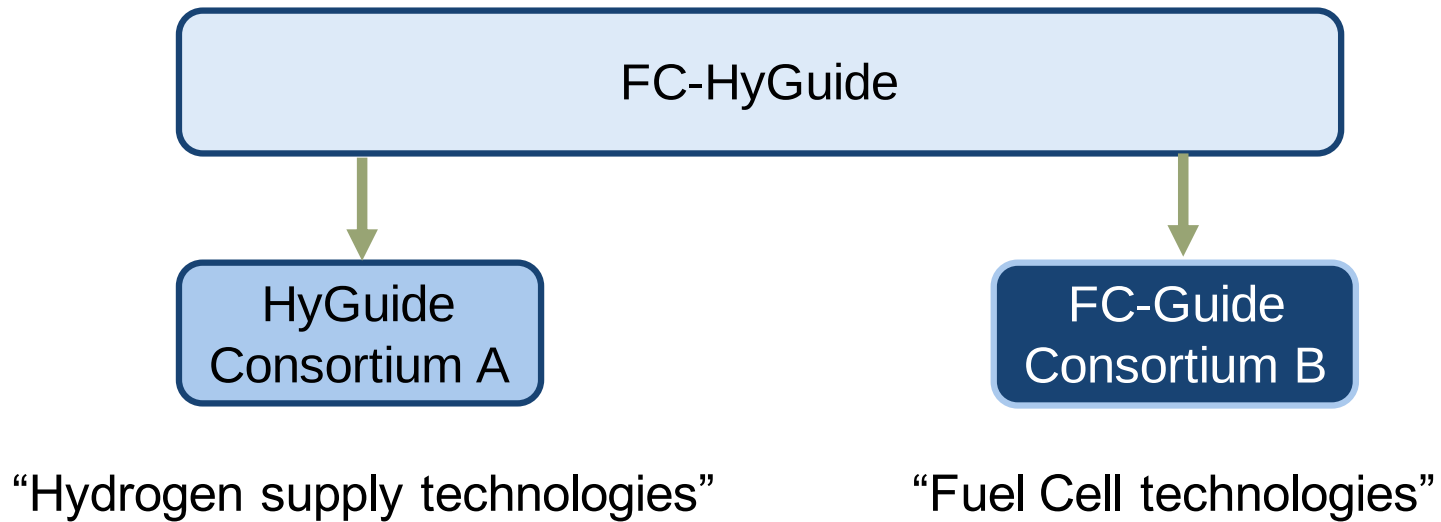
1st tier

General rules

- Prepare and make available to the final user **knowledge and a pre-elaborated set of information**, ready to be used:
 - **FC Guide** (information and provisions)
 - **Templates**: Data collection, Data documentation, Reporting
 - **Examples** from case studies
 - **Training** (today😊)
- Target: technology developers, LCA practitioners

Modular approach



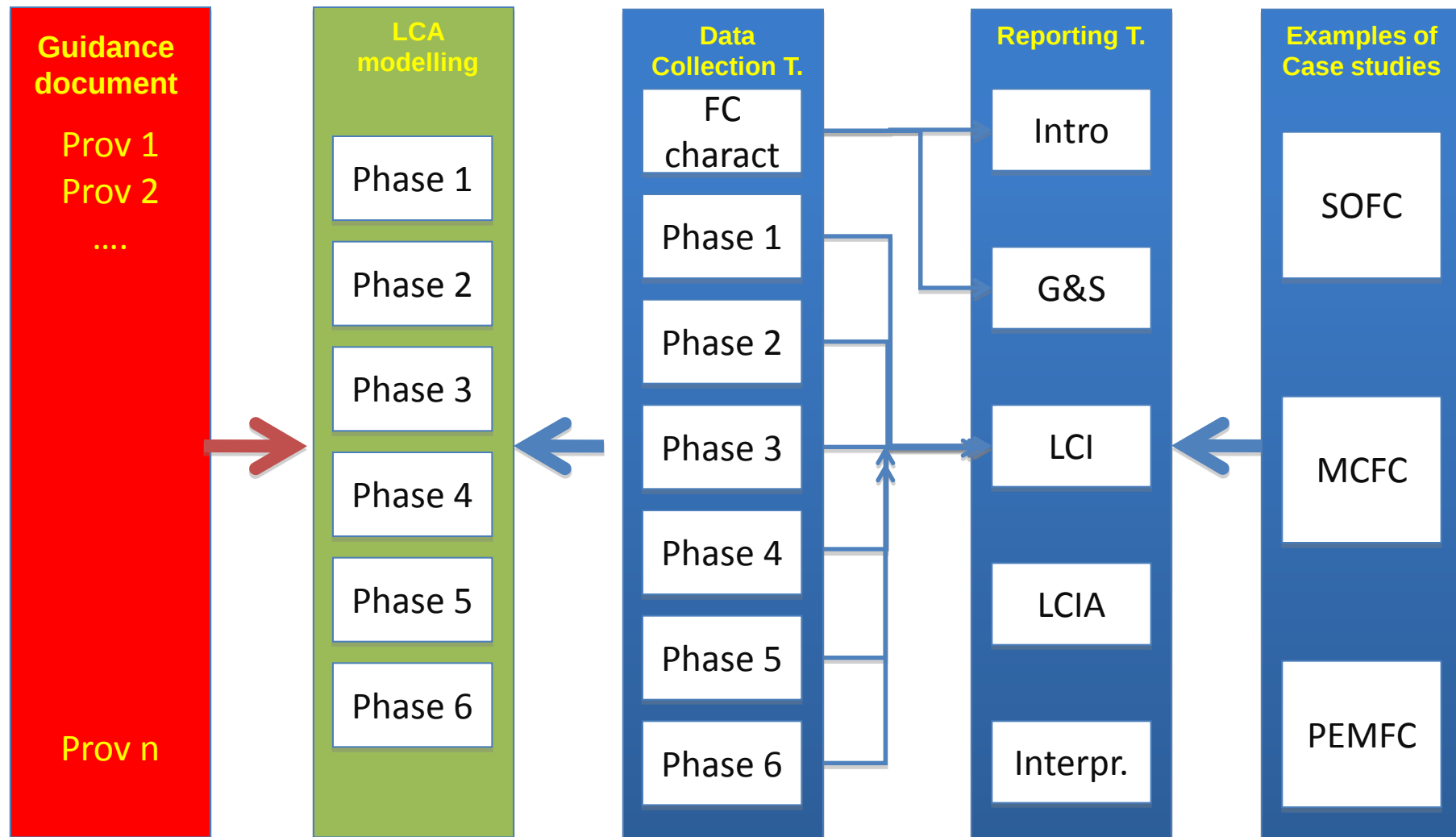


→ FC-HyGuide = HyGuide + FC-Guide

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How to use the documents



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