

SUSTAINABLE DEVELOPMENT GOALS ADDRESSED



PARTNERS



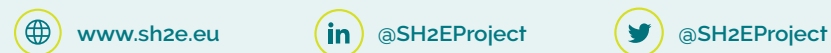
FUNDING ENTITIES

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DISCOVER MORE



SUSTAINABILITY ASSESSMENT
OF HARMONISED HYDROGEN
ENERGY SYSTEMS

Guidelines for Life Cycle Sustainability Assessment and Prospective Benchmarking



ENVIRONMENTAL
DIMENSION



ECONOMIC
DIMENSION



SOCIAL
DIMENSION

The project

SH2E will **develop and demonstrate specific guidelines for the environmental (LCA), economic (LCC) and social (SLCA) life cycle assessment and benchmarking** of FCH systems, while addressing their consistent integration into robust sustainability (LCSA) guidelines.

1

STRAND 1

Environmental reformulation

Development of FCH-LCA guidelines: implementation of material criticality and environmental life cycle assessment.

2

STRAND 2

Harmonised extension

Development of FCH-LCC guidelines: life cycle costing
Development of FCH-SLCA guidelines: social life cycle assessment

3

STRAND 3

Harmonised integration and demonstration

Development of FCH-LCSA guidelines: life cycle sustainability assessment and demonstration and validation.

1

OBJECTIVE 1

Reformulation of FCH-specific guidelines for environmental Life Cycle Assessment.

2

OBJECTIVE 2

Implementation of material criticality indicator in the environmental framework.

3

OBJECTIVE 3

Extension of the FCH-specific Life Cycle Assessment framework to the economic and social dimensions.

4

OBJECTIVE 4

Joint formulation of the FCH-specific "Life Cycle Sustainability Assessment and Benchmarking" guidelines.

5

OBJECTIVE 5

Testing and validation of the FCH-LCSA guidelines.

The goal of **SH2E** is to provide a harmonised (i.e., methodologically consistent) multi-dimensional framework for the **LCSA** and prospective benchmarking of **FCH** systems.