# A TRANSPORT SPECIFIC LIFE-CYCLE ASSESSMENT

#### THE CSA TRANSENSUS LCA

Development of the methodological building-blocks for the TranSensus LCA methodology

#### **Transensus LCA Consortium**

Representatives attending: Élise Monnier,



Nikolas Hill, Thilo Bein

09/01/2024, 13th IWG on A-LCA, 8th-9th January 2024, United Nations, Geneva



# The Coordinated and Support Action (CSA) TranSensus LCA





EU Funding ~3,7M€



30 Months
Started in January 2023



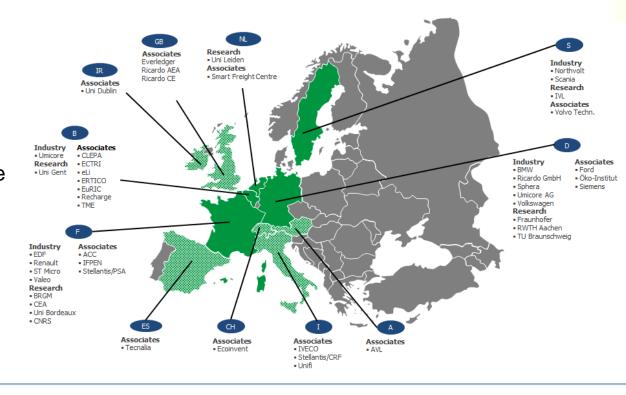
20 Beneficiaries11 Industrial Partners9 Research Partners

**24** Associated Partners

4 Wider consultation groups

# Commonly accepted and applied single LCA approach for zero-emission road transport

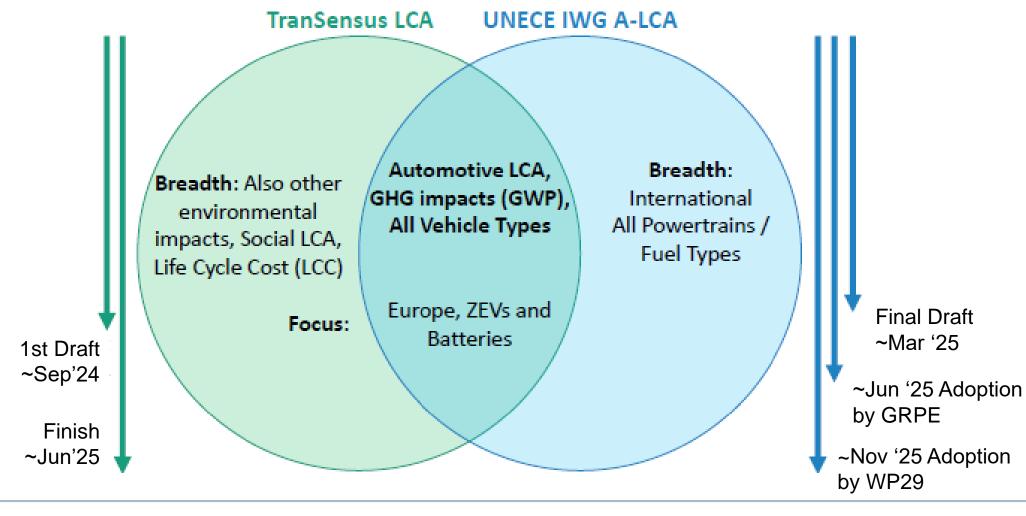
- Conceptualize and demonstrate a single, European-wide real-data LCA approach for zero-emission road transport
- Harmonization of methodologies, tools and datasets
- Elaborate an ontology and framework for a European-wide LCI database
- Conceptualize LCI data management and update along the life cycle and along the supply chain
- Paving the way for LCA-based product and business development
- Consensus building across all stakeholders



## Overlap: TranSensus LCA and UNECE IWG A-LCA

Reminder from previous presentation

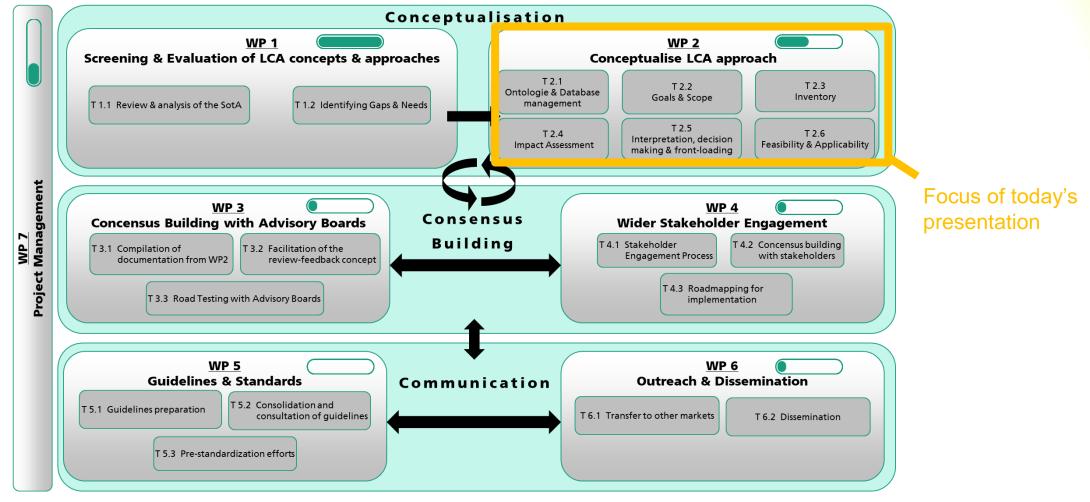




### **Transensus LCA Project**

#### Work Package Structure and Progress in 2023





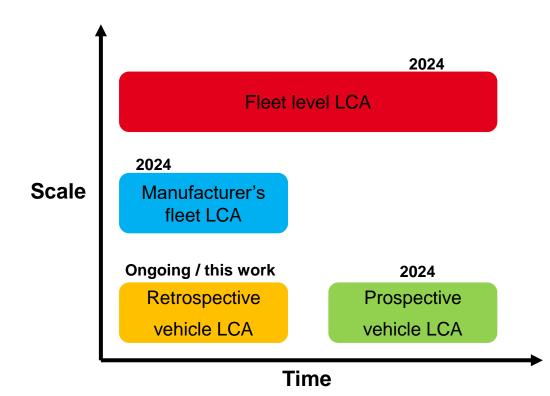




## LCA types considered in TranSensus LCA

# Typology and planning





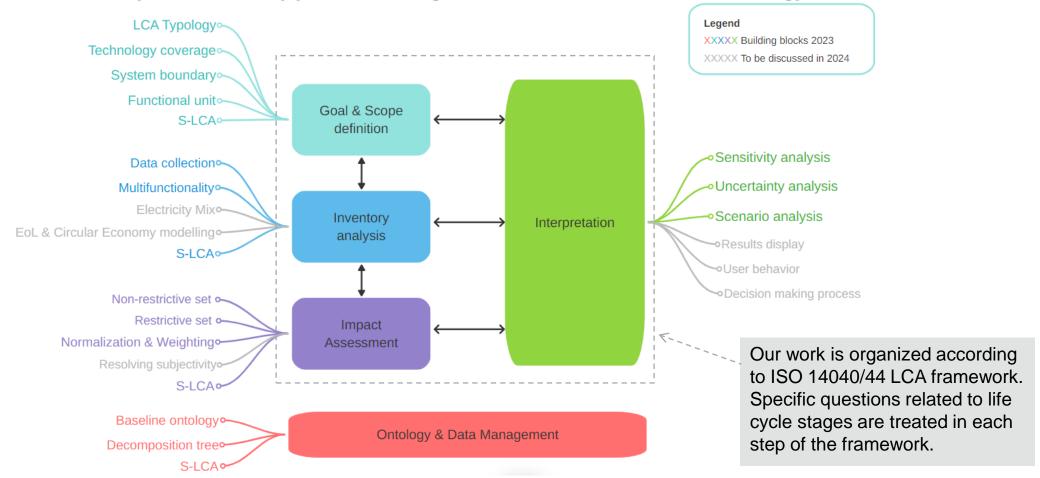
Type  Retrospective vehicle LCA	Definition  Evaluation of impacts slightlybefore or after the start of production. A nearly finalised bill of materials of all parts is available to the OEM
Prospective vehicle LCA	Conducted in the development stage and aims to estimate impacts before the start of production (several years). The TRLis low (TRL6) and the BOM is not completely defined.
Manufacturer fleet LCA	Aims to evaluate the weighted impact of a series of different products introduced by a single manufacturer. Typicallyit is based on a extrapolation of vehicleLCAs
Macro level fleet LCA	Conducted at the <b>sub</b> , <b>national or international level</b> to support <b>economy-scale strategies</b> . Fleet is typically generic, i.e. representative of a variety of manufacturers

#### Conceptualize an LCA approach

#### Overview of 2023 WP2 methodological work



Retrospective Vehicle (S)-LCA - Building blocks of TransensusLCA methodology



#### Conceptualize an LCA approach

How we proceed for both scientific & internally shared building blocks





State of the art & needs and gaps (D1.1 & D1.2)



**Discussion** on methodological options

- current practise
- problem clarification
- solutions
- opinions



Selection of most appropriate methodological approaches



Internal WP2 voting on options

Part of the TranSensus building blocks (**Deliverable** 2.2)

Further
consortium
discussions +
consultation
advisory
boards

#### Tasks:

- 2.1 Database & ontology
- 2.2 Goal & Scope
- 2.3 Inventory
- 2.4 Impact assessment
- 2.5 Interpretation

**Type 1:** one recommendation

Type 2: reduced number of possible options



Qualified

Majority

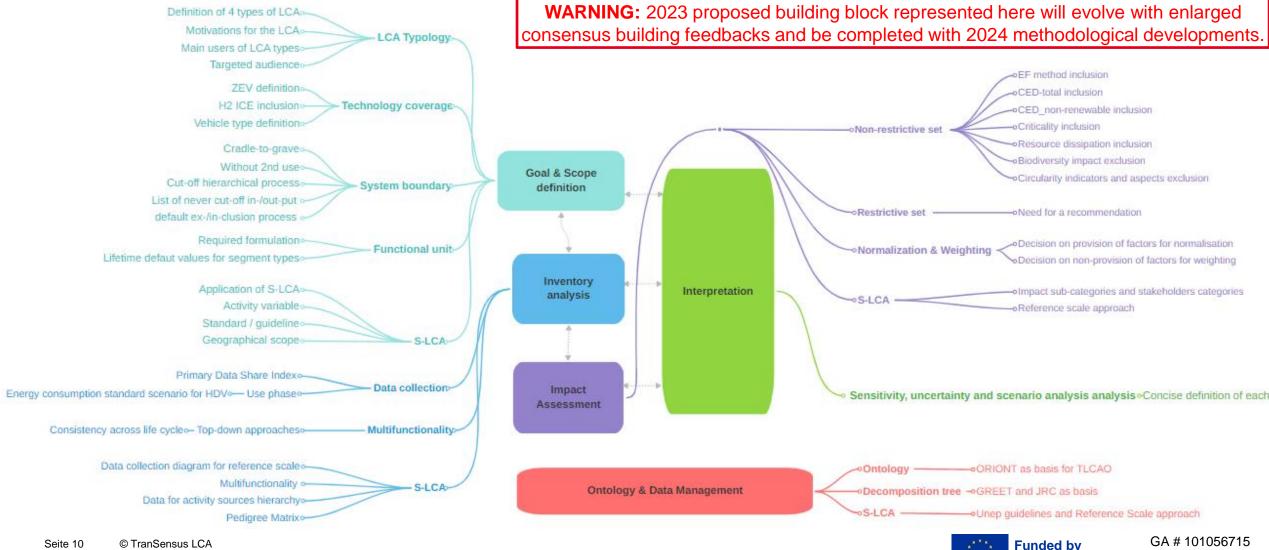
(2/3)?

#### Conceptualize an LCA approach

#### Proposed 2023 WP2 building blocks for retrospective vehicle



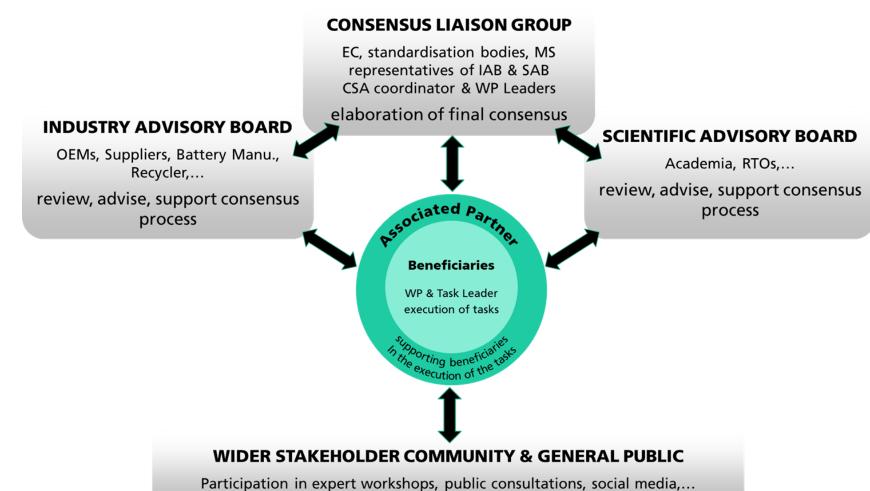
the European Union



# **Broadening consensus building**

#### TranSensus LCA Management Structure

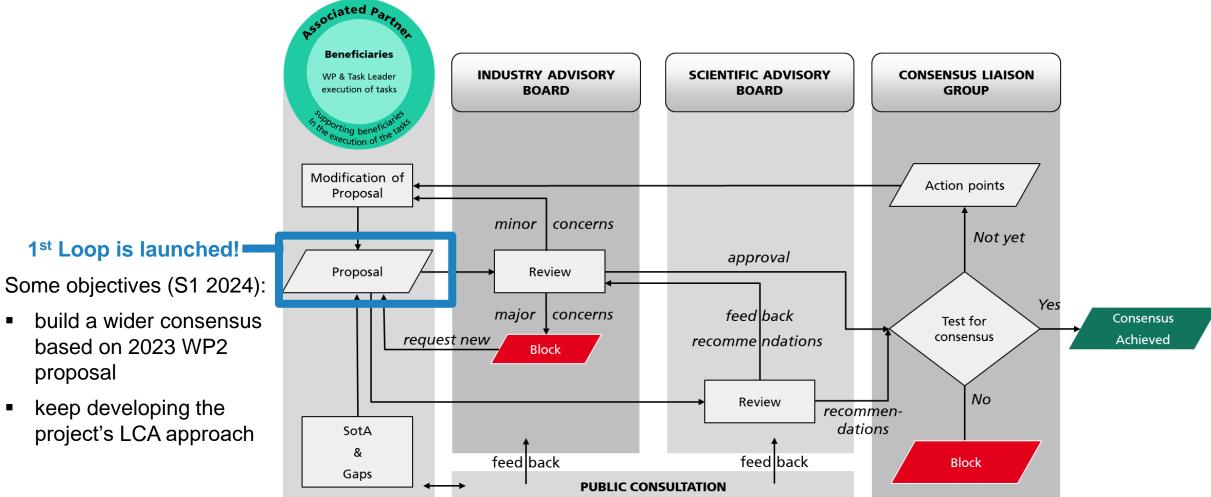




# **Broadening consensus building**

**Decision Making Process** 





#### **More information**



www.lca4transport.eu



Please register to our newsletter to receive all public consultations invitations



#### Contacts:

- Project's coordinators: <u>Thilo.bein@lbf.fraunhofer.de</u> & <u>Felipe.cerdas@ist.fraunhofer.de</u>
- Regular representative of the project at UNECE: <u>Nikolas.Hill@ricardo.com</u>
- Today's speaker: elise.monnier@cea.fr, WP2 co-leader with gladys.moreac-njeim@renault.com





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