Niels Angel, BMW Group
Project lead Sustainability @Catena-X
Catena-X is building an ecosystem to digitise the automotive supply chain

Build a **global data space** that can host our industry

Create the first **data driven value chain**; incorporating all participants via interoperable and trusted solutions

- 275,000+ legal entities
- # locations globally
- # digital twins machines, products, ...
- # apps business processes
- # users business responsibility

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The Catena-X association has currently more than 120 members, and it’s open to all interested parties.
It takes an Open and Balanced Approach to build and run a Global Data EcoSystem for the Industry

Association Catena-X e.V.

Standardization | Certification | Neutral Governance | Transfer

External Input

Application for Standardization

Certification

Target: 1000 User within Year 1

Development Environment

28 initial partner to kick-start the ecosystem

Open Source Code Repository

Proprietary Applications

Services

License & Service Agreements

Operating Environment

>120 Members

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How Catena-X Works

Example

Open Source SaaS
Tenent
Tenant
SME 1

GreenToken SaaS
Tenant
Tenant
Tenant
SME 1

SIEMENS
Tenant
Tenant
Tenant

data exchange option B
Catena-X
Federated Operating Environment

Data Exchange Option A

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The First Use Cases to Kickstart the Network

10 business-critical end-to-end use cases
Challenge: No access to accurate, specific primary data of PCF in the supply chain

Status quo:

Today: PCF calculation using technology averages from LCA databases
Average data blurs any differences in supply chains and fails to measure reductions in your supply chain.

Established methods

LCA dataset: average production of a product, e.g., regional market mix

Supplier-specific, primary data

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Catena-X aims to exchange PCF based on primary data along the value chain wherever possible...

Quality indicators like primary data share allow for a system which is improving over time, improving quality along with a growing network!

... falling back on recognized database values when necessary
Capture GHG emissions data based on real processes and site data to measure, reduce and report.

Identification of hotspots

Definition and implementation of measures in the n-tier chain

Efficient and credible reporting of PCF values and achieved reductions

Goal: Replace average values from databases with specific data over time
Catena-X has identified 5 core tasks to enable PCF measurements along the value chain

- Rulebook
- PCF Exchange Format
- Calculation support for SMEs
- PCF Verification & Audit
- Infrastructure for PCF

PCF calculation guidance
Unified data model based on rulebook
Calculation support apps and ecosystem for small and medium enterprises
Streamlined processes to build trust along the supply chain while minimizing efforts
Exchange software solutions

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Catena-X has already worked on a draft for a common rulebook, to be consulted and further developed with interested parties.

- **Goal:** Standardising measurement and reporting along the supply chain to make CO₂ emission data comparable.
- **Team:** LCA Experts of Catena-X Consortium and Association
- **Collaboration:** WBCSD A-Pact
- **Timeline:** Consultation Process starting now
Interoperable Apps exchange data via standardised connectors, data-model and with a common methodology.
Questions?

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