

Consortium Project Circular Economy for Battery Technologies

Key Facts


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KEX.
Knowledge Exchange®

Fraunhofer
IPT

 Start: Q3

 Participation Fee: € 29.000*

 End: May 2021

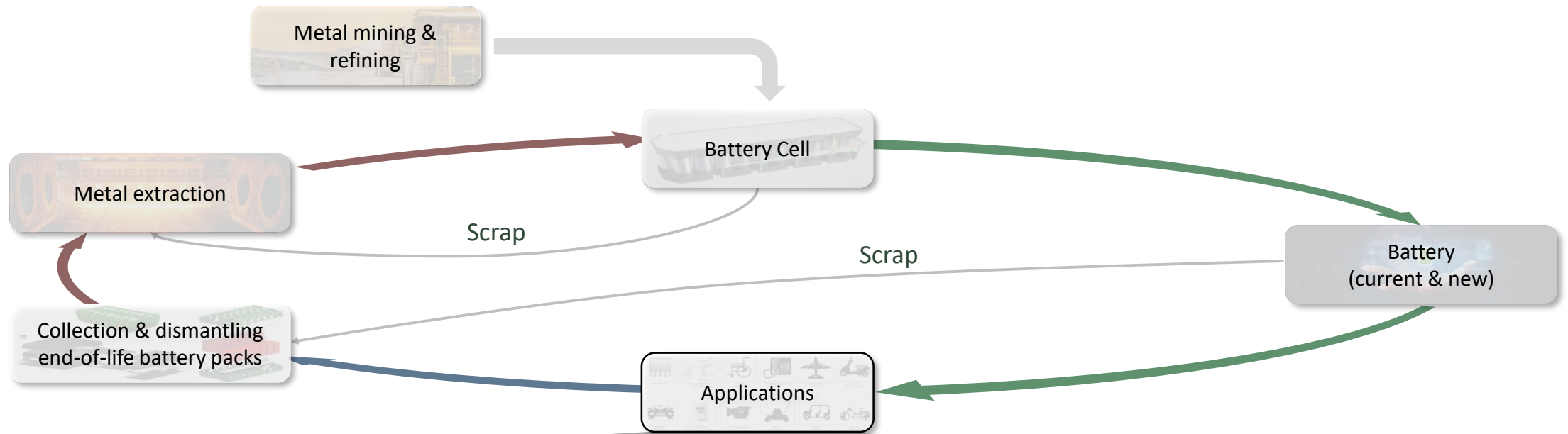
 Cross-industrial
consortium partners

*Discount for INC members & SMEs

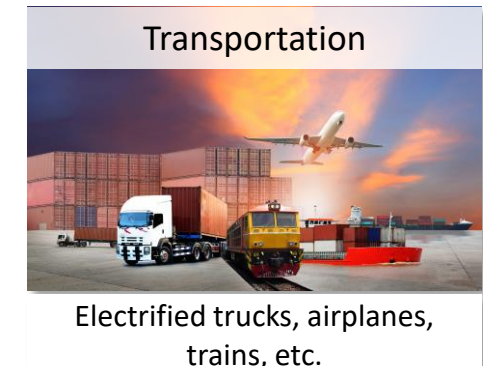
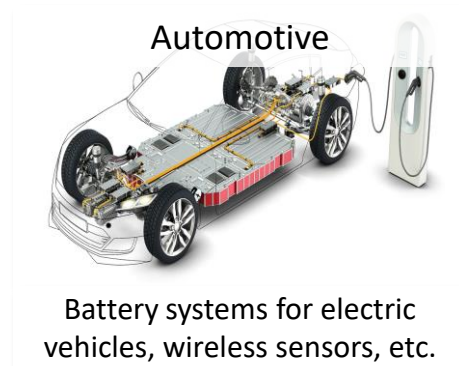
MOTIVATION

Circular Economy – Addressed Industries & Applications

Circular Economy



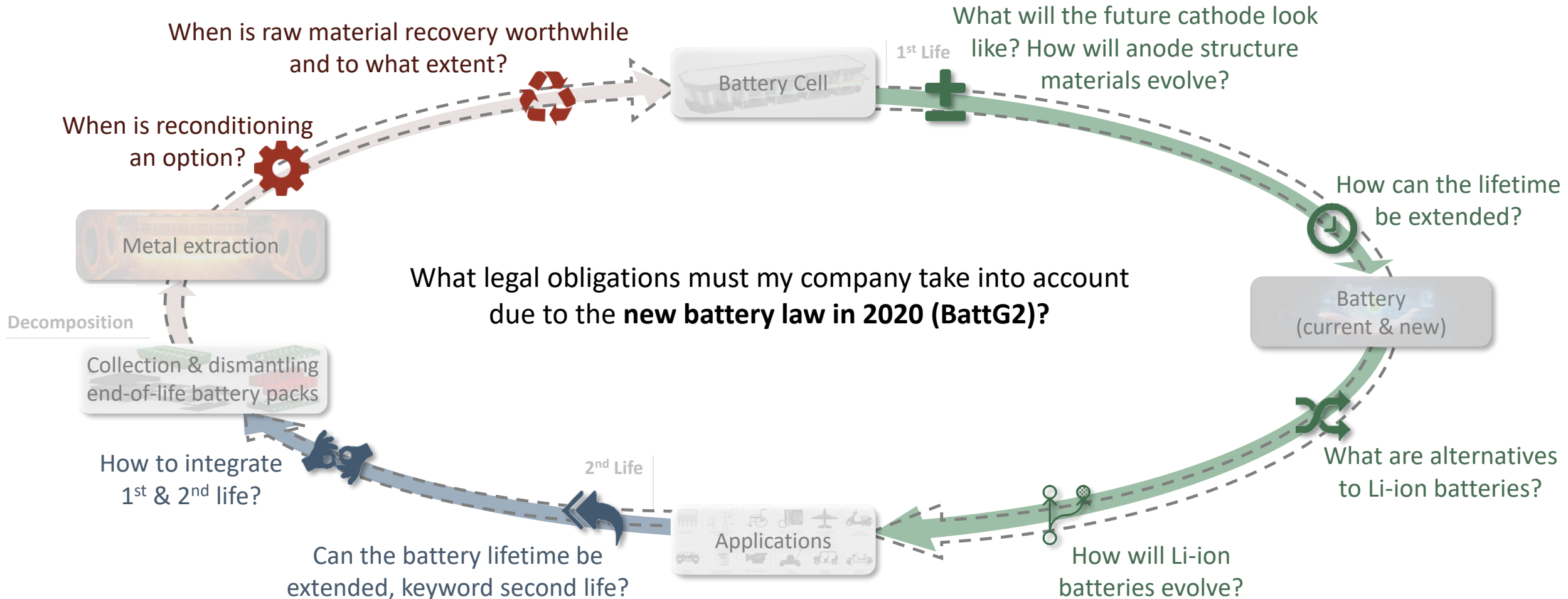
Exemplary Target Industries



MOTIVATION

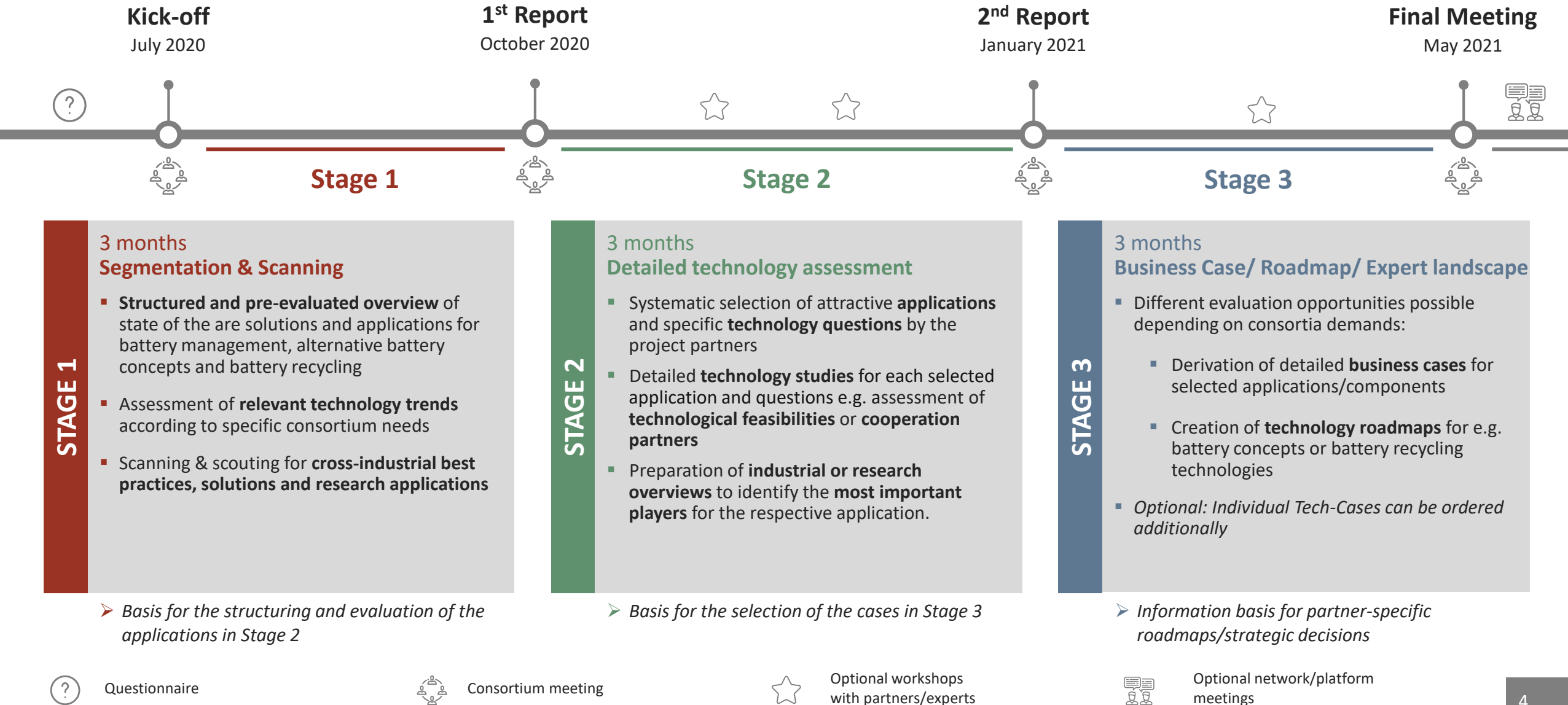
Someday every battery must be recycled! – The question is when?

Example questions answered in the consortium project



TIMELINE & POTENTIAL RESULTS

Circular Economy for Battery Technologies



PROCEEDING – EXAMPLE OF PREVIOUS PROJECTS

Stage 1: Segmentation & Application Trees



Segmentation

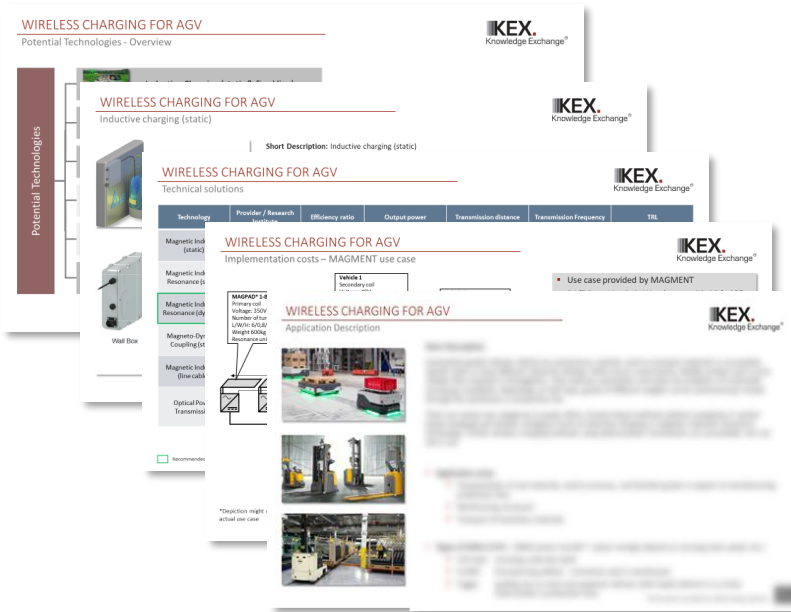
- Selection of focus areas based on consortium preferences (questionnaire)
- Systematic overview on technology segments, structure and overall market readiness within the focus areas
- Suggested segmentation: battery materials, battery technologies, battery management system (BMS), second life, battery recycling/ decomposition
- A connection between the different segments and its solutions is generated

Application trees

- **Structured overview** of current and future solutions in the context of specific applications fields to be presented to the consortium during the 1st report meeting
 - Pre-evaluation of the most relevant applications (**approximately 250 cross-industrial solutions**)
- ➔ **Basis for the selection of possibilities in Stage 2**

PROCEEDING – EXAMPLE OF PREVIOUS PROJECTS

Stage 2: Detailed Technology Assessment



Detailed technology analyses

- Technological deep dive to assess different technological concepts based on partner specific applications of interest.
- Aggregation of relevant **technology- and market-related information**
- Evaluation of current **advantages and disadvantages** of the applications chosen by the consortium and their **technological feasibility**
- Identification of **potential technology partners 6 providers**
- **Executive Summary** for a quick evaluation of each application

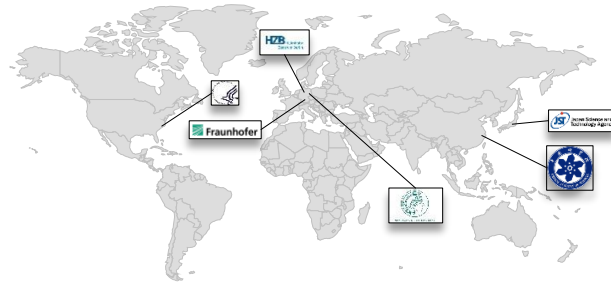
Cross-industrial workshops

- **Cross-linking** of compatible research and implementation partners from different industries in a facilitated workshop
- Derivation of clusters of **common problems** and derivation of **possible common solutions**



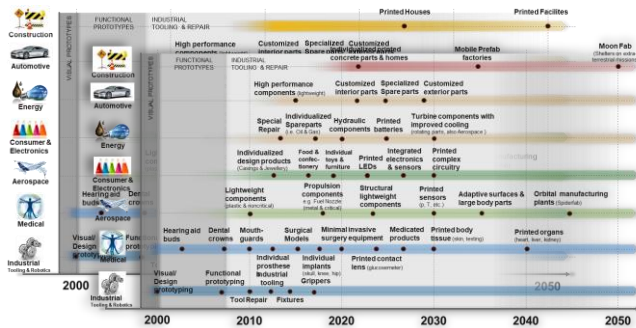
PROCEEDING – EXAMPLE OF PREVIOUS PROJECTS

Stage 3: Expert landscape | Roadmaps | Business Cases



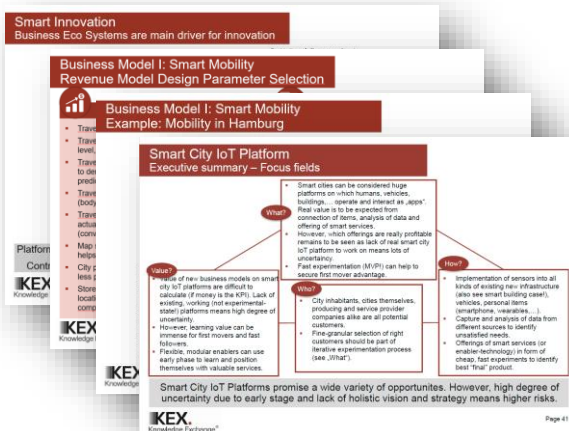
Expert landscape

- Identification of **relevant research facilities** (science, industry) conducting research and development in the field of the selected solutions
- Determination & evaluation of **potential partners**



Roadmaps

- Identification of **relevant research facilities** (science, industry) conducting research and development in the field of the selected materials
- Definition of development roadmaps for the selected applications/ technologies



Business Case analyses

- Detailed calculation of business cases for the selected applications/ solutions relevant to the consortium/ partner

Former KEX Consortium Partners

More than 250 previous
Consortium Partners*



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YOUR CONTACT PERSON

Realizing the Potentials of Robotics & Automation



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