



VTT

# IndustryX: Hyper-connected Factories for Sustainability

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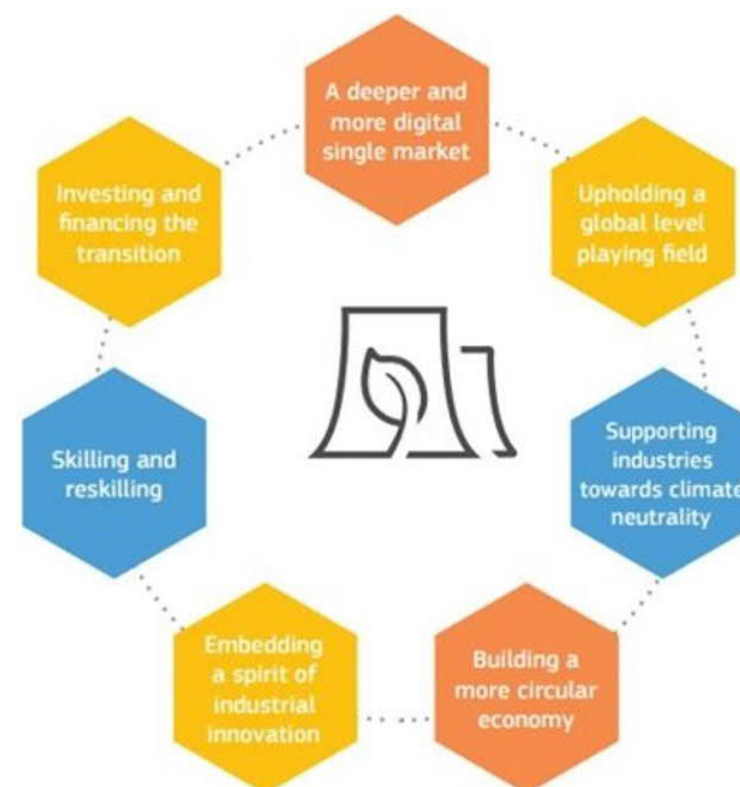
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# Project idea

- ***Hyper-connected factories*** for actualizing a ***shared vision of sustainable manufacturing***
  
- Hyper-connected factories
  - Digitalized, connected, automatic exchange of information
  - Control of resources on a network level
  - Transparency, traceability and situational awareness
  
- Sustainable manufacturing
  - Circular economy (e.g. maintenance, re-manufacturing, recycling)
  - Optimized use of natural resources and energy
  - Widely studied multifaceted issue, a broad multi-stakeholder vision required

## Project objective & outcome

- **Project objective:** through utilizing the advancing possibilities of ICT/AI and telecommunications, the Finnish manufacturing industry will be working in closer collaboration and coordination while at the same time addressing the EU climate objectives
- **Project outcomes:** increased competitive advantage; manufacturing industry jobs will be widely regarded as attractive career options; the companies involved will access the **EU €1 trillion green deal funding**



[European industrial strategy](#)

## Project topics (sustainability objectives emphasized)

The VTT logo consists of the letters 'VTT' in white, bold, sans-serif font, centered within an orange square.

### 1. Open manufacturing networks and supply chains

Tracking product identity through its life-cycle; enhanced operational situational awareness; joint IoT-infrastructure; **advancing circular economy**

### 2. Co-operative renewed manufacturing

Additive manufacturing, collaborative robots and shared productions units; **reduced use of raw materials and energy in manufacturing**

### 3. Transformation of industrial work

Designing new work roles and assignments; **enhanced attractiveness of manufacturing industry through new sustainability-related jobs**

### 4. Serving clients as a network of companies

Actualizing projects that cannot be addressed by one company alone; trust-based network within the Finnish manufacturing industry; **creating and actualizing a shared vision sustainable manufacturing**

## Contact & info



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Business Finland Sustainable Manufacturing programme:

<https://www.businessfinland.fi/suomalaisille-asiakkaille/palvelut/ohjelmat/sustainable-manufacturing-finland-ohjelma/>

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