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Sustainability – drivers & definitions

Understand what is sustainability and what are its drivers

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The mandate

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Today it is critical that businesses and the products & services they provide are more **sustainable**

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The triple bottom line

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“Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.”
World Commission on Environment and Development, Our Common Future (1987)

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What's the value for your business? 

Product innovation	Operational excellence	Brand value	Regulatory compliance
			
<ul style="list-style-type: none">Revenue ResilienceRevenue GrowthSustainability Driven Innovation	<ul style="list-style-type: none">Operational EfficiencyEmployee ProductivityValue Chain Efficiency	<ul style="list-style-type: none">Employee AttractionEmployee RetentionReputation Management	<ul style="list-style-type: none">Operational RisksValue Chain RisksSocietal RisksRegulatory Management


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LCA – drivers & definitions

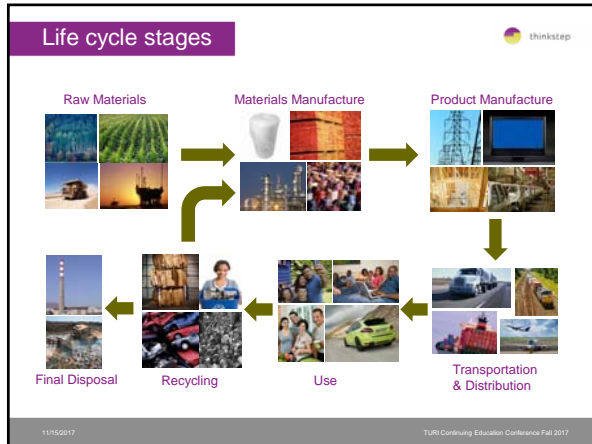
Understand what LCA is about and why companies do it

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Life cycle thinking 



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Why LCA?

- Choose materials and design features that lead to less harmful products and technologies
- Design public policies and incentives that improve sustainability without simply shifting environmental problems
- Provide insights that guide you to better purchasing decisions
- Increase knowledge and identify "green washing" claims

Examples:

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LCA is standardized

Compilation and evaluation of the inputs, outputs and the potential environmental impacts of a product system throughout its life cycle (ISO 14040, section 3.2).

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ISO

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LCA framework

- Goal & Scope Definition**
 - Reason for conducting study
 - Determination of scope and system boundaries
- Life Cycle Inventory**
 - Data collection
 - Modeling & analysis
- Impact Assessment**
 - Analysis of inputs and outputs using indicators
- Interpretation**
 - Dominance / sensitivity / uncertainty analysis

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ISO

Defined by ISO 14040 / 14044 standards

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Circular Economy – definitions & examples

Understand what CE is about and what it can do for companies

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The Take, Make, Waste economy

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Linear economy

Raw materials → Production → Distribution → Consumption → Waste

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Circularity instead – High level view

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A circular economy is restorative by design and aims to keep products, components and materials at their highest utility and value, at all times.

1. Decouples economic growth from consumption
2. Distinguishes technical and biological materials
3. Designs optimized material flow
4. Innovates across product design, service and business models, food, farming, biological feedstocks and products
5. Establishes a framework for resilience in the longer term

Source: World Economic Forum and Ellen MacArthur Foundation

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Looping in biosphere and technosphere

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The key risks and opportunities relate to recovery and material choices

Source: World Economic Forum and Ellen MacArthur Foundation

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To succeed in circular economy 

- To achieve a circular economy, the market needs **safe recycled materials of known and high quality**, so that they can become an attractive alternative to virgin materials
- **Substances of concern** ending up in recycled materials are a barrier
- Understand the relevance of circular economy thinking in the context of your **product and corporate sustainability activities**
- Get inspired and **challenge your existing strategies** and practices



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Reduce, Reuse, Then Recycle 

CE requires INNOVATION and NEW BUSINESS MODELS for meeting consumer needs – think beyond products!

- **Circular Inputs**
- **Resource Recovery**
- **Product Life Extension**
- **Sharing Platforms**
- **Product as a Service**



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**Thank you
for your attention!**

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