

TORERO – TORrefying wood with Ethanol as a Renewable Output: large-scale demonstration



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Overview of the project



- TORERO – innovative technology for producing bio-ethanol from a wood waste feedstock in a large-scale steel mill.
- H2020-EU.3.3.3. - Alternative fuels and mobile energy sources, 3 Years
- Demonstration Project ID: 745810FP7
- Coordinator: Arcelor Mittal, Belgium
- Partners:



Sister project: „STEELANOL“



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Main items and goals

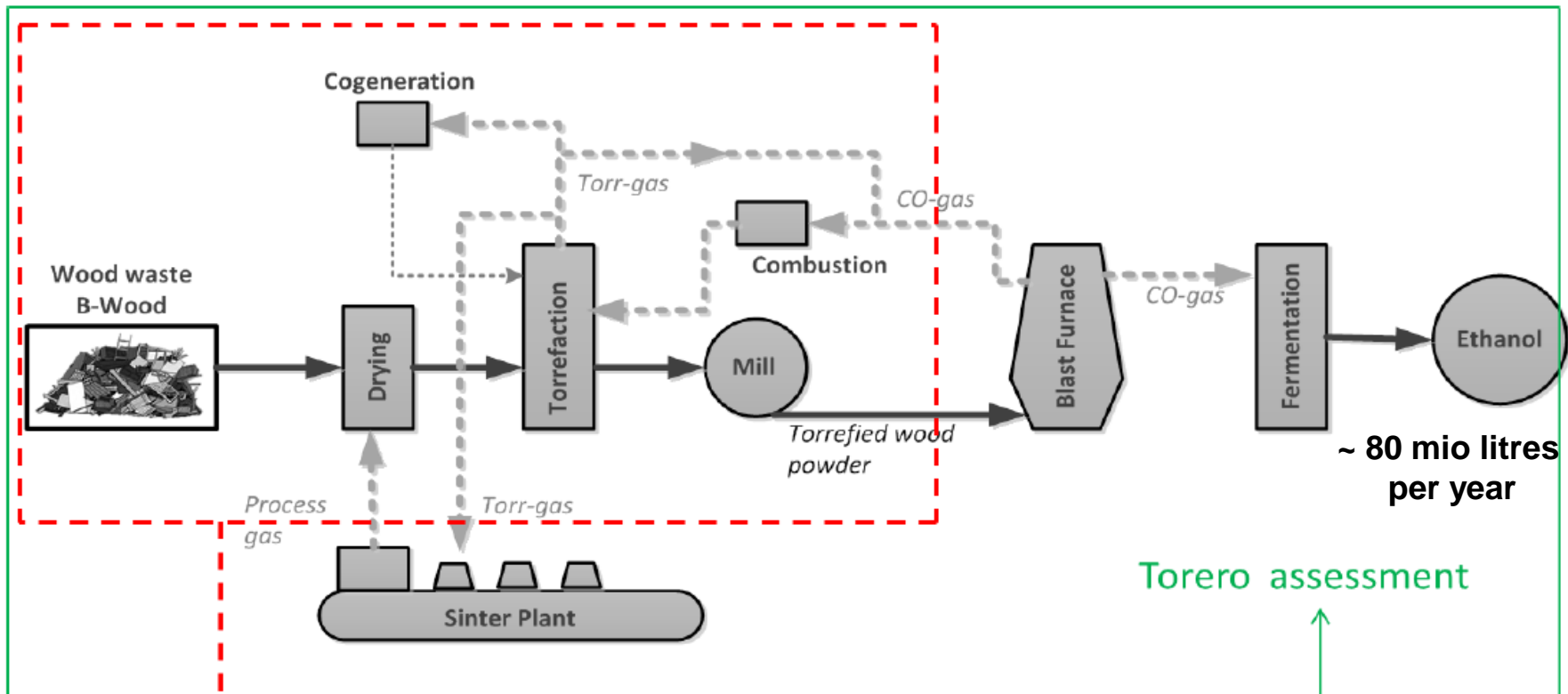
- Wood waste converted to bio-coal by torrefaction (value chain)
 - Bio-coal replaces fossil powered coal in a steel mill blast furnace
 - Carbon monoxide in blast furnace exhaust fumes is microbially fermented to bio-ethanol
 - Material and energy loops of the process are closed to a very large degree (resource and energy efficient)
- Cost reduction of operational costs (30%)
- Future replication of the concept with other feedstocks and biofuels
- Job creation, save energy supply, economic growth



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Production chain

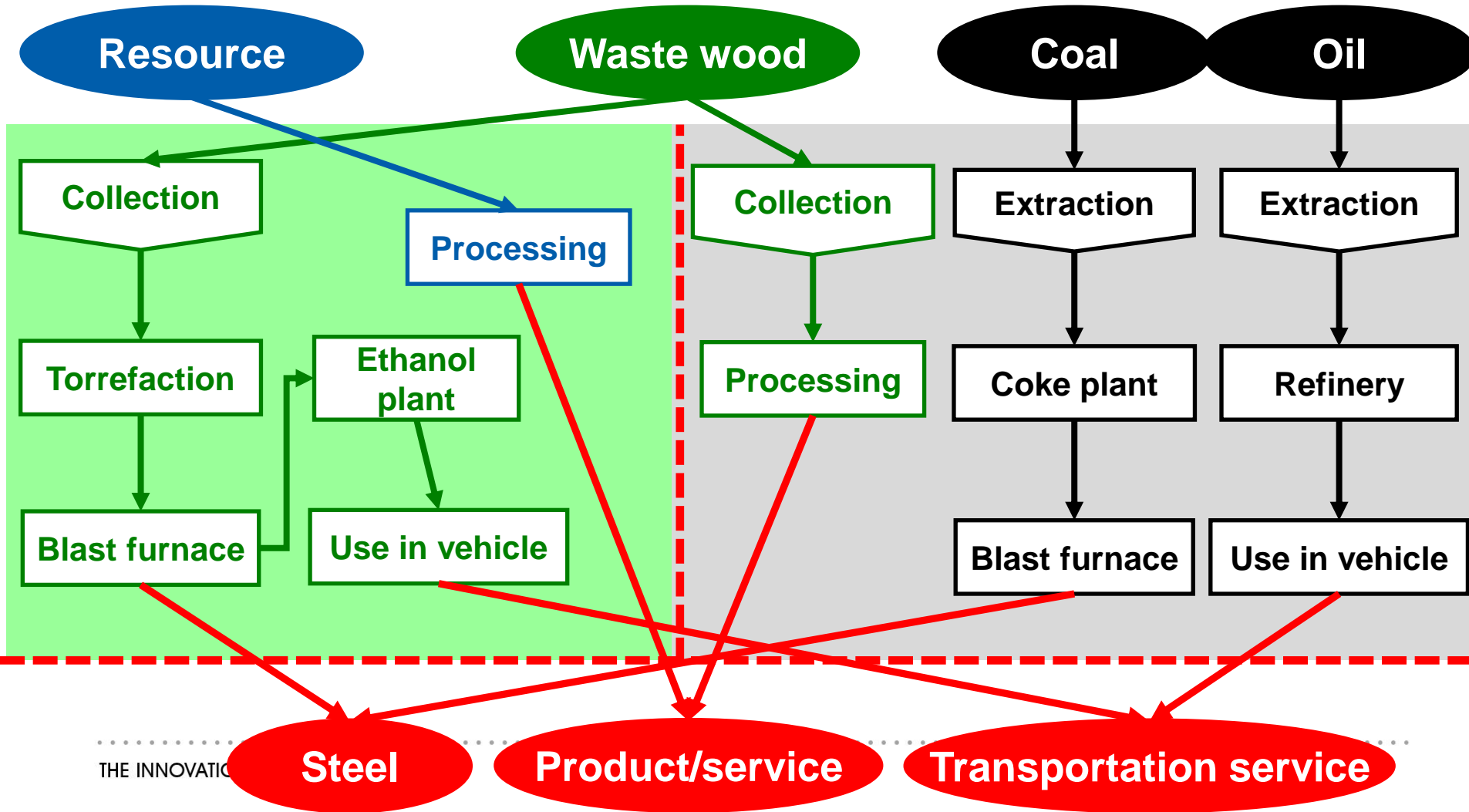
The only H2020 project that is integrated in an existing, fully functional large-scale industrial facility



Torero torrefaction implementation

Environmental LCA: Comparison of New Conventional Value Chains

Transport&distribution not shown



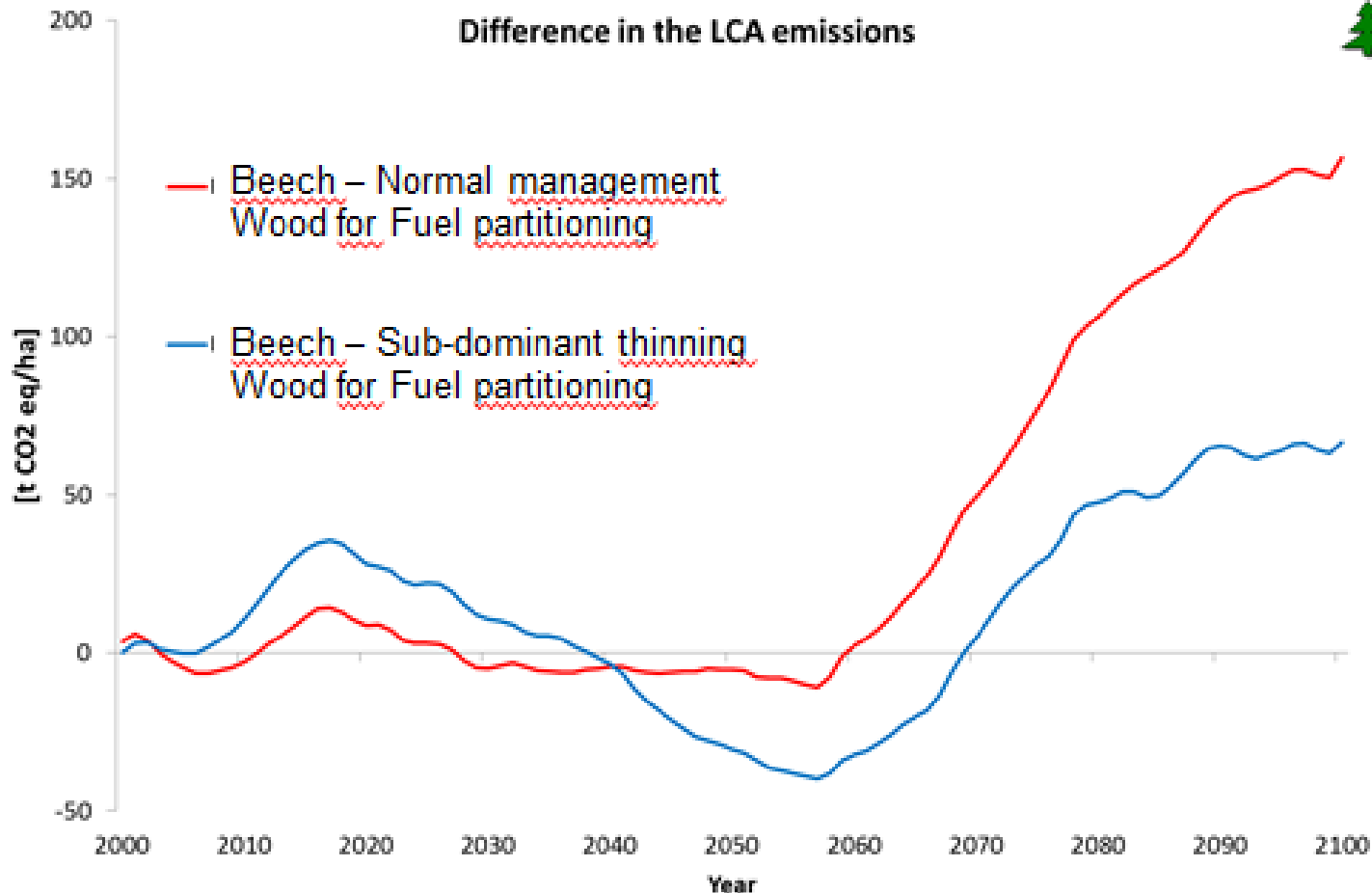
Social assessment methodology of Life Cycle Assessment (SLCA)

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- ...is method of reference for investigating social impacts
- ...is an excellent opportunity to investigate and assess claims about products
 - to improve the social performance of products
 - to remove false perceptions of the public
- ...is an attempt to get a broader picture of the social situation
 - Which stakeholders are relevant?
(workers, consumers etc.)
 - Which impact categories are relevant?
(human rights, working conditions, health and safety)

The timing problem....

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Homepage and contact

www.torero.eu



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