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DeCarb-PUI *
Decarbonization of Industrial Processes through Redesign of the Process-Utility Interface

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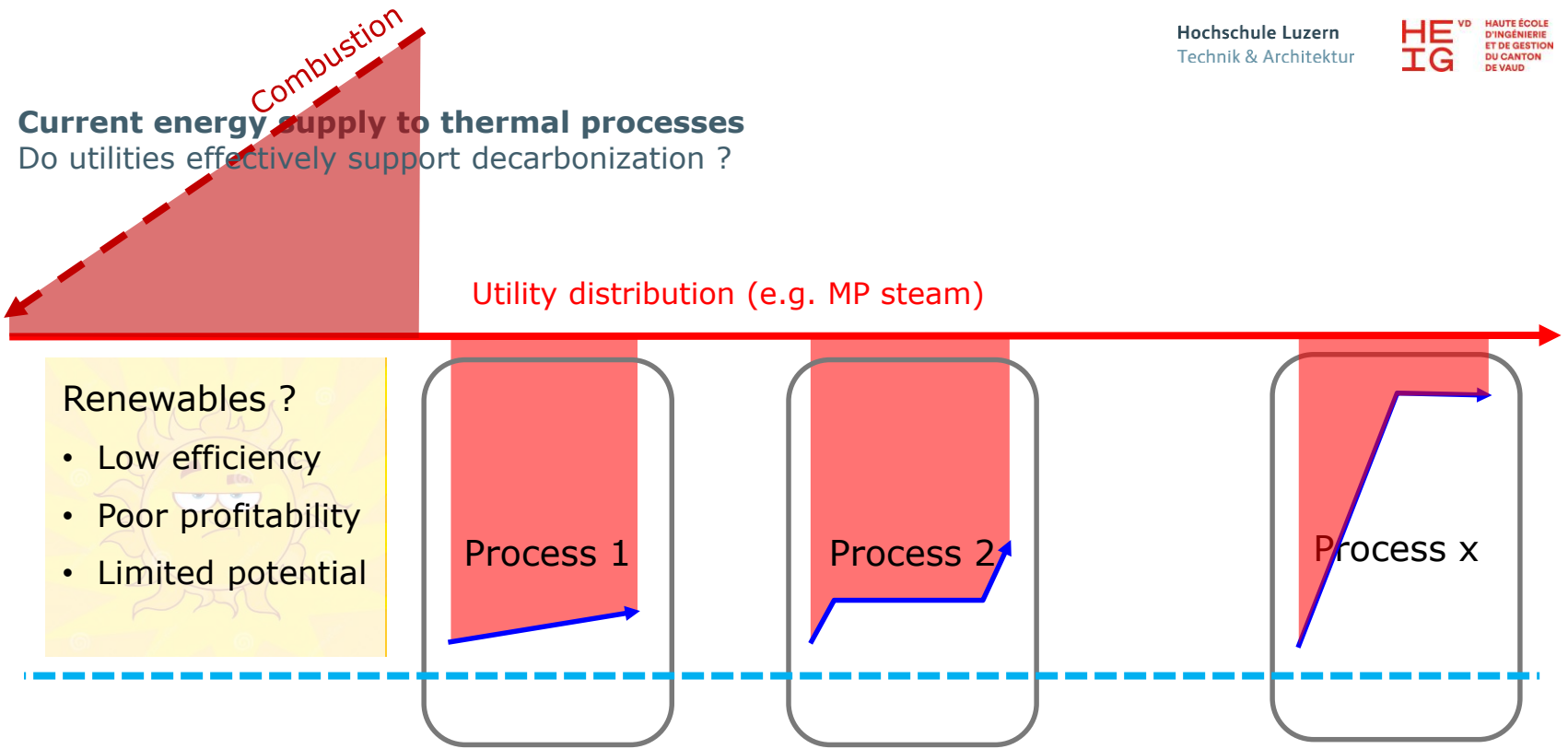
Current energy supply to thermal processes

Do utilities effectively support decarbonization ?

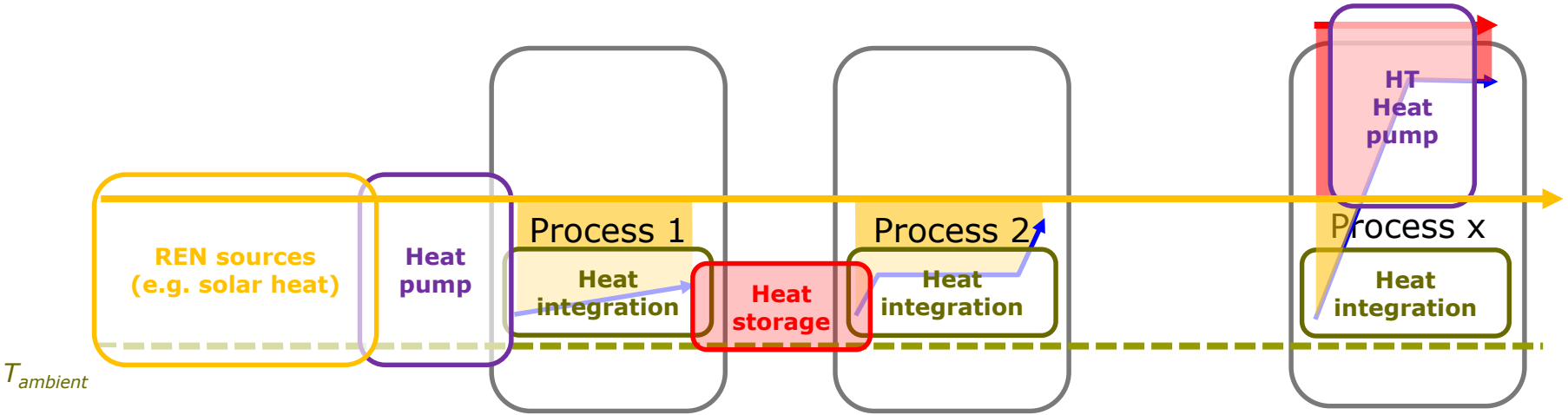


Significant exergy losses due to large heat transfer driving forces : a chicken-and-egg problem ?

A symetric situation applies (to a lesser degree) to process cooling

DeCarb-PUI vision

Boost renewables and heat pumping by process-utility interface (PUI) retrofit and heat integration



Vision behind DeCarb-PUI how to decarbonize processes in the range 0°C to about 160°C

DeCarb-PUI Project Goals and Means

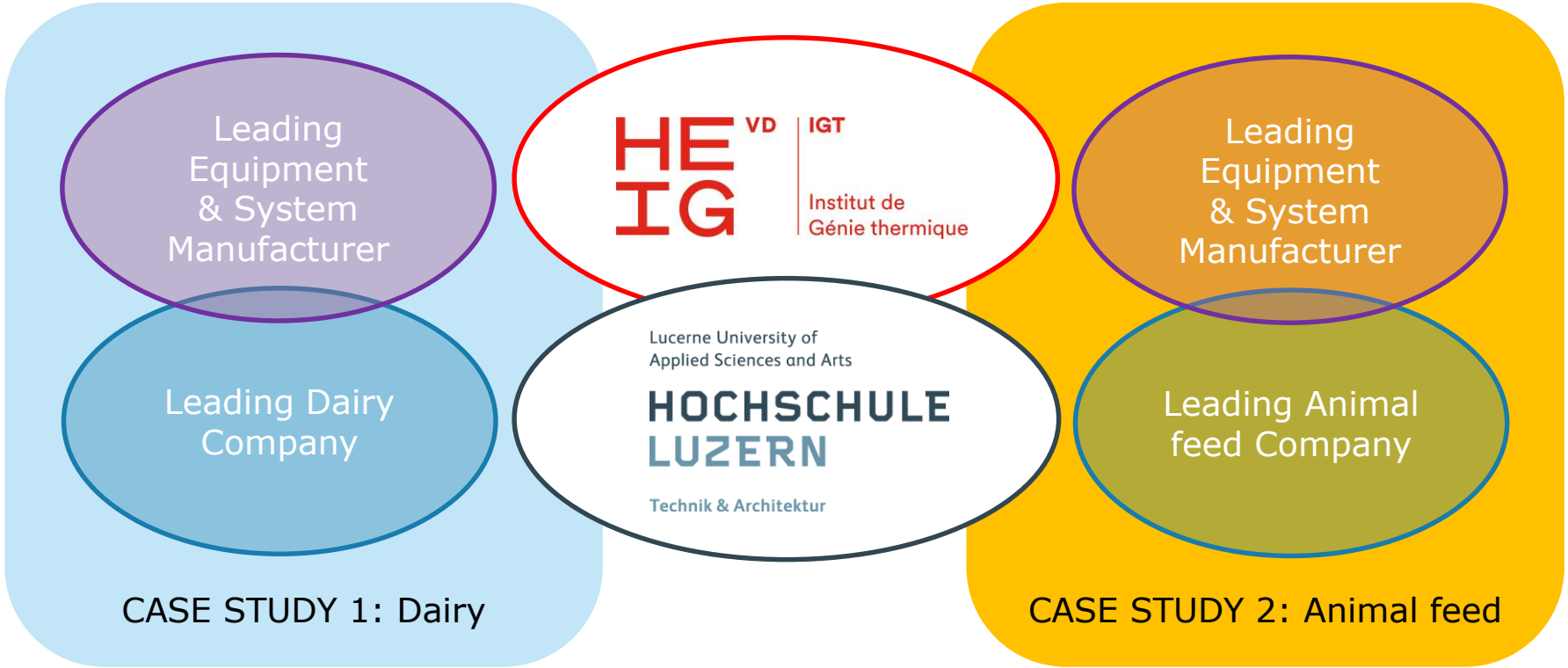
- allow **process industries** to achieve **larger decarbonization in a cost-efficient way**
- provide **process equipment manufacturers quantitative data** to further **improve their design**

The goals are to be pursued resorting to the following **means**:

- **identifying heat transfer exergy losses**
- **quantifying associated decarbonization targets and benefits**
- **"optimizing"** and designing processes, utilities, and energy resources **simultaneously as a whole**
- **developing tools and methods** allowing simple, **practice-oriented and applicable solutions**
- **increasing stakeholders awareness by "how to" guidelines for KTT**

Project team & organization

Practice-oriented case studies involving leading, worldwide active industrial partners



Work packages