

<div>SUSTAIN</div>	<div>Life cycle assessment</div> <div>LCA</div>		<div>s6</div>	<div>session plan</div> <div>EQF level 5</div> <div>unit of L.O.</div> <div>SUSTAIN 2</div>
	<div>Objectives</div> <ul style="list-style-type: none"> Introduce the LCA concept, its limits, challenges and benefits Use databases needed for LCA Implement a LCA for different building materials and calculate primary energy content, R-value and density 			<div>Trainer</div>
	<div>Methods</div> <ul style="list-style-type: none"> Video input Theory presentation, introduction to databases Individual or team research Calculation exercise in small teams Discussions and feedback about exercise 			<div>Place</div> <div>Seminar room</div> <div>Time</div> <div>7H</div>
<div>Content</div>	<ol style="list-style-type: none"> What is LCA (0,5h) Assessing energy consumption on the construction site Where to find the indicators (1h) Database introduction How to compare different materials (1,5h) Learning building physics basics (density, R-value, U-value, PEI) Limits of LCA (0,5h) Non-industrial <i>versus</i> industrial materials, factors like transport Conclusion (1h) <ul style="list-style-type: none"> Comparing and discussing results Links to footprint and grey energy 			<div>Documents</div> <ul style="list-style-type: none"> RG excel sheet with links <div>Equipment</div> <ul style="list-style-type: none"> internet connection computers beamer tables paper, pens paperboard & pens
<div>Activities</div>	<p>After theory content 1-4, make teams of 2-4 persons Using online resources, each team calculates for at least 1 building material (2h):</p> <ul style="list-style-type: none"> grey energy CO₂ R value material costs labour costs <p>Feedback about the exercise and discussion about the limits (theory content 5) Recap and conclusion (theory content 6)</p>			
<div>Preparation</div> <p>Seminar room ready for the lecture and exercises</p> <ul style="list-style-type: none"> computer, beamer working internet connection <p>Enough space and laptops/computers for the participants</p>				