

SUSTAINABLE ENERGY
SET at Work
TECHNOLOGY AT WORK



Sustainable Design

Creating success

Authorized by Lars Munklee

www.setatwork.eu

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Course structure

1. Introduction
2. Workflow in Sustainable Design projects
3. Tools for Sustainable Design
4. Integration with design practices
5. Organisation and stakeholders
- 6. Success with Sustainable Design**

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2

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Agenda

- Business perspectives with Sustainable Design
- Case
- Barriers
- Success criteria

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3

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Business perspectives

- Political focus on energy and Climate Change
- Direct and indirect business perspectives
- Win-win for industry and suppliers

4

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Industry

- Reduced operating costs from project
- Reduced emissions
 - Income from sales of EU-allowances
 - Reduced costs for compliance with EU-ETS
- Improved performance can be copied to other sites
- Improved process control increases product quality

5

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Engineering company

- New service to clients
- Additional turnover for existing/new projects
- Interface with existing business areas
- Quantified value for clients
- In depth process analysis adds value for clients

6

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Success with Sustainable Design

- Start in early project phases (Conceptual or Basic design)
- Include independent energy expert
 - Independence from project
 - "fresh eyes"
 - Use experts for dedicated processes
- Industry commitment is important
- Spend sufficient resources for baseline

Analysis Implementation Baseline

10

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Benchmark results

Environment related costs [%]

Baseline project After Sustainable Design

Sustainable Design:
 -40% environment related operating costs
 -60% greenhouse gas emissions
 -32% fresh water consumption

11

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Make success measurable

- Make a robust baseline
- Keep track of saving potential
 - Cost savings
 - Investments
 - CO₂-emissions
 - Reduced consumption
- First target is reductions in process
- Address utilities at a later stage
- Make a summary report of initiatives implemented
- Benchmark impact from Sustainable Design with baseline costs/emissions

12

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The end

Thank you for your attention

13

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