

Energy efficiency as a profit center



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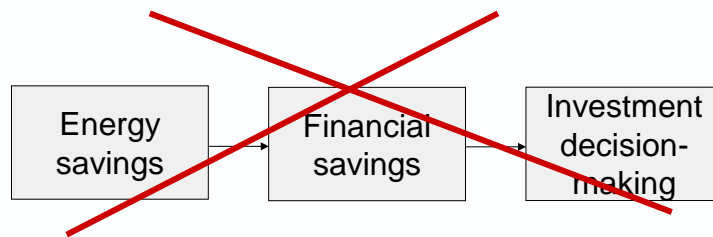


UNECE Group of Experts on Energy Efficiency (GEEE), 31 October 2017



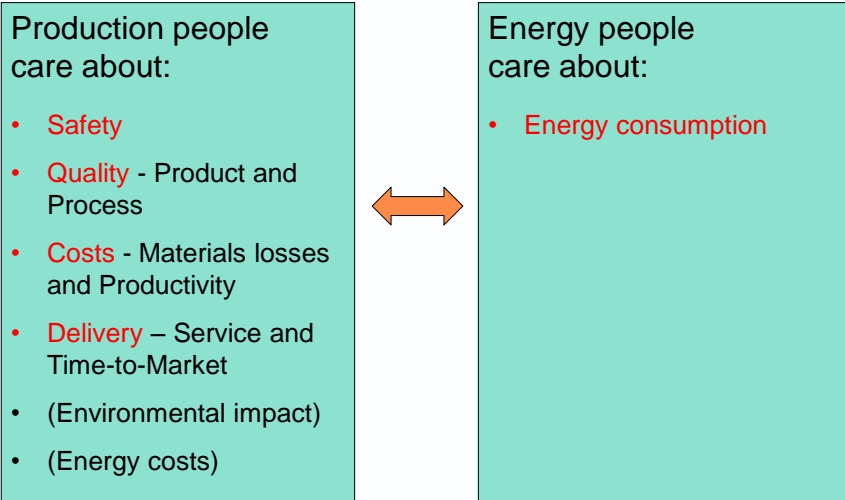
Context

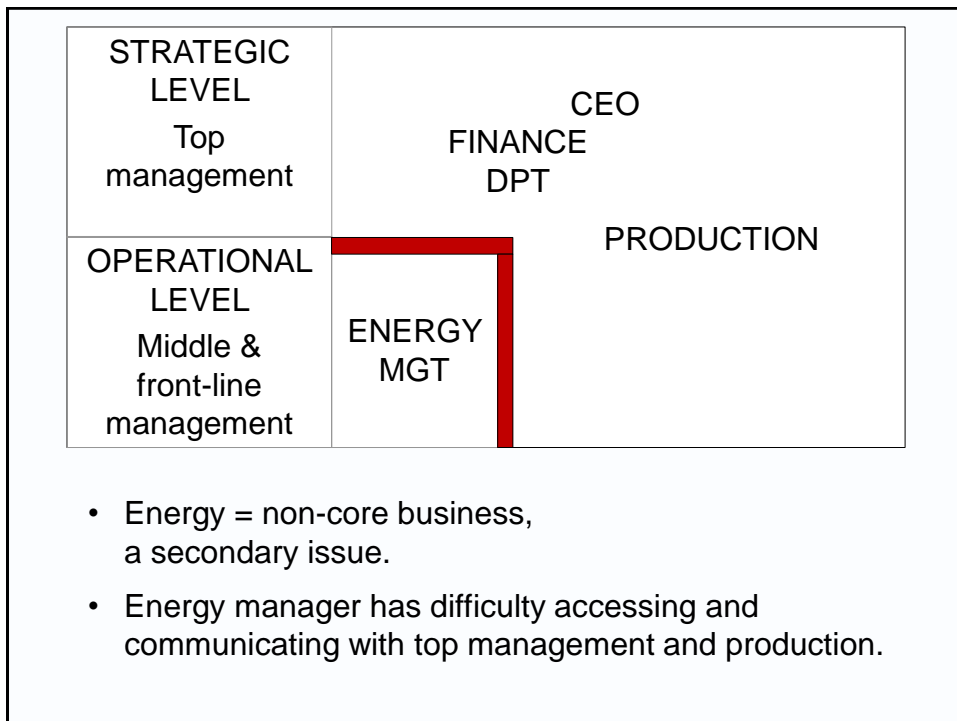
The classical technico-economic approach
("KWh saved" approach)



... does not work (well enough).

Business cultures and interests
in organisations:





Solution

A broader approach:

- Energy efficiency as a profit center
- The Multiple Benefits of energy efficiency

Energy efficiency as a profit center

The concept

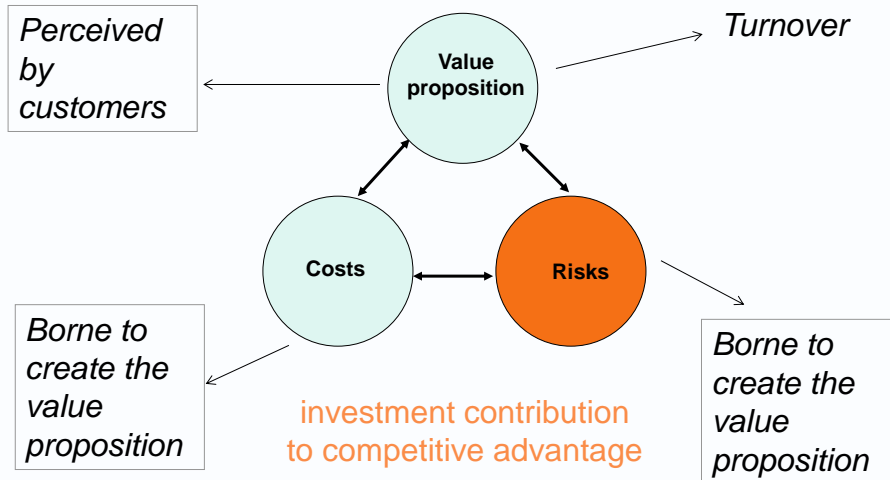
1. Operational and energy analysis
2. Strategic analysis
3. Financial analysis

1. Operational & energy analysis

Identifying:

- Process map and process services
- Energy services
- Equipment and systems + monitoring & control tools
- Energy carriers

2. Strategic analysis



Source: Cooremans, 2011

3. Financial analysis

Benefits (or impacts) of energy-efficiency projects are quantifiable

3 methods to define magnitude:

- Estimation
- Calculation
- Measure

BEVERAGE INDUSTRY		Year 0
Investment project "Replacement filling line"		
Investment flows		
Cash-flow after taxes		
Capital expenditure		-1000000
Terminal value		
Terminal value after taxes		
Investment flows "Replacement filling line"		000000
	Discount rate:	0%
ANALYSIS OF THE FREE CASH-FLOWS		
NPV 20 years @ 8%		-1118384
IRR		0.0%
Simple pay-back time (years and months)		25.0

Information does exist in companies:
just ask the right people!

EU H2020 M-BENEFITS

Evaluating & Communicating the Multiple Benefits of Energy-Efficiency Projects

3 years – 13 partners - 11 EU countries

EU H2020 - M-BENEFITS DELIVERABLES

1. Create a harmonised approach and methodology
2. Develop database and case studies
3. Develop ways to communicate about MBs to stakeholders
4. Train the “efficiency providers” inside and outside companies

THANK YOU FOR YOUR ATTENTION

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