

Implementing and using Eco-Efficiency within AkzoNobel

How to incorporate sustainability in financial decisions

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Introduction

Research based on master thesis Industrial Ecology at AkzoNobel in 2008:

- Use of EEA
- Incentive scheme
- Decision making structure

From this practice the sustainable decision making model was developed



What is sustainability?

Doing business in the future! (My personal interpretation)

This is business that society needs and accepts:

- **Add value and profit**
 - Create jobs
 - Sell products
- **Treat planet and people well**
 - Environmental performance
 - Labor conditions
 - Follow legislation

Society makes rules



Why sustainability?

Companies will follow (within playing field)

Being unsustainable means risk:

- Lose access into (future) markets (for sustainable products)
- Lose existing business
- Acceptance customer
- Exposure to prices of non-renewable materials and energy
- Loss of qualified personnel
- Possible higher energy and material use
- Harder to find investors

Be prepared: go into the right direction

Invest in sustainable projects!



Sustainable decision making

How to achieve?

- Measure sustainability of a project
- Change (financial) requirements based on sustainability projects
- Motivate managers to find sustainable solutions

First “normal decision making”

Look at LCC and “profit” definition within AkzoNobel



Decision making model

Decision maker (DM) identifies possible actions (need for change / problem)

Step 1

For example new product, tighter regulations or investment opportunity

DM investigates the possible action

Step 2

Decision maker orders an EEA study (or something else of course) in order needs information to see what happens if he fulfills "need"

DM "calculates" impact of possible action on his targets.

His targets are:

	AkzoNobel targets		Personal targets	
	Financial	Non financial	Financial	Non financial
Long term	Goals	Goals	Future salary	Personal needs
Medium term	Action plans	Action plans	Bonus	Personal needs
Short term	Budgets	Working orders	Bonus	Personal needs

Step 3



Life Cycle Costing

EEA uses Life Cycle Costing to measure “Profit”

Profit for AkzoNobel is not measured via LCC

Already financial decision making structures being used
“Standard” Corporate Finance structures

Use existing financial structure

Focus on extra insights that LCC can give:

- Cost structure in Life cycle
- Value of activities to society

Use Eco-Efficiency to give advice on financial parameters



Sustainable decision making

Measure sustainability of a project:

Full societal Eco-Efficiency Analysis (+ Social impacts)

Planet + Profit (+ People)

Why? Measure impact actions on society

Eco-Efficiency (EE score) = Impact planet (LCA) / Impact profit (LCC)

For example the AkzoNobel average Eco-Efficiency score as a benchmark:

Identifies:

- Unsustainable products and applications
- Unsustainable parts of company

Eco-Efficiency = high, is that business that can done in the future?

Eco-Efficiency = low, is that the right direction to go into?



Sustainable decision making

Change requirements based on sustainability project

Give advise on financial parameters using EE score:

If project is sustainable:

Lower risk

Accept with lower risk premium (invest in future)

If project is unsustainable:

Higher risk

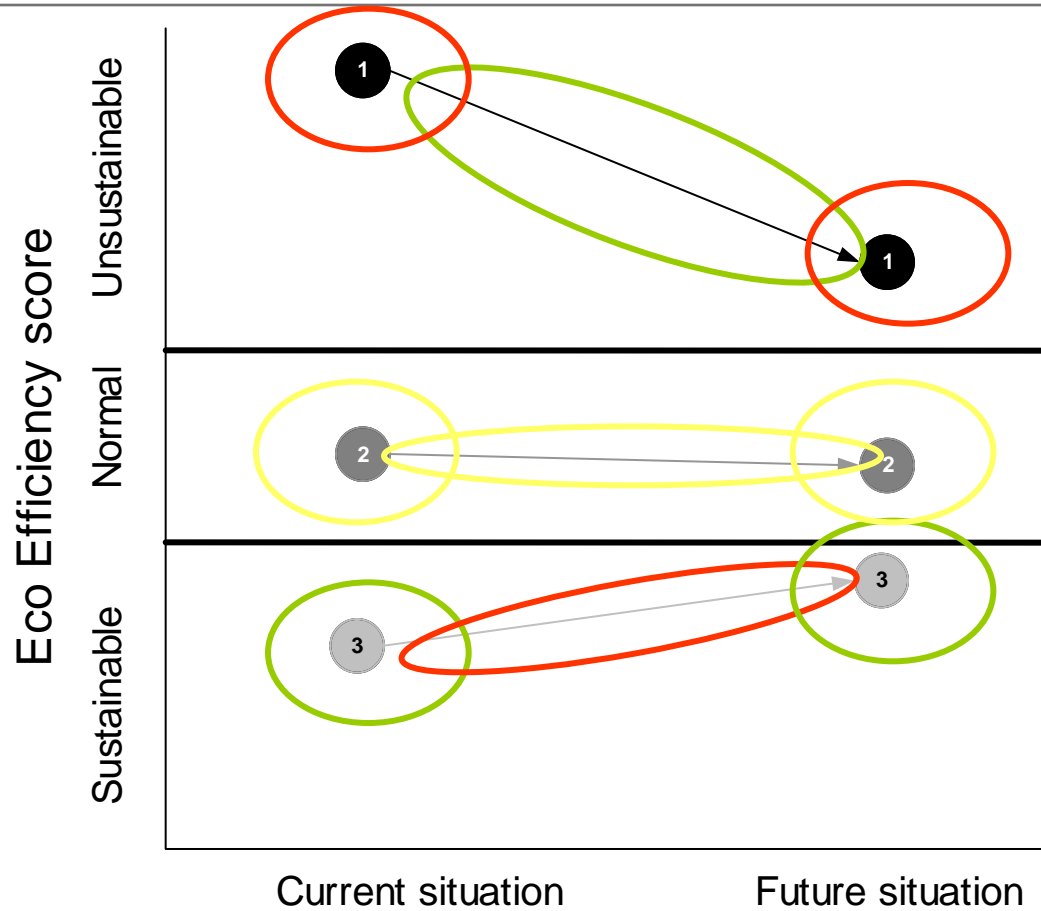
Accept at high risk premium only (make money now)

Sustainability	Investment
Phase out	No invest possible
Very Unsustainable	Very Difficult
Unsustainable	Difficult
Business as usual	Normal
Sustainable	Easy
Very sustainable	Very easy



Sustainable decision making

Example imaginary cases



Sustainable decision making

Motivate managers to find sustainable solutions

If AkzoNobel decides to invest

Decision maker must always strive for improvement

What is improvement?

Compare improvement with current situation:

No or small improvement = unsustainable

Medium improvement = normal

Large improvement = sustainable

No better viable alternatives

Improvement on current project situation		
Small	Medium	Large
Penalty	Nothing	Bonus

Give incentive: bonus or penalty on bonus



Sustainable decision making Framework

18

1- 68/23 1422%

			EE relative score versus current		
			Improvement versus current project situation		
EE score	Sustainability	Investment	Low (<5%)	Medium (5- 20 %)	High (>20%)
above 56,6	Phase out	No invest possible	-	-	-
Between 28.3 and 56,6	Very Unsustainable	Very difficult	Penalty	Nothing	Bonus
Between 14,1 and 28,3	Unsustainable	Difficult	Penalty	Nothing	Bonus
Between 7,1 and 14,1	Business as usual	Normal	Penalty	Nothing	Bonus
Between 3,5 and 7,1	Sustainable	Easy	Penalty	Nothing	Bonus
Below 3,5	very sustainable	Very easy	Penalty	Nothing	Bonus

Example 1: EE score project = 18 & EE current situation = 23

Example 2: EE score project = 6 & EE current situation = 7

Better alternative available

Example 3: EE score project = 70 & EE current situation = 96



Conclusions

Use of Sustainable decision making framework

Decision maker within AkzoNobel

- Will see benefit of doing EEA
- Direction from AkzoNobel
- Quantified in bonus

AkzoNobel (board)

- Strong internal and external communication device
- Steers where they have power
- Enables move in right direction
- Quantified comparison of different parts of company



Discussion point

EEA Methodology

- E/E score will give input for variables use in financial decision
- Financial assessment will include discounting therefore no need to do that in EEA Methodology

Does this sound logical?

Also applicable outside business decisions?

