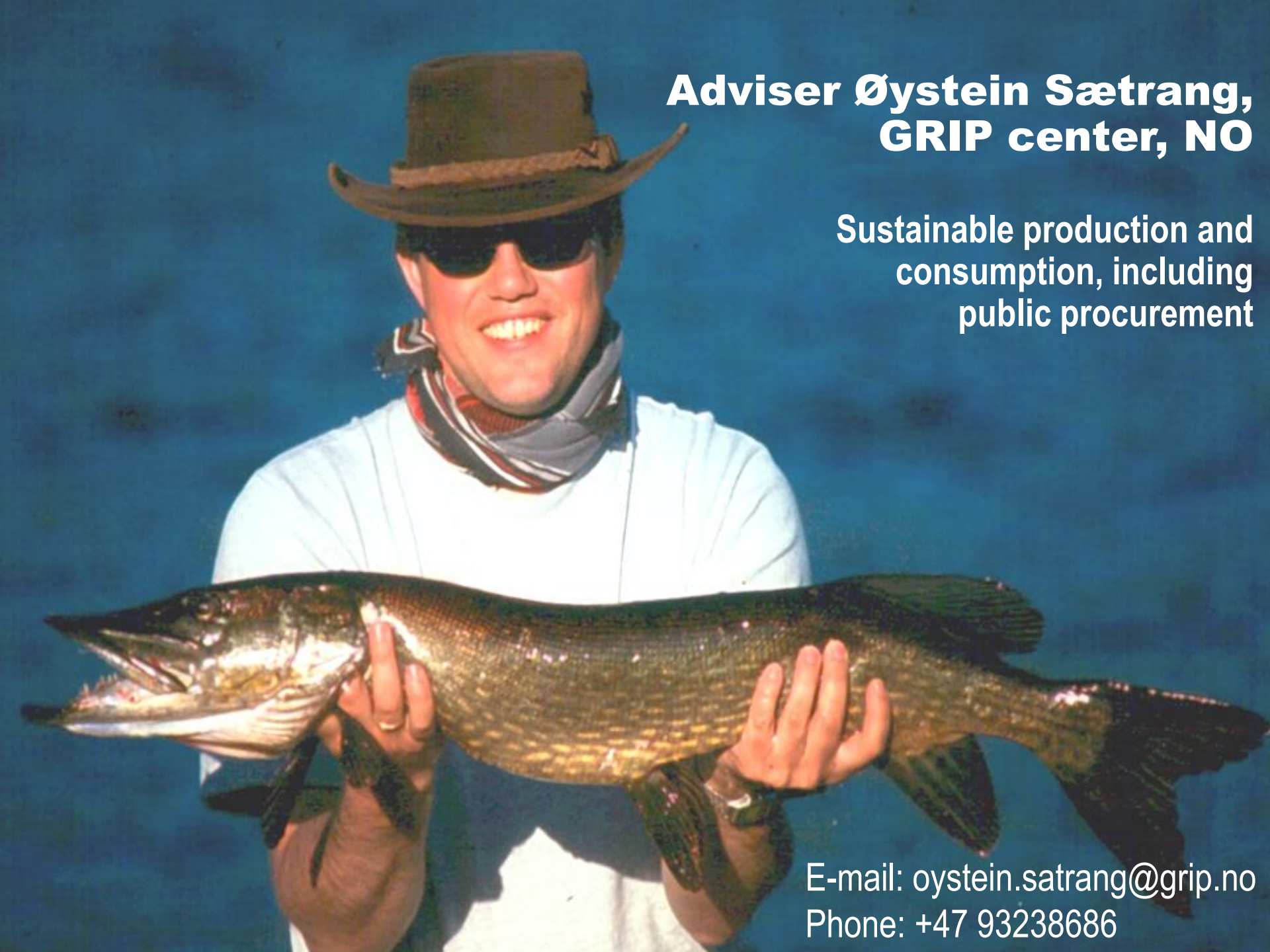

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GRIP

GRIP center

www.grip.no

- Foundation set up by the Ministry of Environment
- Vision: Making sustainable development profitable and inspiring
- Focus on market, business and organization
- Special focus on GPP, EMS, mobility and tourism

20 co-workers – 11 co-workers on GPP

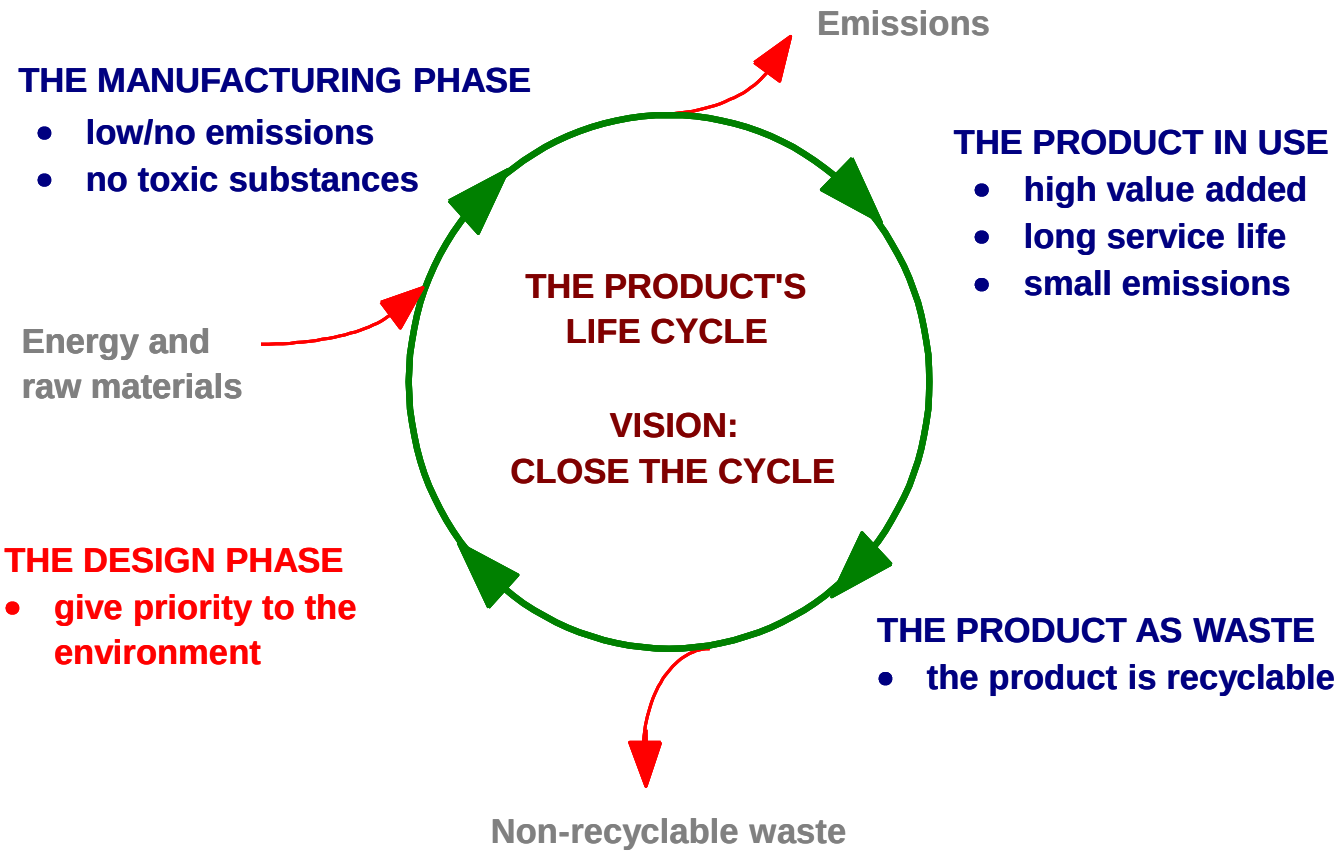
GRIP

Eco-efficiency in 7 steps

- Reduce the material intensity of goods and services
- Reduce the energy intensity of goods and services
- Reduce toxic dispersion
- Enhance material recyclability
- Maximise the sustainable use of renewable resources
- Extend product durability
- Increase the service intensity of goods and services

Source: WBCSD (World Business Council for Sustainable Development)

Vision – Closing the circle



The concept of eco-efficiency

$$\text{Eco-efficiency} = \frac{\text{Value-added (over time)}}{\text{Environmental impact (over time)}}$$

Environmental impact:

- Consumption of raw materials and energy
- Pollution
- Waste

=

Corporate + external costs

- Implementing the concept of sustainable development
- Can be measured

Green Procurement

Green procurement → Organisation development

- Management involvement is a prerequisite
- Should be formalised in a purchasing policy
- An EMS in place will often help process

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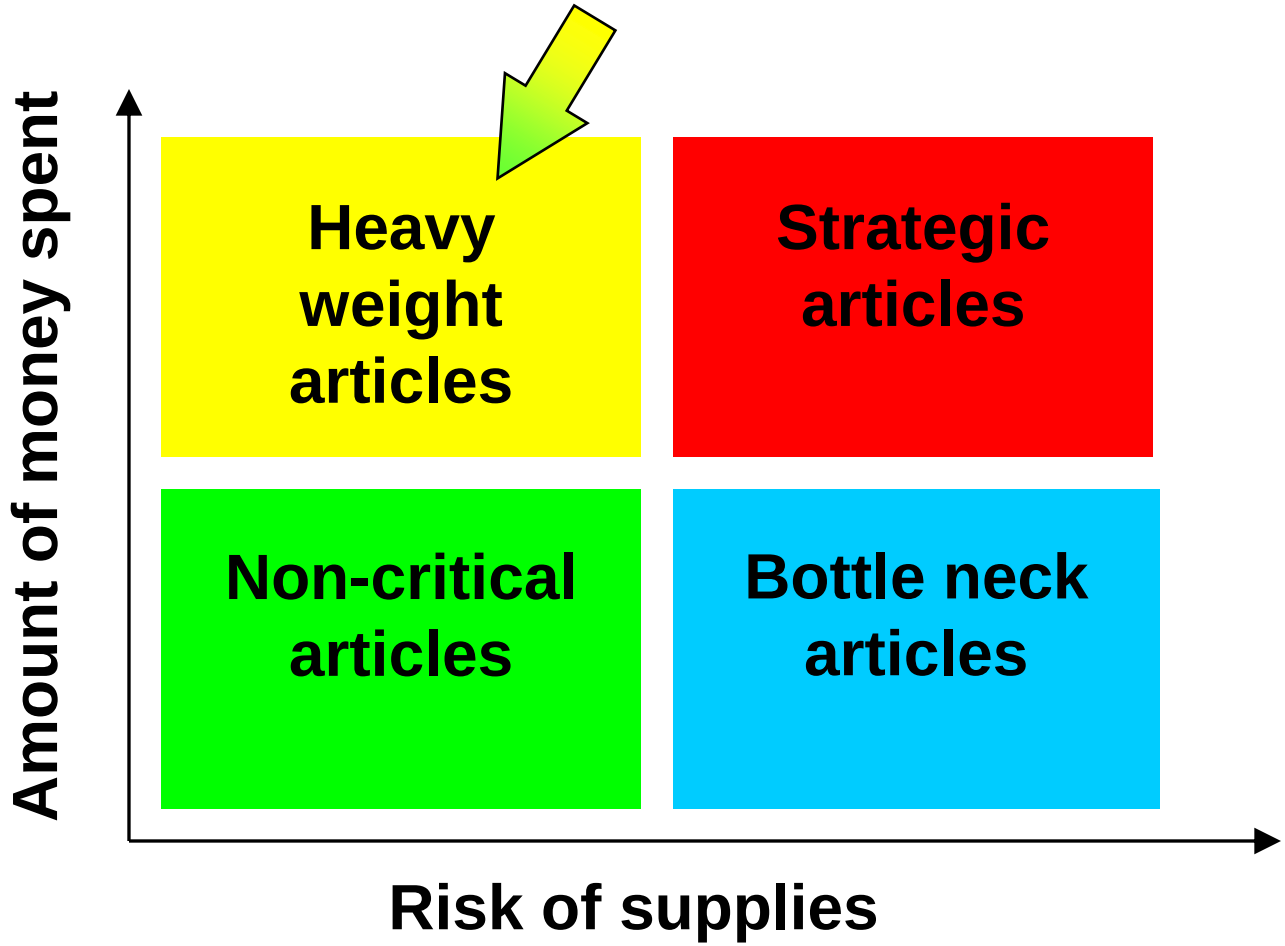
Many advantages...

Parameter	Advantages
Does the job – long durability	Increased value added/low costs
Env. friendly production	Reputation/profile
Recycled materials, sustainable resources	Profile and costs
Low content of dangerous chemicals	Health, safety, costs
Low energy consumption	Costs
Low water consumption	Costs
Low emissions/low noise level	Health, safety, costs
Little packaging	Costs
Design for recycling	Costs
No hazardous waste	Costs

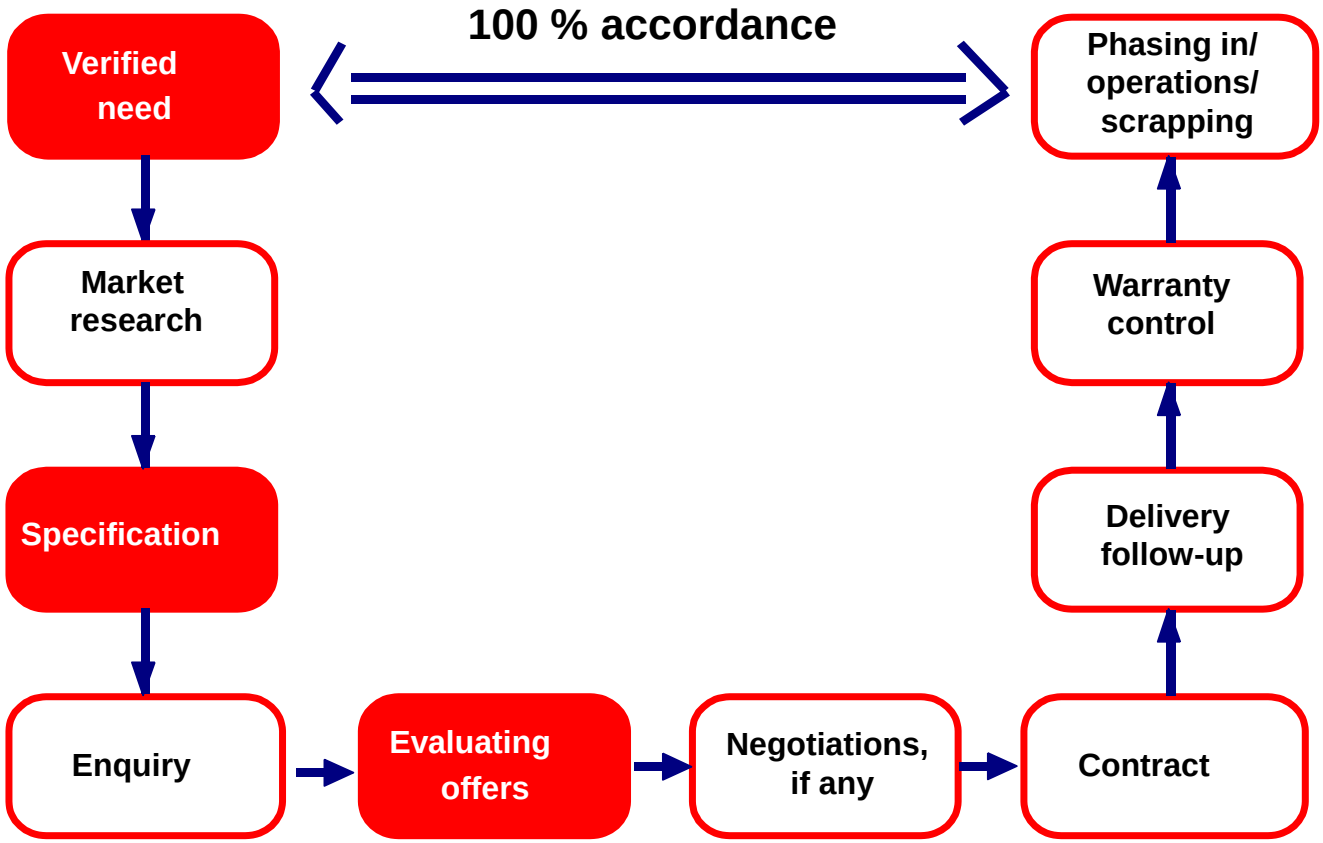
Environment

Which product groups to choose? Where to start?



Source: Kraljik

The procurement phases



Source: Interpro AS


I'd like to end poverty, stop violence and racism, and get rid of pollution. Everyone should be equal.
I want to dress in the nicest clothes, drive a great car, talk on the latest mobile phone, and watch my brand new DVD

GRIP

Verifying needs

Questions to be asked:

- Who are the actual users?
- What is the real need?
- Which performance is required?
- Can the need be satisfied without purchasing?
- Can methods and routines be changed?
- Can a completely new solution be found?
- For how long will the need last?
- Is the need constant? Or will it change over time?
- In this phase the biggest gains can be achieved!

Video conference

- A new way of communicating
- Saves time, money and environment
- A good alternative in many cases
- ”Skype” is the low cost alternative to traditional video conferencing

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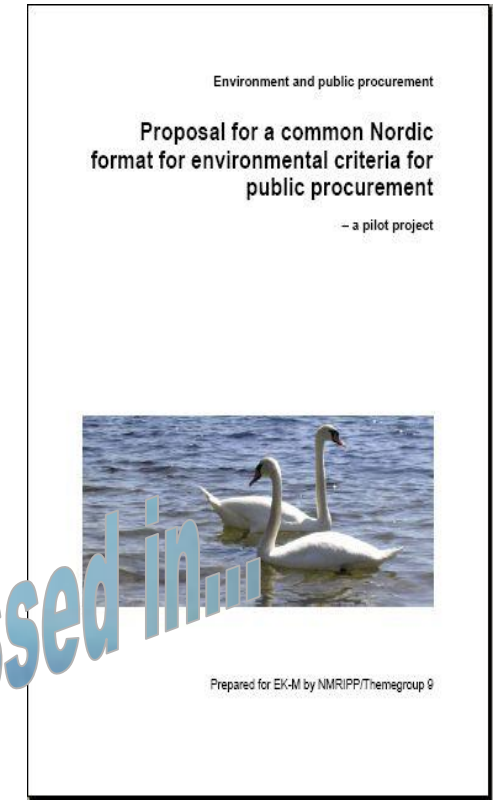
Example - transport

- **The best buy can be the one that is not done:**

- *Example from the Municipality of Oslo: The water and sewer department felt the need for a truck to be used to deliver goods. After a need verification process they concluded that that it would be good enough to hire a truck from the municipality's transport central.*

Specification – an art

- The specification shall express verified needs as objective, measurable demands
- Many variables to have in mind
- Two main categories of specifications:
  - **Technical specifications**
  - **Award criteria**

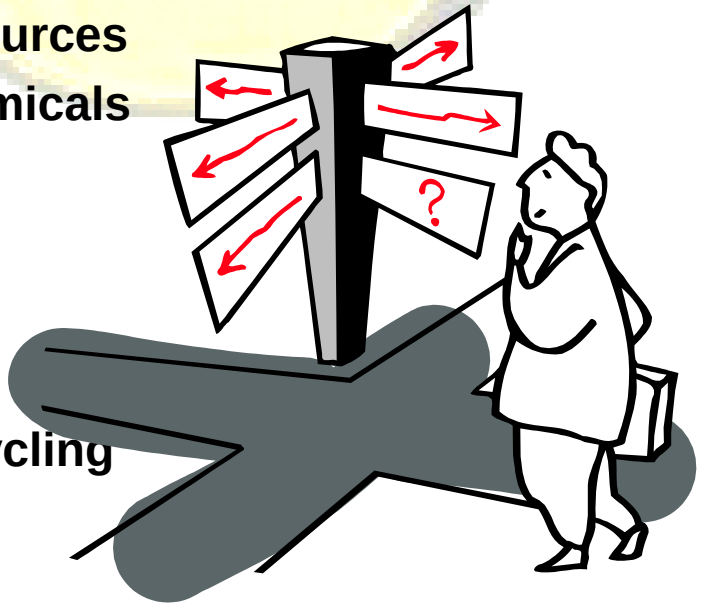


Discussed in...

What should the specifications include?

Check list:

- Functionality
- Durability
- Maintenance/Service
- Reused materials
- Sustainable managed resources
- Content of hazardous chemicals
- Energy consumption
- Water consumption
- Pollutions
- Noise
- Possibilities for reuse/recycling
- Hazardous waste



Tender document: Subject matter of the contract

- Subject matter of the contract: Tell the supplier what you want!
  - ***E.g Car leasing, Municipality of Asker: Car keeping is not the core business of Asker Municipality. The aim of the tender is to obtain a frame agreement with a supplier of car administration services that will include running, maintenance, repair, car buying, car sale, and a service that makes it possible to follow up the contract and report the costs.***
  - ***Cars and car keeping are activities that have a negative impact on the environment. As a part of the ongoing work in Asker Municipality to reduce our own environmental load, the environmental profile of both the recommended cars and the supplier of the service will be evaluated.***

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Technical specifications

- Technical specifications: Defines what the product must perform as a minimum, e.g: energy consumption, water carrying capacity of a fire truck, chemical content etc
- Technical specifications are easy to evaluate (Yes/No)
- The demands can not be too tough – must be sure the market can deliver
- Therefore this stage eliminates the worst products
- BUT market research is important: A proper job here and one can go for the best:
  - **E.g: Municipality of Sandnes wanted low sulphur heating oil:** ***The offered heating oil shall not have a sulphur content above 20 ppm.***

Env. friendly cars in Oslo municipality

- A definition of ”env. friendly car” was made
  - Petrol: 140 g CO_2 per km
  - Diesel: 122 g CO_2 per km
- A market research was done
- 12 cars fulfilled the def – definition was included in technical specification
- Tender process gave a good economical and environmental result
- Cars selected: El-car Kewet, Skoda Fabia, Toyota Yaris, Toyota Yaris Verso and Toyota Prius

Award criteria

- Award criteria are good when you do not know the market response – and have wishes that go beyond what anyone presently can deliver…
- Award criteria can drive innovation
- Award criteria are recommended if you are skilled in evaluation

- Ex: How much CO_2 pr km?
- Ex: Does the product fulfill the EU-flower criteria?
- Ex: How much mercury does the product contain?

Contract clauses

- One can as part of the contract demand that the supplier do so and so during the contract period, e.g:
  - **fulfill the eco label criteria**
  - **have an EMS implemented**
  - **reduce the number of chemicals being used performing the service etc**

Alternative bid

- Within the procurement directives one can ask for alternative bids
- Gives suppliers the possibility to cover the specified need in new and possibly innovative or environmental ways
- Demands more from the procurement officer

Early warning

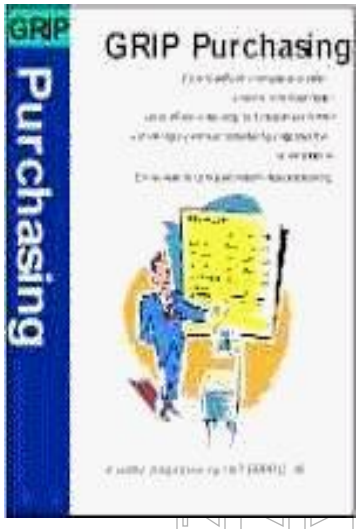
- A good routine for big buyers is to warn the market well in advance what they are going to buy and which criteria that will be used.

Life Cycle Cost

- Focus on life cycle costs is good for the procurer and good for the environment
- Consist of three elements: Procurement cost, running costs, disposal costs

- The net present value method is made for this purpose

Described in GRIP Purchasing



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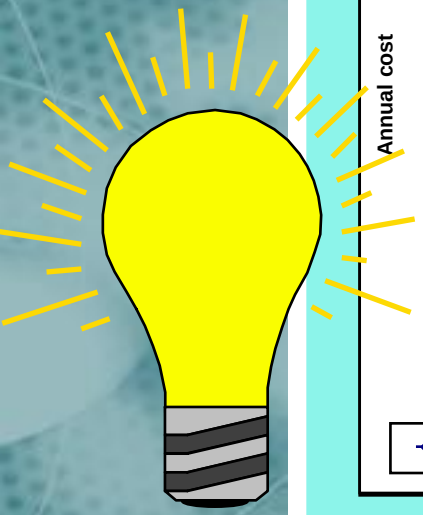
Example – energy saving bulb

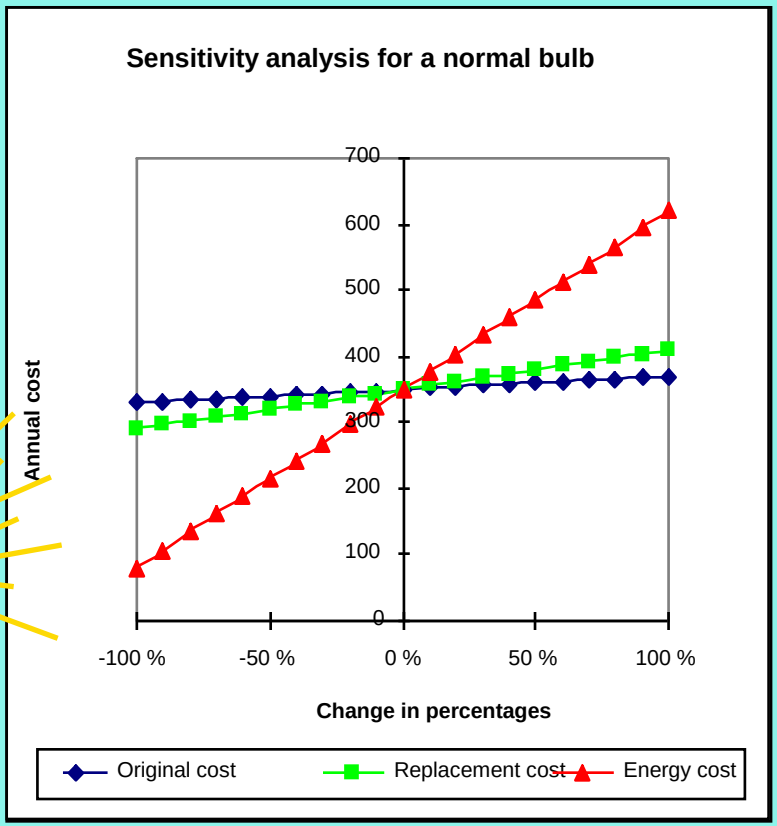
The choice is between:

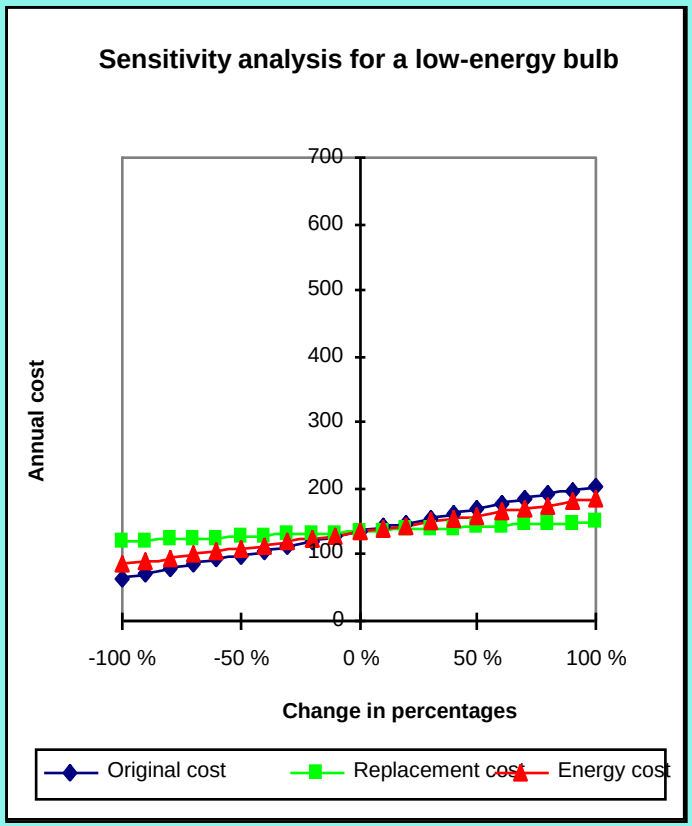
- the lowest price
- the economically most advantageous offer

	Normal bulb	Low energy bulb
Unit prce:	*5 NOK*	*70 NOK*
Service life:	*2500 hours*	*10000 hours*
Energy consumption	*60 W*	*11 W*
Replacement costs:	*15 NOK*	*15 NOK*
Price per KwH:	*0,45 NOK*	*0,45 NOK*
Over a period of 10000 hours (more than one year's continuous operation) gives roughly the following result:		
TOTAL annual cost:	*350 NOK*	*135 NOK*

Use sensitivity analyses







Example: New signboards for Storebrand

Contract between Storebrand and ElektroVakuum Ltd:

- Signboards approved by local authorities
- Half of electricity consumption for lightning
- Triple durability on light bulbs
- Seven year guarantee on surface treatment
- Approved treatment and destruction of waste

→ **Life cycle costs reduced by half**

Source: ElektroVakuum Ltd

Example: Telenor Kokstad

GRIP

Focus on:

- Env. friendly materials
- Low energy consumption
- Pollution during building life
- Low total costs
- Efficient use of floor space

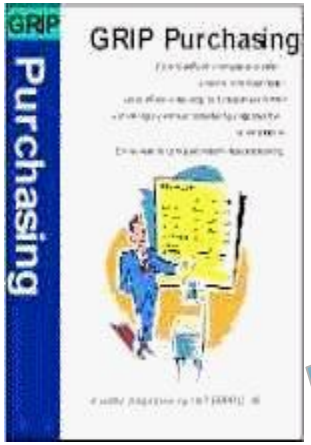
Results:

- Energy consumption: 80 kWh pr m^2 pr year (normal >160 kWh/m^2)
- Investment costs: 30 % lower than normal
- Annual running costs: Lower than normal

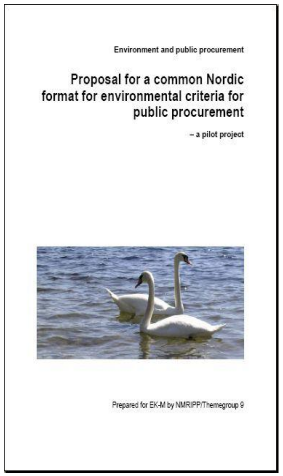
Guidelines in English

- **"GRIP Purchasing" (1996) – a general handbook on Green Public Procurement (GPP). It is based on general purchasing principles. (In 2006 it was rated second best among 17 tools assessed by the UK Green Procurement Task Force.)**

- **A Good Buy – two Nordic brochures – one for leaders and one for purchasing officers**

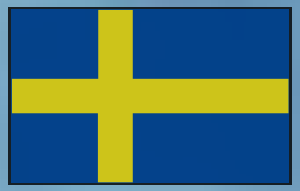


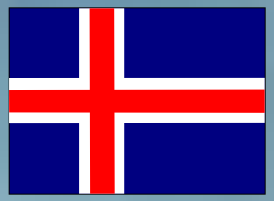
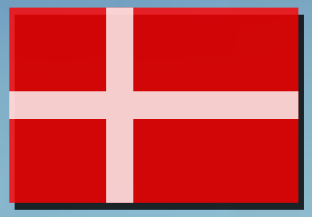
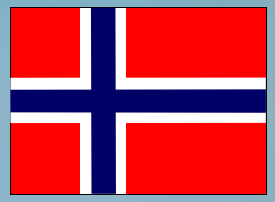
Available at www.grip.no/innkjop



Welcome to the Nordic Green Procurement Criteria Base

Please select language…




To be launced in 2007

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