

# SKI's experience with green procurement

2. maj 2023

**Adam Goslett** 

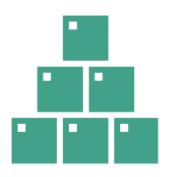
Senior consultant, CSR & Sustainability



**Creation** of tender material



**Contract** use







<u>Creation</u> of tender material

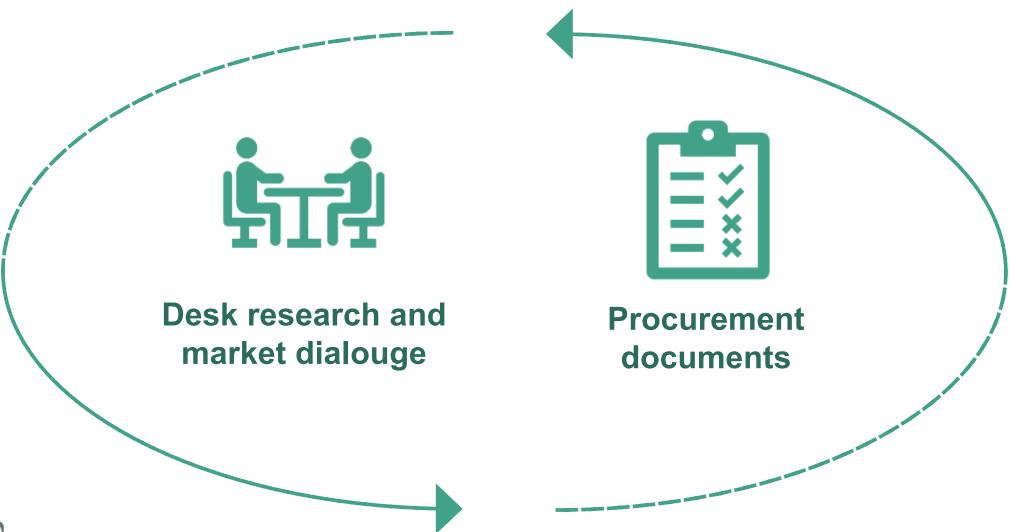


**Contract** use





### **Creation** of tender material





### Stakeholder involvement



### **Customers**

Experiences and expectations



### **Industry association**

Main messages and upcoming changes



**Potential bidders** 

- Needs and recommendations



### SKI looks at the entire value chain



### Methodology (example)

#### 1. Production



- Energy consumption
- Chemicals
- Raw material extraction
- Deforestation
- Corruption
- Labor rights
- √ Labels/certifications

#### 2. Logistics



- ❖Transport
- ❖Packaging
- ✓ Short distance to manufacturers
- ✓ Packaging minimization requirements
- ✓ Delivery deadlines

#### 3. Inventory management



- ❖Inventory energy consumption
- ❖Waste
- ✓ Requirements that reduce energy consumption for e.g., cooling or storage

#### 4. Delivery



- Transport of products
- Installer transport
- Packaging
- ✓ Minimum order and delivery fee
- ✓ Emission requirement

#### 5. Use/behavior



- ❖Power usage
- Chemicals
- ❖ As-a-service models
- Packaging
- Extended warranties
- Repair work
- Update e.g. in RAM
- ✓ Labels
- ✓ TCO

#### 6. Disposal/afterlife



- ❖ Reuse / resale
- Recycling
- Disposal
- Waste sorting at source
- ❖ Chemicals/toxins
- ✓ Labels



### Operationalisation of analysis (example)

#### Sustainable value chain

#### Methodology (example) + Energy concumption Chericulu consumption e Size material extraction. @ Debarotation Short detance to 4 Compton - Requirements that reclude 4 Labor rights Packaging renembation energy concurration for e.g., coming or storage Cately/red0cations «Stationsy deadliness ◆ Transport of products Affiner stage & Respé l'essaie 9 Installer transport. & Chemicals \* Recycling + Packaging ® Au-a-service models. + Disposal + Packaging . Woody sorting at assets: - Minimum until and \* Edwilled varianties **4**Chereutsfeites # Repor work √ Employ regularement # Update # # in PUME of Laborita < 13000

### **Chosen elements**

Factor 1: Energy consumption

Factor 2: ISO 14001

Factor 3: Product guarantee

Factor 4: Eco labels

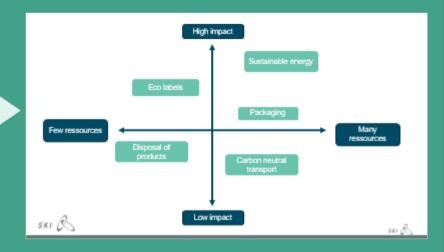
Factor 5: Reparations

Factor 6: Transportation

Factor 7: Recyclability

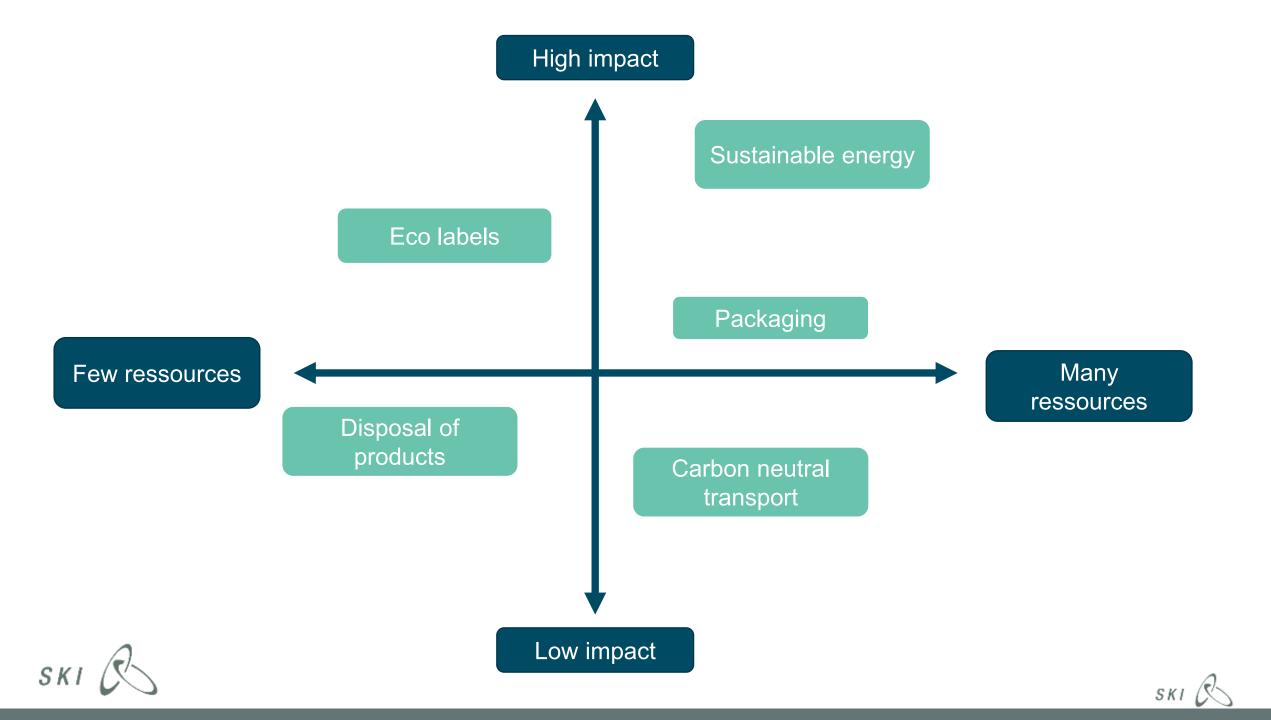
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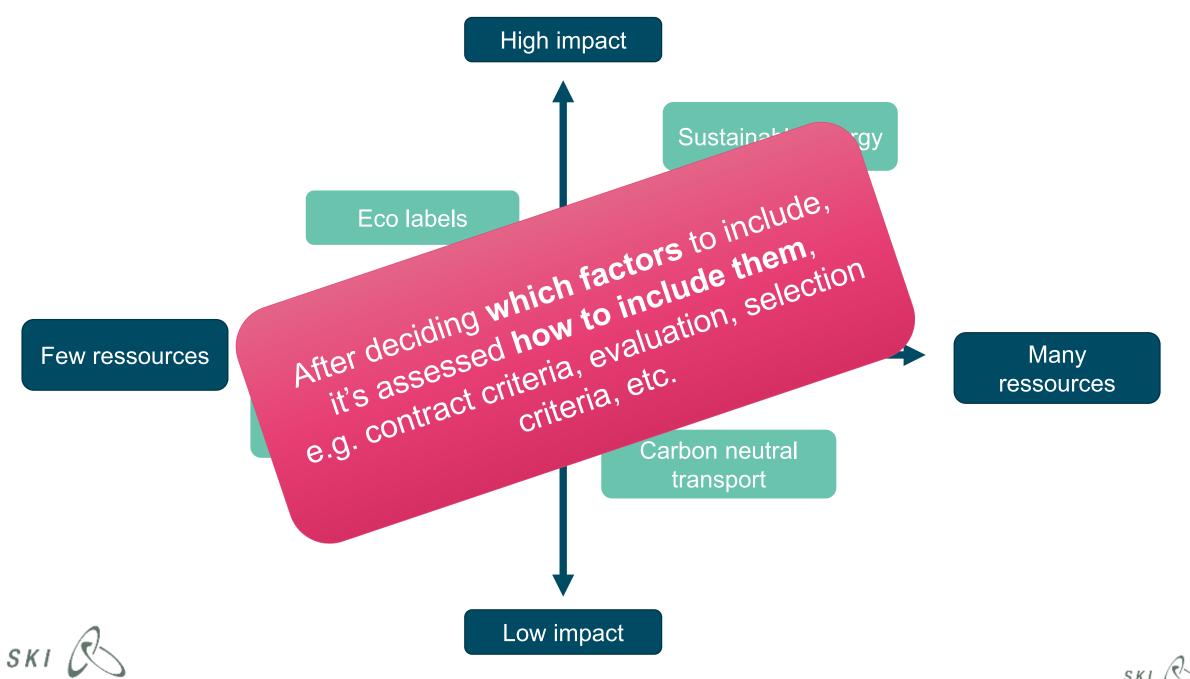
### Impact vs. ressources

















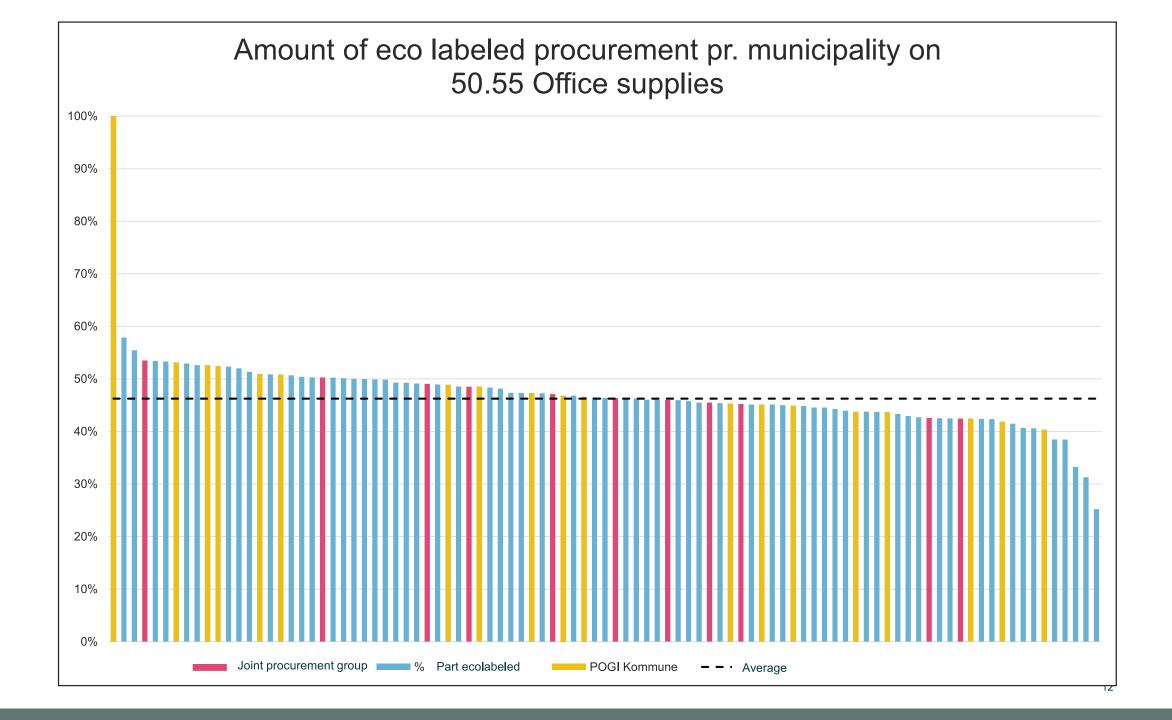
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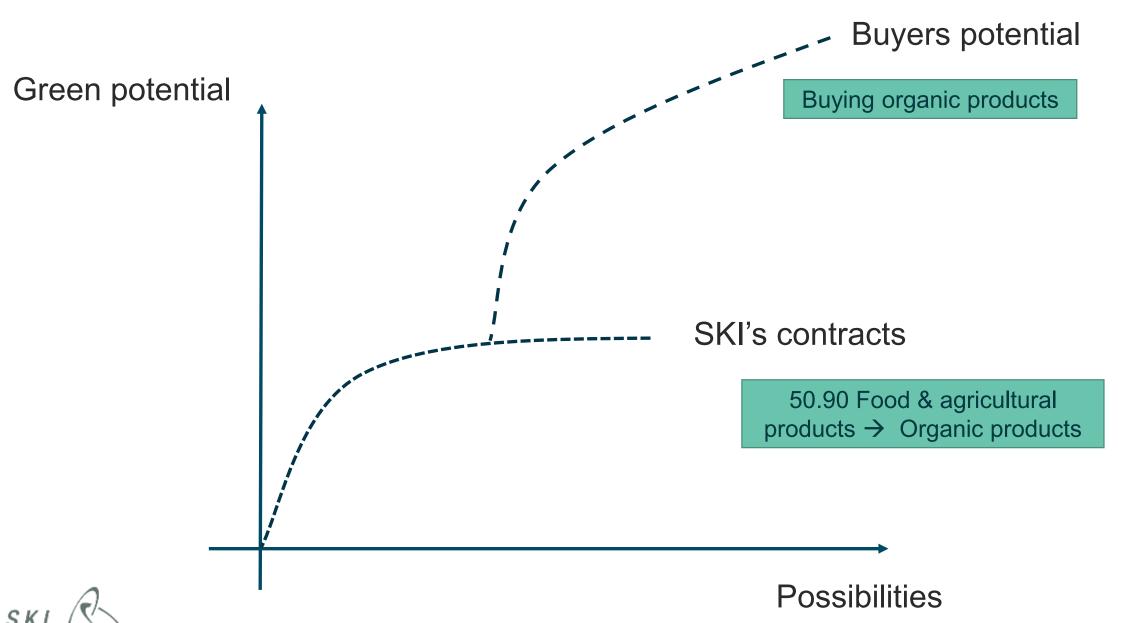


**Contract** use

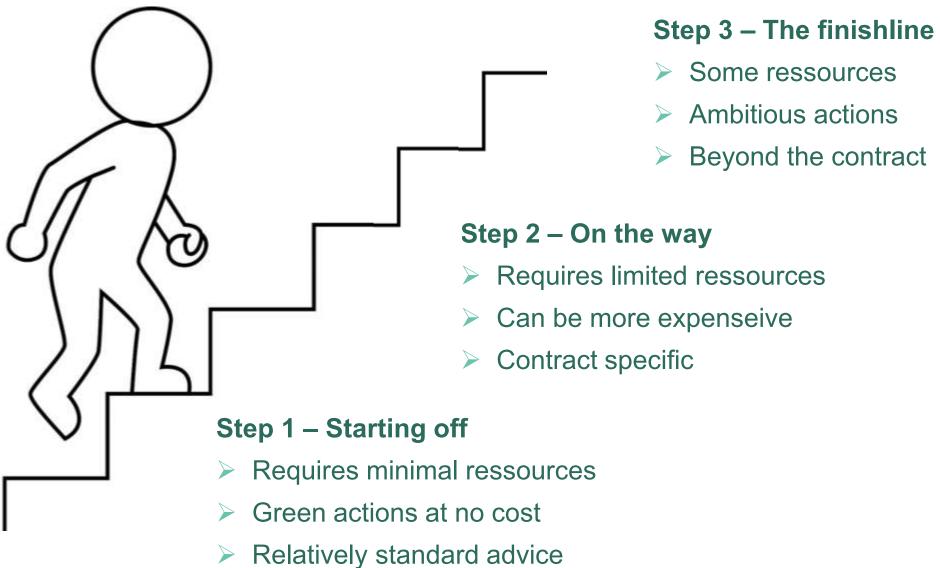








### Green advice: Concrete suggestions pr. contract





Green	Specifikke krav på denne aftale		50.07 Kommuni-	50.20 orbrugsartikl (2020)
CO2-krav	Her får du et overblik over de grønne krav, vi har stillet på	aftalen. Du kan også	å se, hvor du kan læse mere i bilagene.	
Grønne emballagekrav	Tender documents	Appendixes		×
Energikrav		пропалоз	- ii	
Fairtrade	Følger POGI-krav på udbudstidspunktet		III	
Krav om arbejdsklausul	Strenge kemikrav	В		x
Krav til kemi og uønske	Krav om ECO-mode og auto-sluk-funktion	В		x
Lang levetid (produktga	Efterlevelse af Energistyrelsens indkøbsanbefalinger	D		X
Gøn leveringadfærd (mi	(energikrav)	В		x
Miljømærker og certifice	Produktgaranti, reparations- og demonteringsmuligheder	B+E		x
Minimering af madspild	Miljømærkekrav	E		
Følger POGI-krav på ud	Emballagekrav	B+E		x
Synlig miljøoplysninger	Rådgivning om bæredygtighed og TCO (teknisk afklaring)	B+E	1	×
Sæsonvarer	Bortskaffelse og genanvendelse af brugt udstyr	E		
гсо	Mulighed for køb af brugt udstyr (med prisreduktion/rabat)	E		
Filbagetagning, affalds:	mulighed for keb at brugt udstyr (med pristeduktion/rabat)	_	<b>*</b>	x
ransportkrav ved level				
Økologi				



B = Basis criteria

K = Criteria

	Cloud services	Datacenter services	Co-location	Network services	Application services
Basis criteria	B 2.1.1	B 2.1.1	B 2.1.1	B 2.1.1	B 2.1.1
Citteria	B 2.1.2	B 2.1.2	B 2.1.3	B 2.1.2	B 2.1.2
	B 2.1.3	B 2.1.3		B 2.1.3	B 2.1.3



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Green light	K 3.1.1 K 3.1.2 K 3.1.3 E 4.1.1	K 3.1.1 K 3.1.2 K 3.1.3 E 4.1.1	K 3.1.2 K 3.1.3 E 4.1.1	K 3.1.1 K 3.1.2 K 3.1.3 E 4.1.1	K 3.1.1 K 3.1.2 K 3.1.3 E 4.1.1



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	B 2.1.3	B 2.1.3		B 2.1.3	B 2.1.3
Green light	K 3.1.1	K 3.1.1	K 3.1.2	K 3.1.1	K 3.1.1
	K 3.1.2	K 3.1.2	K 3.1.3	K 3.1.2	K 3.1.2
	K 3.1.3	K 3.1.3	E 4.1.1	K 3.1.3	K 3.1.3
	E 4.1.1	E 4.1.1		E 4.1.1	E 4.1.1
Yellow light	K 3.2.1	K 3.2.1	E 4.2.1	K 3.2.1	K 3.2.1
	K 3.2.2	K 3.2.2	E 4.2.2	K 3.2.2	K 3.2.2
	K 3.2.3	K 3.2.3		K 3.2.3	K 3.2.3
	E 4.2.1	E 4.2.1		E 4.2.1	E 4.2.1
	E 4.2.2	E 4.2.2		E 4.2.2	E 4.2.2



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	B 2.1.3	B213		B 2.1.3	B 2.1.3
Green light	K 3.1.1	K 3.1.1	K 3.1.2	K 3.1.1	K 3.1.1
	K 3.1.2	(212	K 3.1.3	K 3.1.2	K 3.1.2
	K 3.1.3	K 3.1.3	E 4.1.1	K 3.1.3	K 3.1.3
	E 4.1.1	E 4.1.1		E 4.1.1	E 4.1.1
Yellow light	K 3.2.1	K 3.2.1	E 4.2.1	K 3.2.1	K 3.2.1
	K 3.2.2	K 3.2.2	E 4.2.2	K 3.2.2	K 3.2.2
	K 3.2.3	K 3.2.3		K 3.2.3	K 3.2.3
	E 4.2.1	E 4.2.1		E 4.2.1	E 4.2.1
	E 4.2.2	E 4.2.2		E 4.2.2	E 4.2.2
Red light	K 3.3.1	K 3.3.1	K 3.3.1	K 3.3.1	K 3.3.1
	K 3.3.2	K 3.3.2	E 4.3.1	K 3.3.2	K 3.3.2
	K 3.3.3	K 3.3.3		E 4.3.1	K 3.3.3
	E 4.3.1	E 4.3.1			E 4.3.1



#### 3.1 Kray til driftsservices - Grønt niveau<sup>1</sup>

### What text should be

added to the mini-tender?

What does the supplier need to do? (Documentation, etc.)

Were does this criteria come from?

SKI will make a supplier's guide too

#### 3.1.1 Kapacitet og strømforbrug<sup>2</sup>

Forslag til konkret aftaletekst:

"Leverandøren skal oplyse kapaciteter samt strømforbrug (i watt) for områderne: servere, storage og netværk. Kapacitet og strømforbrug skal opgøres pr. område. Leverandøren skal angive en totalkapacitet samt en totaleffekt i Watt"

Leverandøren skal for at opfylde kravet fremsende:

1 Inspirationski le: EU's ki erier for grønne indkøb for datacentre, serverrum og cloudtjenester. Side 8 skema, Tilgang til GPP – Punkt 1.

Med Servere me es alt l'atacenter IT, herunder servere, storage og netværk. <sup>2</sup> Inspir "onskilde: EUS "iterier for grønne indkøb for datacentre, serverrum og cloudtjenester. Side 8 skema, Tilgan, til GPP –

EU Code of Conduct kt. 4.1.1.

giverse af relevant parameter for området.

- ervere: Opgøres i \*[GB RAM eller TFLOPS eller Andet]
- Storage: Opgøres i \*[TB Useable eller TB RAW eller IOPS eller Andet]
- Netværk: Opgøres i \*[Gbps båndbredde eller Antal porte eller Andet]
- Opgørelser skal følge EU's adfærdskodeks pkt. 4.1.1 med udgangspunkt i 100% utilisa-
- Samlet set, skal der således kunne opgøres en watt pr. kapacitet for løsningen / enheden. Eksempler:
  - 2.270watt pr. 500GB RAM svarende til 4,54 watt pr. GB RAM.
  - 10.510watt pr. 470TB Usable storage svarende til 22,36 watt pr. TB usable storage.



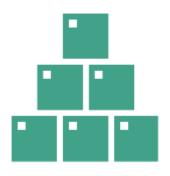




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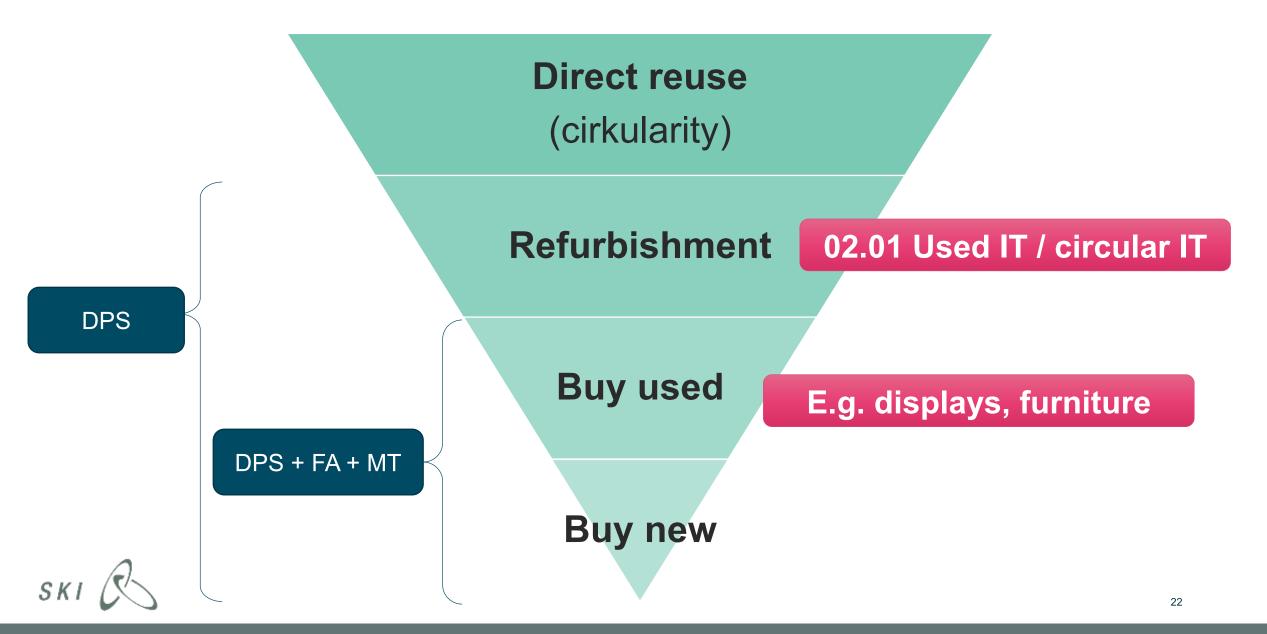


**Contract** use





### Waste hierarchy



### Different examples of sustainability integration on SKI contracts

#### 17.11 Management consultancy

- A new lot for green consultancy
- Customer tools amped up (require green transportion, online meetings, etc.)

#### 50.03 Server storage

- Evaluation on six different questions based on EU's GPP criteria
  - → becomes part of the delivery contract

#### 50.90 Foods and agricultural products

- Signifianctly greener than previous agreement due to ambitious criteria
- CO2 statistics on foods for buyers to see

### Evaluation based on total cost of ownership (TCO):

- 50.62 Light equipment
- 50.10 Printers
- 50.70 Audiovisual equipment (displays, projectors, etc.)

And many, many more...



### Thank you



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