

Welcome

to

Seven steps to circular procurement

Why?

ENVIRONMENT

1,032,135 Forest loss [this year](#) (hectares) [+]

1,389,532 Land lost to soil erosion [this year](#) (ha) [+]

7,218,963,124 CO2 emissions [this year](#) (tons) [+]

2,381,608 Desertification [this year](#) (hectares) [+]

1,943,467 Toxic chemicals released in the environment [this year](#) (tons) [+]

ENERGY

207,862,559 Energy used today (MWh), of which: [+]

176,944,348 - from non-renewable sources (MWh) [+]

31,302,289 - from renewable sources (MWh) [+]

1,302,477,126,319 Solar energy striking Earth [today](#) (MWh) [+]

42,632,565 Oil pumped today (barrels) [+]

1,444,738,802,835 Oil left (barrels) [+]

15,067 Days to the end of oil (~41 years) [+]

1,083,230,614,183 Natural Gas left (boe) [+]

57,012 Days to the end of natural gas

4,297,224,938,026 Coal left (boe) [+]

148,180 Days to the end of coal

[Worldometer - real time world statistics \(worldometers.info\)](http://worldometers.info)



Udvinning af råvarer



Produktion af materialer



Fremstilling af produkter



Distribution



Forbruger



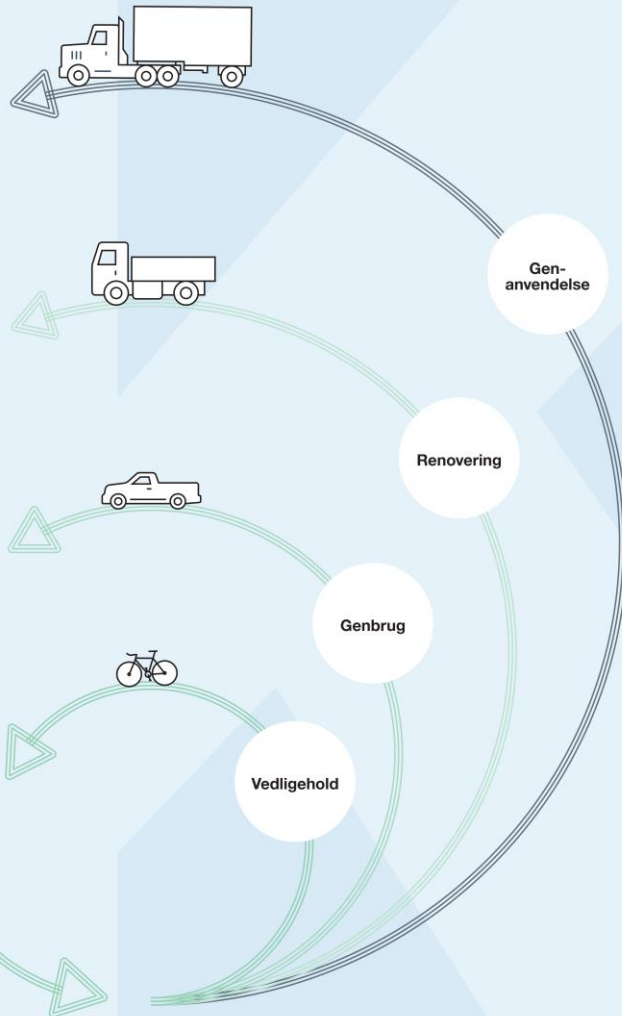
Forbrænding



Deponi

Lineær økonomi

Vejen mod en hverdag uden affald



Cirkulær økonomi

Vores høje levestandard trækker på naturens ressourcer. Derfor skal vi kaste kritiske øjne på vores forbrug. Cirkulær økonomi er et opgør med den traditionelle lineære økonomi, hvor vi har udvundet råstoffer til et produkt, der er blevet solgt til forbrugeren, som efter noget tid har smidt produktet ud igen. Den cirkulære tankegang handler blandt andet om, at de ting, du køber, skal være

produceret af genbrugte materialer. Vi skal altså vænne os til, at alting ikke er spritnyt. Dermed kan vi spare både ressourcer og udledning af CO₂ i en cirkulær økonomi.



CO2



Effect



Forbruger

Forbrænding **Deponi**

Lineær økonomi

Vedligehold

Genbrug

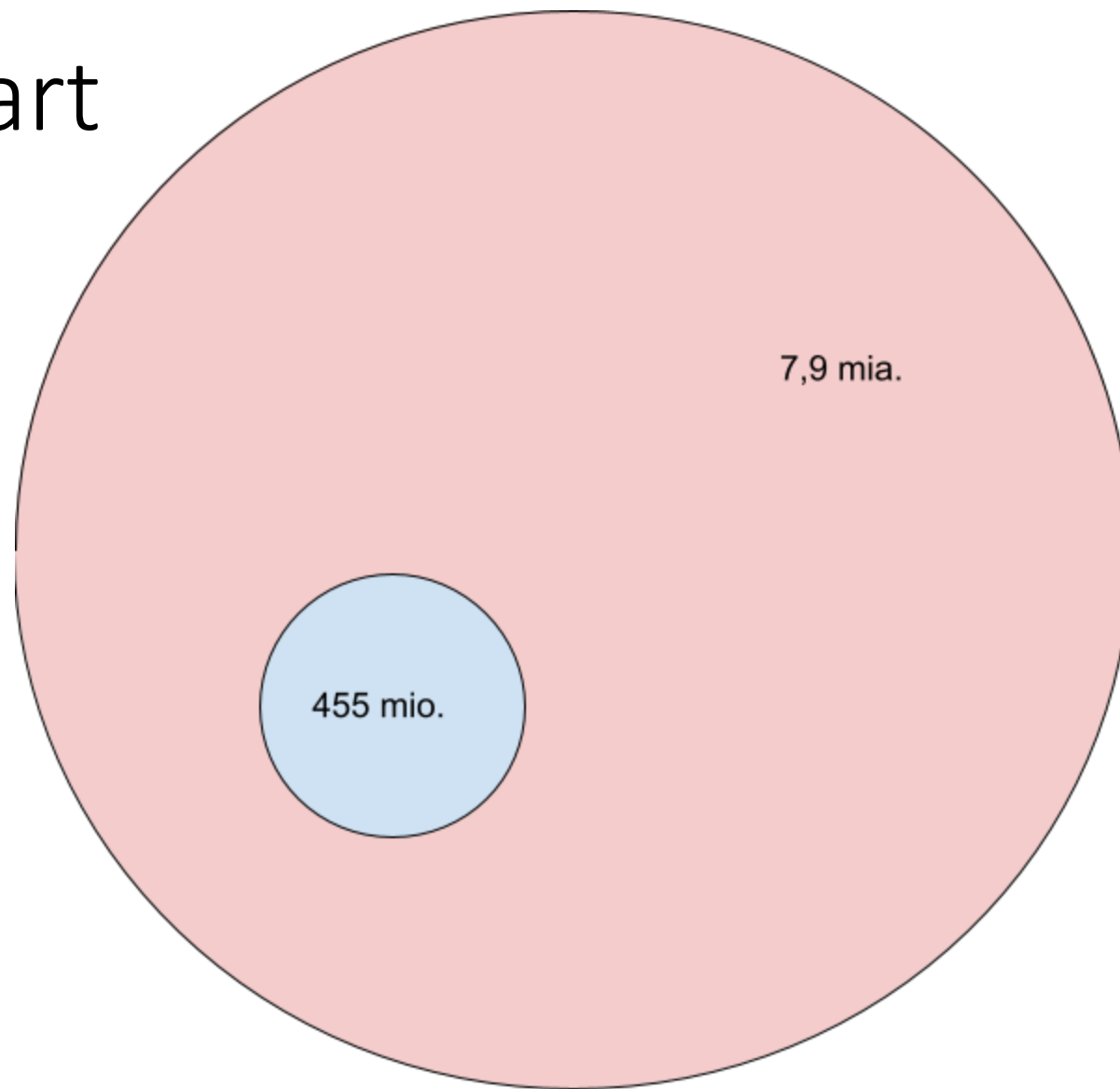
Recycling

Cirkulær økonomi

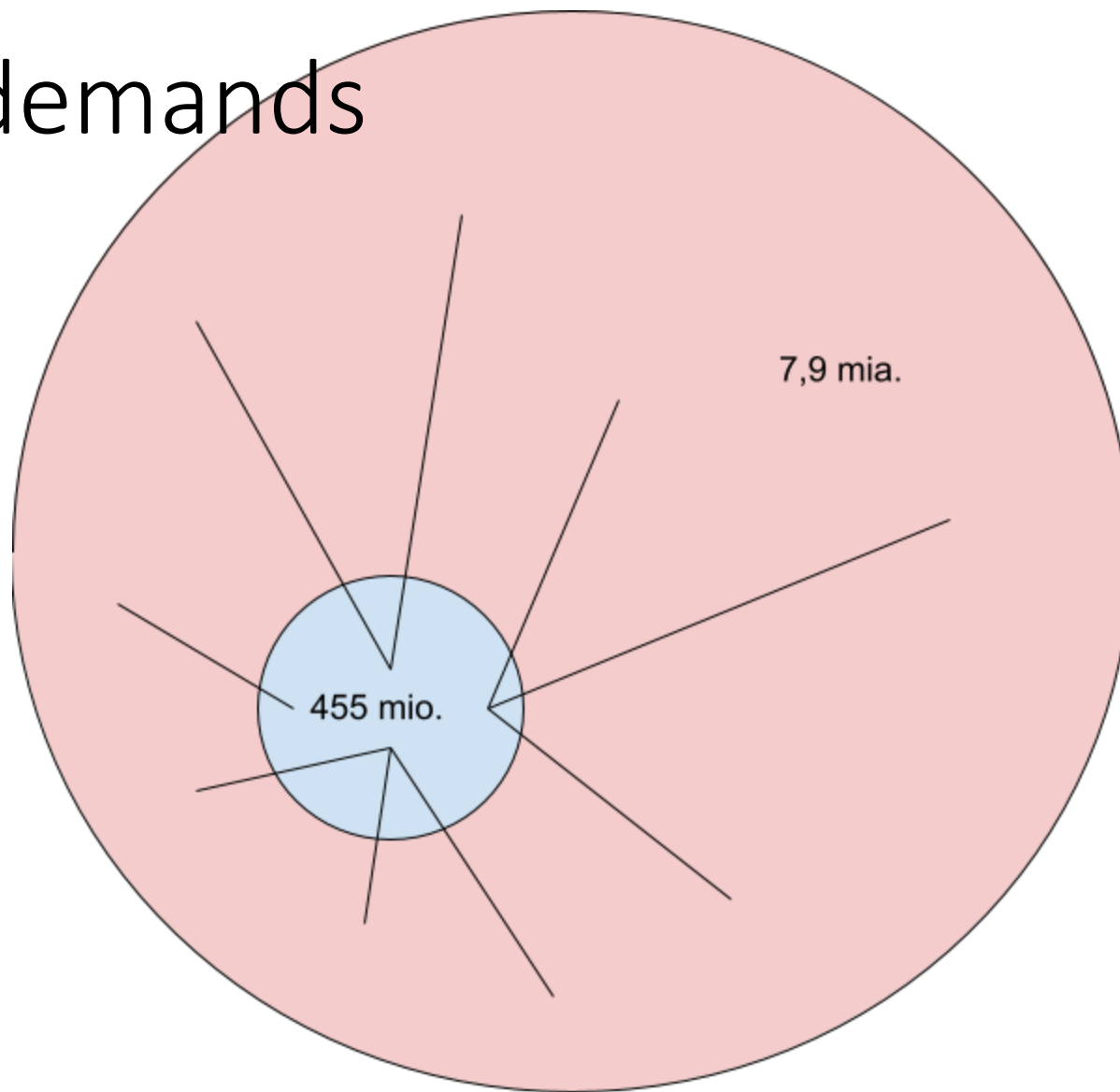
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Kolding Kommune
en del af trekantområdet

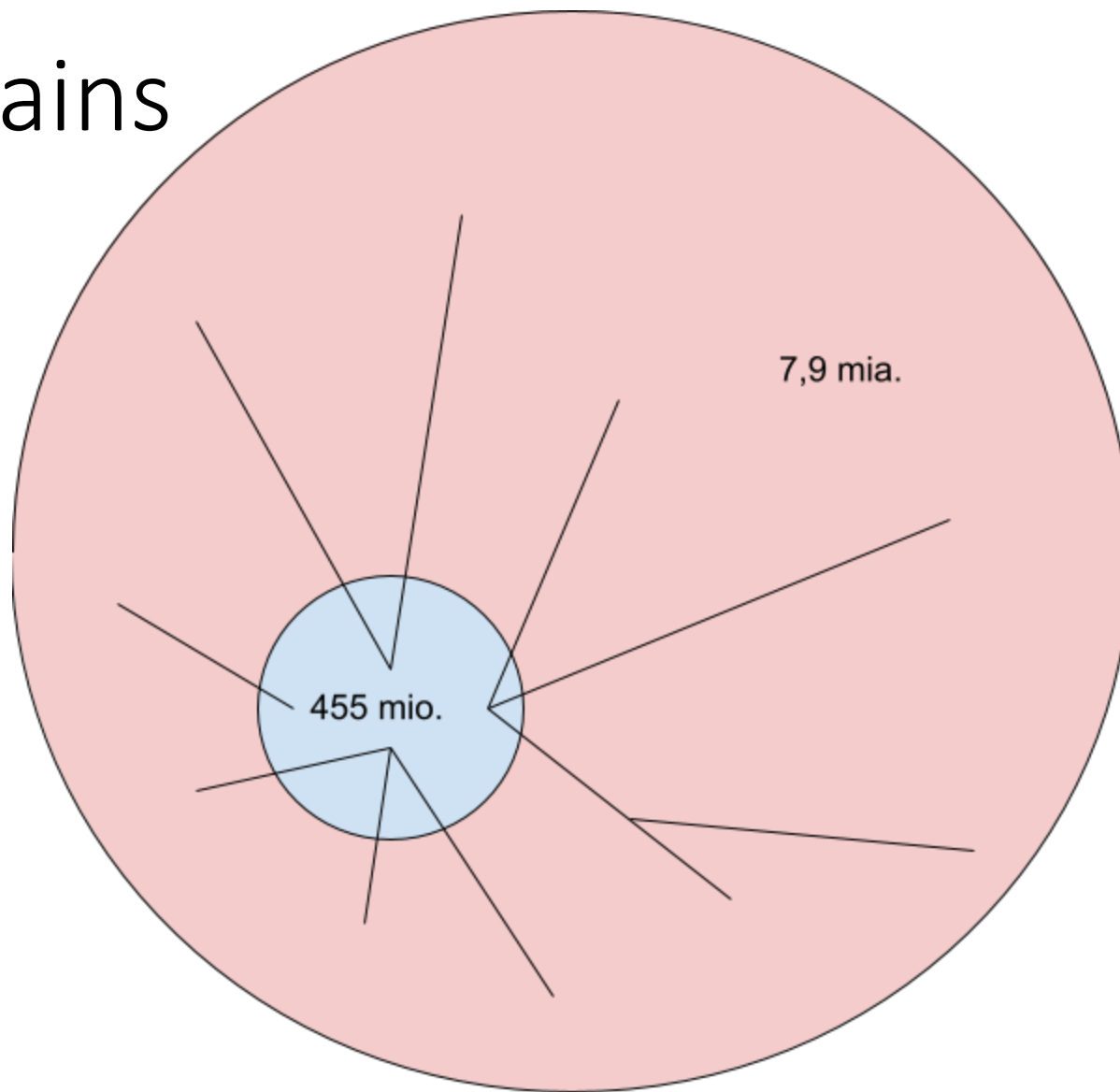
A small part



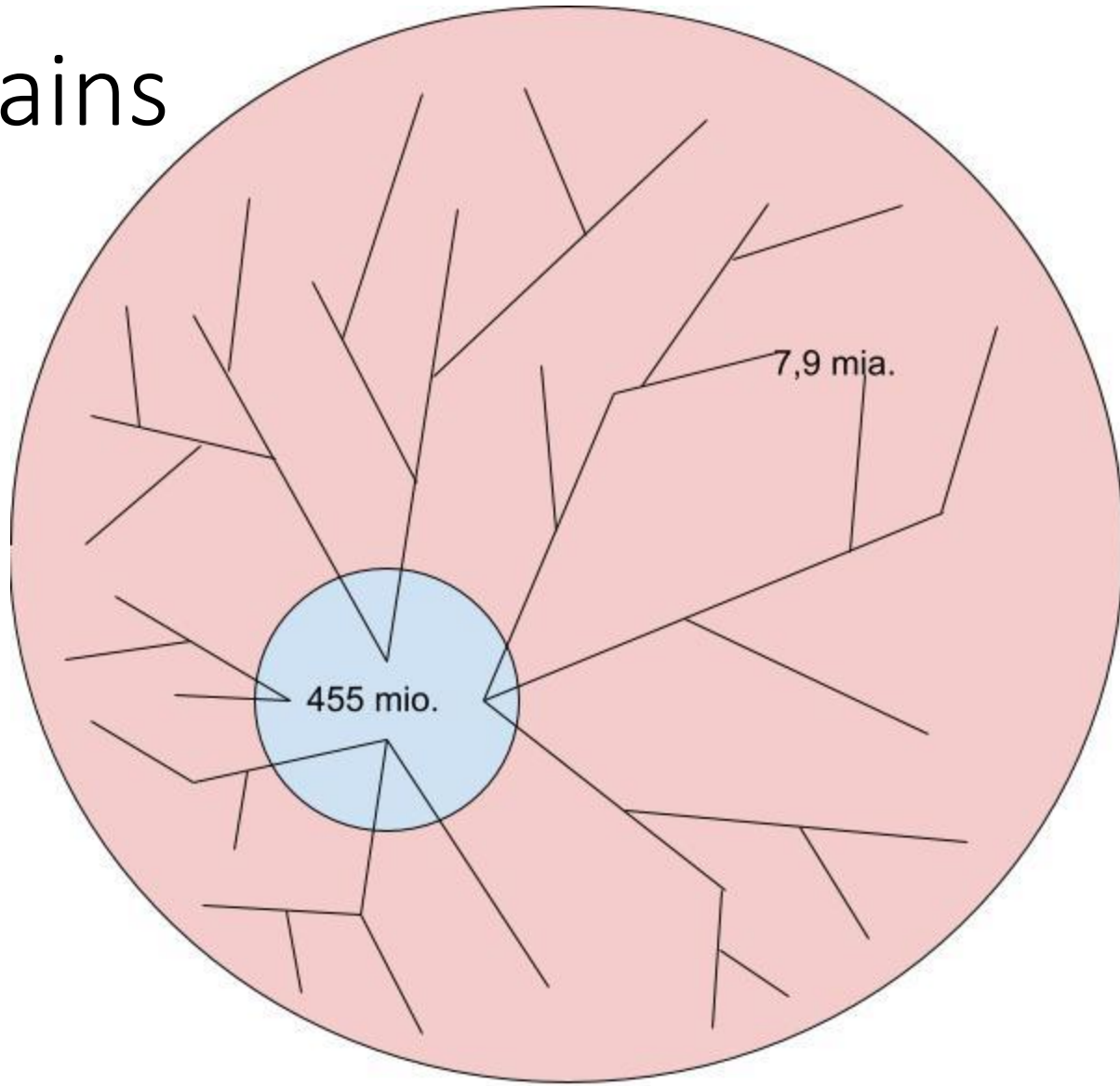
Supplier demands



Supply chains



Supply chains



The chain makes the difference

- Biodegradable is good right?
- What is the most likely user scenario?
- Why?

Et spørgsmål til jer mine skarpe kollegaer: hvordan sorteres denne pose? Stregkode kan ikke pilles af 🙄



Choice change markets



- Choice of goods
- Dialog with suppliers



Challenges

...about circular transitions

ProCirc Minimum Circular Requirements

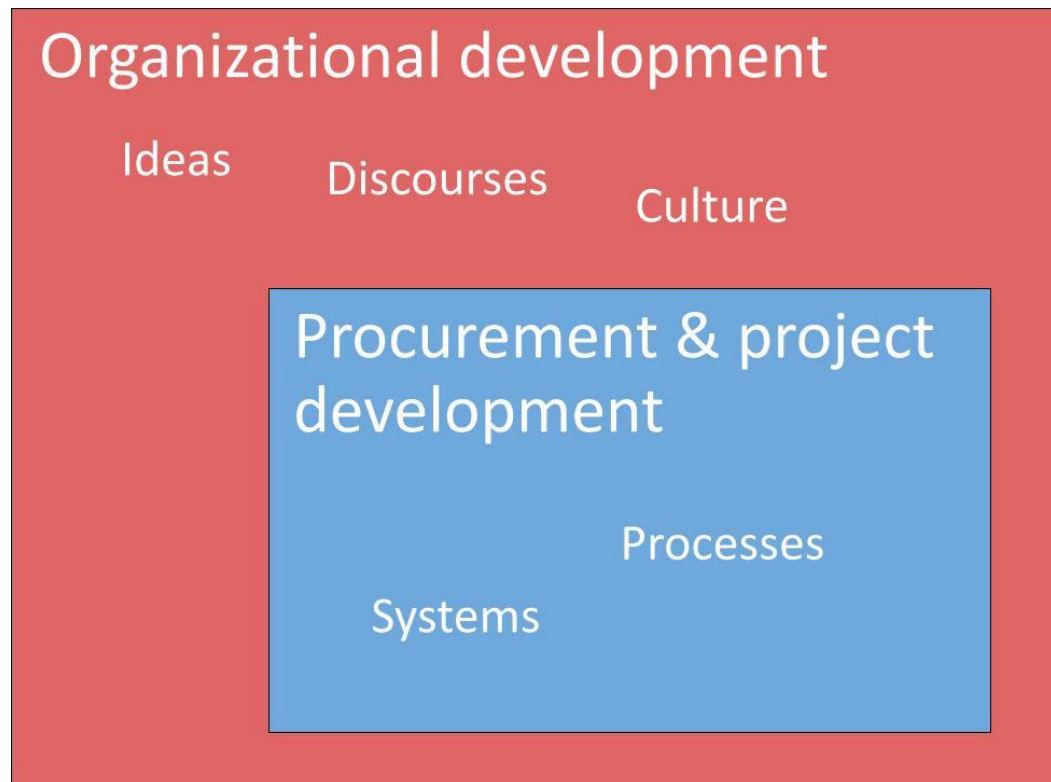
Seven steps to circular procurement

The buyers journey

- 1. Creating a support base in your organization
- 2. Setting requirements
- 3. Market engagement
- 4. Specification & engagement
- 5. Evaluation of the offers
- 6. Contract management
- 7. Evaluation

The buyers journey

Two main phases



*If we're not moving forward,
we are falling behind*

The buyers journey

Organizational development

- 1. Creating a support base in your organization
- 2. Setting requirements
- 3. Market engagement

Procurement and project development

- 4. Specification & engagement
- 5. Evaluation of the offers
- 6. Contract management
- 7. Evaluation

Organizational development

Four opportunities for developing ideas, discourses & culture

- Pre project
- Design process
- Execution
- Implementation

Creating a support

- Align circular procurement with the values of the agent whose support you want.

Case: Rethinking the Waste Station & New office building

Setting requirements

Two very different standards

- We want more sustainability in our construction project
 - Rethinking the Waste Station
- 100% of the building materials must be recycled
 - New office building

These requirements affect every future aspect of the project. Vague requirements can benefit flexibility and experimentation, put clear and ambitious criteria create out of box thinking, far better results and better contract management and evaluation.

Market engagement

- Focusing on price and good basis for collaboration with no clear criteria for sustainability at this point.
 - Rethinking the Waste Station
- Setting the conditions for the project before going into a market dialog, to force ourselves and the suppliers to collaborate on how to solve the challenge.
 - New office building

The requirements guide the questions you ask your advisors and suppliers, and this in turn affect the project outcome.

Procurement

Three approaches to developing systems and processes in projects and circular procurement

- Incremental
- Radical
- Developmental

Specification & engagement

- Incremental: Using standard contracts with price as the defining factor. Focusing on sustainability in the process and not in the tender itself.
 - Rethinking the Waste Station
- Radical: Setting the conditions for the tender high to narrow the number bidders to the businesses with the most sustainable processes. Thus rewarding businesses that strive to achieve better results.
 - Insulation waste tender
- Developmental: Setting criteria in the contract that focus on development. This will bring every bidder to the desired level of sustainability by the end of the contract.
 - Still need testing in Redux

Evaluation of the offers

- Incremental: Looking at price as the sole determining factor.
 - Rethinking the Waste Station
- Radical: Using a standardized formula to evaluate the different criteria, using standardization to make both price and qualitative evaluations comparable. Good documentation is very important here if you are a public entity.
 - Purchasing a suction system for hazardous waste facility & New office building
- Developmental: Looking at price as the sole determining factor, but with funds set aside as a reward for satisfactory contract completion. It is also an option to include a penal structure for failure to complete certain deliverables on time.
 - Still need testing in Redux

Contract management

- Incremental: Focusing on budget management and looking for opportunities to include sustainability ad hoc. This makes it difficult to produce a high level of sustainability in the project, but affords a high level of flexibility for experimentation.
 - Rethinking the Waste Station
- Radical: Focusing on the criteria and deliverables already set in the contract. This creates a high level of sustainability, but with less project flexibility.
 - New office building
- Developmental: Using milestones or clear deliverables as determining factors for rewarding or penal action. There can be no doubt or loop holes on deliverability completion, as this incentivize continuous struggles and debates.
 - Still need testing in Redux

Evaluation

- Incremental: Successful project completion is the overall goal here. Staying inside the allotted parameters of budget, quality and time. Evaluation the project deliverables and criteria for success in the classic project fashion.
 - Rethinking the Waste Station
- Radical: Sustainability (or whatever key criteria was used) takes precedence over the classical project measurements. The key is to understand how this new approach affects the classical project measurements to create better predictability in the future.
 - New office building
- Developmental: Deliverables and milestones are surly important here, but focus will be on improving supplier development along with the process of contract management.
 - Still need testing in Redux

Next steps

- ProCirc will continue to develop this model and the end result is a tool that can be used by procurers.
- By mapping needs, risks and solutions from real projects, the tool is firmly grounded in praxis.
- Current work focuses on making all of this information easy to comprehend and understand.
- The goal is to make it easy to become aware of the needs for each phase, be aware of likely risks and how to mitigate them, and find a tool that can help.

How to get started?

Evaluate your starting position and take the first/next step

- 1. How do you create a support base in your organization?
- 2. How do you set better requirements?
- 3. How can you improve market engagement?
- 4. How do we create better specification & engagement?
- 5. How can we evaluate the offers better?
- 6. How can we improve our contract management?
- 7. How do we improve evaluation?

Working with circular procurement

Use the tools in you company.

Assignment 1 – 5 minutes

- 1. How do you create a support base in your organization?
- 2. How do you set better requirements?
- 3. How can you improve market engagement?
- 4. How do we create better specification & engagement?
- 5. How can we evaluate the offers better?
- 6. How can we improve our contract management?
- 7. How do we improve evaluation?

Assignment 2: 25 minutter

How can you begin setting demands with the guide to basic circular procurement

[EU-project ProCirc – Get started with circular procurement \(kolding.dk\)](https://www.kolding.dk/interreg-procirc)

Guide til grønne indkøb

Gentænk	Samarbejd	Prioriter	Design	Genbrug	Indtænk	Vedligehold
<ul style="list-style-type: none">Vi har reduceret, eller helt undgået, dette indkøb. Vi fandt ud af, at indkøbet ikke længere tjener et formål, eller at vi kunne forbedre processen eller logistikken omkring den opgave, det var tiltænkt.Produktet kan købes som en service.Produktet kan lejes/lånes for en kortere periode.Produktet kan lejes som en "pay per use"-løsningProduktet kan købes med en cirkulær tilbagetagningsordning. Dette kan også være i producentens interesse, da det bidrager til en grøn profil.	<ul style="list-style-type: none">Jeg har undersøgt brugernes behov for at sikre, at produktet matcher behovet.Jeg har været i dialog med relevante aktører på markedet for at afdække cirkulære potentialer og samarbejde om at matche brugernes behov.Jeg har undersøgt, om der er andre brugere med samme behov og været i dialog med dem om muligheden for fælles indkøb.Jeg har fået cirkulære indkøbseksperter til at lave en analyse for bedre at kunne udnytte de cirkulære potentialer.	<ul style="list-style-type: none">Produktet er lavet af bæredygtige materialer (materialer, der ikke indeholder skadelige stoffer for hverken mennesker eller miljø).Produktet er lavet af fornybare materialer (fx træ eller andre vedvarende ressourcer).Produktet er CO2-neutralt.Produktet har en positiv CO2-effekt.Produktet, samt produktion og transport af dette, lever op til organisationens overordnede visioner for den grønne omstilling.	<ul style="list-style-type: none">Produktet kan indstilles så det kan tilpasses den enkelte bruger og/eller tiltænkt brug.Produktet er designet, så det er nemt at vedligeholde og reparere.Produktet er designet på en måde, der gør det nemt at skille ad, så materialerne er lettere at genanvende.Produktet er lavet af genvendelige materialer.Når produktet er udtjent, kan det genanvendes, da det er lavet af genvendelige materialer.	<ul style="list-style-type: none">Der er allerede et produkt i organisationen, der kan bruges til formålet, så det er ikke nødvendigt at købe nyt.Det giver mening at købe produktet brugt.Produktet kan sælges brugt, når det er en fordel at gøre dette.Når produktet er udtjent, kan det genanvendes, da det er lavet af genvendelige materialer.	<ul style="list-style-type: none">Tilbud er indhentet på basis af den totale økonomi for produktets levetid i forhold til fx indkøb, reparation og vedligehold (TCO eller Total Cost of Ownership).Teknologi og/eller dataindsamling kan integreres (for at kortlægge korrekt brug, optimere vedligehold, tilgængelighed, lokation, varedeklaration mm.).Brugeren af produktet skal oplæres for at fremme den korrekte brug og undgå fejlanvendelse.	<ul style="list-style-type: none">Produktets levetid kan forlænges (ikke-teknologisk) gennem reduceret og/eller bedre brug.Den totale økonomi for produktets levetid (indkøb, reparation og vedligehold) er bedre end ved konkurrerende produkterDet er muligt at opgradere og optimere produktet efter køb for at imødekomme nye behov i fremtiden.Produktets reklamationsret har så lang tidsperiode, at den matcher produktets forventede livstid.Produktet har en reklamationsret, der også dækker udskift af dele samt vedligehold.

Rethinking the recycling station

91/97 lamps converted to LED

35% recycled asphalt rather than the norm of 30%

60 reused windows

Former office building was reused in constructing the new building

100 % of the isolation, 85 % of the wood, most doors and windows



I have researched the needs of the users to ensure that the product matches this.



I have been in dialogue with relevant players in the market, to uncover circular potentials and collaborate to match users' needs.



The product is made from "healthy" materials i.e. materials containing no harmful substances (e.g. to humans or environment).



The product can be adjusted so that it can be adapted to the individual user and / or the intended use.



The product is produced from recycled material.



Digital technology and/or data collection can be integrated (e.g. for mapping, usage and maintenance optimization, accessibility, positioning, wear, material content etc.).

Procurement of electric vehicle

Needs analysis showed that the car was in use 35,8% of the workday on average.

Max 67,1% - minimum 14,3%

Change  praxis around  vehicle use and avoided procurement.

We have limited or avoided the purchase, because we found out that it no longer provided a benefit or because we improved the process, logistics or job it was intended for.

I have researched the needs of the users to ensure that the product matches this.

How can you start creating better criteria for success with the tool?



Sammen designer vi livet

Chose something you are working on now or something you buy often as a case.

Next steps

25 minutter

Assignment 3 – 5 minutter

- Which three small steps can you take, to start using the knowledge you have acquired today in your organization?
- Think about what you can get done in a week, in two weeks and within a month.

Thank you