

Mikkeli procurement review workshop

WP: 5.3

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Rijkswaterstaat



Agenda

| | |
|--------------------|--|
| 8:40-9:00 | Coffee and breakfast |
| 9:00-9:15 | Welcome and introductions |
| 9:15-9:30 | Objective of the workshop |
| 9:30-10:15 | Presentations by Mikkeli City of procurement activities in the demonstration project(s) |
| 10:15-10:45 | Plenary discussion session <ul style="list-style-type: none"> • Reflection on procurement cases presented |
| 10:45-10:55 | Redoing the ambition web (using Mentimeter) <ul style="list-style-type: none"> • Current status and future ambition |
| 10:55-11:10 | Coffee break |
| 11:10-11:30 | Plenary discussion |
| 11:30-12:00 | Break-out sessions <ul style="list-style-type: none"> • Reflection current status and ambition for circular procurement in the city • Next steps |
| 12:00-12:15 | Summary of break-out sessions |
| 12:15-12:30 | Conclusions |

Introductions

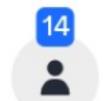
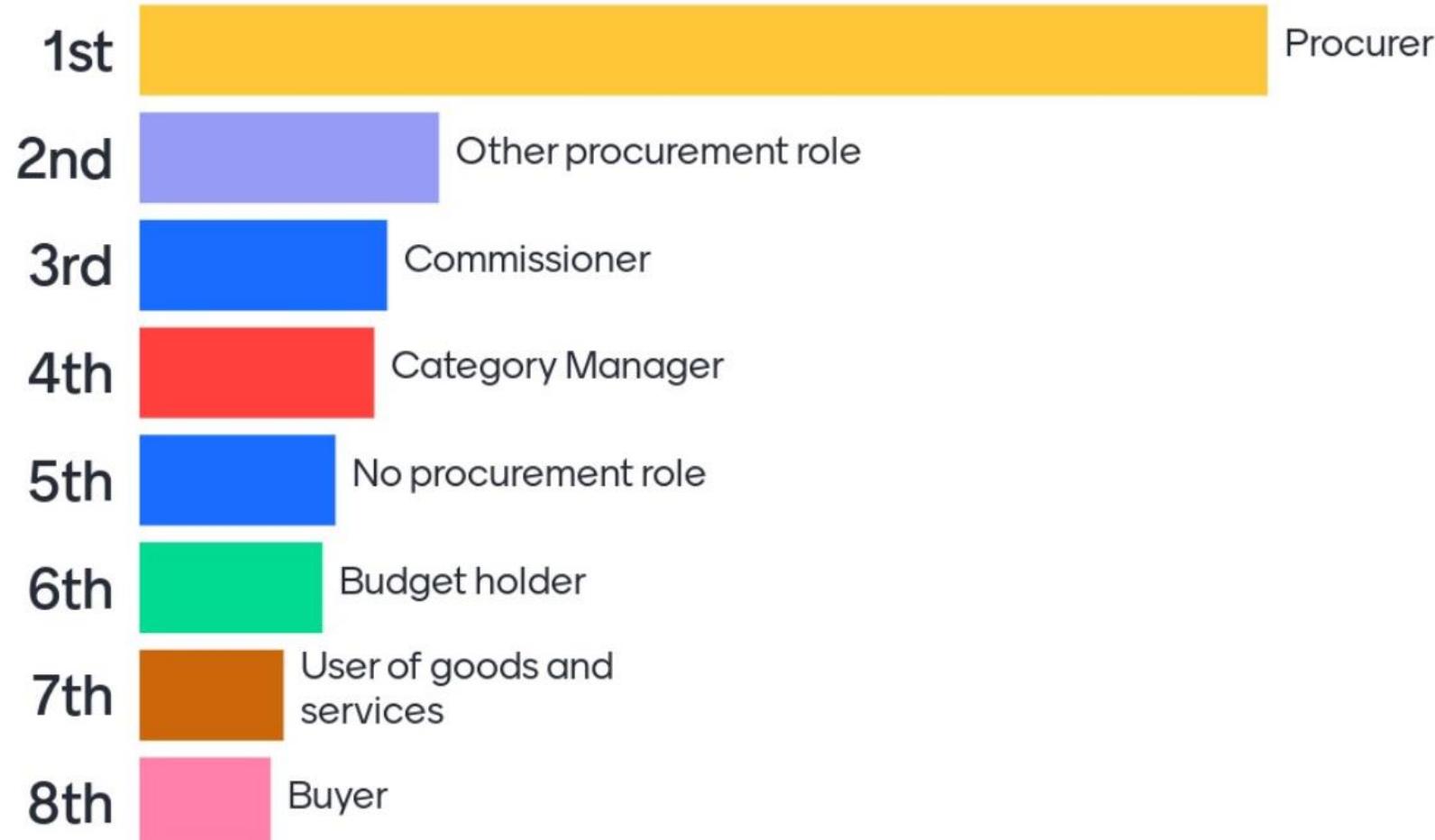
1. Who we are
 - a. CityLoops project
 - b. WP5 circular procurement – our aims

2. Stakeholders - who is here?
 - a. Project / non-project

 - b. Roles – technical, finance, procurement, sustainability, other..... Mentimeter!



What is your procurement role?



Objectives

1. Assess the impact of the circular procurement activities being implemented in the demonstration project
 - A work package 5 deliverable!
2. Reflect on CP Scan and procurement opportunities
 - What ambitions and options
3. Identify next steps and concrete actions
 - What needs to happen to create sustained change



Recap WP 5 activities in Mikkeli

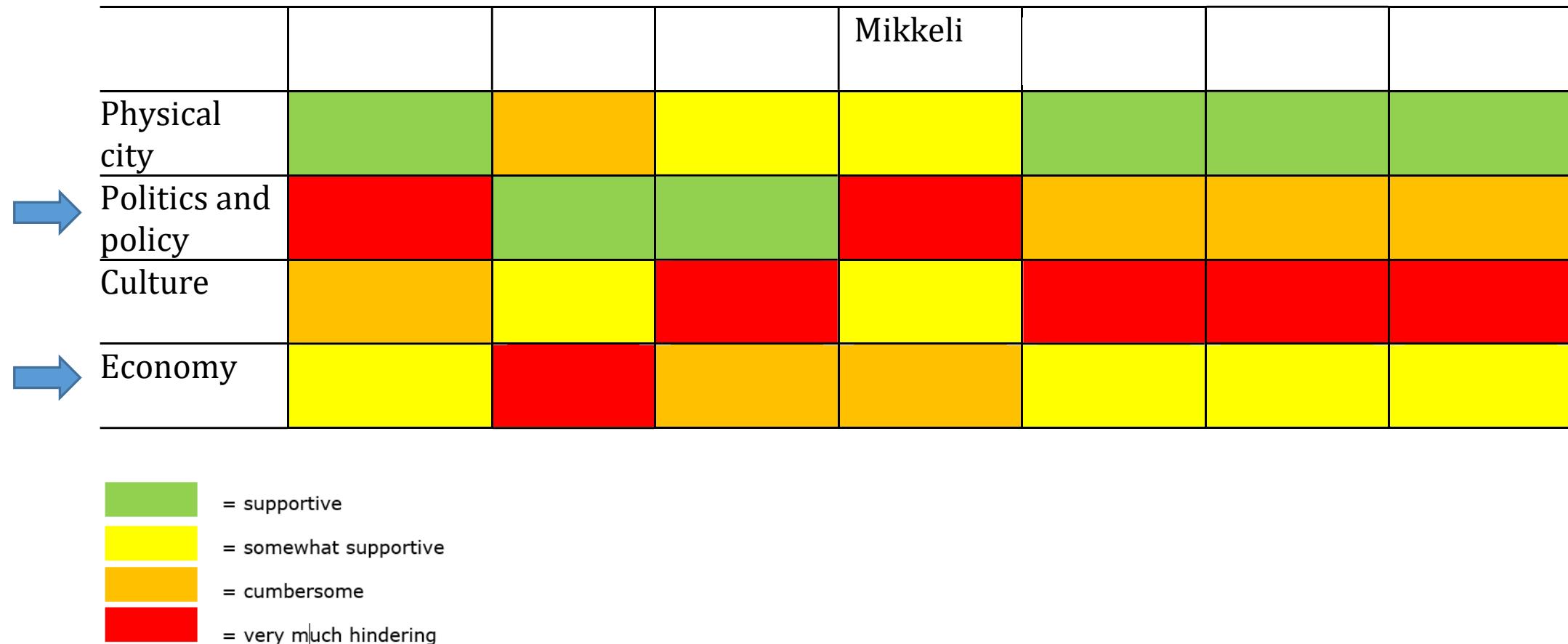
Circular Procurement Scan looked at:

1. Current perception of CP and ambitions -
2. Sustainable themes of relevance and their priority
3. Scope to influence across procurement categories
4. Risk exposure
5. Procurement spend



Applied a multivariate approach to determine categories of high impact potential

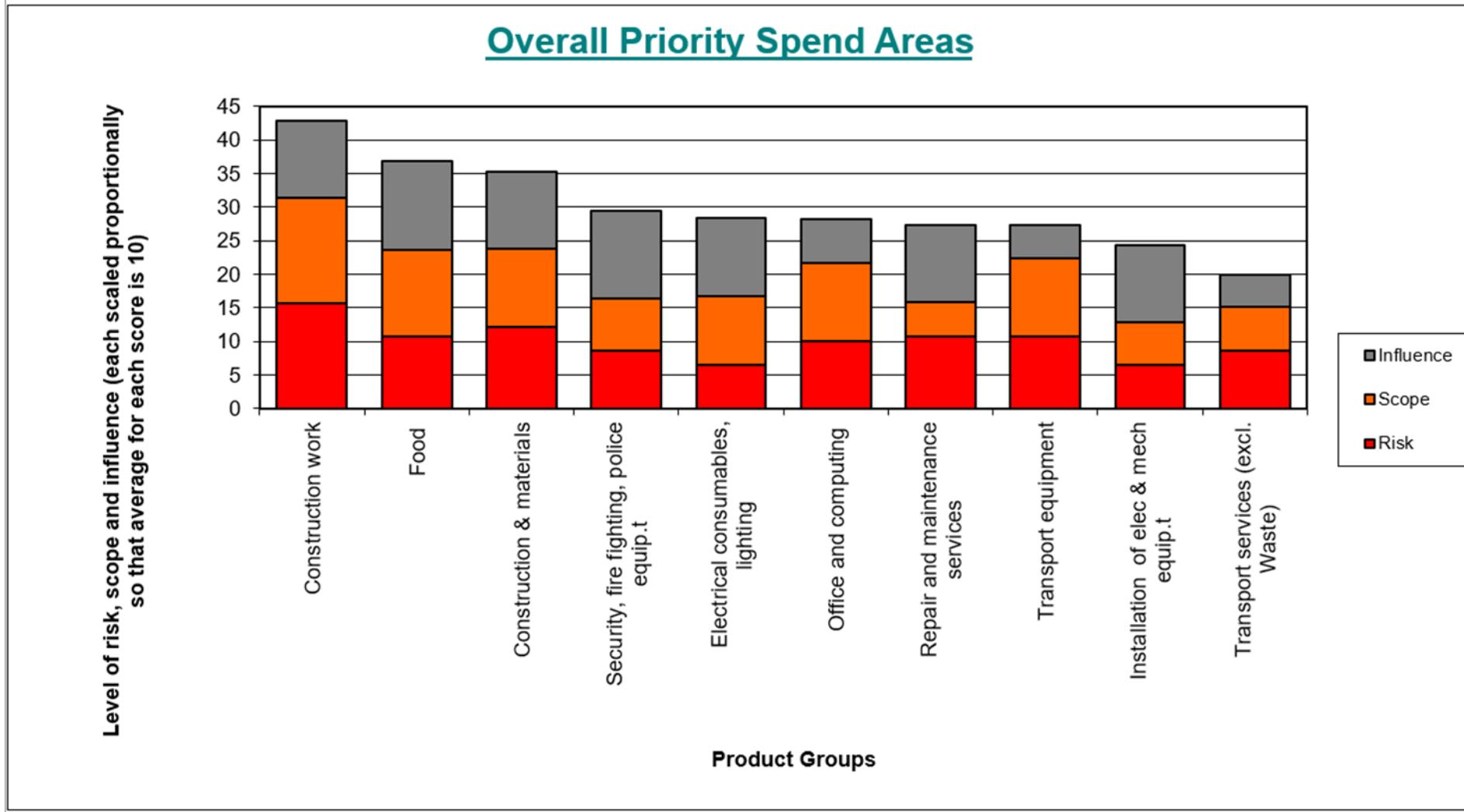
Quick scan 2021



Priorities

| CIRCULARITY | H, M, L | ENVIRONMENTAL | H, M, L | SOCIO-ECONOMIC | H, M, L |
|------------------------|---------|----------------------------|---------|-----------------------------|---------|
| WASTE MANAGEMENT | H | CO ₂ e + CARBON | H | GREEN GROWTH | |
| RESOURCE PRODUCTIVITY | | VIRGIN MATERIAL REDUCTION | | COST SAVINGS | |
| REUSE & RECYCLING | | WASTE | | REGIONAL SUSTAINABLE GROWTH | H |
| CLOSING MATERIAL LOOPS | | HAZARDOUS SUBSTANCES | | DEVELOPING SUPPLY CHAINS | |
| UTILISATION | M | ENERGY SELF SUFFICIENCY | | HEALTH | |
| LIFETIME OPTIMISATION | | WATER | | EDUCATION | |
| | | BIODIVERSITY | | EMPLOYMENT & TRAINING | M |
| | | AIR QUALITY | | EQUALITIES – INCLUSION ETC | |
| | | CLIMATE CHANGE | H | WELL-BEING | |
| | | RESILIENCE | | | |

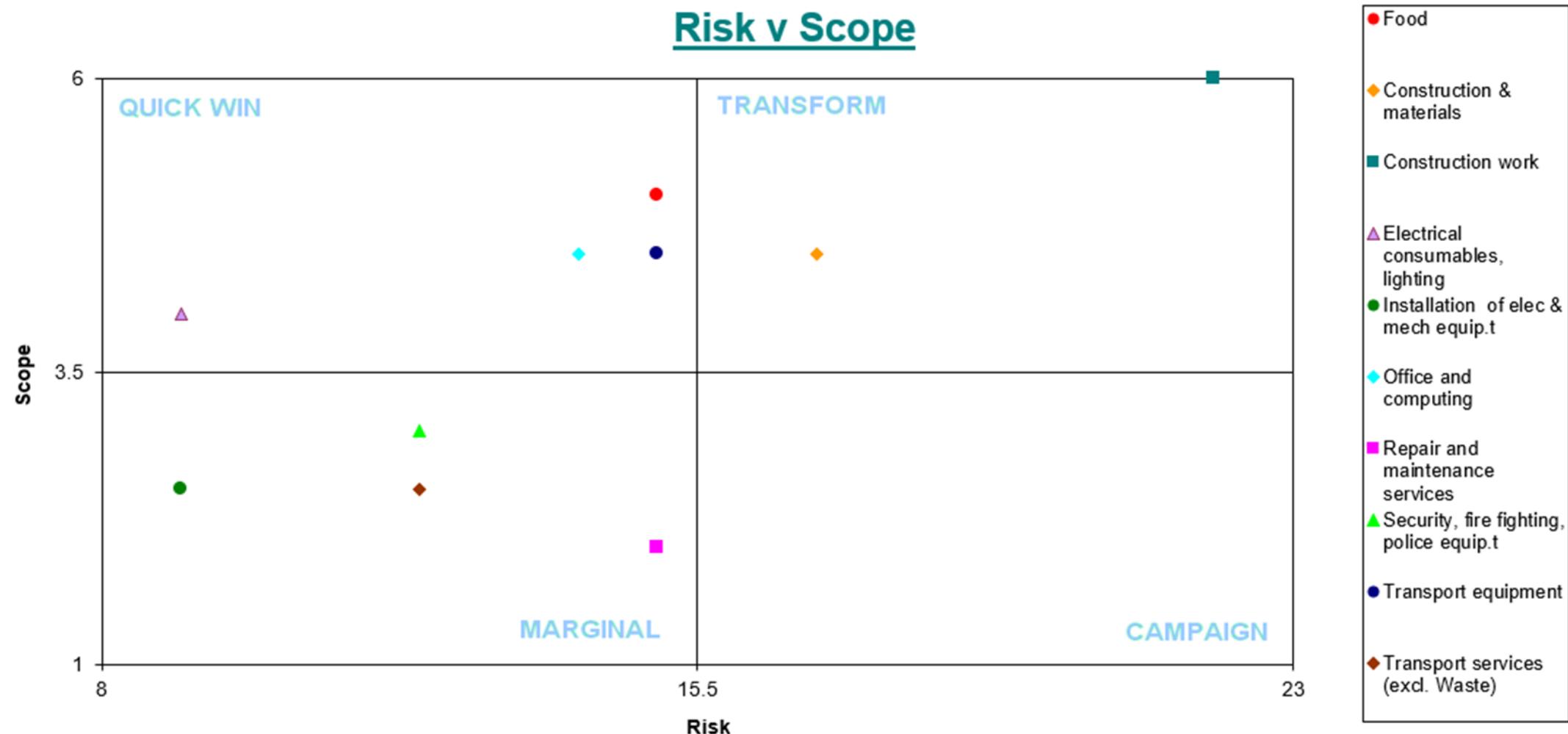
Mikkeli – overall priorities



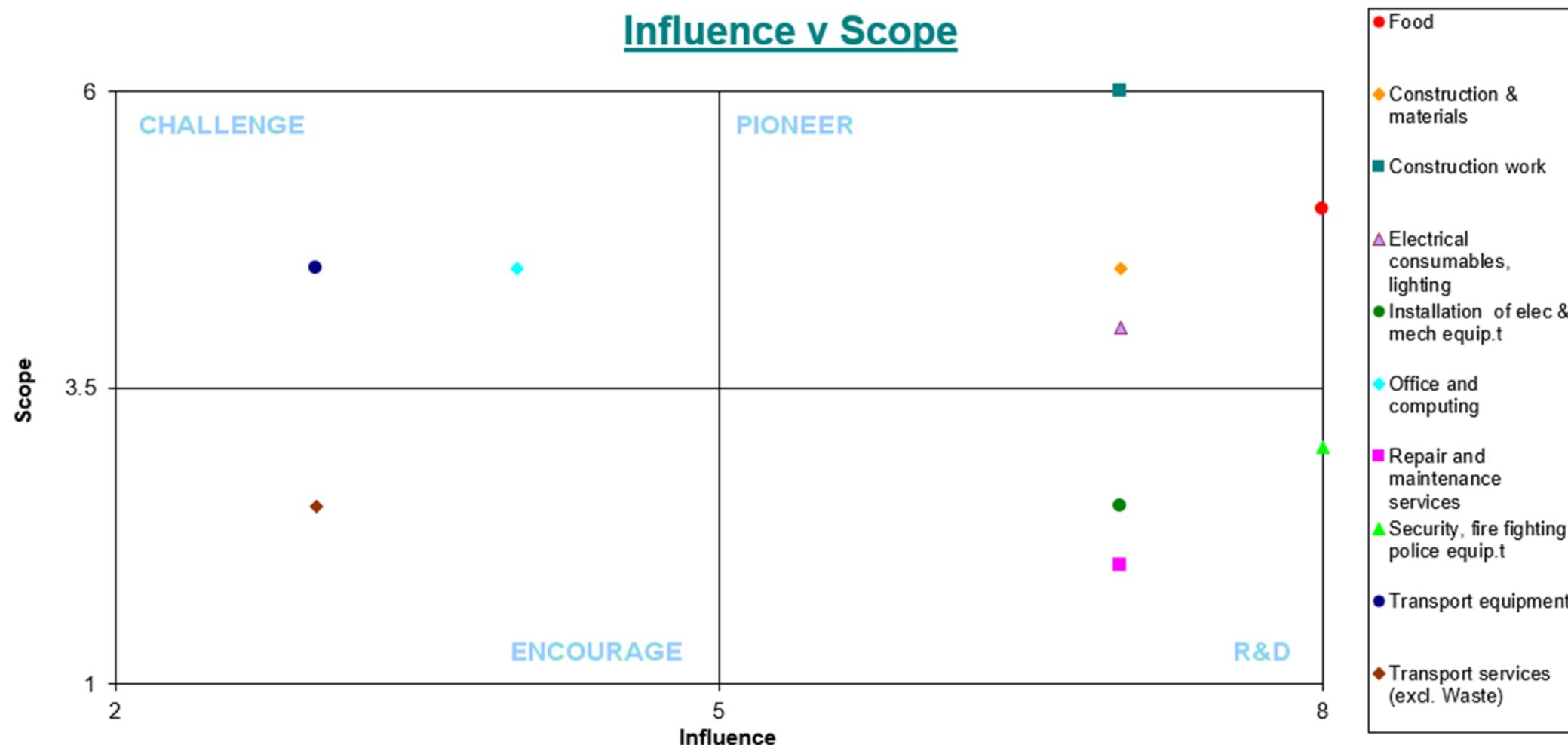
Prioritisation: action & management approach



Prioritisation exercise: buyer approach



Prioritisation exercise: market engagement



Discussion

Questions?





Mikkeli presentations



Mikkelin kaupungin demonstraatioikohteet CityLoops -hankkeessa

MIKKELIN KAUPUNKI Talonrakennuspalvelut

28.11.2022 Saija Himanen

MIKKELI

Miksi rakennuksia puretaan?

- Väestömäärään ja ikäjakauman muutokset
 - Peruspalveluiden rakennemuutokset
- Rakennuskannan ikä ja korjausvelka
 - Julkisten rakennusten rakennuskantaa on paljon 1960-luvulta
- Tulipalot
- Rakennusmääräyksien muutokset
 - Uudisrakennuksien määräykset koskevat myös peruskorjauksia. Vanhojen rakennuksien rakenteet on haasteellista saada täyttämään määräyksiä ja ne eivät ole toimivia esim. koneellista ilmanvaihtoa ajatellen.





Mitä ja kuinka paljon rakennuksia puretaan?

- 2018: n. 6 400 m² n. 0,4 M€
(2 koulua)
- 2019: n. 8 000 m² n. 2 M €
mylly/silo, vanhainkoti, piharakennus, urheilutalo ja
koulun palovahinko
- 2020: n. 6 300 m² n. 0,5 M €
koulu, meijeri, asuinrakennus, 3 huoltorakennusta,
joista yksi palovahinko
- 2021: n. 17 200 m² n. 1 M €
sairaala, vanhainkoti, terveysasema,
teollisuusrakennus, piippu ja varasto



Demonstraatiokohteiden toimenpiteet

- **Pankalammen terveysasema**
 - Hammashoitolan osalta purkukartoitus
 - Lajitteluaste 99,38%
- **Tuukkalan sairaala**
 - Oppilaitosyhteistyönä irrotettu tiiliä julkisivusta
 - Lajitteluaste 99,35%
- Molemmissa toteutettiin
 - Drone-kuvaukset massojen hallintaa varten
 - 360-kuvaus sisätiloissa
- Kirjallinen prosessikaavio / toimintaohjeet
- Toimintakeskuksen myyntipäiväkokeilu ja yhteistyösopimus



Toimintamallin kehittäminen ja tulevaisuuden haasteet

- Valmistelevat työt:
 - Nopeampi aikataulu käytöstä poistamisen jälkeen kaupungin omaan käyttöön jäävien kalusteiden ja rakennusosien osalta
 - Yhteistyön kehittäminen kaupungin yksiköiden kesken (mm. infra, vuokraus- ja käyttöpalvelut, kaavitus)
 - Ennakoiva materiaalikoordinointi esim. maarakentamisessa
 - Päästölaskenta ja kustannusvertailu
- Tarjouspyyntö:
 - Laatuvertailun ja -määrittelyjen kehittäminen
- Purkuvaihe:
 - Urakoitsijan mahdollisuudet purkumateriaalien hyödyntämiseen
- Haastena
 - Mikkelin sijainti ja koko
 - Kustannusten nousu



Kysymyksiä

Kiitoksia

PURKUHANKE



- CASE ETELÄINEN SATAMAMAKASIINI

- ▶ Purukohteena vanha satamamakasiini
- ▶ Rakennettu 1930-luvulla
- ▶ Pinta-ala n. 1.500 m²
- ▶ Teräsbetoniperustus
- ▶ Runko tiili- ja betonirakenteinen
- ▶ Välipohja ja vesikattorakenteet puuta
- ▶ Vesikatot teräspeltiä ja sementtiiltää
- ▶ Kiinteistössä sähkö- ja viemärijärjestelmät

- ▶ Kiinteistö oli suojeiltu, mutta yhdessä museoviraston kanssa todettiin tutkimuksissa kiinteistön tekninen kunto niin heikoksi, ettei suojelulle ollut perusteita. Korjauskustannukset olisivat olleet huomattavasti uudisrakentamista korkeammat eikä rakennuksen luonteen johdosta sille ollut perusteita.
- ▶ Kohde inventointiin ennen purkuhankkeen alkua
- ▶ Purku-urakoitsijana toimi Savonlinnan PR-urakointi Oy
- ▶ pima-asioissa mukana Sari Hämäläinen, Mikkelin kaupunki ja Ramboll Oy
- ▶ Jätteiden toimituspaikka Metsä-Sairila Oy
- ▶ Hanke alle 150.000 €
- ▶ Kilpailutuksessa 5 urakoitsijaa, jolta 2 tarjousta
- ▶ Urakkahinta 97.600 €, alv 0%

- ▶ Kohteesta toimitettiin Metsä-Sairilaan
 - ▶ Puujäte 80 tn
 - ▶ Murskattu betoni-, kivi- ja tiiliaines (jaekoko alle 500mm) 1.150 tn
- ▶ Metallijätteen toimitti urakoitsija erehdysissään paikalliselle toimijalle kierrätettäväksi
 - ▶ Metalli 10 tn
- ▶ Pilaantuneet maa-aineekset 7m³ toimitettiin Riikinnevalle
- ▶ Vaarallinen 0,1 tn
- ▶ Sekajäte 4 tn



- ▶ Hankkeen kustannukset, alv 0%
 - ▶ Rakennuttaminen 6.500 €
 - ▶ Palkityöt 110.000 €
 - ▶ Asbesti+haitta-aineet 12.000 €
 - ▶ Jätekustannukset 23.500 €
- ▶ Kustannukset n.95€/m²

- ▶ Puhtaan tiili- ja betonijätteen olisi voinut murskata liikennealueen täytteeksi



Discussion

Questions?





Mikkeli – where next?

Redoing the ambition web

Matching actions to expectations and outcomes

Input:

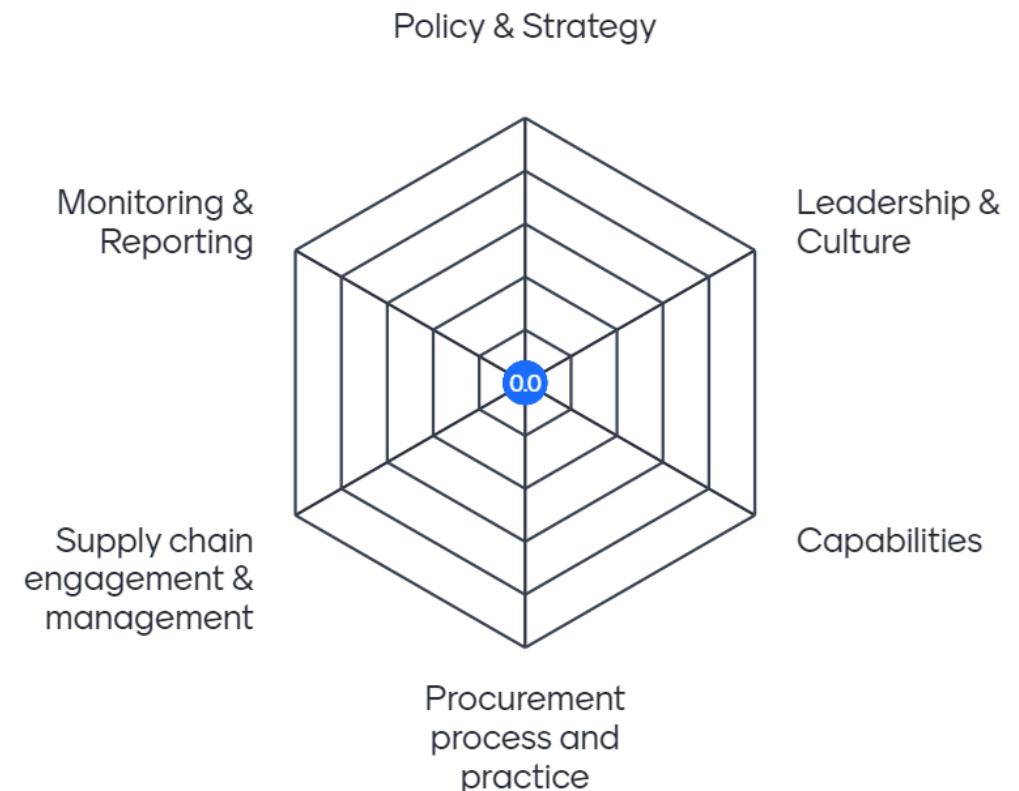
- Where do you see your organisation now
- What level do you feel is required through embedding & replication?

Ambitions - updated

Based on what you know now, what is your current position and where do you think you need to be in each of the six ISO 20400 themes to deliver the project and embed circularity within the wider procurement practices in Mikkeli?

2 answers required for each ISO 20400 theme:

1. Current position
2. future – circular procurement



Mikkeli ambition web exercise

Go to mentimeter on on your phone or device:



www.menti.com

Enter the following code:

2678 6037





BREAK

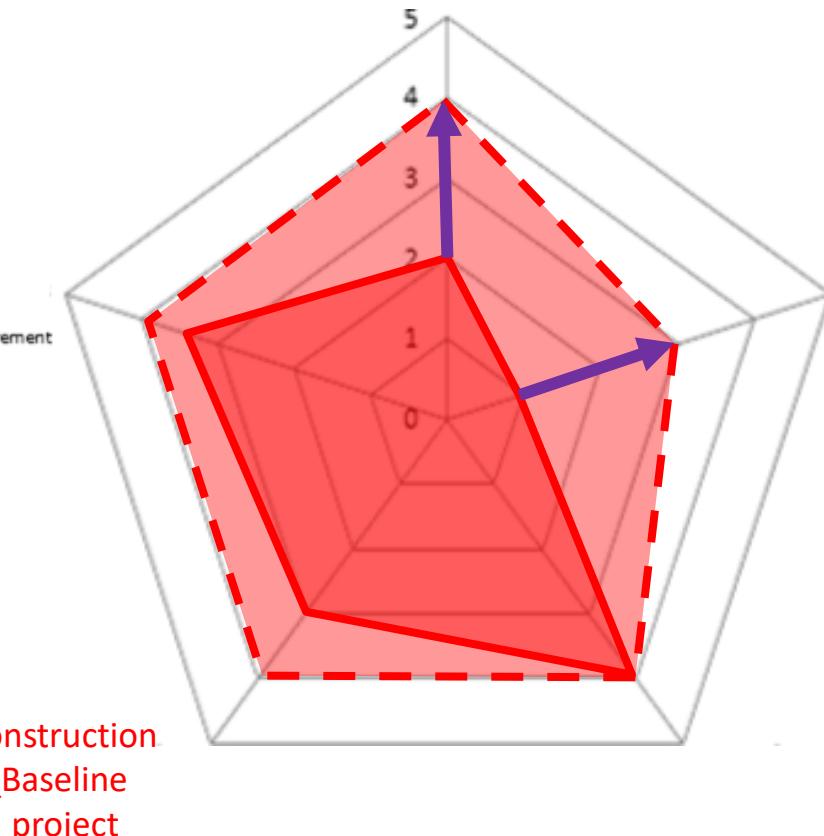
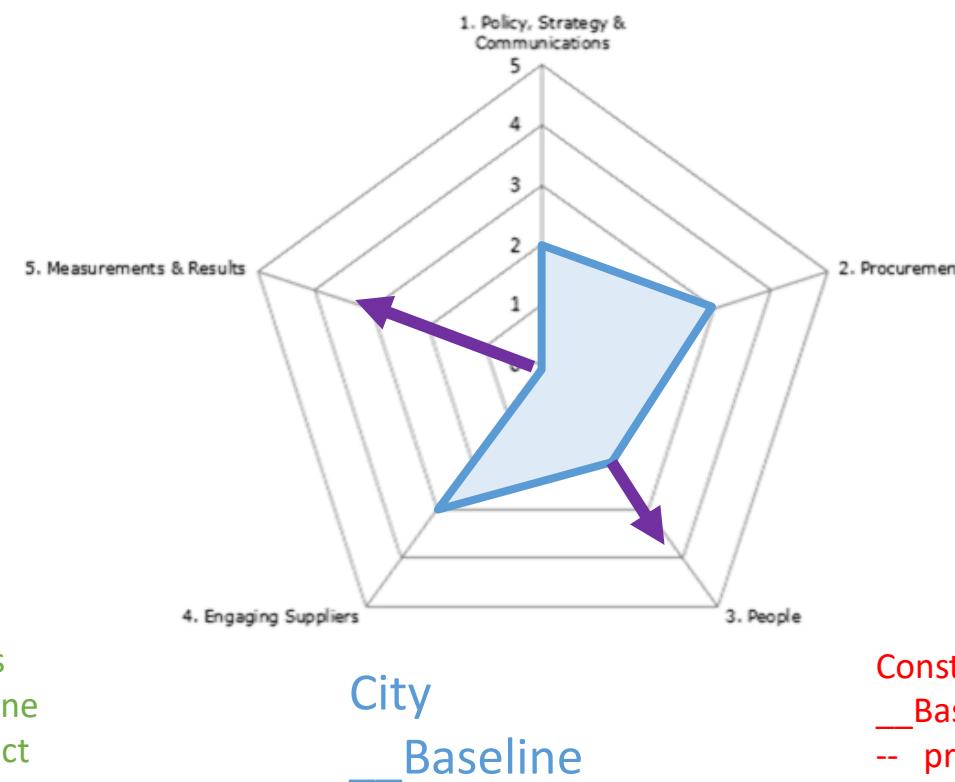
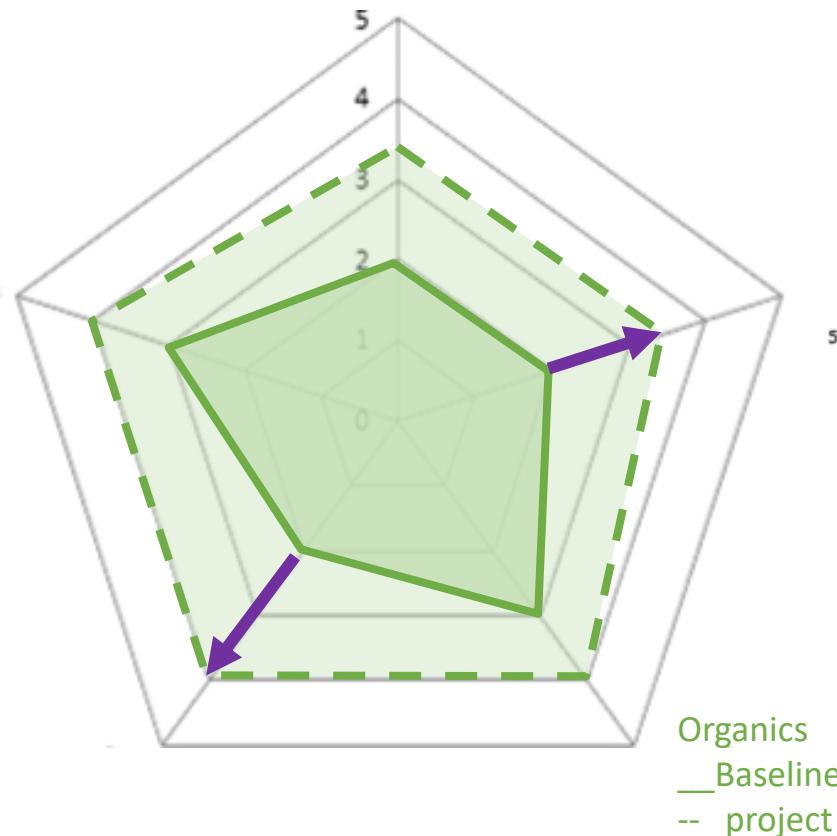
15 minutes

Please be back promptly

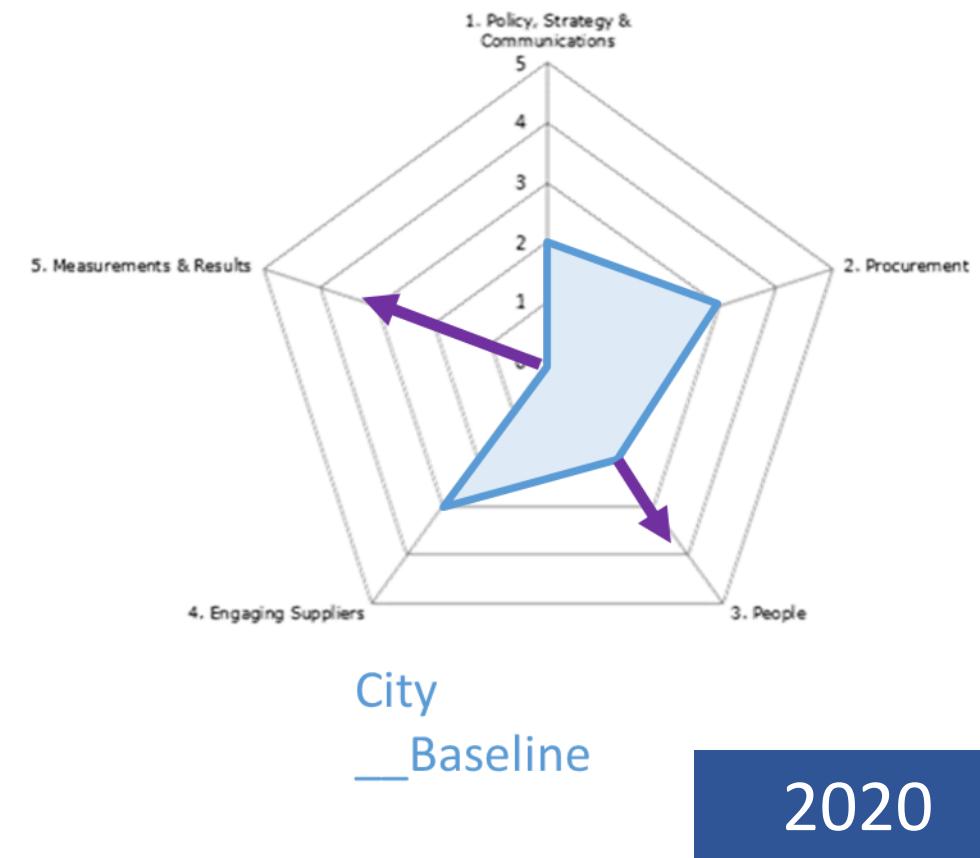
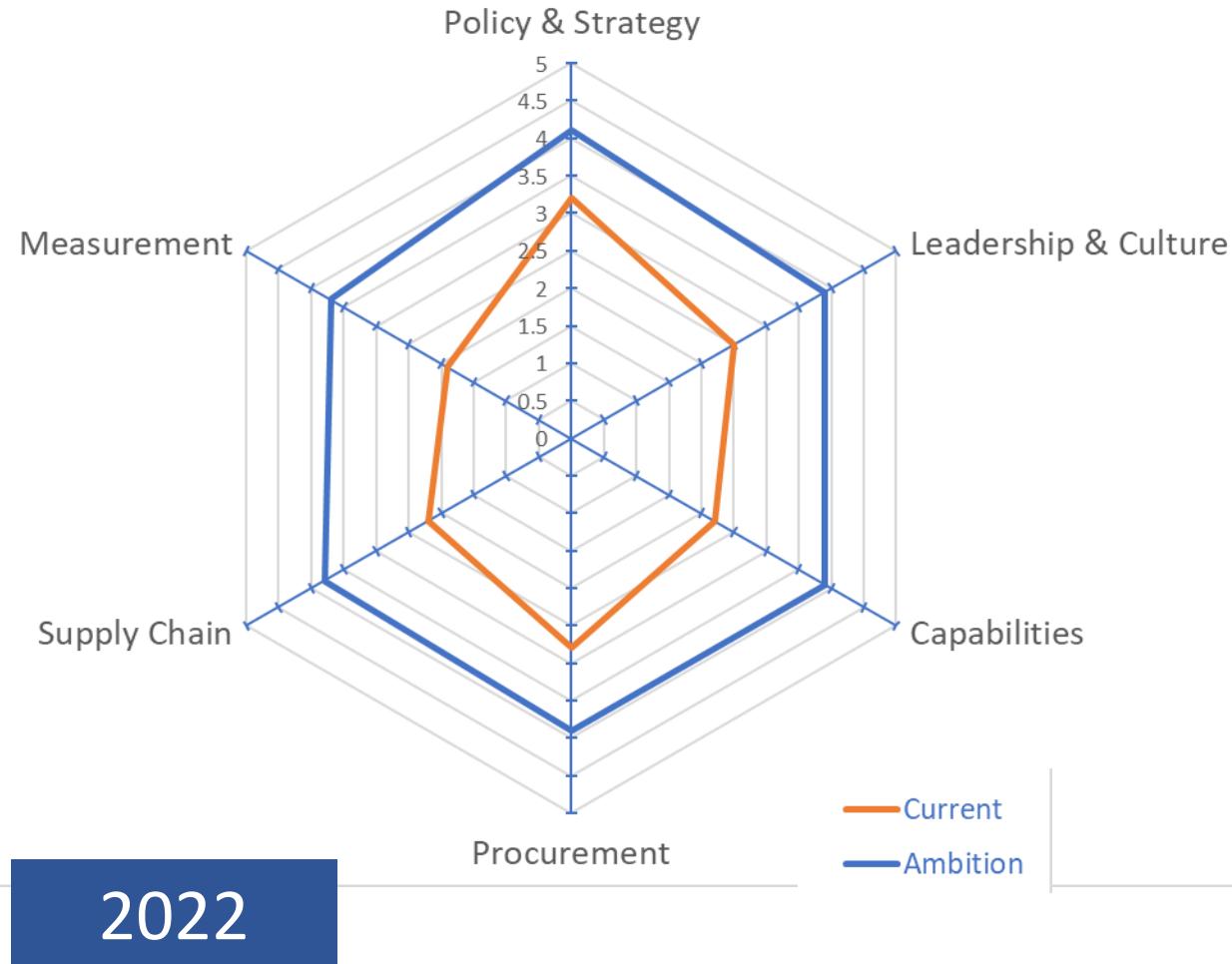
Circular Procurement ambitions 2020

1. Where do you see your organisation now
2. What (realistic) level are the demonstration project(s) aiming for?

How to address the gaps through WP5? 



Changing perspective - 2022



Discussion



Breakout sessions

1. In each group assess the actions required to move from current position to ambition for each theme.

2. What enabling factors are required to achieve these actions for each theme?
For example, removal of barrier X, adoption of policy Y, development of criteria Z, training etc



Addressing the gaps - Group 1 (procurers)



Theme 1: Capabilities

- Keep up to date on latest EU and national legislation
- Need more interaction across City departments and companies – better links to department heads and Council leaders.
- Education and training on circular procurement benefits and practices for management and non procurers across the City

Theme 2: Process

- Budget cuts may become a challenge (and also an opportunity to change ways and reduce)
- Synchronise procurement plans and forecasting
- Improve /change structure to look at impacts of doing things differently (more strategic procurement role)
- Alternative procurement contents, regarding structures.
- Demolition and synchronization of construction procurement.

Carbon neutral by 2035 target is a big driver for creating actions across these points – see next (additional) slides on impacts of procurement on carbon footprints.....

Addressing the gaps - Group 2 (construction)

Theme 3: Market engagement

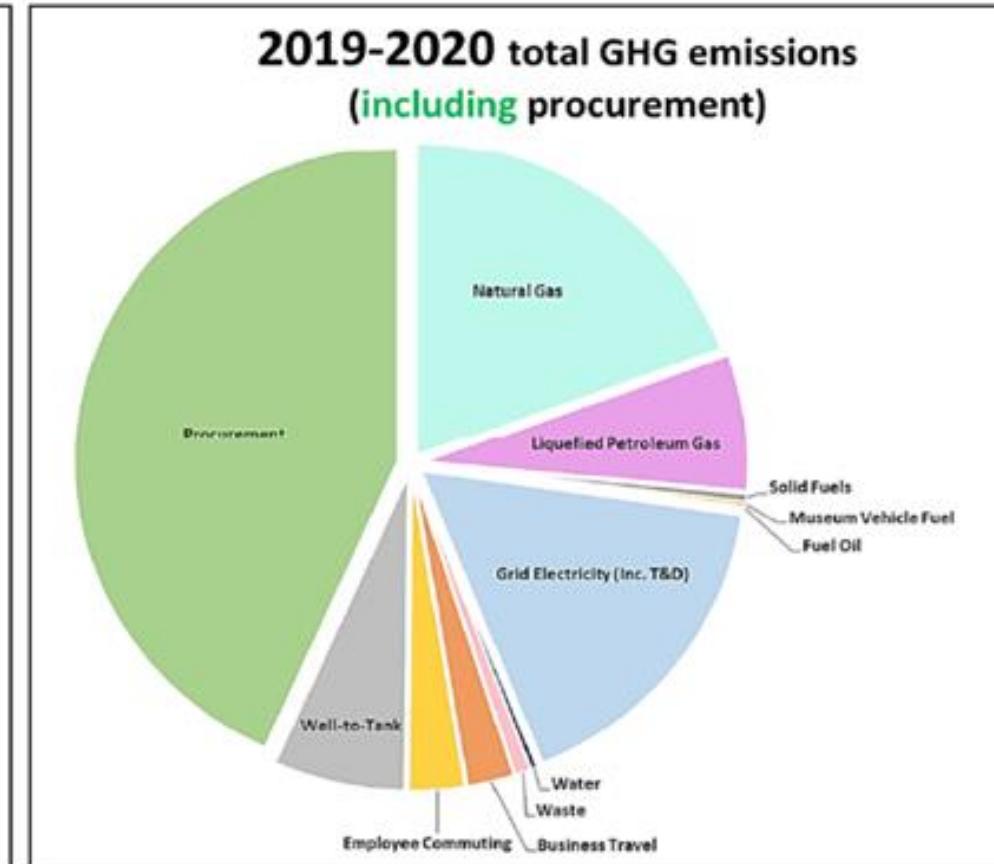
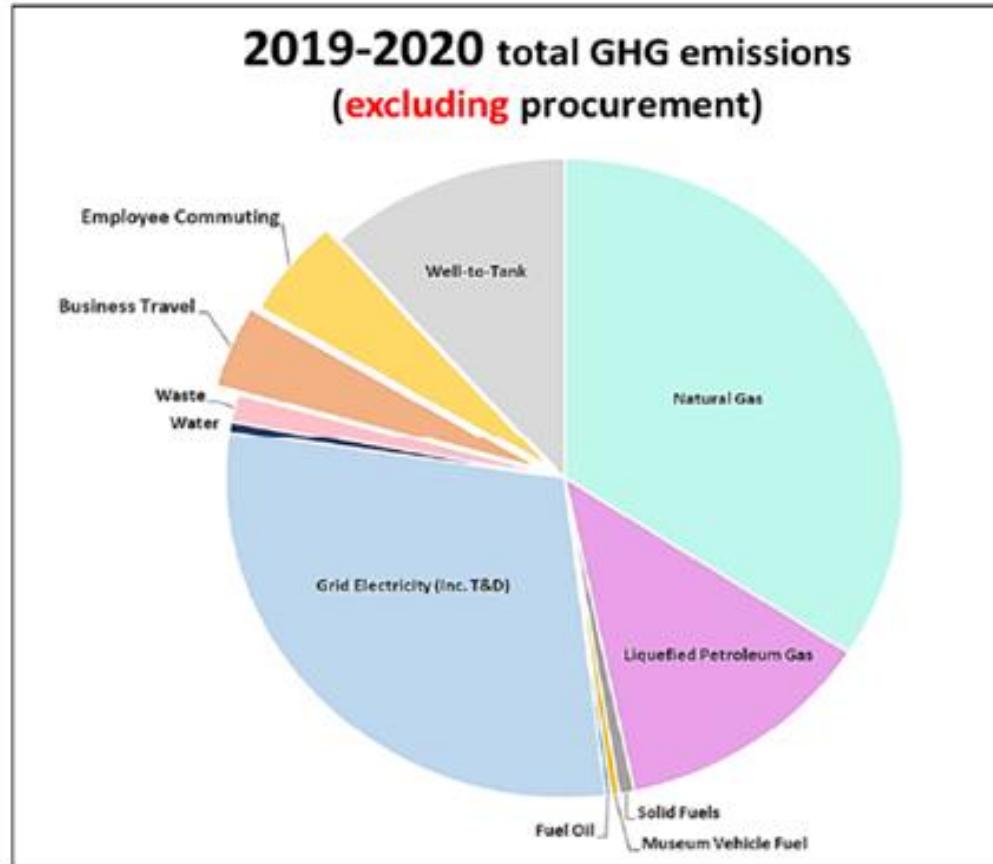
- Discussed how to create more effective materials banks
- Market dialogues to be regular requirement for larger procurements, Mikalo and Xamk
- Better planning and preparation in pre-tender stage enabled by preparing the market engagement such that circularity aspects are more ambitious.

Theme 4: Monitoring & reporting

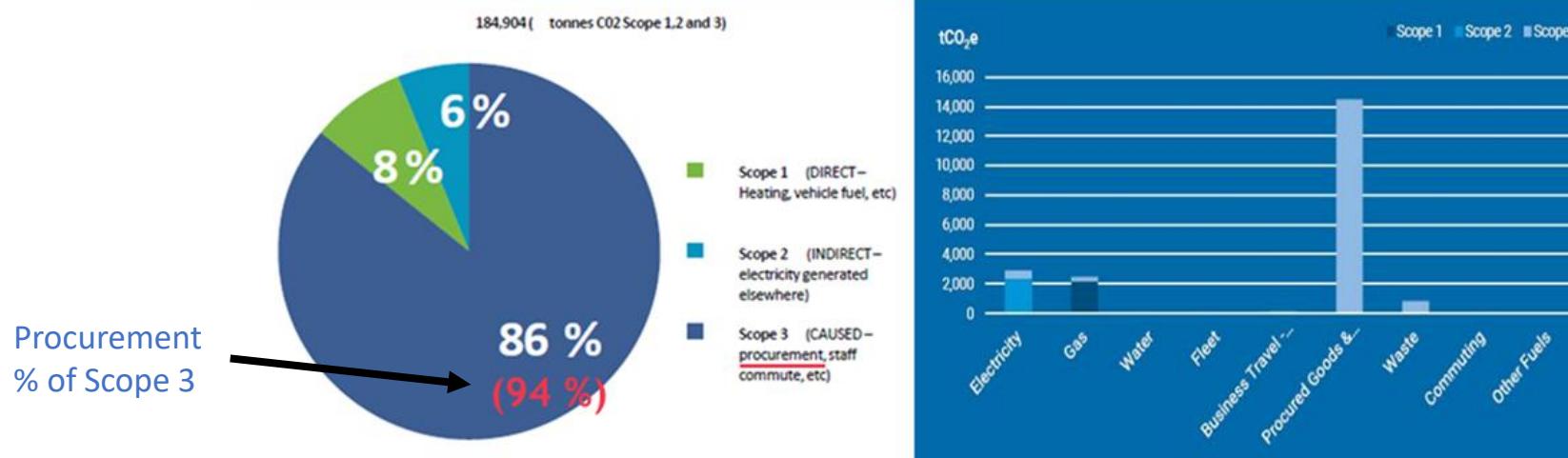
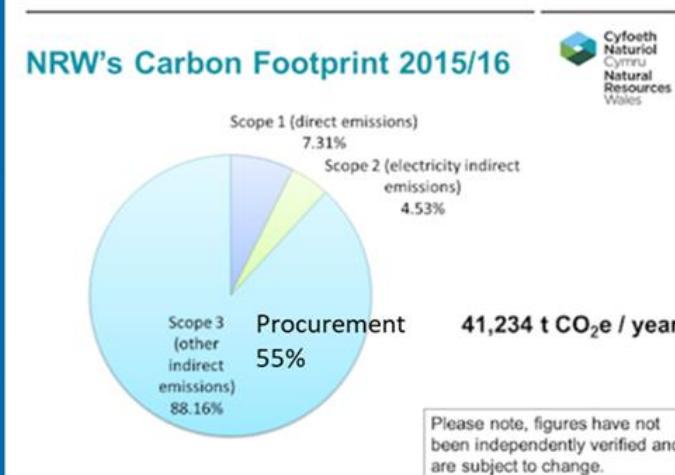
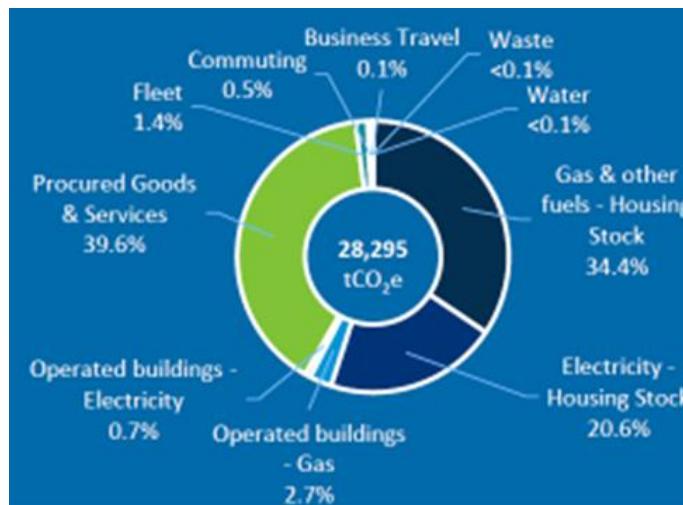
- Define the KPIs to be included in tender requirements
- Better skills need for evaluation to determine what a good sustainable /circular response looks like
- the criteria acc. to guidelines and climate strategy should be implemented in the whole city organization, Mikkeli as a whole.
- Must make the criteria, eg. CO2e for the monitoring: waste fractions, reusable/reused materials. Competence of the procurement people, or expert services enabled by guidelines and climate program for the sustainability but they must be implemented consistently.

Carbon neutral by 2035 target is a big driver for creating actions across these points – see next (additional) slides on impacts of procurement on carbon footprints.....

Museum of Wales Carbon footprint



Carbon scope 3 summary impact examples



Clockwise: NRW, Swansea, Cardiff Council, Valley to Coast Housing Association



Some case study examples

Circular viaduct: Vianen bridge, Netherlands

Reduce materials used, Reduce waste,
Minimise disruption

- Modular approach – multi-span
- Designed for disassembly
- Faster onsite build – less disruption
- Fewer materials used in total construction
- Materials passport

LESSONS LEARNED

- Early consideration of alternatives to traditional build result in life cycle benefits.

Volker InfraDesign

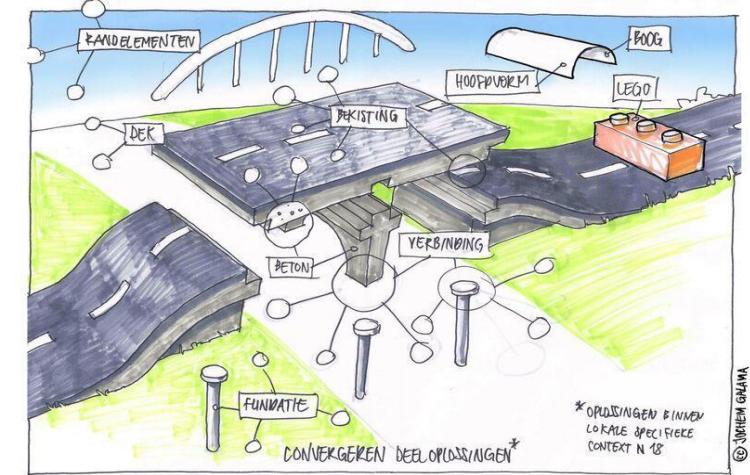


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Example



Netherlands A6 Refurbishment benefits

Reduced monetized environmental impacts by €21.8M

| | CO ₂ e emissions | Energy consumption |
|-----------------------------|--------------------------------|--------------------|
| Low Carbon Solution | 552.9 t CO ₂ e/year | 157.8 toe/year |
| Last Tender/or „worst case“ | 731.8 t CO ₂ e/year | 208.6 toe/year |
| Annual savings | 178.9 t CO ₂ e/year | 50.8 toe/year |
| Total savings (50 years) | 8,944 t CO ₂ e | 2,549 toe |



Public Health Wales

Example



- 1,143 items re-used
- 1,270 re-manufactured
- Impacts:
 - Product lifetime optimised
 - 134 tonnes CO₂e saved which equals 400,000 car miles
 - 41 tonnes landfill diversion
 - 2,435 employed hours for 8 people
 - Employment & training has led to real jobs for 3 people
 - Virgin material displaced

Circular bridge - Netherlands



**Reduce materials used, Reduce waste,
Minimise disruption**

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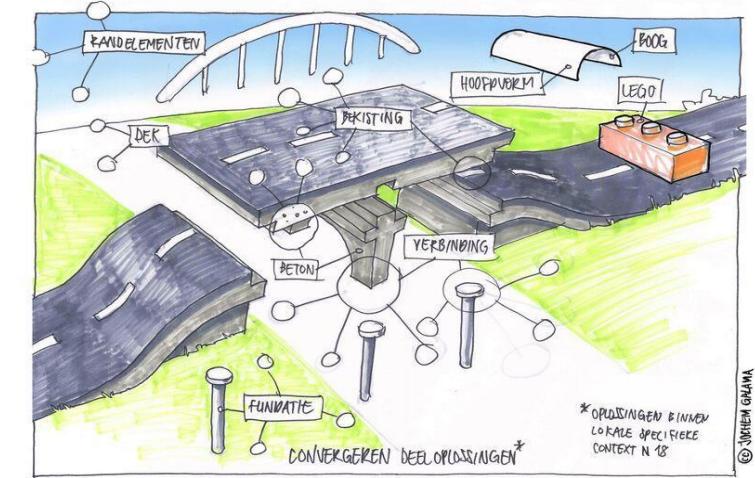
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Business models - leasing workwear



Textiles - Recycle existing materials, create demand for recycled materials, innovate, reduce waste.

- As part of a commitment by the Dutch Government to achieve maximum re-use and recycling, Rijkswaterstaat set up a pilot to explore the potential for remanufacturing workwear.
- The main question was whether used clothing could be 'dematerialised' successfully back into its component materials – and then be used to create new clothing?
- 50 lock stewards were issued with caps, polo-shirts, raincoats and fleece jackets made of 100% recyclable polyester materials.
- All of the clothing was successfully recycled, although the raincoats needed additional material added for remanufacture into new items.



Schools food: Malmö, Sweden

- Malmö spends €15 million pa on food from wholesale (non-fresh)
- Each of the 25 kitchens preparing meals undertakes its procurement via an electronic buying system and as part of the city's food contract.
- Each kitchen is guided in the purchase to **select the most environmental friendly products** as these are clearly indicated in the online catalogue.
- **Training of kitchens' staff is important**, especially in those catering systems where kitchens purchase the food.
- Products for which local supply is likely (i.e. dairy, fresh fish, fresh bread and fresh vegetables) are treated as separate contracts.
- **Environmental award criteria for food produce may also drive the local sourcing of produce**, for example via packaging and transport requirements.
- Malmö had achieved a 5% reduction in emissions by 2015 and is actively looking into the carbon footprint of other aspects of the food supply chain.



Reducing single use plastics – Caerphilly, Wales

Background

Caerphilly County Borough Council (CCBC) took steps towards reducing the impact of problematic and single use plastics in their food and drink supply chain.

Actions

Spend review and extensive engagement exercise with internal CCBC and external stakeholders to understand how products procured, used and disposed of.

Impacts

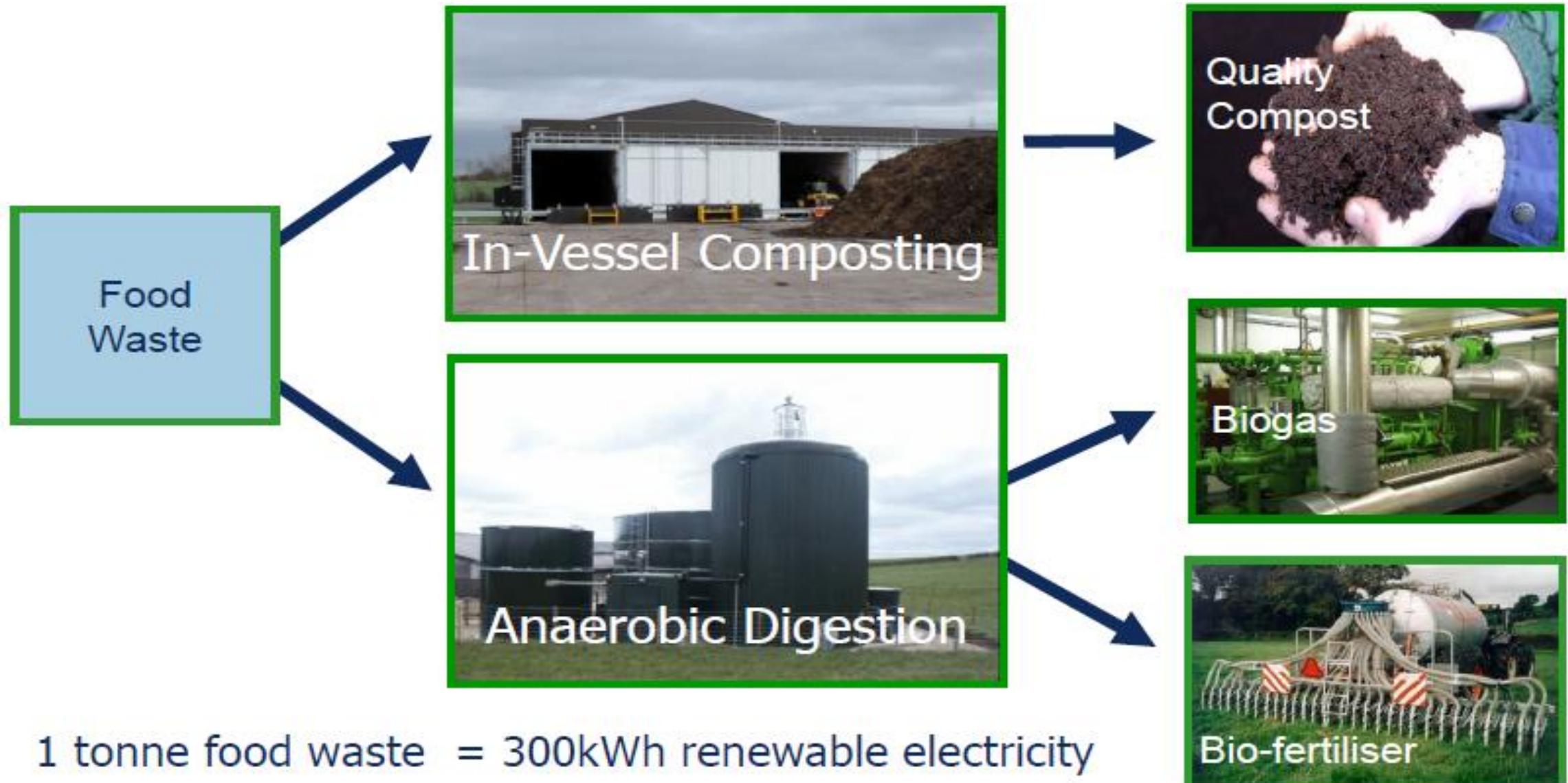
Avoidance, levies on disposables and the sale of re-usable containers at a profit offset the cost of more sustainable alternatives.

Barriers overcome & Lessons

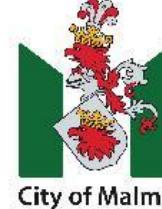
Holistic approach to procurement decisions key. Main lesson is not to look at making changes in isolation; some may cost more, some less, but overall it represented value for money.



Market development example

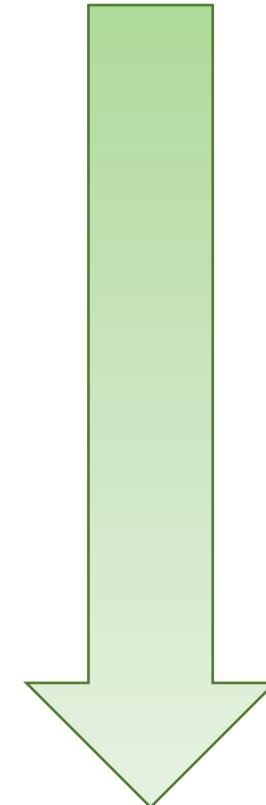


Malmo, Sweden Priority list



Example

1. The goal is to utilise the furniture that is available in the city of Malmo first by doing inventory of what is in store and in office;
2. If furniture has been found,
 - a. can these be renovated internally;
 - b. or can be renovated externally by contract supplier;
3. If furniture has not been found, examine the furniture range externally with suppliers (if not already engaged in step 1);
4. Purchase brand new to circular principles.



What is the CityLoops impact?



What will be your next step?

Tarjouspyytöjen kehittäminen

Pass information forward and put it in use in daily things. Make circulation economy "normal".

Create CP training program for procurers
Establish Co-operation team for concern
Meeting with the procurement manager for feedback and actions

Update Toimintakeskus cooperation agenda Ford 2023 with The City, Miksei and Xamk

Yhteistyö,vuorovaikutus,hankintamenettely

Keep on spreading the ideas and examples
Organize seminars and workshops in the area

Vuorovaikutuksen lisääminen, informoiminen omista hankinnoista ja niiden valmistumisesta

Yhteistyö ja vuorovaikutusHankintamenettelyjen kehittäminen

Yhteistyöhön kaupungin muiden hallinnonalojen kanssa ja pyrkiä huomioimaan kiertotalous paremmin sekä hankinnoissa että muuutenkin.

What will be your next step (translated)?

- Development of RFPs
 - Update Action Center cooperation agenda For 2023 with The City, Miksei and Xamk
- Increasing interaction, informing about own purchases and their completion
 - Pass information forward and put it in use in daily things. Make circulation economy "normal".
- Cooperation, interaction, procurement procedure
 - Development of procurement procedures
- Create CP training program for procurers

What will be your next step (continued)?

- To cooperate with other branches of the city's administration and strive to take the circular economy into account better both in procurement and otherwise.
 - Organize seminars and workshops in the area"
- Keep on spreading the ideas and examples
 - Establish Co-operation team for concern
- Meeting with the procurement manager for feedback and actions.

What will be your next step (continued)?

I will promote the monitoring of climate strategy of city of Mikkeli.

Making a cooperation group for different departments. Improve the quality comparisons of tender requests.

Porto have taken a similar decision and also decided to have regular meetings between the procurers in the City and their city companies

Resources



[Circular Procurement – getting started](#) (Circular Flanders)

[Zero emission construction sites](#) (Big Buyers Group)

[Furniture reuse and refurbishment](#) (Public Health Wales)

[Circular design and procurement of town hall extension](#) (Brummen, Netherlands)

[Lighting as a service](#) (Schiphol Airport, Netherlands)

[Circular Procurement Learning Network](#) (LinkedIn)

[Procuring Resource Efficient Construction Projects.](#)

[Procuring for Repair, Reuse and Remanufacturing.](#)

[Urban Agenda for the EU Online Circular Procurement course.](#)

[ProCirc Pathways to Circular Procurement.](#)

[Circular Furniture webinar.](#)

[Circular ICT webinar.](#)

Videos:

[Circular procurement](#) (<3 minutes) - Zero Waste Scotland

3 video presentations on [pre-tender](#), [tender](#) and [post-tender](#) circular procurement considerations from Circular Flanders and Zero Waste Scotland (Circular Economy Stakeholder conference, November 2020)

**THANK YOU
VERY MUCH!**



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