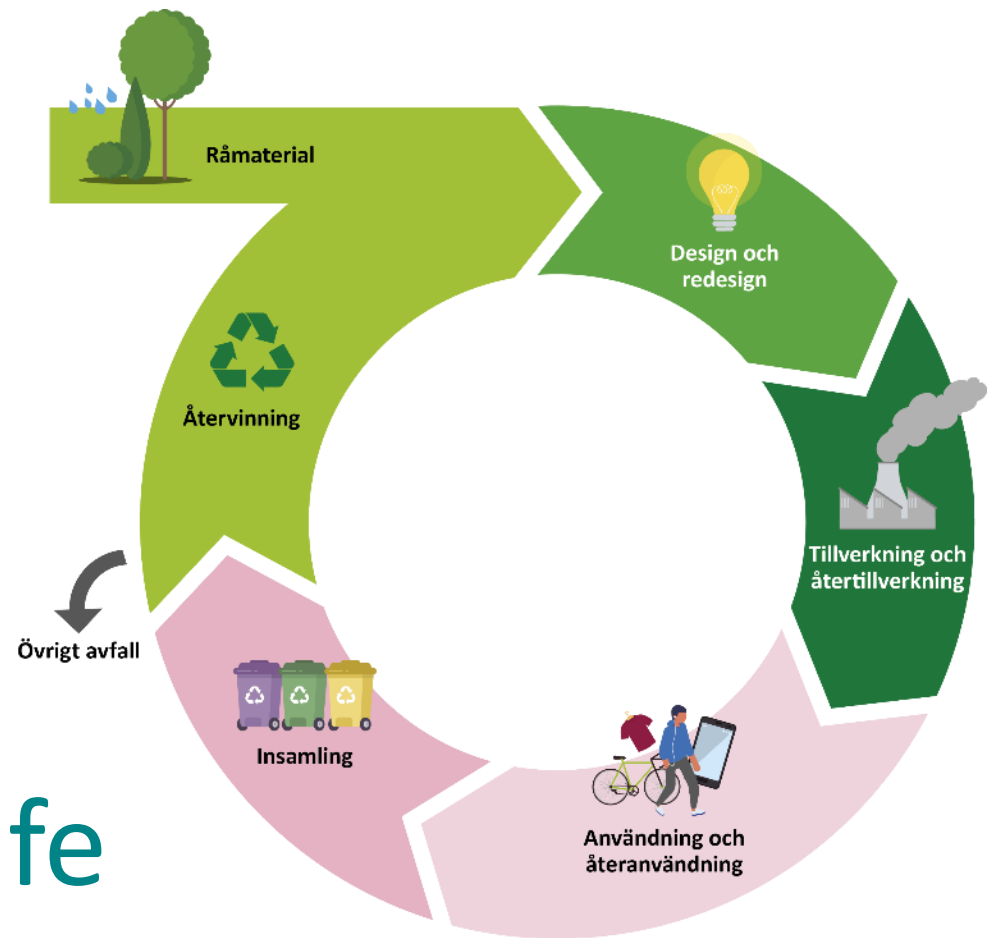
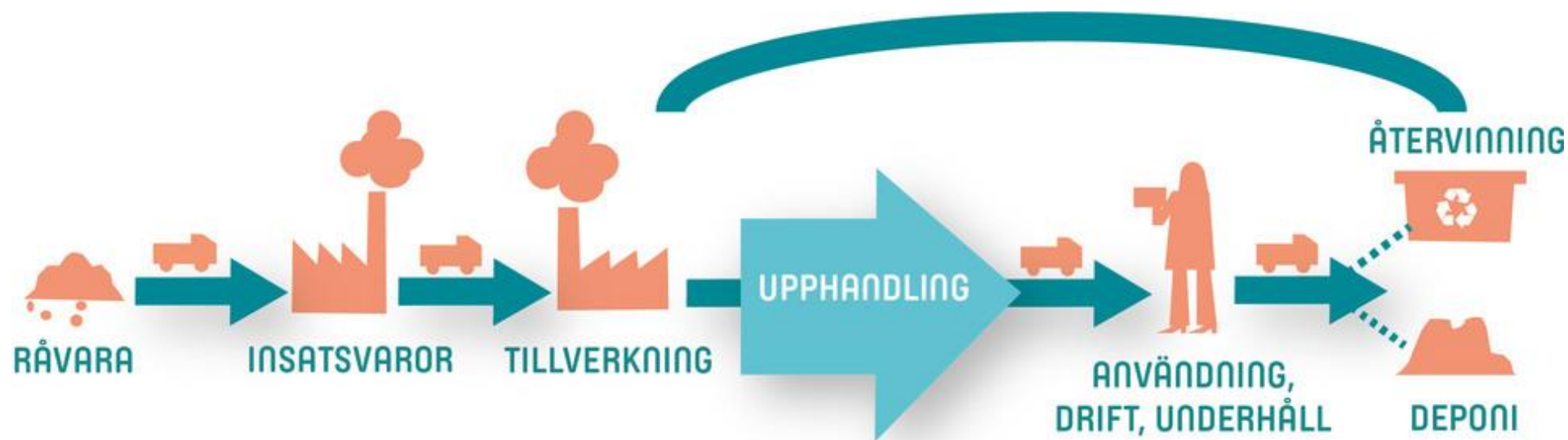


KRITERIEKOLLEN – Circular criterias with a life cycle perspective

Sven-Olof Ryding, IVL



Procurement is in the middle of a product's life cycle
→ shared responsibility between procurers and suppliers



This becomes particularly noticeable when calls are made in connection with circular procurement...

→ Suppliers must guarantee compliance with set circular requirements.

→ The procurer must guarantee that the product is used, maintained and repaired in the best possible way.

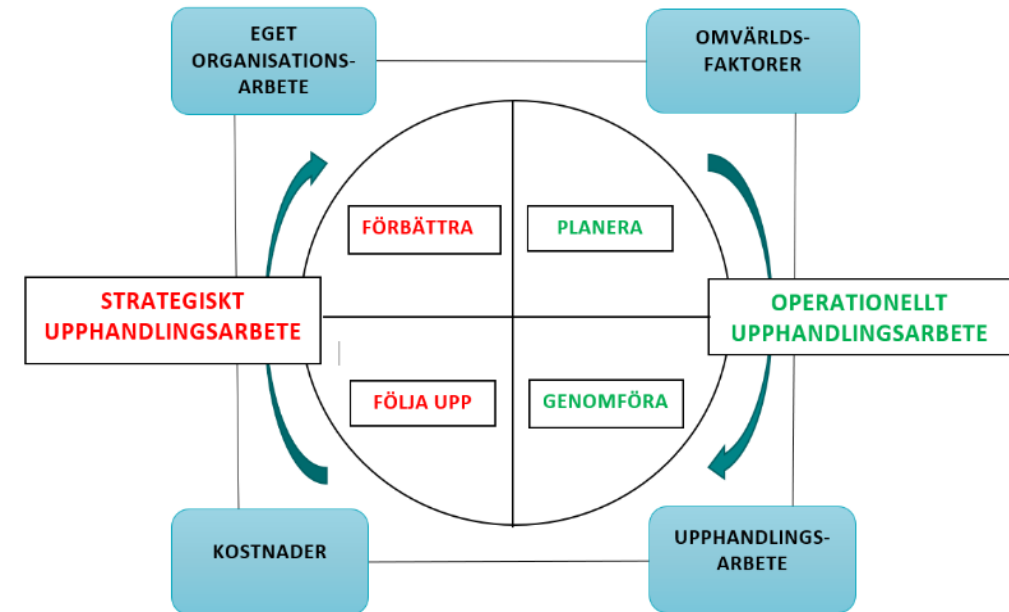
Identified potential obstacles in circular procurement

Strategic procurement work

- The perception that circular products have poorer performance
- Limited resources in the own organization
- Unprepared for new procurement routines
- Insufficient incentives to strengthen market advantages

Operational procurement work

- Need for more unified procurement routines
- Lack of clearer political initiatives
- Regulations and legislation
- Lack of relevant standards for quality assurance and verification

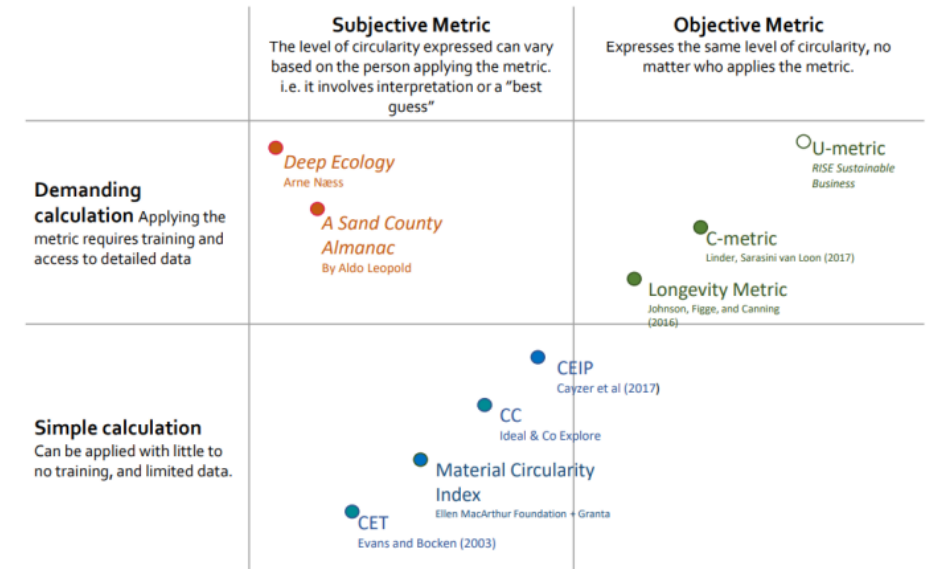


Development of methodological approaches for circular indices

A general literature review indicates that several different methods for calculating circularity are reported in various research papers. Some of these are:

- Material Circularity Indicator
- Eco-Efficient Value Ratio
- Circular Economy Index
- REPRO
- Material reutilization part

They differ in terms of value, reliability, transparency, generalizability, and the possibility of being connected with other evaluation methods. Only in a few cases was there a link to LCA and procurement. In most cases, the calculations result in various cost aspects.



Other international examples

In Flanders and the Netherlands, an 8-step approach for circular procurement has been proposed:

Step 1. Circular Procurement: Clarify what and why from a long-term perspective.

Step 2. Organizational Setup and Support: Understand what circular procurement means for a procuring authority.

Step 3. Key Questions: Determine important questions to answer in the initial planning phase.

Step 4. Broad Collaborations Across Sectors: A circular economy is a multidisciplinary concept.

Step 5. Procurement Process: Identify which principles and procedures best support the use of circular materials and products.

Step 6. Measuring and Evaluating Circularity: Understand the difference between measuring and evaluating circularity.

Step 7. Ensure Circular Agreements: How to ensure long-term circular agreements.

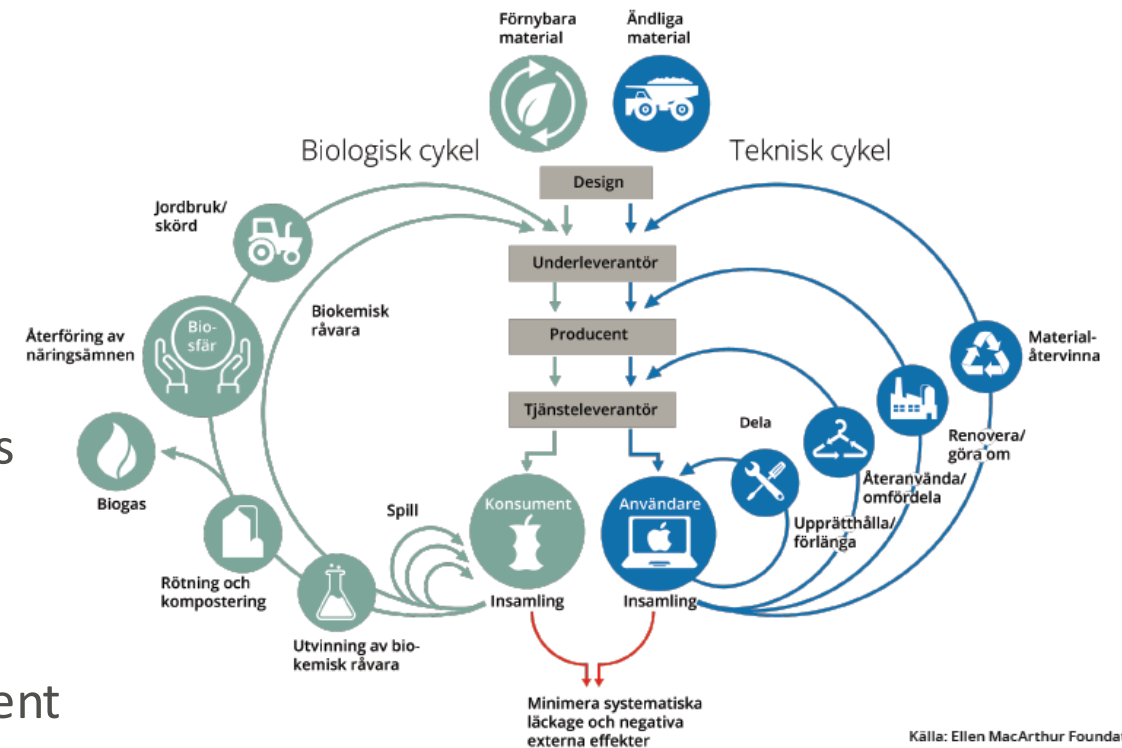
Step 8. Follow-Up on Agreements: Monitor compliance with circularity agreements.



Challenges of developing proposals for relevant circular procurement criteria – many starting points to consider.

Examples of such starting points:

- Use renewable energy in production and transportation
- Conserve resources
- Use recycled and recyclable materials
- Extend the lifespan of products
- Avoid environmentally and health-hazardous substances
- Manufacture products that are easy to disassemble
- Enable repair and reuse
- Reward material or energy recovery in waste management



A good startingpoint – “The Rainbow table”

A  Begränsa den totala materialåtgången	B  Minska mängden jungfruliga råvaror	C  Förläng livslängden på produkter	D  Maximera möjligheten för återanvändning av en produkt eller komponent	E  Maximera möjligheter till återanvändning och återvinning av material
A 1 Delad användning internt	B 1 Kunskap om andelen återvunna, biobaserade och jungfruliga råvaror	C 1 Förlängda garantier	D 1 Design för demontering	E 1 Design för återvinning
A 2 Delad användning externt, uthyrning eller leasing	B 2 Ökat innehåll av återvunna råvaror	C 2 Avtal om underhåll och reparationer	D 2 Modulär design	E 2 Kunskap om innehåll och material
A 3 Återanvändning, renovering och uppgradering	B 3 Ökat innehåll av biobaserade råvaror	C 3 Uppgraderingsbara produkter	D 3 Standardiserad design	E 3 Avtal om återtagning och återvinning
A 4 Design för minimerad materialåtgång		C 4 Design för ökad livslängd	D 4 Kunskap om innehåll och konstruktion	E 4 Begränsning eller förbud av farliga ämnen
A 5 Mindre avfall		C 5 Möjligheter till underhåll och reparationer	D 5 Avtal om återtagning och återanvändning	E 5 Material som är nedbrytbara/komposterbara
		C 6 Modulär/förändringsanpassad design	D 6 Stimulering av cirkulära affärsmodeller	E 6 Stimulering av cirkulära affärsmodeller
		C 7 Avtalade incitament för ökad livslängd		
		C 8 Vägledning från tillverkare för optimal användning		

MÅL OCH STRATEGIER FÖR CIRKULÄR UPPHANDLING



Modell från Vlaanderen-Circular.be
Översatt 2020.

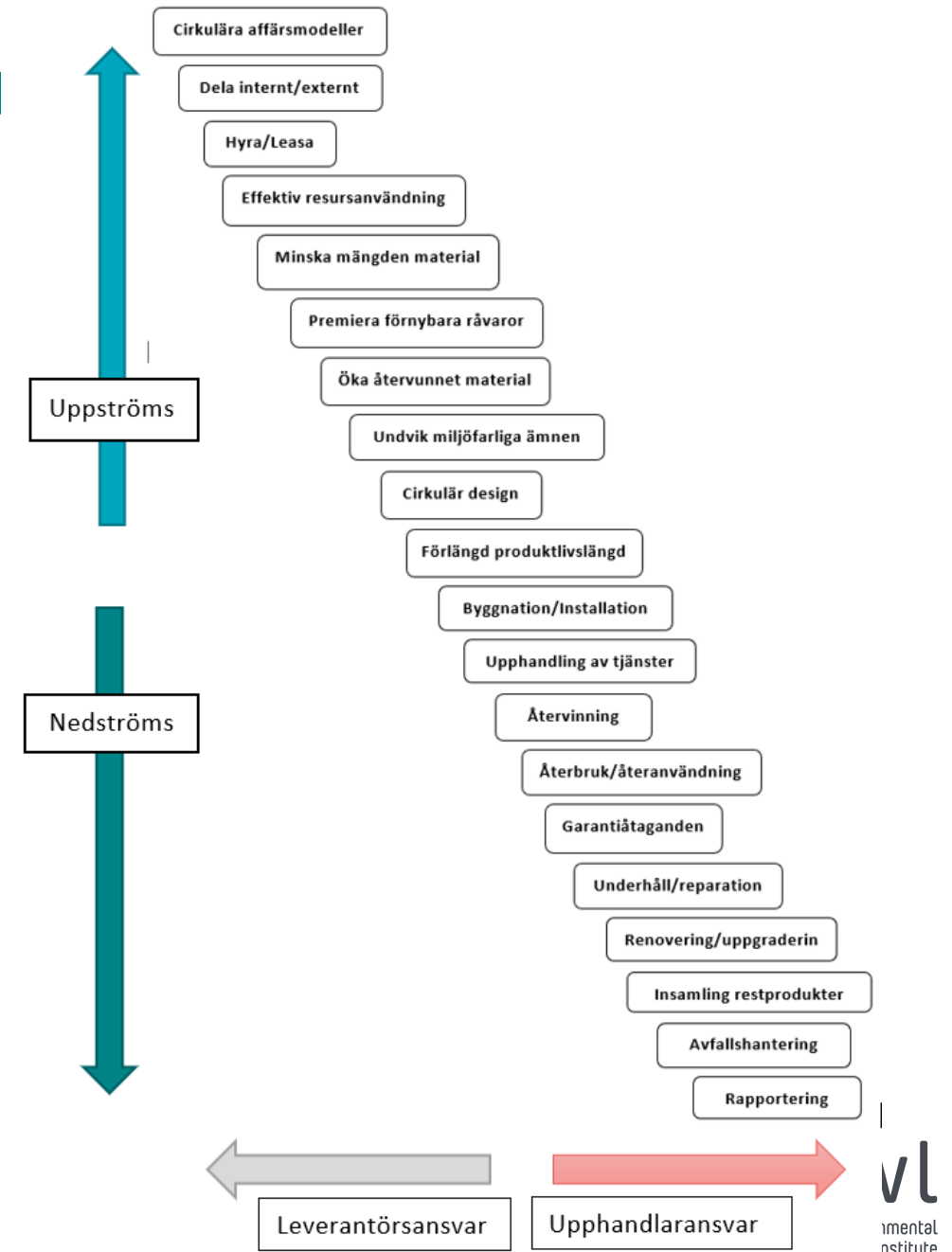


An attempt to identify circular criteria from a procurement perspective

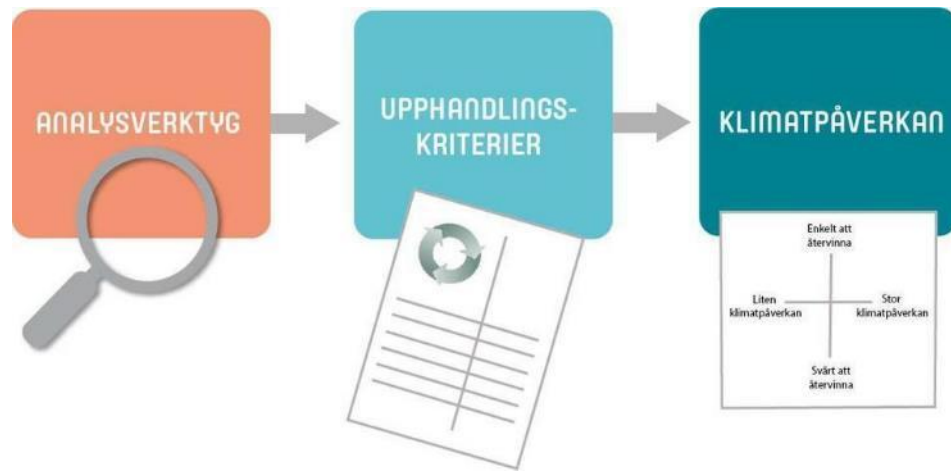
It is possible to separate the various action-specific circular requirements that can be set, which suppliers must meet, from the requirements that the procurer is responsible for fulfilling.

Some of these are easier to meet, while others require more **organizational and product development** work.

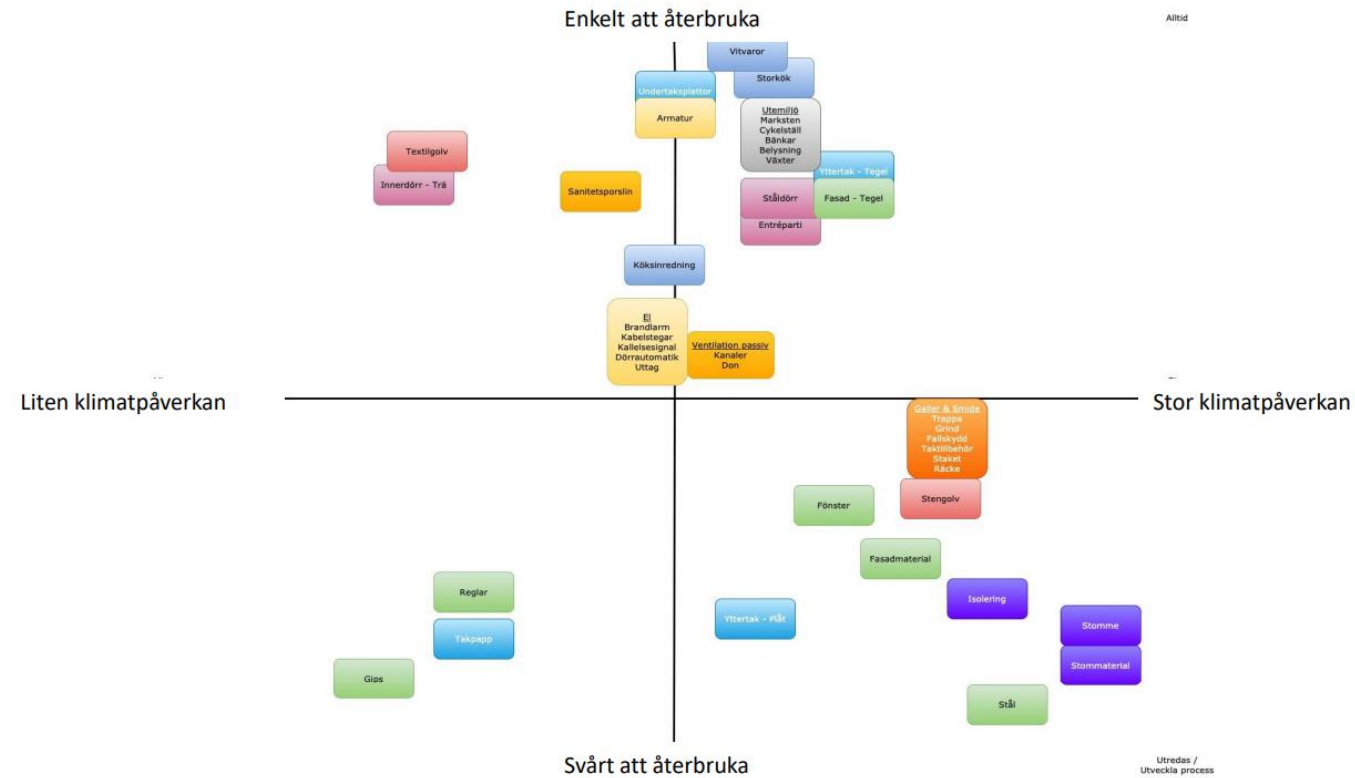
Reviewing experiences of using these different action-specific measures is valuable for moving forward and assessing their climate benefits.



What remains in the work to assess the climate benefits of set circular requirements?



Goal
To be able to rank the climate benefits of various action-specific circular criteria in relation to costs or effort.



Thank you!