

Cargo Bike: Swedish experience

ZCI Master class - October 18, 2023 - Cork, Ireland



Agenda

- Introduction
- Examples
- Tips and reflections for
 - "Infrastructure"
 - Engagement
 - Procurement



About me



Andre Benaim – project leader

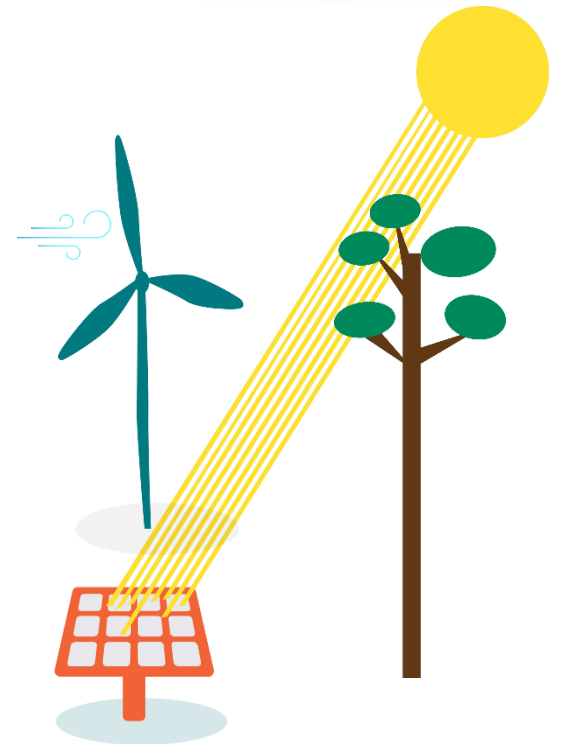
Sustainability, innovation and empowerment

- Leadership and teams dev.
- Strategic Planning
- Development coach
- Process facilitator

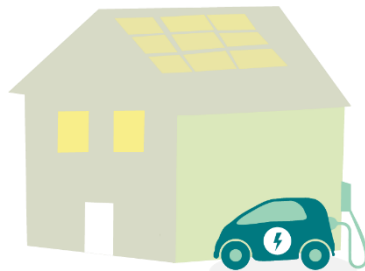


Our aim and task is to work for

- Reduce the energy use (be less dependent)
- Use energy as efficient as possible
- Increase the amount of renewable energy



energi**kontor**
sydost



We are part of something bigger



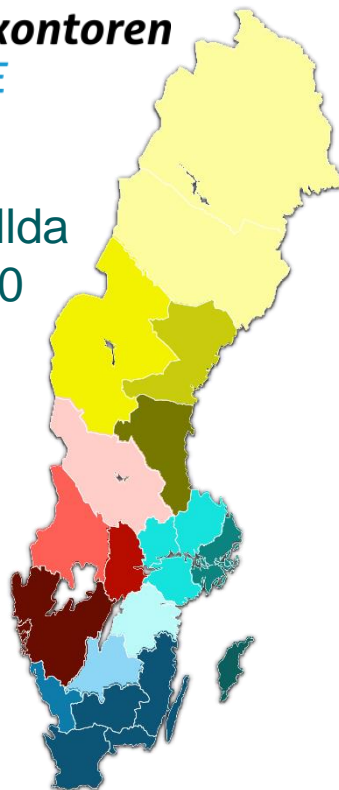
**ENERGIKONTOR
SYD**

31 anställda
1 972 800
invånare



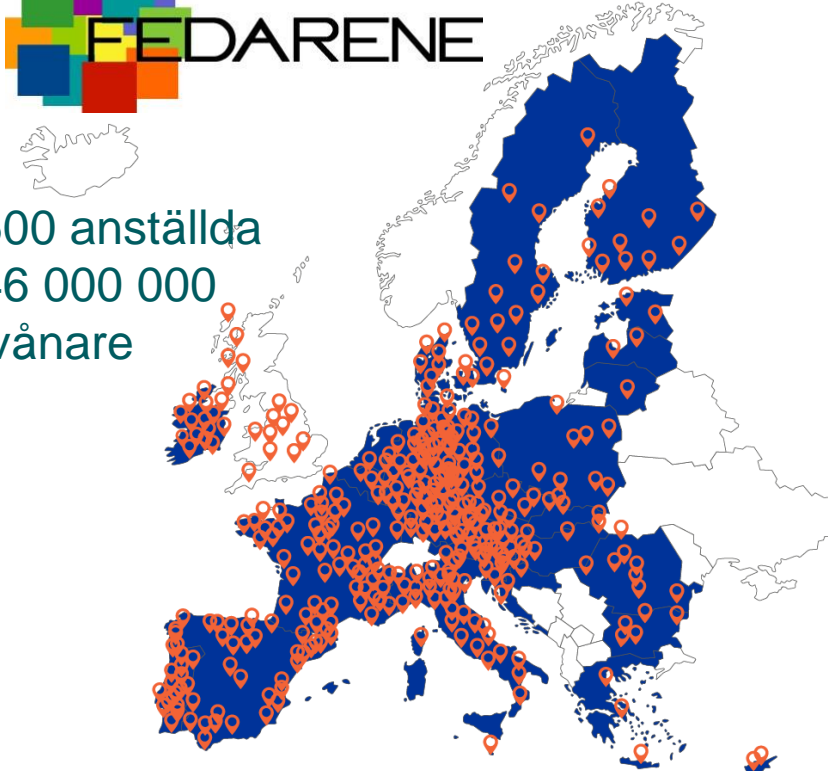
**Energikontoren
SVERIGE**

140 anställda
10 380 000
invånare



FEDARENE

2500 anställda
746 000 000
invånare



Mobility Projects and cargo bikes



LASTA

Stöttar kommuner kring
lastcykelsatsningar



CARGO BIKES
in urban mobility





Cargo bikes



Lådcykel

Packcykel

Fraktcykel

Transportcykel

Flakcykel

Paketcykel

80 % of "automobile"
trips in urban areas
are shorter than **3-4 km**



Cargo bike a bit of the transport puzzle



There are many
ways to
contribute to
Fossil free
Future





Types and uses of cargo bikes



Models...



... It is much more than 2 eller 3 wheels



Types and Uses of cargobikes

Parcels



Food



Intern transport



Services



Bilder: www.nwzonline.de; www.elektrobike-online.com

Bilder: www.enviado.de; www.lastenrad.vcd.org Bilder: www.badische-zeitung.de; www.lastenrad.vcd.org

Bilder: www.coffee-bike.com; www.lastenrad.vcd.org



Types and Uses of cargobikes

Heavy (or just lots of) Cargo



Källa: <https://www.etc.se/sites/all/files/styles/mega/public/atoms/images/2014/03/lastcykel1.jpg?itok=pAKgR410>

Källa: <https://energiforskmedia.blob.core.windows.net/media/25634/bild-2018-554.jp>



Price tag



Cargo bike arrow like
(different brands)
2,000 – 5,000 Euro



Starke cykel: ?
Velov :?

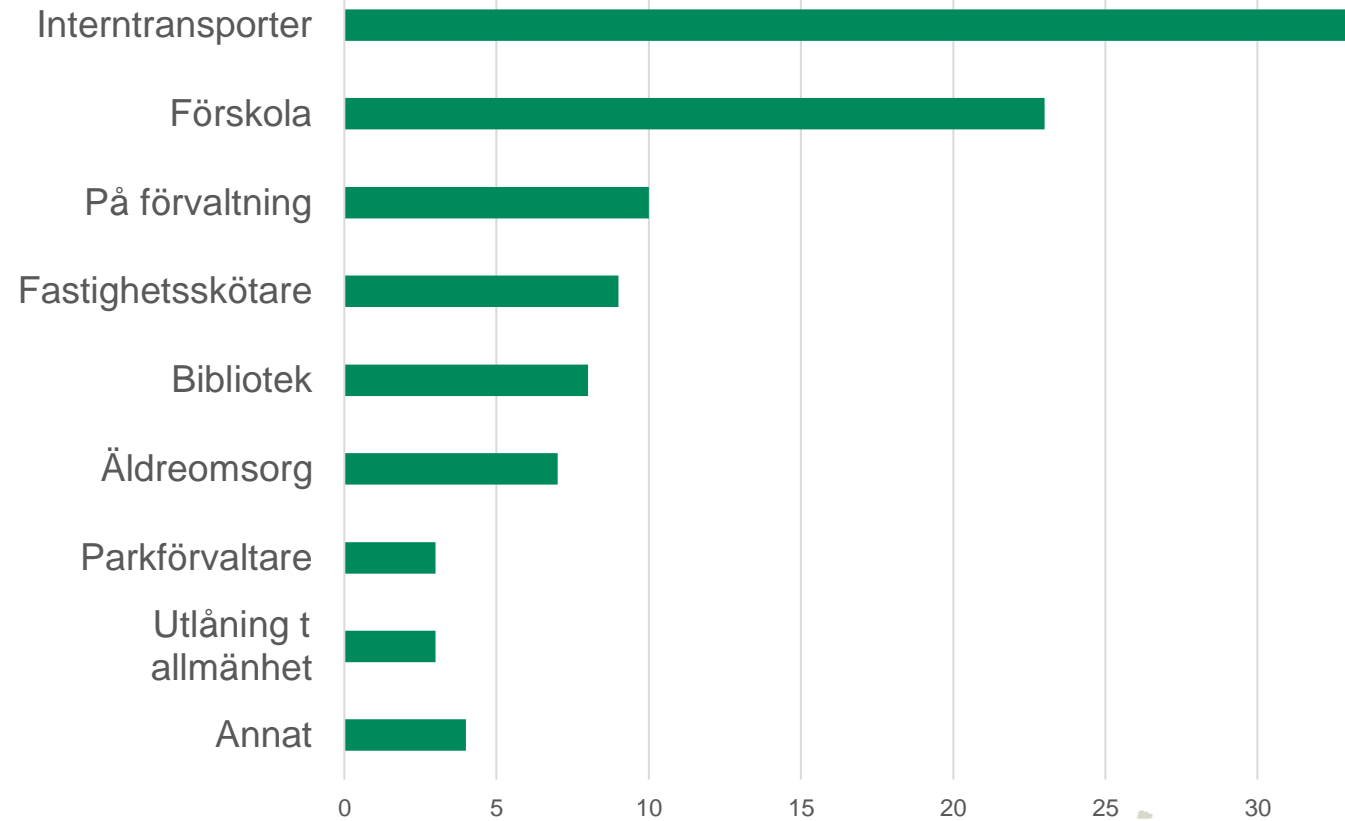
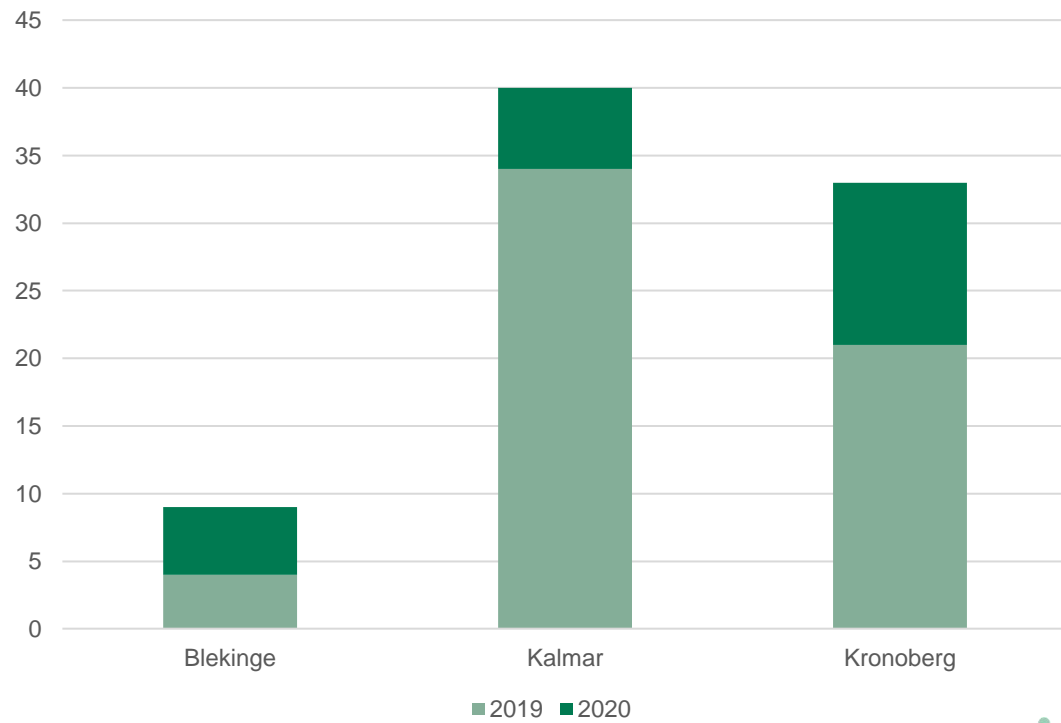


Nihola Flex: 8,000 euro



Uses C.B. (2019-20) SE Sweden

Antal lastcyklar i sydost



Good examples in Sweden





- A cargo bike as a cleaning tool equipped with all that is needed for cleaning and preparation during uest change
- An eletric cargo bike for general transport of materials within site.



Ett tydligt värtecken är när Neptuni kör igång städsäsongen - och det gör vi idag! Städcykeln är laddad för 2017 och först på tur står fönsterputsning. Nu kör vi!! 🧽



In Schools



Increase pre-schol "working radius"

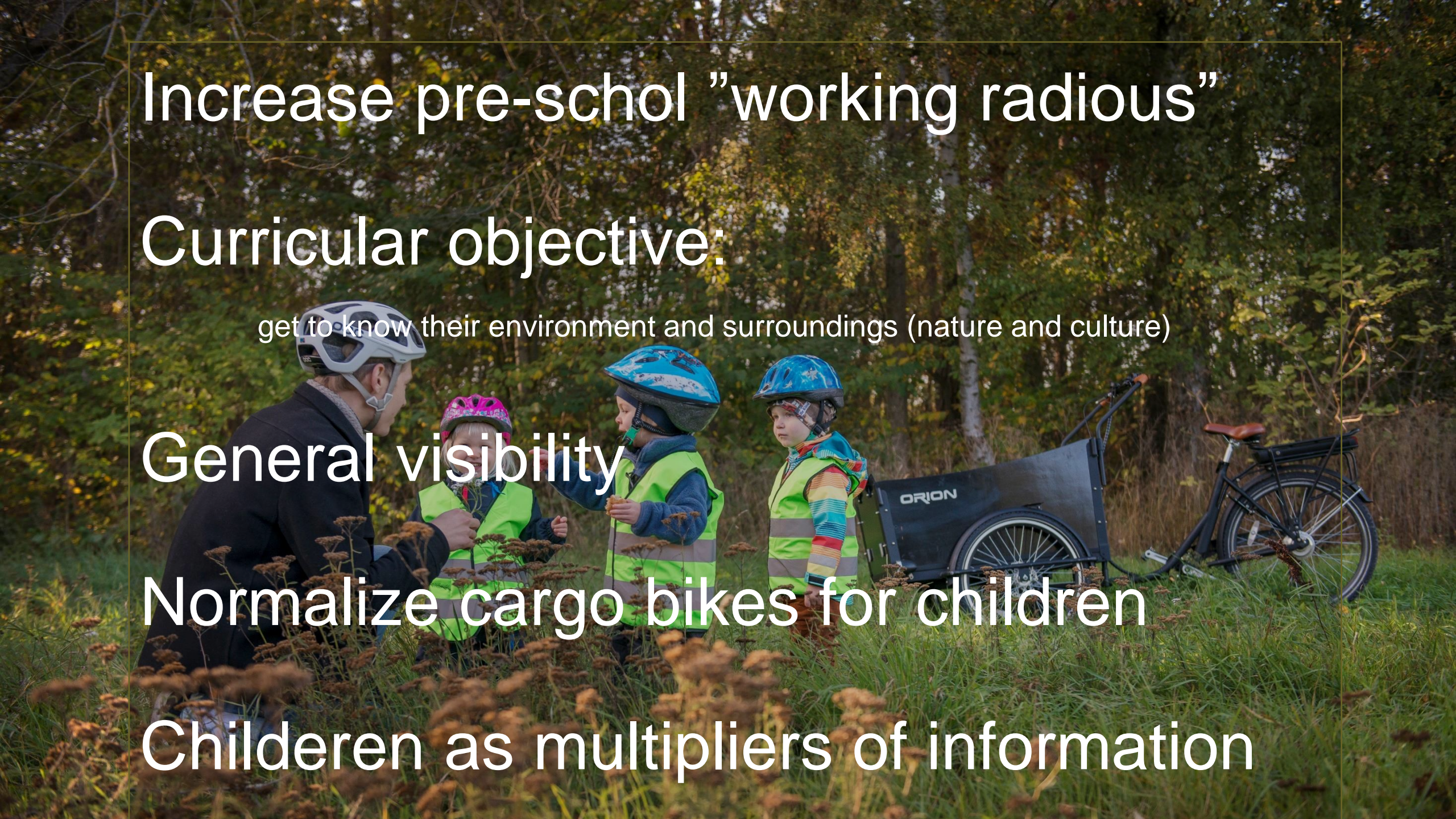
Curricular objective:

get to know their environment and surroundings (nature and culture)

General visibility

Normalize cargo bikes for children

Children as multipliers of information



In Schools

financing example

- Climate compensation
- Money used to environmental activities
- Employees can suggest money use: cargo bikes!
- Bikes were also purchased from municipality budget



Customer care at Olofströmshus

- Load box adapted
 - with lock for tools.
 - to carry a stair
- Improved contact with customer.
- Employees perceive a better work environment
- Bit interest from the general public
- space for marketing

Warning!
There can be
implementation
challenges



Utflykt i lugnt tempo





Cykelbibliotek in Växjö

- 21 bikes, different models, 9 types
- Collaboration with 4 stores that loaned bikes
- Support: purchase and compensation per loan
- Website and booking via vaxjo.se
- 3 week loan period
- Feedback will contribute to future transport plans.
- Success! 2-3 days all bikes were booked





Cykelbibliotek in Växjö

- Test drive – for decision making support!
- 141 respondents reduced their car trips
- 39% bought or were going buying a cargo bike
- Shop owner explored new business models lease and loan



City Logistics



Mikrodepå i Bad Doberan

Micro depot and Cargo Bike in a small town

- Container (10 ft shipping container)
 - Located on a city-owned parking area
 - Special authorization for biking in the pedestrian area
 - The micro depot also serves as a shelter for the Bike.
-
- Parcels transported from the central depot to micro depot

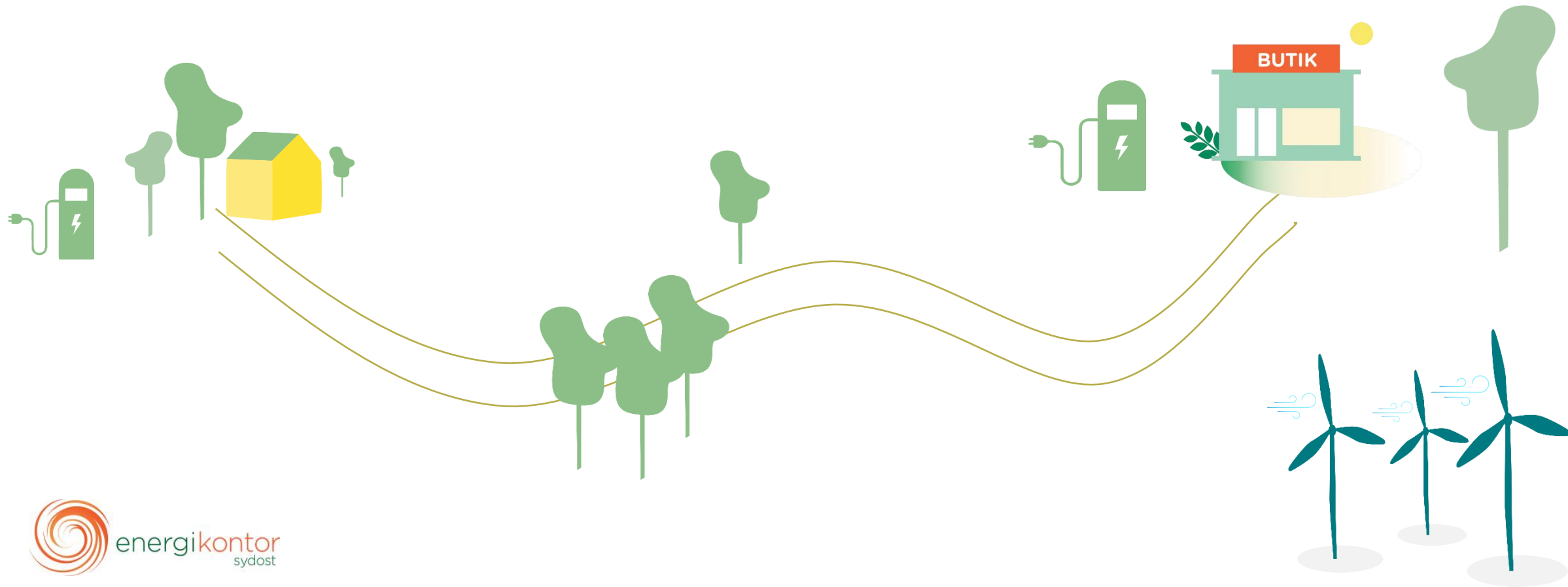


Infrastructure



What are the conditions for cargo bikes to thrive?

Who is responsible for developing such conditions?



At the city planning level

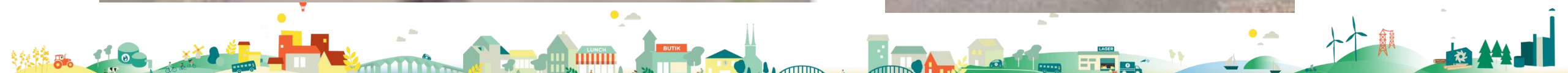
Think about the whole journey



Tips for cargo biking infrastructure

Expected challenges for cargobikes:

- Speed Gates dimensions



Tips for cargo biking infrastructure

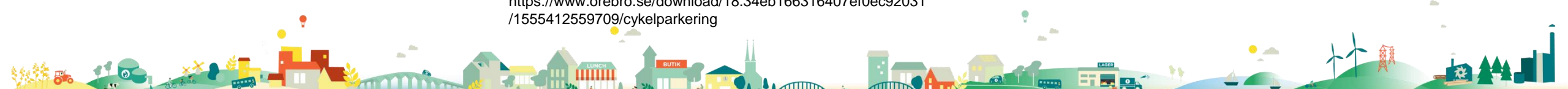
Expected challenges for cargobikes:

- Parking space, but bread and length!



Foto: Tomaz Lundstedt.

<https://www.orebro.se/download/18.34eb166316407ef0ec92031/1555412559709/cykelparkering>



Tips for cargo biking infrastructure

Expected challenges for cargobikes:

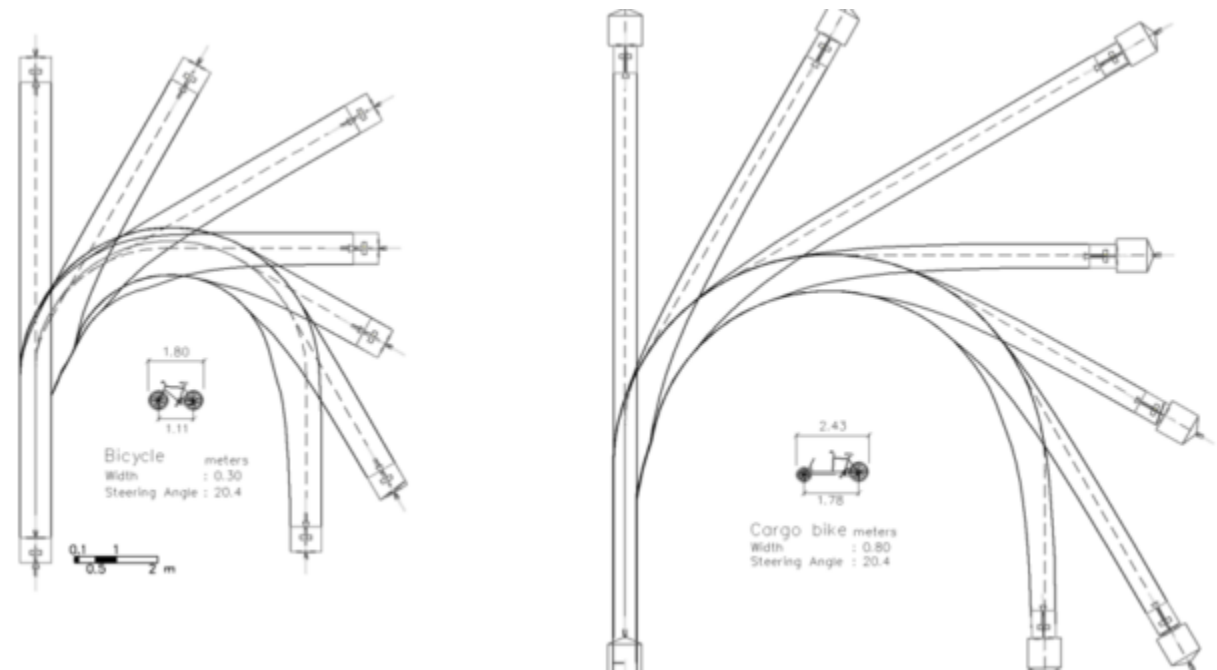
- Breadth of the bike path!
- Curb!
- Placement of crossing button!



Tips for cargo biking infrastructure

Expected challenges for cargobikes:

- Turning radius!



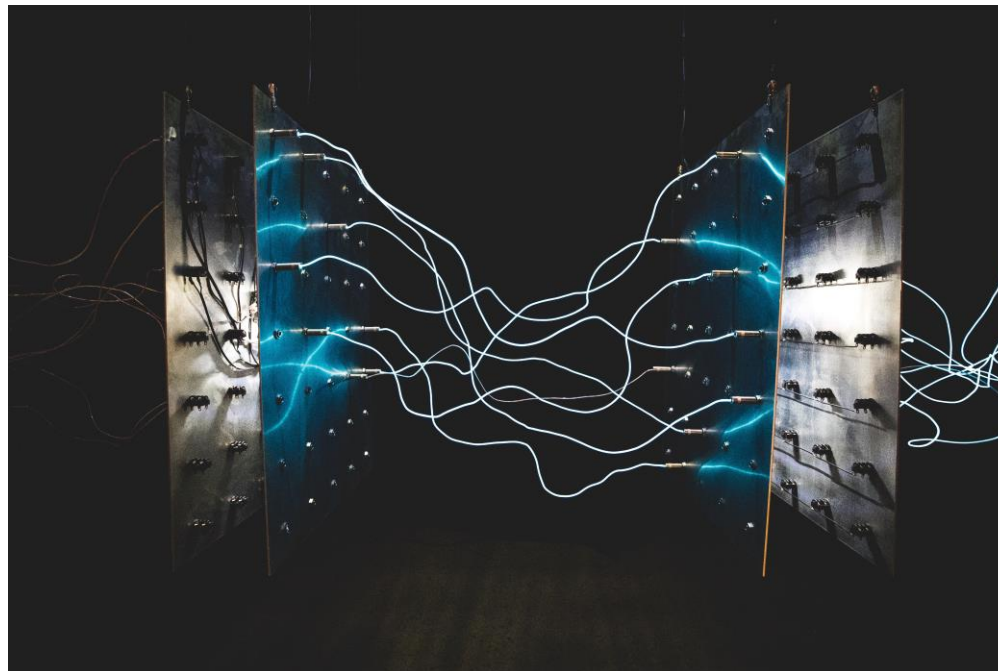
<https://bikebiz.com/sustrans-adapts-software-to-help-design-streets-for-inclusive-cycling/>



Tips for cargo biking infrastructure

Expected challenges for cargobikes:

- Charging or planned battery change?





Implement Planing, purchase and Buy in,



Levels of readiness

Stages	Create Visibility	Increase momentum	Full-Scale adpotion
	Create the buzz!	Bike libraries	Policy implementation
	Bike test	Local Pilots	Scaling up adoption
		Planing strategic engegement	



Tips for engagement

- Engage ambassador and enthusiasts
- Think thought and be clear with booking systems, parking, gear, and instruktions
- Communicate and activites
- Safety first!



Tips – to start at the organizational level

- Help with financing
- Sign clearly on each bike that they contribute to environmental and climate goals
- Interest spreads by seeing other bikes
- Think of good outerwear and studded tires
- Arrange good parking with charging option
- Rotate the first purchased bike of a new model for many to test
- Start in the spring!
- Begin with volunteering usage
- Make sure you can have maintenance and support near by



”Vårt öde i framtiden är summan av våra val idag”

Procurement





Sustainability requirements?

- Vilka krav kan, bör, ska man ställa på
 - Cykeln, flaket, motorn, batteriet
 - utformning, komponenter, funktion, stölskydd
 - Reparation, demontering, reservdelar
- Leverantören – cirkulärt tänk, återvunnet material, reservdelar
- Produktionen – hållbara material
- Bra serviceavtal för att öka livslängd
- Social hänsyn vid upphandling

Att tänka på - handla upp lastcykel



Cyklens övergripande utformning och funktion	Mått, antal mm	Ska	Bör
Cyklens max bredd och längd	cm x cm	<input type="checkbox"/>	<input type="checkbox"/>
Cyklens maxvikt utan last	kg	<input type="checkbox"/>	<input type="checkbox"/>
Minsta maxlast på cykeln totalt	kg	<input type="checkbox"/>	<input type="checkbox"/>
Antal hjul	st.	<input type="checkbox"/>	<input type="checkbox"/>
Storlek och utformning på hjul	"	<input type="checkbox"/>	<input type="checkbox"/>
Antal växlar	≥ _-växlad	<input type="checkbox"/>	<input type="checkbox"/>
Typ av växlar		<input type="checkbox"/>	<input type="checkbox"/>
Antal bromsar	st.	<input type="checkbox"/>	<input type="checkbox"/>
Typ av bromsar		<input type="checkbox"/>	<input type="checkbox"/>
Rullbroms		<input type="checkbox"/>	<input type="checkbox"/>
Modell (dam, herr, unisex)		<input type="checkbox"/>	<input type="checkbox"/>
Förväntad livslängd på cykeln (ev. olika komponenter)	Ja/nej	<input type="checkbox"/>	<input type="checkbox"/>
Garanterad tid som det kommer finnas reservdelar	år	<input type="checkbox"/>	<input type="checkbox"/>
Manual som beskriver skötsel och underhåll av cykel	år	<input type="checkbox"/>	<input type="checkbox"/>
Små instruktioner/tips att fästa på cykeln för ökad livslängd och säkrare framförande.		<input type="checkbox"/>	<input type="checkbox"/>
Dokument som beskriver garantitid och vad som ingår		<input type="checkbox"/>	<input type="checkbox"/>

Filmer, mallar och illustrationer

Film



Grafiska illustrationer



Affisch/rollup/vykor
t



Tack







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