

WELCOME TO NSR AB

Helsingborg 2025

Pst... before we start

Have you turned your phone into silent mode?

What happens if there is a fire alarm?

- Evacuation leader and evacuation route
- Fire extinguishing equipment
- Nearest assembly point

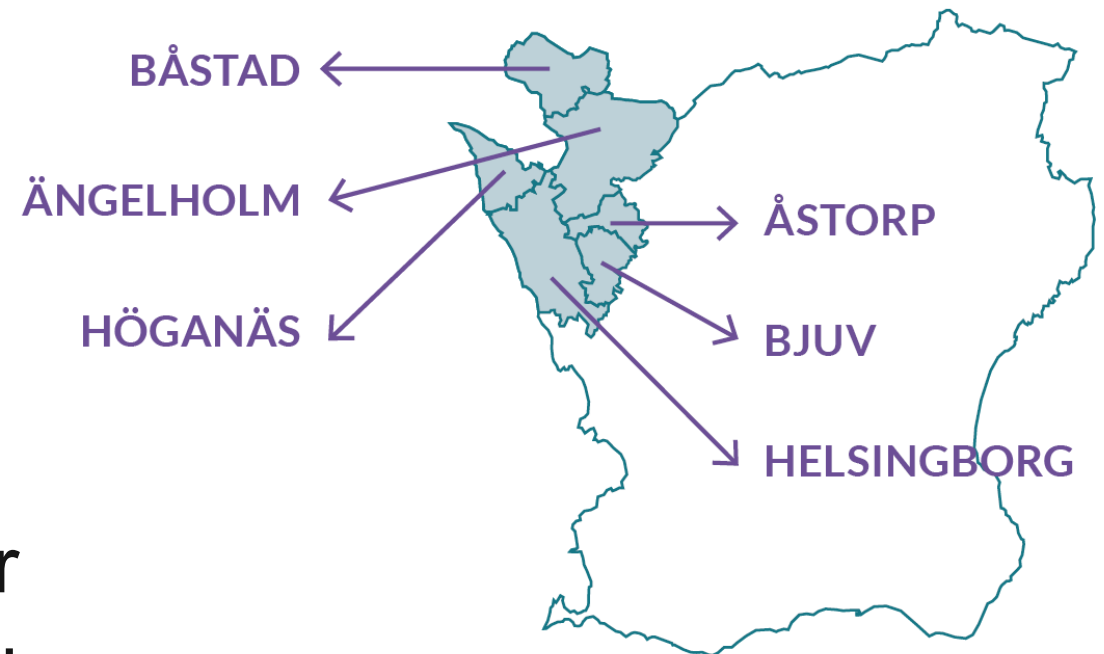
Equipment available in case of an accident?

- Defibrillator
- First aid
- Knowledge of CPR



NSR – North Scania Waste Company

- Owned by 6 municipalities
- Founded in 1982
- 272,000 inhabitants
- 70 000 customers
- Empties 4,7 million bins a year
- Turnover 2024: SEK ~550 million



Key facts

- Thomas Falkstrand, CEO
- Around 240 employees
- Head office in Helsingborg
- 9 facilities in the region



COLLECTION



80% Own direction

Ohlssons
Urbaser
PreZero
Nordisk Återvinning

RECYCLING CENTRE



100% Own direction

5 Recycling centres

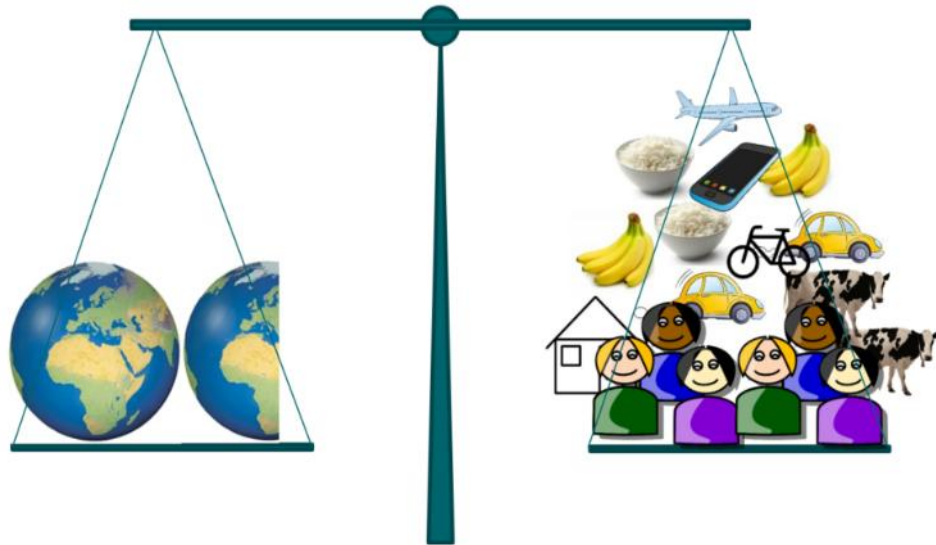
TREATMENT



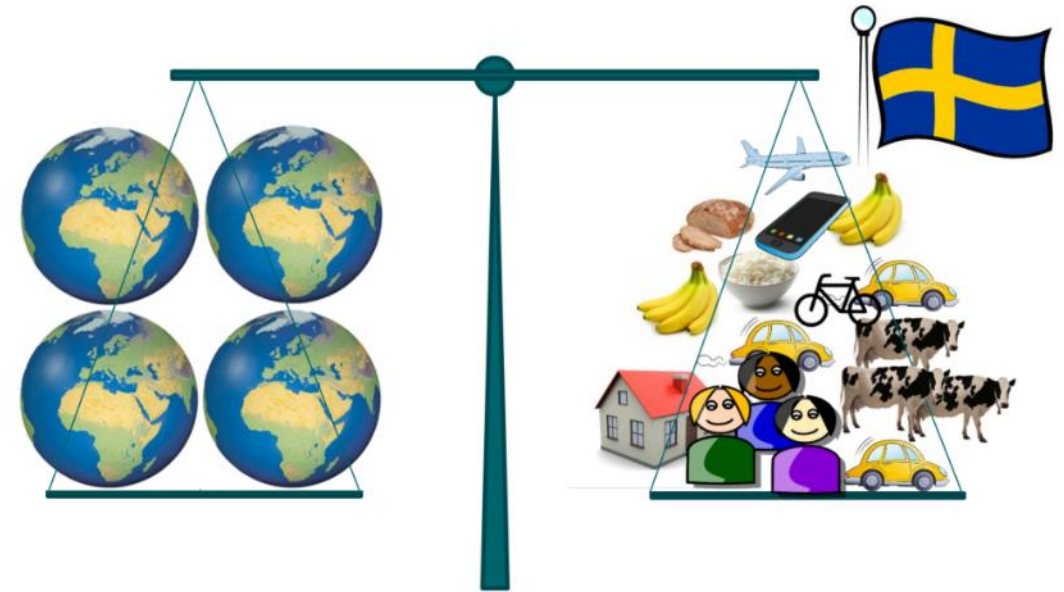
20 % Own direction

Baling NSR (TMR)
NSR Biogas AB (Biond)
Uppgradering (LBG AB)
Transport/Maskin entreprenader
Metalls (NRM)
Incineration (Öresundskraft)

Unsustainable consumption

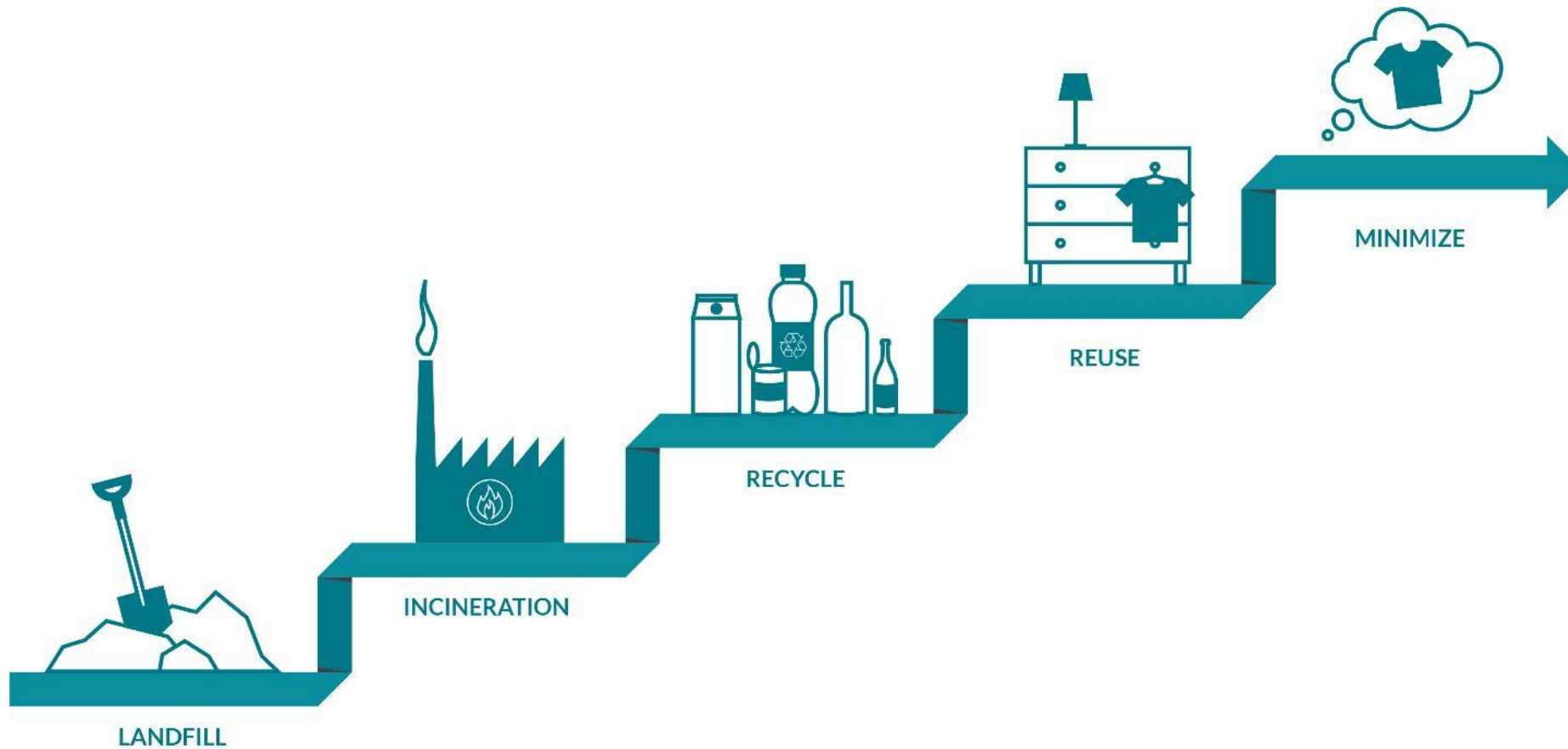


Global footprint:
1.7 Earths



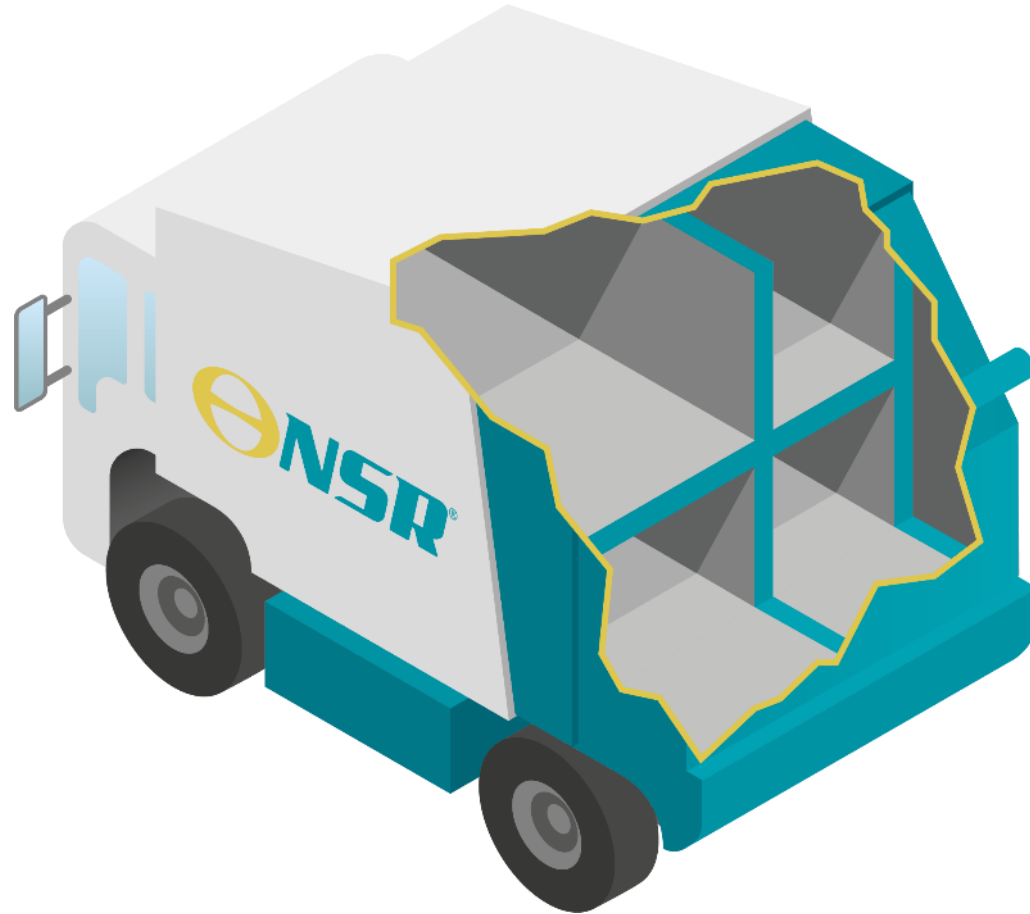
Footprint Sweden:
4.2 Earths

Moving up the waste hierarchy



Four compartment bins

- easy sorting at the source



Attitude and behaviour

- Minimize waste
- Increase the degree of sorting
 - Residual waste
 - Organic waste
 - Plastic in residual waste



Biochar for a greener region

- A biochar plant in Helsingborg
- Production starts 2024
- Garden waste is converted into biochar
- Produces climate-neutral district heating
- Binds carbon dioxide and reduces global warming
- Good soil improver





Roadmap from Garden waste to Biochar

NSR – biokolsresan

2016–2017

Det första storskaliga projektet i Helsingborg, Drottninggatan Järnväggsgatan och Mariatorget.

2022

NSR:s biokolsanläggning tas i drift

2022–2023

Bloomberg Philanthropies finansierar det mesta av RecoPark, kompetenscenter för biokol.

Investeringsprojekt för produktion av biokol.

2023

Biochar Summit.
Global 4 dagars konferens med 400 deltagare i Sea U.



2018–2020

Projekt "Från organiskt avfall till resurs för nyttiggörande av jordavfall"
Deltagande organisationer är NSR, SGI, SLU, KTH m.fl.

2020–2022

Greater Bio, EU-finansierat projekt med bl a marknadsanalys, tillsammans med Roskilde universitet och 2050 Consulting.

2022

NSR vinner titeln "Årets Återvinningsinspiratör" på avfallsgalan i Stockholm.



2022–2025

Balance projektet, uppföljning av projektet 2018–2022 med SGI, SLU, Örebro Universitet etc.

Därtill flertalet FoU projekt med finansiering bland annat för Vinnova, EU Interreg m.fl.

2023–2025

Energimyndigheten och NSR finansierar projektet Innovationskluster för biokol och bioenergi från pyrolys.

Choice of technical solution

- Flexibility, Lead times, temperatures (400-800 degrees Celcius)
- Garden Waste as raw material
- Tender on functionality rather than technique

Results

- VOW (N)
 - Pyrolysis biogreen from ETIA (FR)
 - E-flox furnace (DE)
- Shredder and dryer from Euromilling (DK)



Challenges

- 3 tenders
- Shredding of garden waste
- Distric heating system
- More expensive than budget
- 4 different suppliers



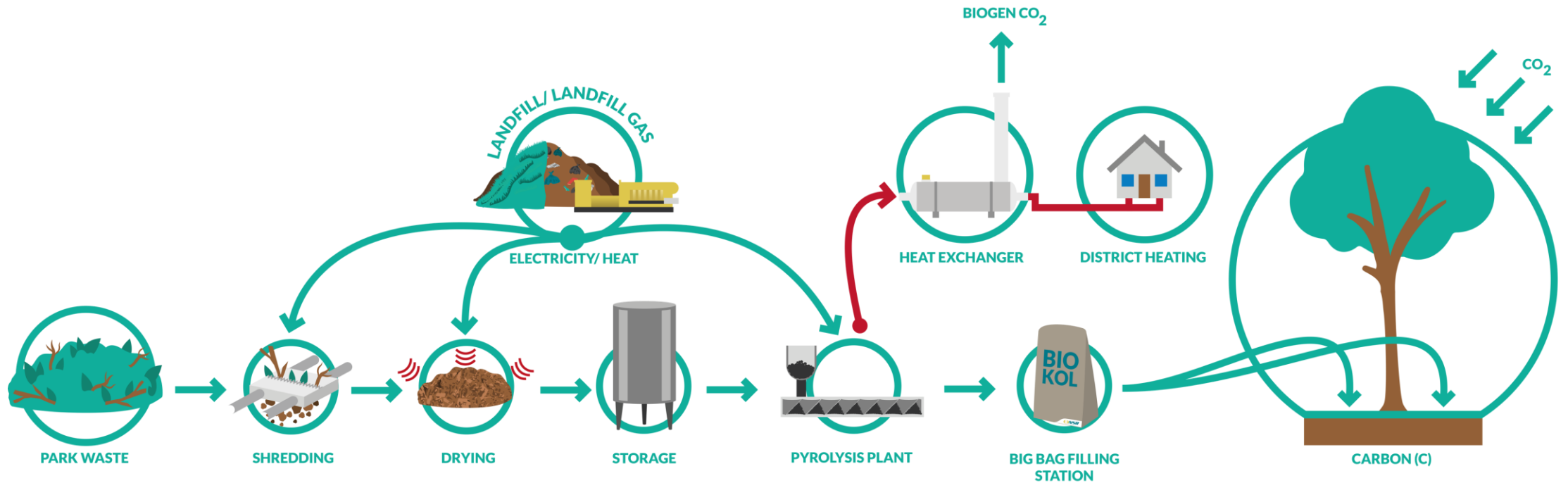


Facts

- Inaugurated 2 June 2022
- Builder: Treano Bygg
- Cost 50 MSEK (12.5 MSEK Klimatklivet)
- 7000 ton Garden Waste – 4500 ton Raw material – 1500 ton Biochar
- Carbon sink 3000 ton
- 15 GWh district heat ~ 1000 villa's need for heat
- CHP-motors equals self sufficiency on heat and electricity



Helsingborg's biochar cycle



OUR VISION

“Eternal life for materials and
the planet”