

# Duurzaamheid in de bedrijfsvoering

*op de Universiteit van Twente*

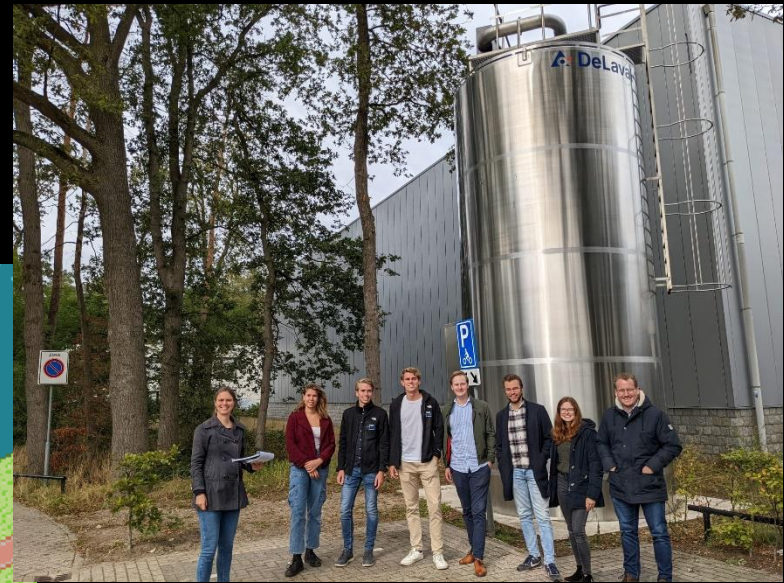
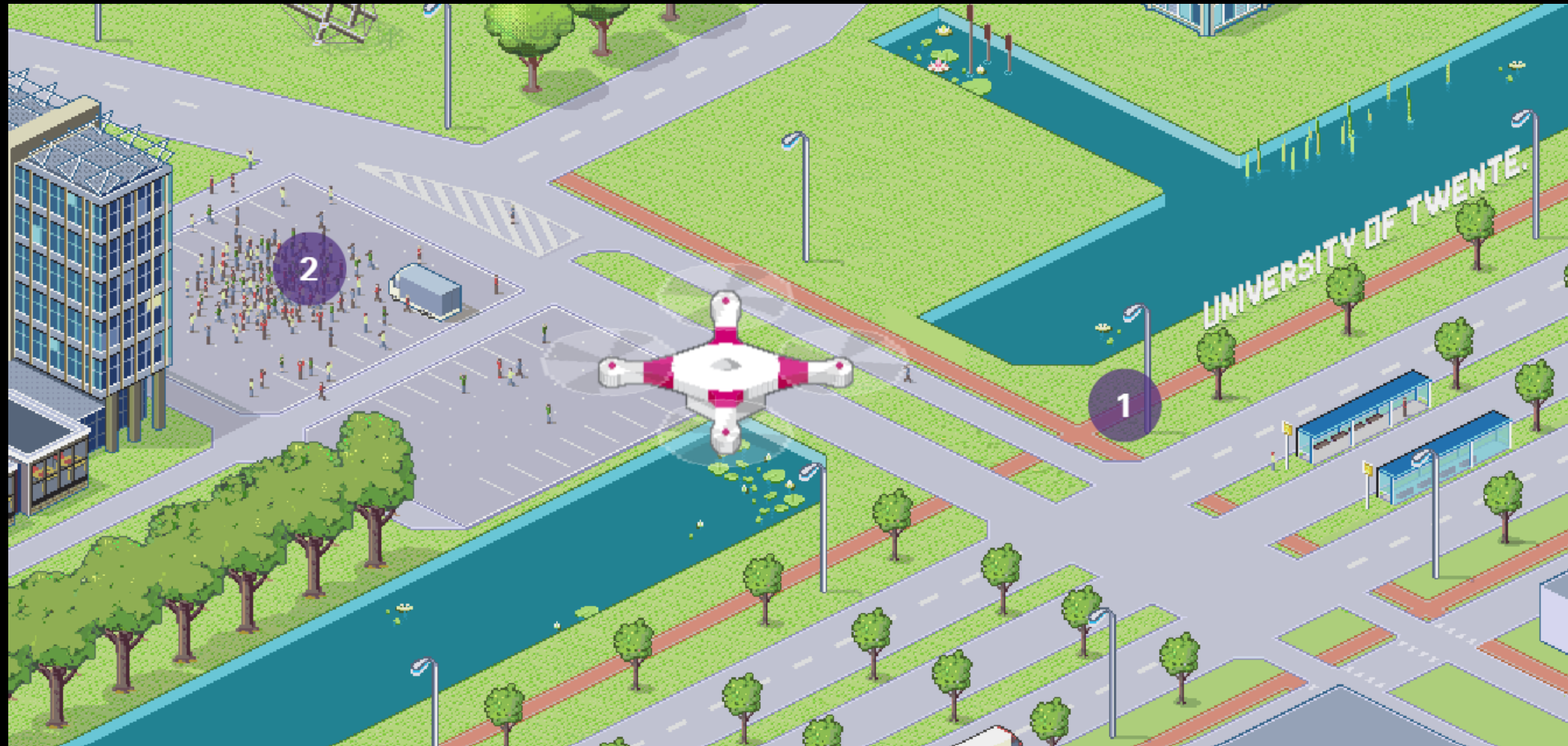
10 Oktober 2023: GEWIS  
Brechtje Maréchal  
Environment & Sustainability Policy Officer,  
Programme Manager SEE  
<https://www.utwente.nl/en/sustainability/>  
[b.marechal@utwente.nl](mailto:b.marechal@utwente.nl)

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# Sustainability walk





Energy



Food & Drinks



Procurement & Purchasing



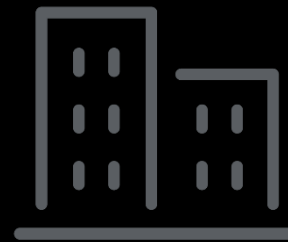
Finance



Water



Mobility



Buildings



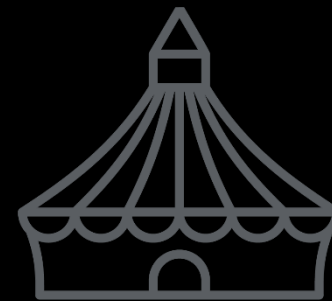
Communication



Waste



Biodiversity



Events



Reporting

# Shaping 2030 & Duurzaamheidsbeleid

Strategy development

2019 2020 2021 2022 2023 2024 2025 2026 2027 2028 2029 2030

Implementation

Shaping 2030 answer to the 'How can we to the develop fair, sustainable society between 2030?'

**SHAPING2030**  
MISSION, VISION & STRATEGY

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INDIVIDUALS CONNECTIONS SOCIETY

- **Shaping individuals** - fostering ownership and talent
- **Shaping connections** - proximity: outside in & inside out
- **Shaping society** - a quest full of challenges



May 2020  
<https://www.utwente.nl/sustainability>  
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# SEE Sustainability Energy Environment programma

UT / Diensten / CFM / Duurzaamheid / Duurzaamheid op de campus / Organisatie / SEE programma



SEE Programma Manager

Strategische Duurzaamheidscoördinator

SEE Programmteam

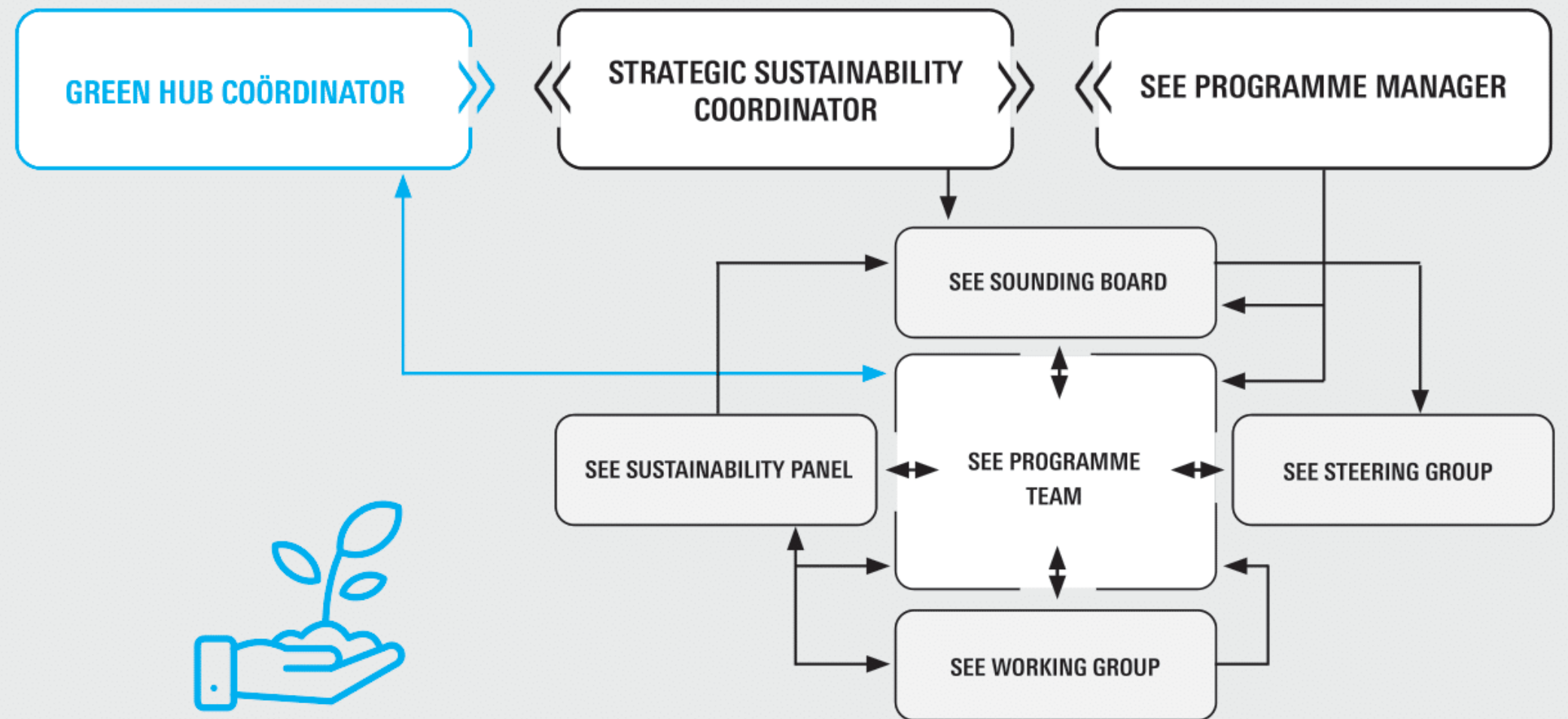
Stuurgroep

Klankbordgroep

Werkgroep

Duurzaamheidspanel

## SEE PROGRAMME ORGANISATIONAL STRUCTURE



# Andere duurzaamheidsgroepen op de UT

<https://www.utwente.nl/en/sustainability>

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Green  
Hub  
Twente



**DR. C.L. DE BOER (CHERYL)**  
Assistant Professor



**PROF.DR.IR. A. VAN DEN BERG (ALBERT)**  
Full Professor



**IR. MIRIAM LUIZINK**



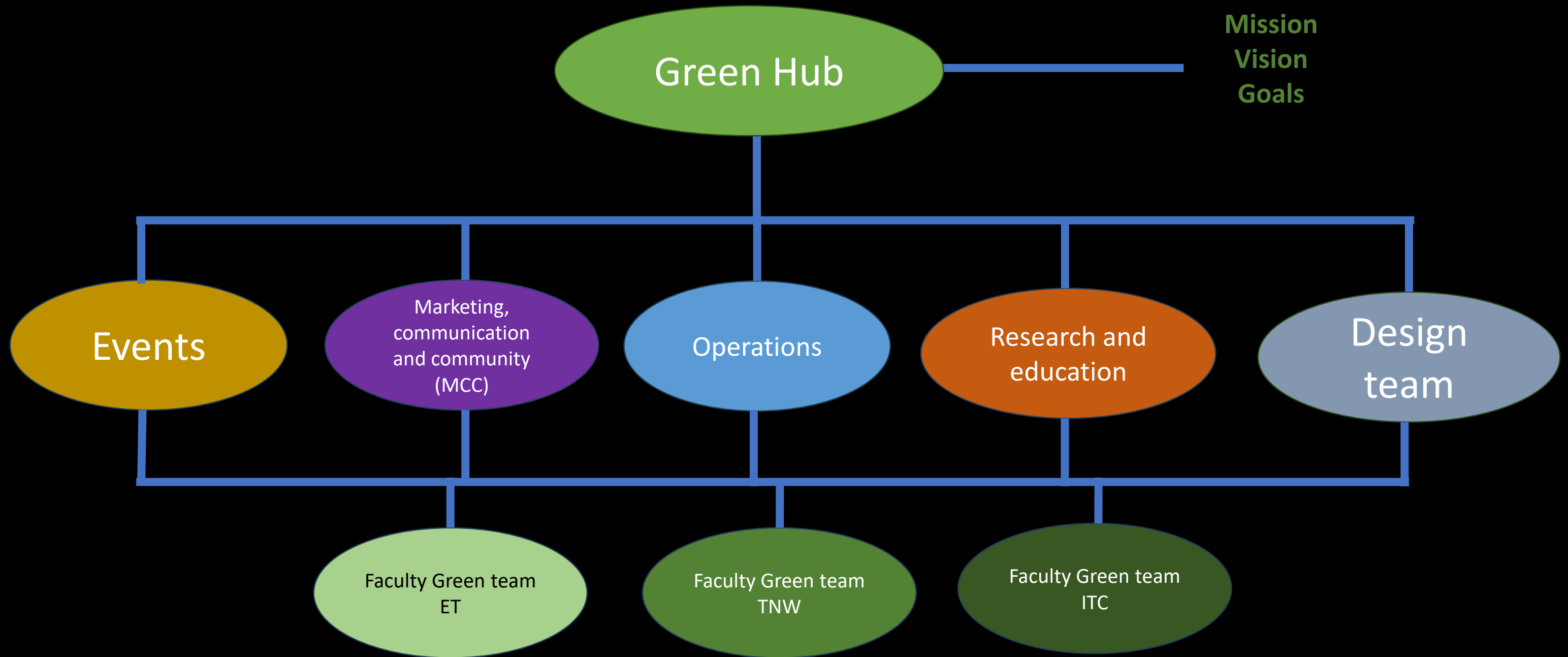
**PROF.DR. F.D. VAN DER MEER (FREEK)**  
Dean

THE CENTRAL  
POINT FOR SUSTAINABILITY KNOWLE  
DGE AND INITIATIVES AT THE UT

<https://www.utwente.nl/en/sustainability/green-hub-twente/>  
<https://www.linkedin.com/company/green-hub-twente/>  
Greenhub@utwente.nl

<https://www.utwente.nl/en/sustainability/climate-centre/>  
<https://www.linkedin.com/company/ut-climate-centre/>  
Climate-centre@utwente.nl

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# Lange termijn doelen: duurzaamheid in de bedrijfsvoering

2023

2030

2050

## GOAL 2030 Carbon neutral campus

- Paris agreement: emission reduction in 2030
- European Green reduction
- Dutch government 60% CO2 reduction

## GOAL 2050 Carbon negative campus

(Paris agreement: 95% CO2 emission reduction in 2050)

## GOAL 2050 Circular campus (National goal: Circular economy)

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# Goals – Sustainability in operational management



## 1. Energy

Trias Energetica: Reduce consumption with 2%/year

Source all electricity from renewable sources in 2022.

CO2 neutral in 2030. Carbon negative campus in 2050.

## 2. Water

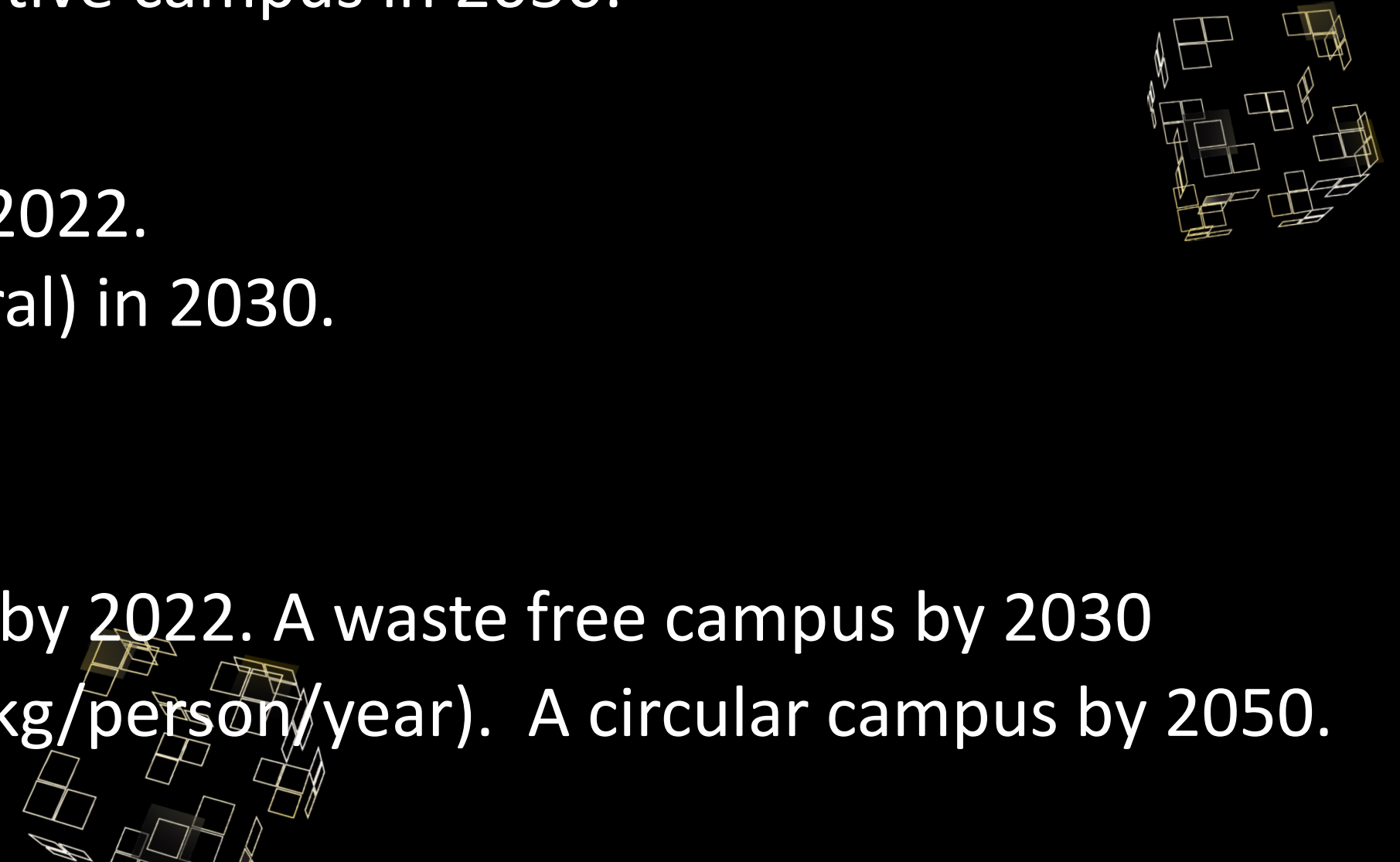
Reduce consumption with 5% in 2022.

Zero water footprint (water neutral) in 2030.

Full recycling of water on campus

## 3. Waste

A (single use) plastic-free campus by 2022. A waste free campus by 2030  
(Twente waste free ambition = 50kg/person/year). A circular campus by 2050.



# Goals – Sustainability in operational management



## 4. Food and drinks

Halve impact (CO<sub>2</sub> footprint) food and drinks on campus by 2030.  
Increase focus op vegetarian/vegan food options.

## 5. Travel and mobility

Train is preferred option for journeys < 800km in 2022  
100% compensation CO<sub>2</sub> emissions work trips in 2025  
Increase in bike and public transport use, low traffic campus

## 6. Biodiversity

Report on biodiversity criteria in green maintenance decision making.  
Improve biodiversity at 2 selected sites by 2025.



# Goals – Sustainability in operational management

## 7. Procurement (products and services)

UT sustainability criteria part of every contract by 2022. Increase weighting criteria. CO<sub>2</sub> monitoring in all contracts 2025. KPIs on sustainability in all contracts in 2025. Focus on sharing and service economy options and circular ('design-for-recycling') /modular products from 2020.

## 8. Buildings

**Existing buildings:** Energy Index (kWh/m<sup>2</sup>/jaar) 1.3, label C, in 2022

**Renovations:** Shell insulation follows criteria new buildings

**New built:** BENG now, energy neutral in 2050.

**Maintenance:** sustainable multiple year maintenance plan by 2022



# Goals – Sustainability in operational management

## 9. Events

UT monitors and reports on sustainability criteria in 2020. External organisers by 2022.

Plastic free event (first small event by 2021 , large by 2022).

Waste free events by 2030.

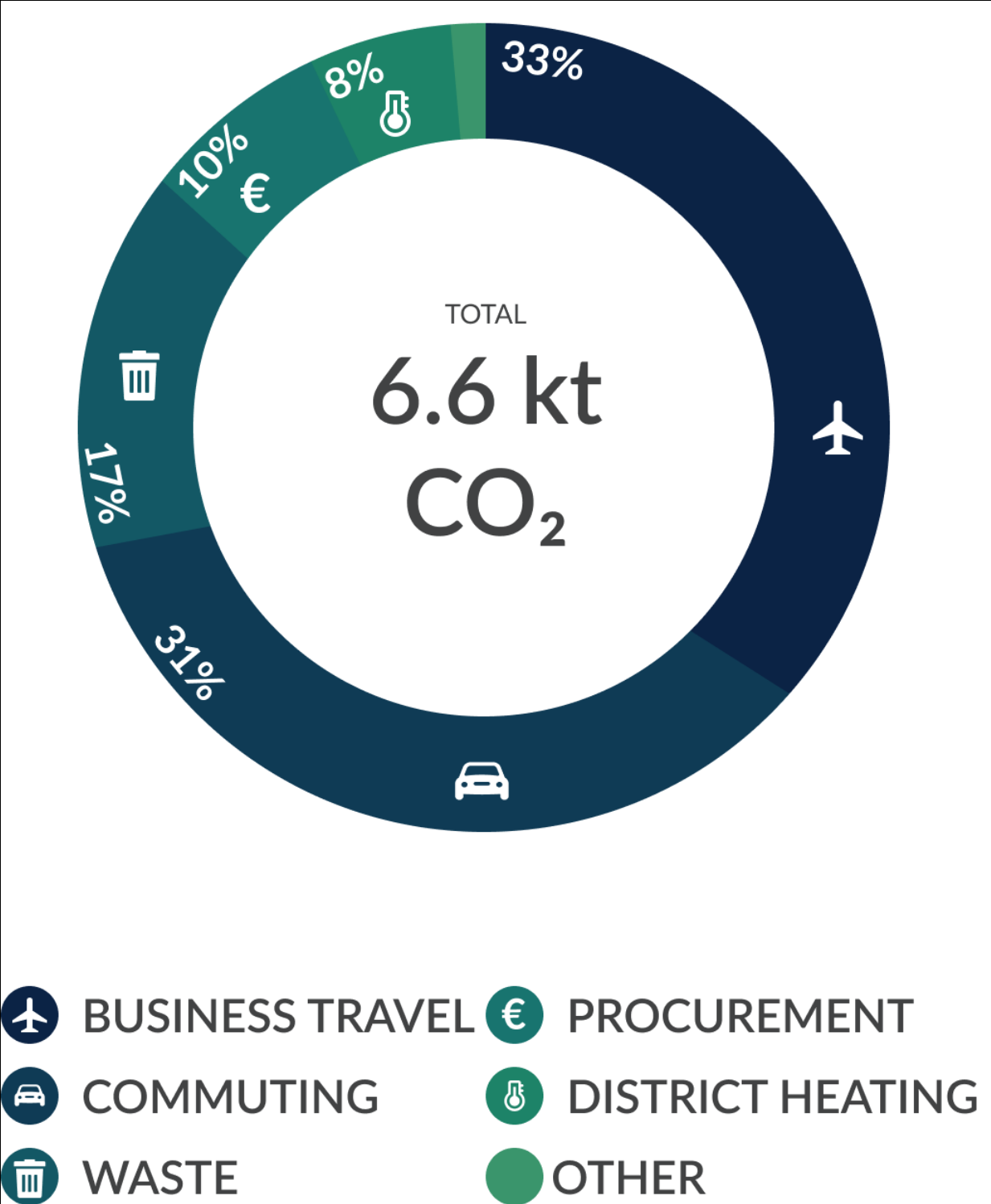
## 10. Finances

UT banks with a sustainable bank by 2022. UT pressures pension funds and investment partners on investing in a sustainable portfolio.

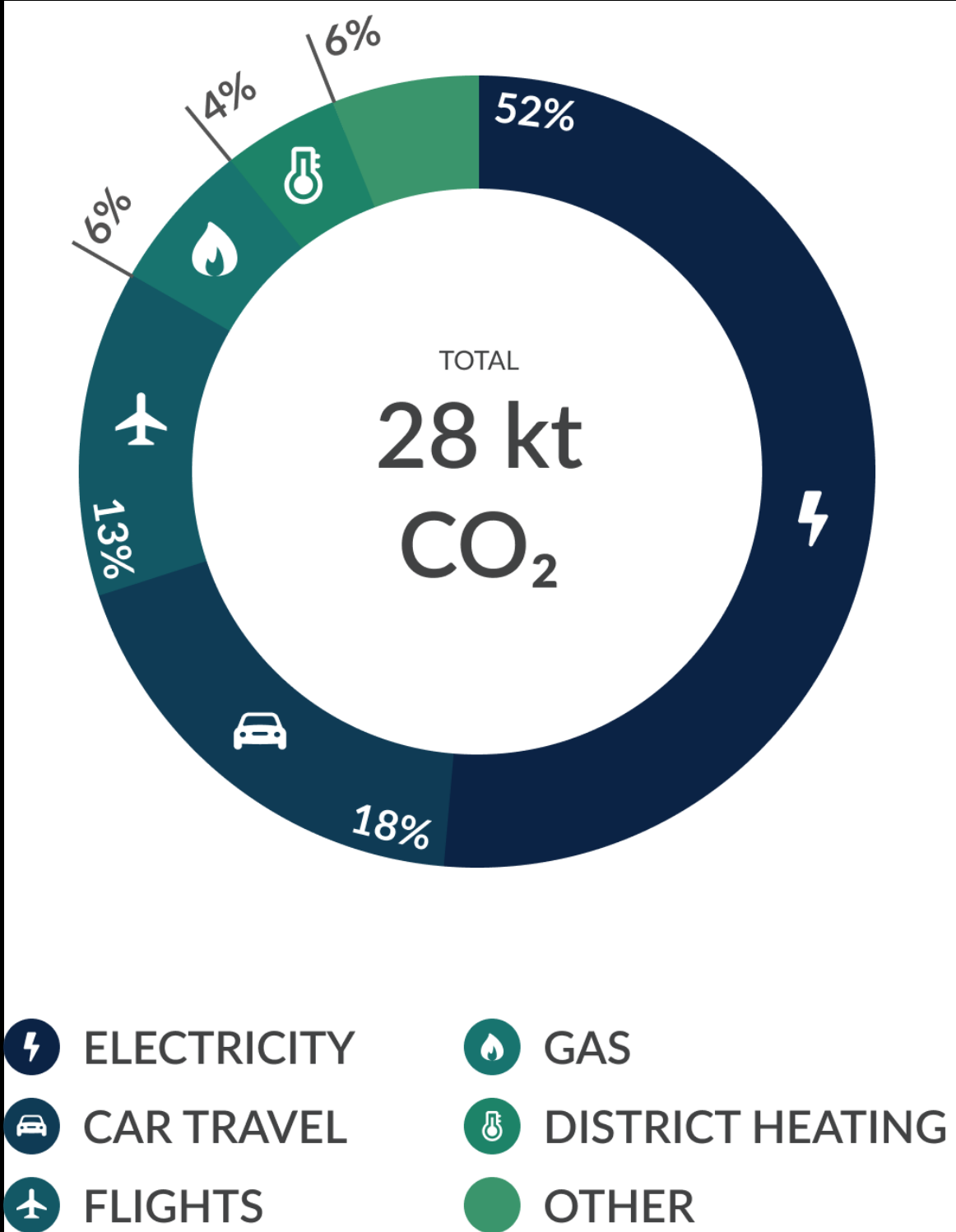
Return on (sustainable) investment is extended to end of life by 2022 (15 years on installations, 30 years on buildings).



# CO2 footprint

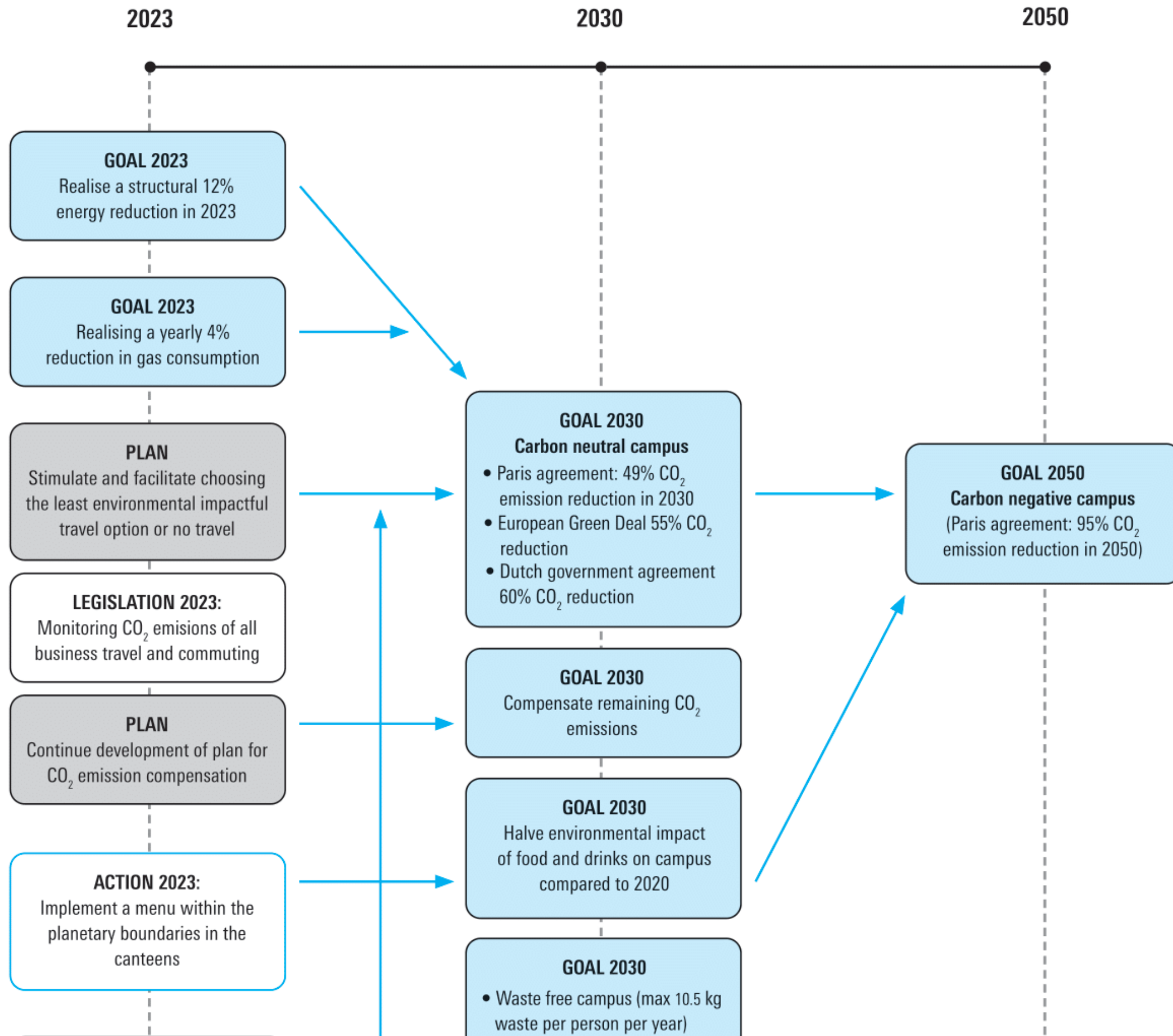


2022

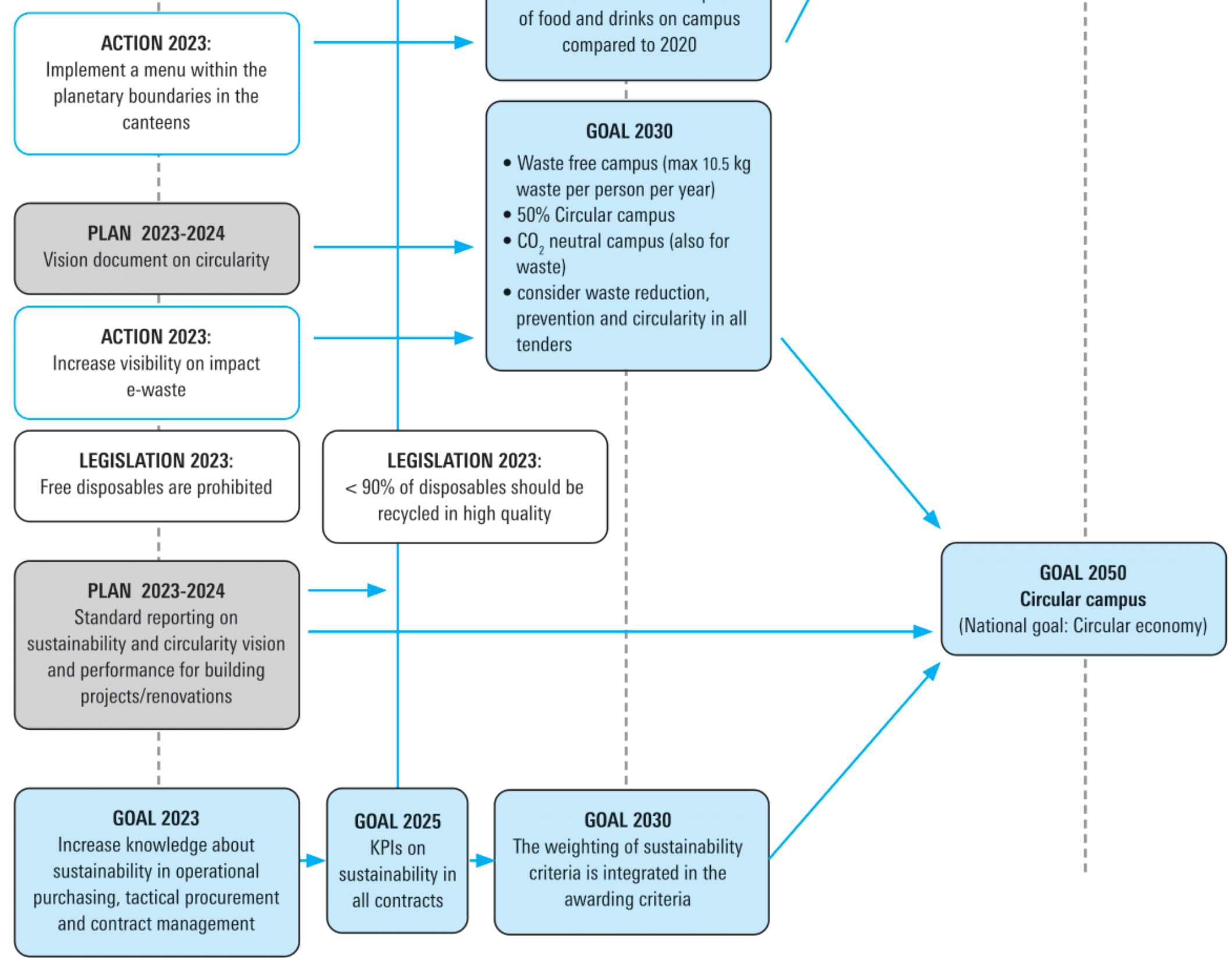


2019

# SEE Annual Plan 2023



Impact  
Zichtbaarheid  
Bewustzijn



# SEE Annual Plan 2023



# Energie

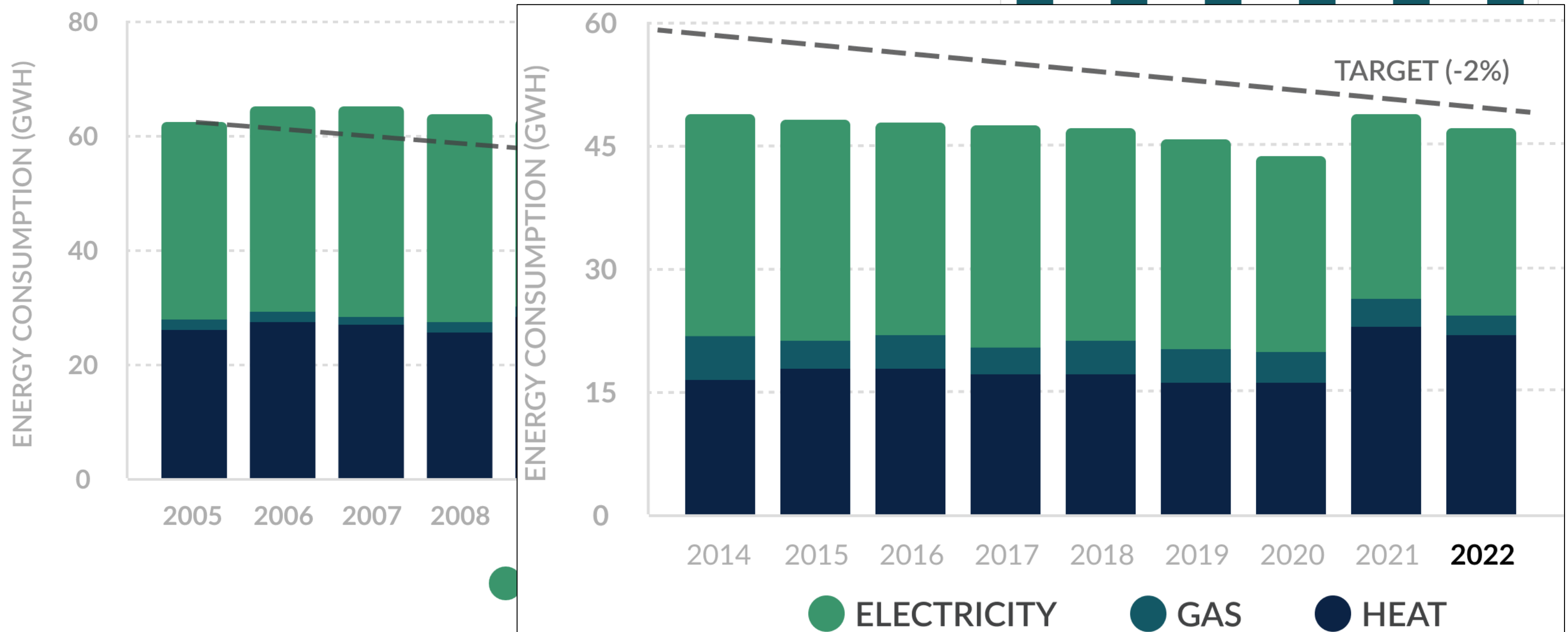
## Highlights

- Discussies en stappen genomen m.b.t. optimalisatie ventilatie (day/night settings) – high impact
- Wetgeving: informatieverplichting en energiebesparingsonderzoek UT gebouwen (i.p.v. MJA)

- ❖ Taakstelling 12% besparing op energie (kosten)
- ❖ Standaard winter temperatuur 19°C
- ❖ Groene electriciteit
- ❖ Gas met vrijwillige certificaten CO2 emissies gecompenseerd
- ❖ 1811 zonnepanelen (incl. 916 Langezijds) ~2.5% UT energiebehoefte
- ❖ Routekaart naar energie neutral vastgoed geïntegreerd in LTSH
- ❖ Waar mogelijk in kaart brengen stappen die studenten (studententeams, (sport)verenigingen, studieverenigingen) maken

# Meerjarenafspraken (convenant – afgelopen in 2020)

-39% energieverbruik in 15 jaar gerealiseerd



# Energy data platform

Corrections

Export

Share

9/5/2023 - 10/5/2023 (day)



University of Twente | Electricity

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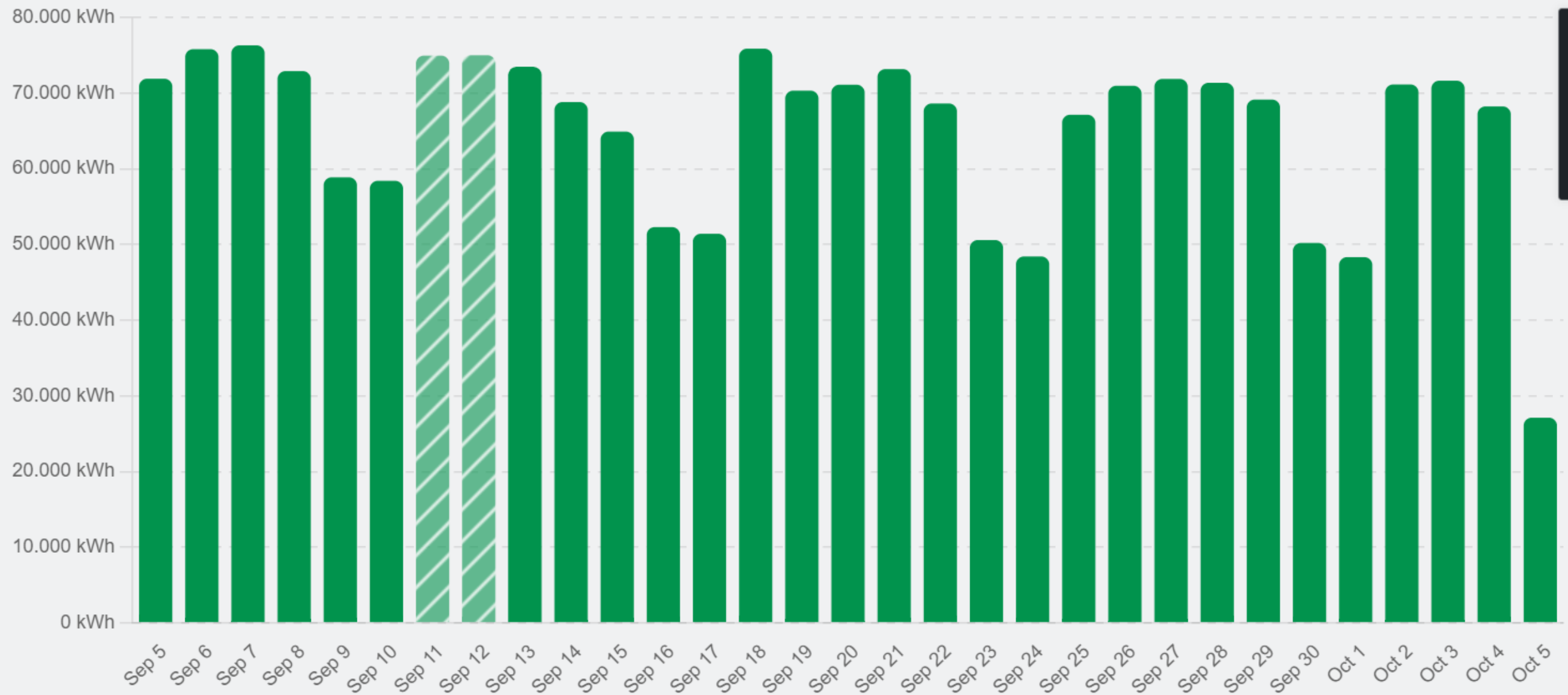
- Cold
- Electricity
- Gas
- Heat
- Water

COLD CIRCLE

- Cold (generation)
- Electricity

BUILDINGS




- Bastille
- Boerderij Bosch
- Botenloods
- Carre








Feedback

# WHAT **YOU** CAN DO TO SAVE ENERGY

## WHEN YOU ARE HERE:

-  TURN OFF UNNECESSARY LIGHTING
-  DON'T LEAVE DOORS AND WINDOWS OPEN UNNECESSARILY
-  LOWER THE HEATING OR COOLING

## WHEN YOU LEAVE:

- TURN OFF THE LIGHTS (EVEN WHEN THERE IS A SENSOR) 
- TURN OFF COMPUTERS, MONITORS AND TV SCREENS 
- CLOSE DOORS AND WINDOWS 
- DON'T LEAVE DEVICES ON STANDBY, UNPLUG THEM 
- TURN OFF THE HEATING OR COOLING 

SEE AN ISSUE YOU CAN'T FIX YOURSELF?  
CONTACT THE SERVICE DESK FOR HELP.

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# Gebouwen

## Highlights

- Langezijds
- ❖ Renovations
  - ❖ Spiegel/Vleugel – Upark hotel - Hangar
  - ❖ Meander - Sportcentrum
  - ❖ Boerderij/Contact Centre – Erve Holzik
  - ❖ Boerderij Bosch – Tennis Paviljoen
  - ❖ Vrijhof - Technohal
- ❖ Routekaart naar energie neutral vastgoed geïntegreerd in LTSH
- ❖ Paris-proof assessment: kantoorgebouwen naar 70kWh/m<sup>2</sup>/jaar

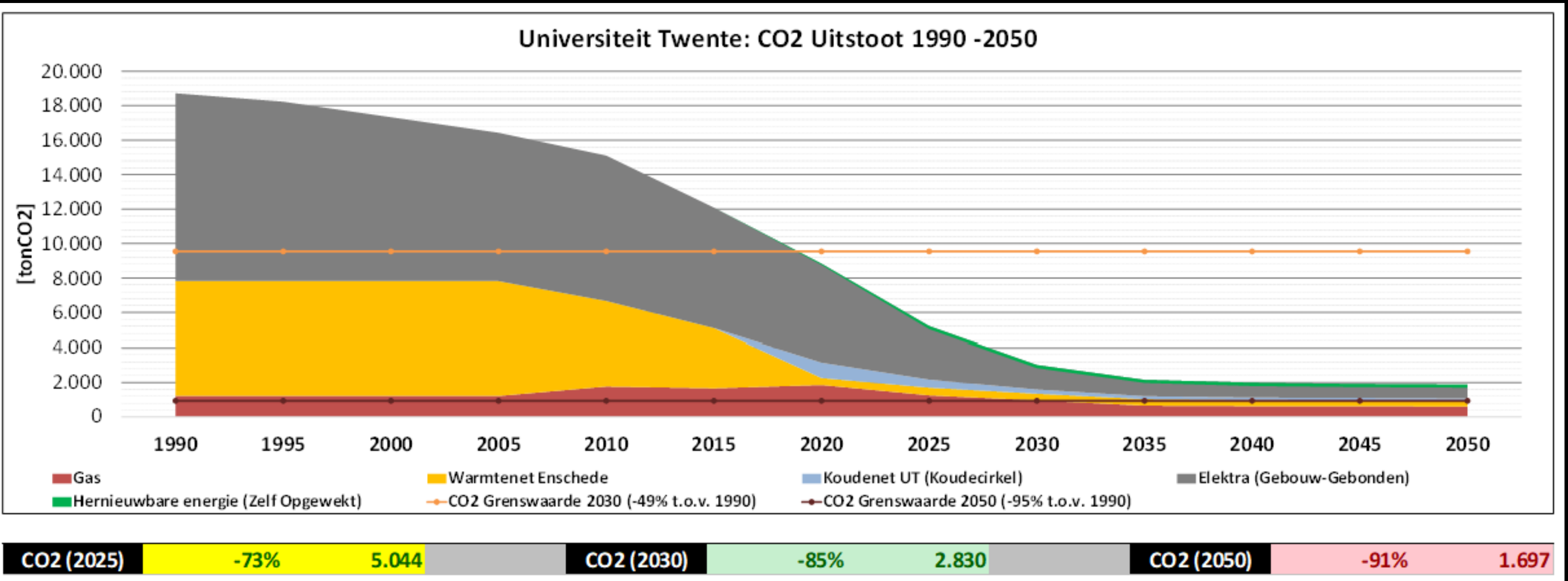


<https://www.utwente.nl/en/sustainability/sustainability-on-campus/themes/buildings/>

<https://www.utwente.nl/en/campus/campus-development/>

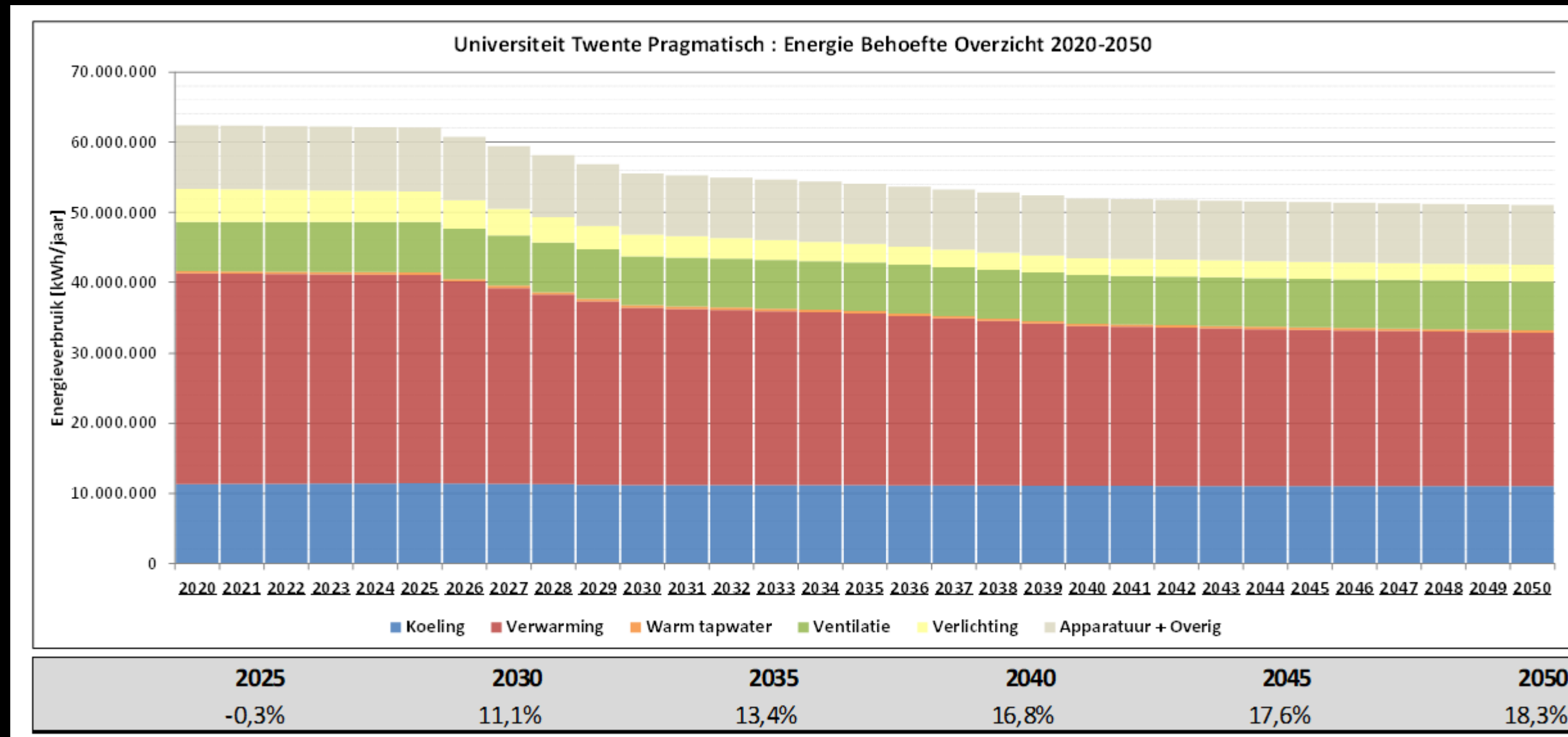
<https://www.utwente.nl/en/ltsh/>

# Gebouwen – naar CO2 neutral vastgoed



- Influenced by Dutch energy mix (% green energy)
- Looking into alternatives for air humidification using gas

# Gebouwen – Energievraag UT



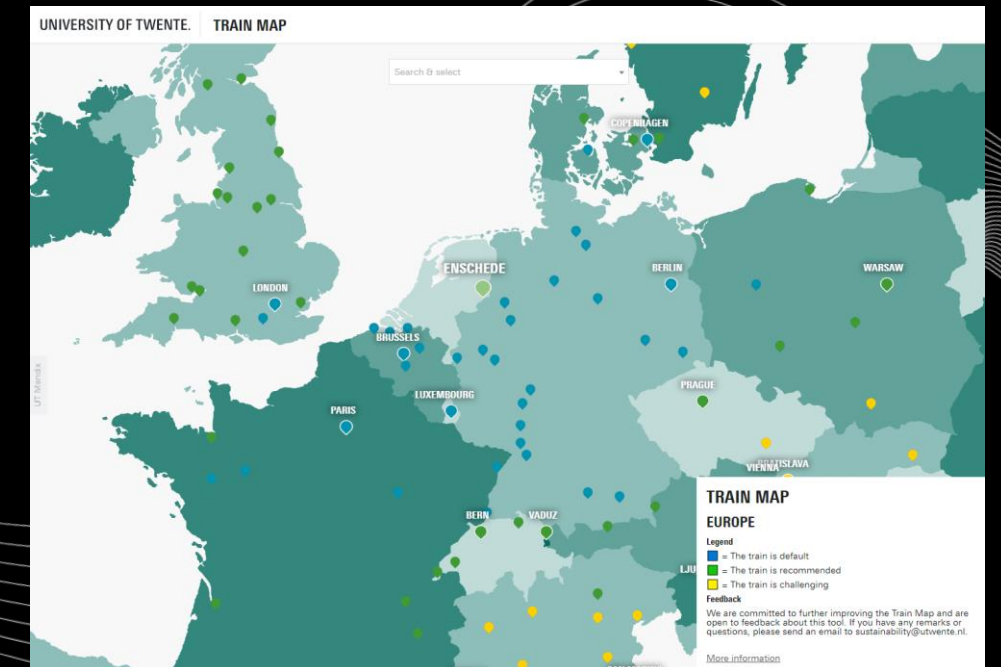
➤ 18% energy besparing – op basis van de huidige kennis

# Mobiliteit

## Highlights

- 2e versie Train Map gepubliceerd om treinreizen te stimuleren boven vliegen in Europe
- Proefrit dag stimuleren huur elektrische en hybride auto's

- ❖ Mobility survey 2022 – rapport bijna klaar
  - ❖ 62.3 % medewerkers, 84% Studenten fietst, beide een toename sinds vorige survey 2011
- ❖ Voorbereidingen rapportage CO emissies werkgebonden personenmobiliteit vanaf 2024
- ❖ Plan verminderen CO2 emissies zakenreizen – Pbv komen met gezamenlijke aanpak
- ❖ Social media Green Hub video Fiets naar je werk dag
- ❖ Green Hub: survey studiereizen





# Trein kaart

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Search & select

TRIP ADVICE

The best way to get to BERLIN is by Train.

Most Sustainable

PLANE

E-CAR

CAR

Legend

Feedback

More information

| Mode                     | Duration | Transfers | CO2 Emission    | Work Time      |
|--------------------------|----------|-----------|-----------------|----------------|
| Train (Most Sustainable) | 4h24m    | 1         | 20 kg           | 3h54m          |
| Plane                    | 8h2m     | 2 (+1)    | 139 kg (+118.2) | 0h0m (-3h-54m) |
| E-Car                    | 5h29m    | 0 (-1)    | 57 kg (+36.9)   | 0h0m (-3h-54m) |
| Car                      | 5h29m    | 0 (-1)    | 62 kg (+41.7)   | 0h0m (-3h-54m) |

Legend

- Blue dot: The train is default
- Green dot: The train is recommended
- Yellow dot: The train is challenging

Feedback

We are committed to further improving the Train Map and are open to feedback about this tool. If you have any remarks or questions, please send an email to [sustainability@utwente.nl](mailto:sustainability@utwente.nl).

More information

<800 km de norm is om de trein te nemen

<https://travelcheck.utsp.utwente.nl/>

<https://www.utwente.nl/en/sustainability/sustainability-on-campus/themes/mobility/>

# Sustainable labs

## Highlights

- Sustainable lab coordinator S&T

- ❖ Implementatie Laboratory Efficiency Assessment Framework
- ❖ Onderdeel van faculty green team

## Plannen:

- ❖ Verbeterde afvalscheiding in labs
- ❖ Energiebesparing door apparaten uit en zuurkasten dicht te zetten na gebruik (stickers)
- ❖ Leveranciers: discussies over recyclebaarheid materialen en verpakkingen i.s.m. inkoop
- ❖ Dag/nacht settings labs
- ❖ ZZS/CMR stoffen vermindering
- ❖ Vermindering afvalstroom GMO/ZSA door steriliseren afval (voorstel wordt opgesteld)



# Afval

## Highlights

- Alle bekers uit warme drankenautomaten (ingang wetgeving 1-7-2023)
- Green Hub video met als doel verbeterde afvalscheiding gepubliceerd
- Posterboards Green Hub met uitleg wat moet waar gemaakt
- Geen flyers bij Bedrijvendagen (-60-70.000 flyers)

- ❖ Voorkomen van afval
- ❖ Bewustwording vergroten
- ❖ Afvalscheiding verbeteren
- ❖ Green certificate voor kleine en grote evenementen (Green Hub)
- ❖ Benchmark afval universiteiten (Ministerie van Infrastructuur en Waterstaat)
- ❖ E-waste: LISA plannen

# Inkoop

## Highlights

- Workshop: handvatten voor integreren duurzaamheid in dagelijkse werk voor afdeling Inkoop
- Vier projecten gestart om gegevens huidige duurzaamheidsprestatie te verkrijgen

- ❖ Tactisch inkoop team
- ❖ Operationele inkoop
- ❖ Informatie management team
- ❖ Contract management team

<https://www.utwente.nl/en/sustainability/sustainability-on-campus/themes/procurement/>  
<https://www.utwente.nl/en/service-portal/facility-services/procurement-preferred-suppliers>

# Water

## Highlights

- XXL smart rainwaterbuffer in gebruik genomen, vangt water dak Sportcentrum op



- ❖ BSc Creative Technology thesis over waterbesparing en wc gewoonten



<https://www.utwente.nl/en/sustainability/sustainability-on-campus/themes/water/>

# Eten & drinken

## Highlights

- Green Dish: samenwerking met Appèl om voedselverspilling te verminderen en het percentage plantaardige eiwitten te vergroten
- Alle warme dranken automaten staan in stand-by mode 's nachts

- ❖ Default werklunch vegetarisch sinds October 2022
- ❖ Sustainable koelkast in Waaiier
- ❖ Water tap bieb met smaakjes

# Events

## Highlights

- Pilot drinks bubbles at triathlon preventing waste of ~2000 cups
- Post-consumer waste separation at Bata: 40% residual waste, 25% reusable paper, 5% metals, 30% contaminated PD waste
- Cup return system at Bata: increased percentage cup recycling

- ❖ Events policy UT & Sustainable Events plan bijna klaar
- ❖ Sustainable Event Initiatives Fund (SEE) om stimuleren initiatieven
- ❖ Saxion Facility Management thesis over bekertjesuitdaging evenementen
  - ❖ Keuzetool binnenkort op UT website

- Aankondiging: Sustainability Week 2023 - 27 November-1 December

<https://www.utwente.nl/en/sustainability/sustainability-on-campus/themes/events/>  
<https://www.utwente.nl/en/service-portal/campus/organising-events-booking-support/organising-events-events-office-support>

# Biodiversiteit

## Highlights

- Wereldbiodiversiteitdag evenement: Biodiversiteitswandeling met gidsen KNNV

- ❖ Biodiversity Plan Krinkels/Eelerwoude
  - concept version ready
- ❖ Soorten Management Plan i.v.m. bouwwerkzaamheden nog in de maak





# Financien

- ❖ Non-financial reporting -> Corporate Sustainability Reporting Directive (CSRD) wordt besproken binnen de UT

## Budget

- ❖ Verwacht dat budget toereikend is



# Communicatie

## Highlights

- Sustainability exhibition

- ❖ Laten zien wat de UT doet
  - ❖ incl call to action en wat dit betekent voor medewerkers en hoe iedereen kan bijdragen
- ❖ Positieve voorbeelden laten zien van UT college's die duurzaamheid in hun dagelijkse werk verweven hebben



**BERT KLOPPERS:  
THINKING IN  
POSSIBILITIES**



**LEO KEEKSTRA: MAKING  
WISE CHOICES TOGETHER TO  
BECOME MORE SUSTAINABLE**

Bedankt voor jullie uitnodiging.

Zijn er vragen?



<https://www.utoday.nl/spotlight/72440/if-we-cant-do-it-who-can>

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