

WELCOME!

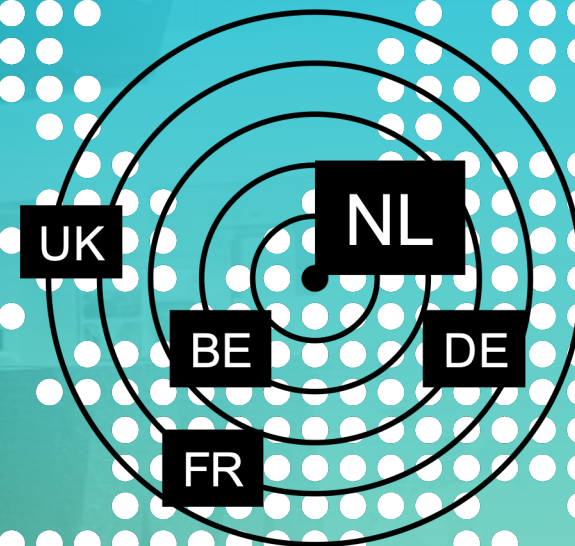
Directors Community

June 16, 2022

Presentation by Bert Kip

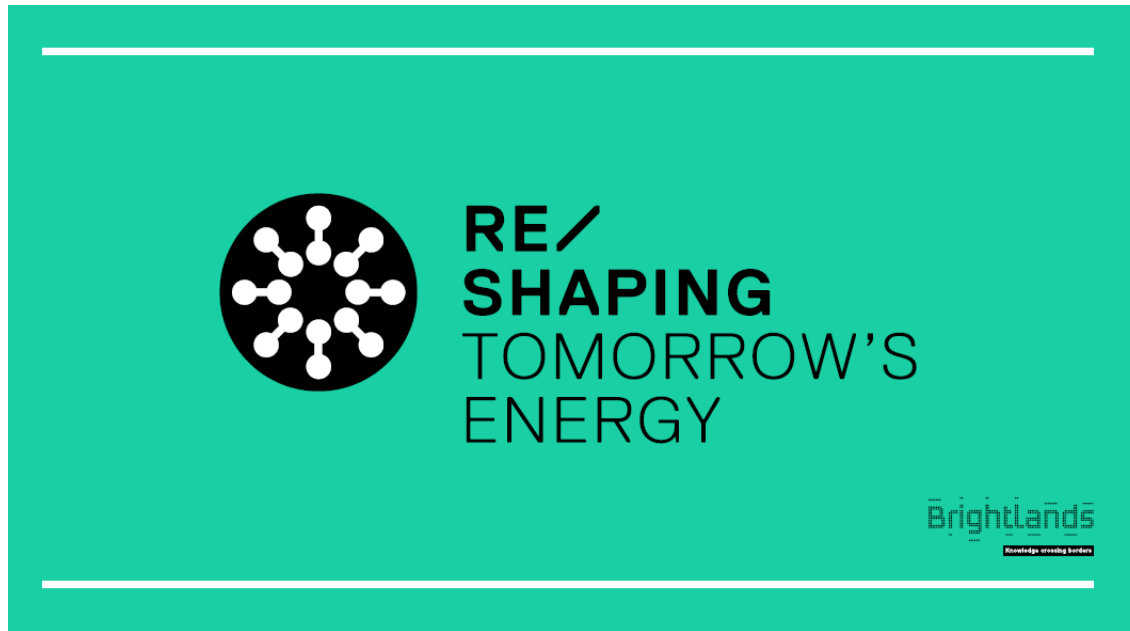
Brightlands Chemelot Campus

Breeding ground for science and innovation
in materials, chemistry and biomedical solutions



Campus Energy Project

Objectives 2026



❑ **Energy Savings:** 50%, compared with end 2018

-> kpi: **4,15** KWH/M2, per month

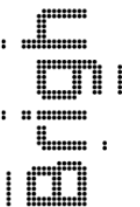
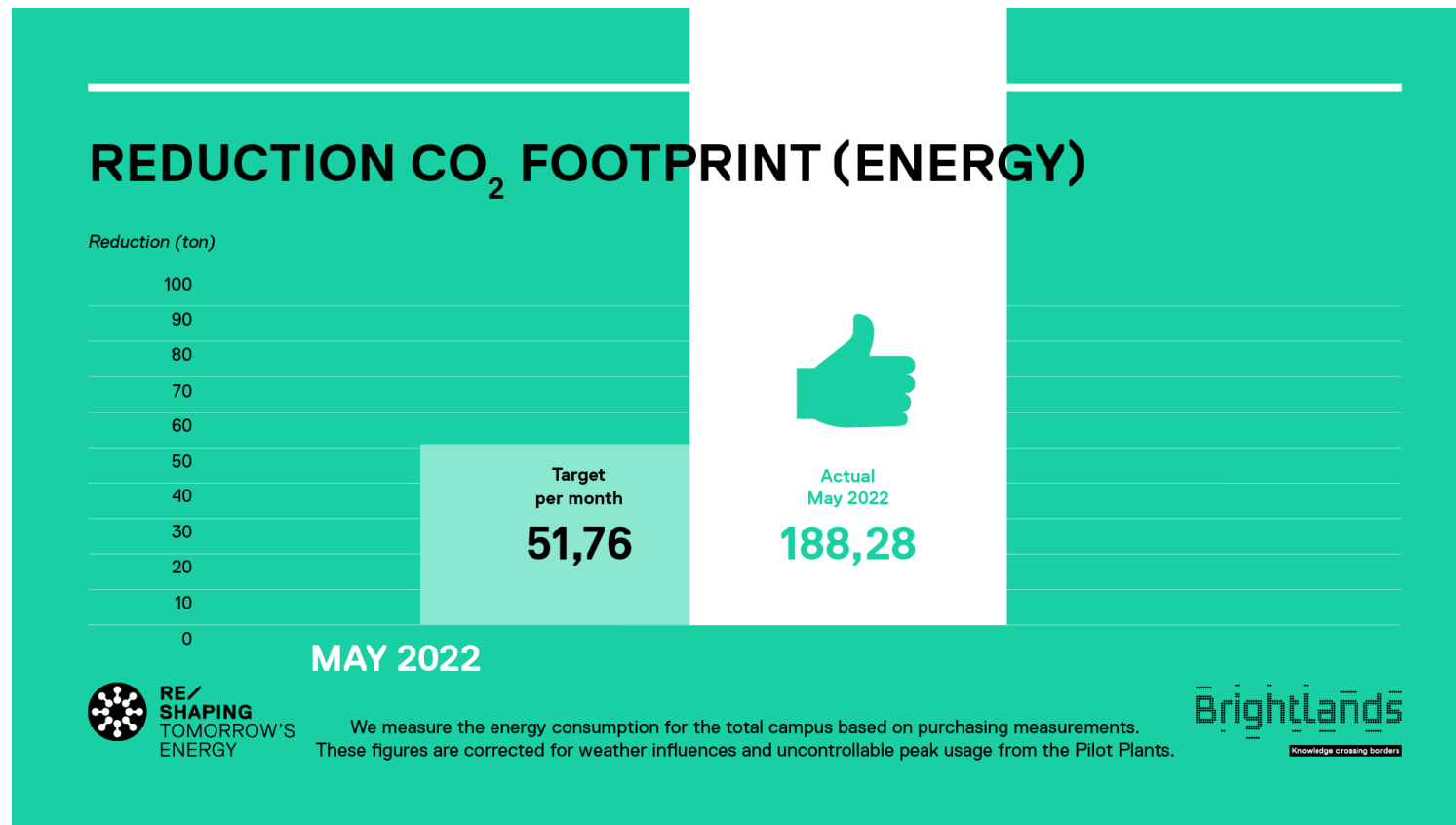
❑ **CO2 Footprint reduction:** 90%, compared with end 2018

-> KPI: **51,76** ton/month

Campus Energy Project

The results | MAY | Reduction CO₂ Footprint

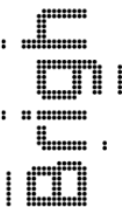
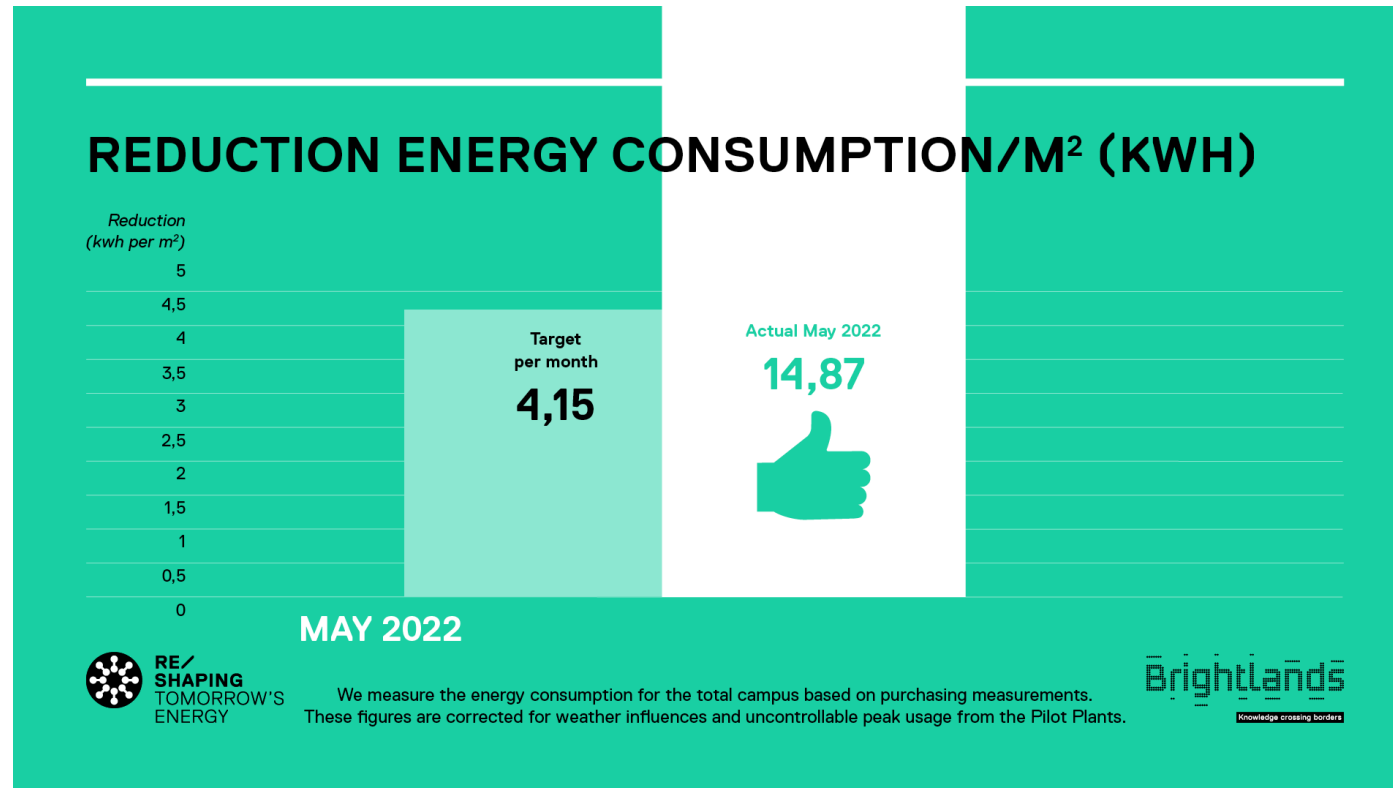
- ✓ The monthly updates will be shared in the campus newsletter, on the narrowcasting screens and in this Directors Community



Campus Energy Project

The results | MAY | Reduction KWH/M2

- ✓ The monthly updates will be shared in the campus newsletter, on the narrowcasting screens and in this Directors Community



Campus Energy Project

Activities so far (Program Line 1 & 2) May 22

New settings are implemented in the following buildings;

122-001	READY	122-170	Week 17
122-001N	READY	121-220	Week 18
122-004	READY	121-240	Week 19
122-006	READY	122-093	Week 20
122-005	READY	122-025	Week 21
111-017	READY	122-046	Week 22
122-026	No action necessary	122-047	Week 23
122-040	READY	121-250	Week 24 (software updated, to be launched)
122-045	READY		
122-050	No action necessary		
111-160	READY		
122-094	READY		
200.	READY		

Next:

- ❖ In depth analysis and further optimization in close cooperation with residents;
- ❖ Especially for Building 93, 94, 170 and 250

Campus Energy Project

Activities so far (Program Line 1 & 2) MAY 22

- ✓ Thanks for your support!
- ✓ All residents are very cooperative and pro-active in support of the project
- ✓ Including sharing small ideas with big impact
- ✓ New settings are installed in all buildings, except for Building 47
- ✓ Further optimizing in cooperation with users
- ✓ Decision: July 1 extra switches will be installed on central lighting in Center Court (designlamps)
 - now switching on / off is not accessible via Helvar, the central lighting system
- ✓ In collaboration with residents is discussed if the air volume at night can be low or switched off
- ✓ Where possible we would like to reduce ventilation capacity during the day too
- ✓ Fume cabinets not being used in building 5 and 6 are turned off
 - Please share with us when fume hoods (temporary) can be switched off
 - This saves energy & sounds!

Campus Energy Project

Tap Water Heating

We ask your attention for tap water heating:

- ❖ In some buildings there are still central hot tap water boilers that circulate hot tap water day and night throughout the building.
- ❖ This costs a lot of energy and also causes unwanted heating of spaces that then have to be cooled off again in the summer.
- ❖ It is therefore the intention to ban central tap water heating where possible and to switch to decentralized hot water supply with a close-in or a somewhat larger electric boiler.
- ❖ If a central hot water boiler is nevertheless required, then preferably electrical heating, possibly with an HT heat pump.

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Lighting

The last point we would like to mention concerns the lighting on campus:

- ❖ We look critically at the amount of light that is on during the day and at night.
- ❖ Where possible, lighting is switched off at night at clock times, but we also look at areas where sufficient daylight enters during the day so that the lighting can be switched off.
- ❖ This presents some technical challenges in the lighting control system, but you will notice the result step by step.
- ❖ Of course we are also open to reports from users who see that there are still rooms where more light is lit during the day or outside working hours than is necessary.

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Electricity grid

Then there is the issue of capacity limitation on the electricity grid:


- ❖ The item has been in the news because the national grid operator Tennet has announced that the grid in Limburg and Brabant is full.
- ❖ This theme is currently not addressed on the Campus because the Campus is fairly spacious with the current distribution network.
- ❖ Moreover, the Campus has its own distribution network, which means that it is not dependent on an external network operator.
- ❖ Nevertheless, we are already looking ahead at making the Campus grid load more flexible, by switching certain (non critical) large electrical loads on or off when requested
- ❖ This is a project that is widely viewed by Chemelot.

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Idea Box update

- Thank you: Covestro, Fortimedix, Yparex, Sitech, Lamoral, Kriya, DSM, Fibrant, Sappi, Volantis, Arlanxeo, ZUYD and Etbcat
- All ideas are collected, answered and progress is or will be shared with your contactperson

Brightlands
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**RE/
SHAPING
TOMORROW'S
ENERGY**

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Idea Box update

Do you have any good tips or ideas for us?

As the management of this campus, we are always looking for ways to improve. Send your suggestion to Ingeborg: ingeborg.voncken@brightlands.com. Thank you! We always try to respond within a week to let you know if and how we have made use of your idea.



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Online Question Time!

Do you have questions for the campus on the “Re-sharpening tomorrow’s energy”-project? You can ask them **live online** to Bert Kip, CEO, and Hugo Hendriks, COO, on:

July 8 **14:00h – 15:30h**
November 18 **14:00h – 15:30h**

You and your Center Managers will be invited for the Question Times via Outlook (eventcc@brightlands.com)

