



Greening the Brussels Healthcare Sector

AGENDA

- HCWH Europe's core work
- Greening the Brussels Healthcare project
- What have we done?
- Where are we going?
- Challenges and lessons learned



ABOUT US

We are a network of thousands of hospitals, healthcare leaders, and healthcare professionals, with members across Europe and partners across the globe.

Together we prove that it's possible to deliver the highest quality of care in a way that's sustainable environmentally and financially.



OUR PROGRAMMES



CLIMATE-SMART
HEALTHCARE



CIRCULAR
HEALTHCARE



SAFER
PHARMA



SUSTAINABLE
FOOD

GLOBAL GREEN AND HEALTHY HOSPITALS

THE HEALTHCARE
PROVIDERS AT THE
HEART OF OUR
ORGANISATION



137 members in 22 countries
across the WHO Europe region



HCWH Europe Programmes

CLIMATE-SMART HEALTHCARE

STRATEGIC GOAL

The European healthcare sector is transformed into a net zero carbon and climate-resilient sector that protects public health from climate change and accelerates the transition to a low-carbon economy.



CIRCULAR HEALTHCARE

STRATEGIC GOAL

European health systems drive markets towards toxic-free products that conserve finite resources, minimise waste, and contribute to an ethical supply chain and circular economy.



SAFER PHARMA

STRATEGIC GOAL

Pharmaceutical pollution and its contribution to the development of antimicrobial resistance (AMR) is minimised.





Greening the Brussels healthcare sector

Project overview

GREENING THE BRUSSELS HEALTHCARE SECTOR: PROJECT FUNDER

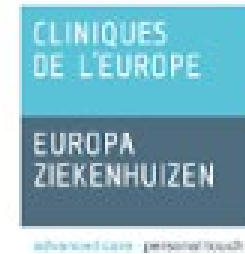


COMMISSION COMMUNAUTAIRE COMMUNE

HCWH Europe remercie la Commission Communautaire Commune (COCOM) pour son soutien financier.

HCWH Europe est le seul responsable du contenu de ce projet et des documents connexes. Les opinions exprimées ne reflètent pas les opinions officielles de la Commission Communautaire Commune.

PARTICIPATING HOSPITALS



PROJECT PILLARS

Knowledge building

- Awareness
- Learning
- Discussion

Pilot hospitals

- Measuring
- Planning
- Sharing

KNOWLEDGE BUILDING

Webinars and training days

- Circular healthcare
- Carbon management
- Sustainable foods



PROJECT PILLARS

Knowledge building

- Awareness
- Learning
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Pilot hospitals

- Measuring
- Planning
- Sharing

PILOT HOSPITALS

Baselining and action plans

- Plastic and waste
- Climate
- Toxic chemicals



RESOURCES AVAILABLE

- Healthcare decarbonisation toolkit
 - Introduction to carbon management
 - Step-by-step guide to carbon management
 - Carbon management plan template
- Measuring and reducing plastics in the healthcare sector





Challenges and lessons learned

There were some uncertainties in the carbon footprint estimations, since data for all scopes is very difficult to gather, particularly for scope 3. For this scope, data was included for waste, water, and the transmission and distribution of

electricity. Over the next few years, we will focus on better defining and measuring these emissions, before implementing reduction measures from 2025 onwards.

Throughout this process, we found that it is important to identify key partners and staff as well as what motivates them, and to get support from the hospital administration - which can require a lot of persistence. Working with the right partners, such as HCWH Europe, and getting insight from other hospitals that are or have been through the same process has also been key to our success, while also allowing us to learn from each other and better direct efforts.

Next steps



We have plans to consolidate our sustainability teams and work on regular projects to reach our goal of becoming net zero. Some of our priorities include: improving our energy autonomy and efficiency, reducing emissions from anaesthetic gases, and working to reduce emissions from transportation.

To reduce our emissions from anaesthetic gases, we have joined a European pilot project for which we have installed an innovative anaesthetic gas capture system that prevents its release into the environment, with the aim of reducing the carbon footprint of healthcare, while maintaining patient safety.

Demographic information


The Hospital Pedro Hispano is situated in Porto, North Portugal. It has an average bed occupancy of 357 beds, 1,921 staff, and serves approximately 22,610 people per year. Our hospital is a direct reference hospital for 175,000

Hippocrates Data Cen...




HIPPOCRATES

Discussion Forum



Resources



Case Studies



Webinar Recordings







A person wearing a surgical cap and a face mask is shown from the chest up, adjusting the mask with both hands. The image is overlaid with a semi-transparent blue filter. The text "Where we stand now" is centered over the image in a white, bold, sans-serif font.

Where we stand now

| Description | 03/22 | 04/22 | 05/22 | 06/22 | 07/22 | 08/22 | 09/22 | 10/22 | 11/22 | 12/22 | 01/23 | 02/23 |
|--|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Training session | | | | | | | | | | | | |
| Circular Healthcare for non medical staff (in person) | | | | | | | | | | | | |
| Circular Healthcare for medical staff (online - 2 sessions) | | | | | | | | | | | | |
| Carbon management for non medical staff (online) | | | | | | | | | | | | |
| Sustainable food for non medical staff (online) | | | | | | | | | | | | |
| Pilot hospitals | | | | | | | | | | | | |
| Recruitment and onboarding | | | | | | | | | | | | |
| Kick off meeting | | | | | | | | | | | | |
| Workshop: Challenges and priority actions | | | | | | | | | | | | |
| Definition of scope and baselining actions | | | | | | | | | | | | |
| Data collection | | | | | | | | | | | | |
| Workshop: Sharing experiences and action plans | | | | | | | | | | | | |
| Development of action plans based on baselines | | | | | | | | | | | | |

DATA COLLECTION METHODOLOGIES

- Emissions calculations
- Stock room audits
- Waste audits



EMISSIONS CALCULATION

- Data collection for scope 1, 2 and 3
 - Consumption data
 - Vehicle data
 - Employee data
 - Pharmaceutical information
 - Waste treatment information
- Input into the Climate Impact Check up

| SCOPE 1 | SCOPE 2 | SCOPE 3 | WASTE* |
|---|---|--|--|
| <ul style="list-style-type: none">● Stationary combustion (e.g. boiler plant)● Mobile combustion (e.g. owned fleet vehicles)● Cooling and fire suppression● Medicinal/ anaesthetic gases | <ul style="list-style-type: none">● Purchased electricity | <ul style="list-style-type: none">● Business trips● Employee commuting● Inhalers | <ul style="list-style-type: none">● Solid waste disposal● Composting● Incineration |

* In situ activities (e.g. on-site waste incineration) will be accounted for under scope 1, while ex situ activities should be accounted for under scope 3.

RESULTS

- Numeric values in terms of tons of CO₂e per source, scope, and total
- Pie charts, bar graphs, and other types of graphics
- Indicators (emissions per occupied bed, patient and employee). These are estimates combining emission results with parameters of the institution

| GHG total emissions (tCO ₂ e) | | 172.95 | 100% |
|--|--|--------------|--------------|
| Scope 1 | | 63.09 | 36.5% |
| 1.1 | Stationary combustion | 0.42 | 0.2% |
| 1.2 | Mobile combustion | 39.52 | 22.8% |
| 1.3 | Fugitive emissions | 23.16 | 13.4% |
| 1.3.1 | Cooling and fire suppression | 19.34 | 11.2% |
| 1.3.2 | Medicinal/anesthetic gases | 3.82 | 2.2% |
| 1.4 | Waste | - | 0.0% |
| 1.4.1 | Solid waste disposal | | 0.0% |
| 1.4.2 | Composting | | 0.0% |
| 1.4.3 | Incineration | - | 0.0% |
| | Non-hazardous/general health care waste | | 0.0% |
| | Clinical mix (biohazardous and hazardous) | | 0.0% |
| | Hazardous | | 0.0% |
| Scope 2 | | 36.40 | 21.0% |
| 2.1 | Purchase of electricity | 36.40 | 21.0% |
| Scope 3 | | 73.46 | 42.5% |
| 3.1 | Business trips | 4.44 | 2.6% |
| 3.2 | Employee commuting | 9.54 | 5.5% |
| 3.3 | Patient commuting | 50.56 | 29.2% |
| 3.4 | Inhalers | 5.04 | 2.9% |
| 3.4.1 | MDI | 3.00 | 1.7% |
| 3.4.2 | DPI | 2.04 | 1.2% |
| 3.5 | Electricity transmission and distribution losses | 3.89 | 2.2% |
| 3.6 | Waste | - | 0.0% |
| 3.6.1 | Solid waste disposal | | 0.0% |
| 3.6.2 | Composting | | 0.0% |
| 3.6.3 | Incineration | - | 0.0% |
| | Non-hazardous/general health care waste | | 0.0% |
| | Clinical mix (biohazardous and hazardous) | | 0.0% |
| | Hazardous | | 0.0% |

STOCK AND WASTE AUDITS

Complex methodology

- Team mobilisation (volunteers)
- Material gathering
- Safety

Central elements

- Sort
- Identify
- Measure

For stock room audits this process is done from what is available in stock rooms and from procurement data.

WASTE AUDITS



RESULTS

| | Wipes | Gloves | Nappies | Gowns/ aprons | Medical packaging | Syringes & accessories | Plastic bags (non-medical) |
|--|--------|--------|---------|------------------|----------------------|---------------------------|-------------------------------|
| H1 (Orthopaedic, Neurosurgery, neurology, spine & video telemetry) | 13.64% | 11.7% | 3% | 8.91% | 4.23% | 2.84% | - |
| H2 (General, maternity, Neonatal, Neonatal ICU) | 3.28% | 10.24% | 11.36% | 4.65% | 3.3% | 5.02% | - |
| H3 (Neonatal, Gastroenterology) | 3.41% | 12.91% | 13.42% | 1.27% | 5.01% | 9.2% | 7.07% |
| H4 (Intermediate care wards) | 16.21% | 11.53% | 17.33% | 7.16% | - | - | 1.9% |
| H5 (Neonatal ICU, Ophthalmology theatres) | 9.76% | 13.26% | 10.74% | 10.11% | 12.81% | 5.33% | 2.73% |

WHY IS THIS IMPORTANT

- Identify hotspots
- Take a picture of the current situation
- Elaborate an action plan
- Measure progress
- Identify problems

A person wearing a surgical cap and a face mask is shown from the chest up, adjusting the mask with both hands. The image is overlaid with a solid blue color. The text 'Coming up' is written in white on the left side of the image.

Coming up

NEXT STEPS

- Training sessions
 - Circular healthcare
 - Food
- Completing data collection and entry
- Experience sharing
- Creation of action plans
- Press conference

 **WEBINAR** REGISTER
noharm-europe.org

**HOW TO REDUCE THE
IMPACT OF PLASTICS IN
HEALTHCARE - PART 1**

28 NOVEMBER 2022
10:00 - 11:30 CET

 **WEBINAR** REGISTER
noharm-europe.org

**FROM NURSES TO
PARENTS: REDUCING
PLASTIC AND HARMFUL
CHEMICAL EXPOSURE**

7 DECEMBER 2022
16:00 - 17:30 CET

CHALLENGES

- Information gaps and competing information
- Heterogeneous landscape of hospitals
- Work intensive
- Scope three data
- Supply chain and purchasing power
- Budget and implementation



LESSONS LEARNED

- Existing projects aren't always communicated
- Importance of dialogue and knowledge sharing
- Getting all the stakeholders involved
- Tailoring to the audience
- Starting is better than nothing





**It doesn't matter if you know
where you're going or how, you
just have to start**



NO HARM

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Funded by COCOM. Views and opinions expressed are, however those of Health Care Without Harm (HCWH) Europe only and do not necessarily reflect those of the COCOM. The COCOM cannot be held responsible for them.

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