Health Care Without Harm

QUICK GUIDE TO CLIMATE-SMART PROCUREMENT

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INTRODUCTION

With 12,990 hospitals and 2.8 million hospital beds,[1] the European healthcare sector and its activities consume large amounts of energy, water, building materials, pharmaceuticals, and medical devices. This results in the EU contributing 12% of the global healthcare footprint.[2] However, its sheer size also means that the European healthcare sector plays a significant role in the economy as a major purchaser of goods and services (approximately 10% of GDP[3] in Europe). It is therefore well placed to catalyse a low carbon economy through changes in procurement practices.

This guide shares examples of sustainable procurement in the European healthcare sector to encourage hospitals and healthcare systems in Europe to follow best practices, creating a healthier and more sustainable future for both patients and the planet. The guide was designed for those positioned to make a difference to healthcare's carbon footprint through sustainable procurement practices: procurers, sustainability professionals, senior decision-makers working within healthcare facilities, and healthcare professionals.

SUSTAINABLE PROCUREMENT FOR EMISSIONS REDUCTION

Measuring greenhouse gas emissions is a critical first step in identifying carbon hotspots and developing strategies for reduction. There are three main categories of emissions:

- **Scope 1** - direct GHG emissions from sources owned or controlled by the organisation
- **Scope 2** - indirect GHG emissions from the consumption of purchased electricity, heat, or steam
- **Scope 3** - indirect emissions resulting from activities outside the reporting organisation[4]

Emissions from the procurement of goods and services, which mostly fall under scope 3, make up 71% of the EU sector's carbon footprint.[5] Whilst scope 1 and scope 2 emissions are often more easily measured and reduced, scope 3 emissions present a greater challenge as they extend beyond the emissions occurring on-site. Sustainable procurement of goods and services, therefore, represents a significant opportunity for organisations to transition towards a net zero carbon and climate-resilient healthcare sector. Effective sustainable procurement programmes allow health systems to:[6]

- **Gain efficiency and save time and money:**
  More efficient operations can save space, energy, and water, reduce waste and costs from waste management and treatment, and extend the useful life of many products.
- **Improve environmental health:**
  It is estimated that nearly 60 to 80% of a health system's greenhouse gas emissions are embedded in products and services they buy. Hospitals can serve as responsible stewards by reducing their own impacts and prompting suppliers to do the same.
- **Support resilience:**
  Creating shorter and more sustainable supply chains prevents healthcare systems from experiencing severe disruptions to care during extreme weather or other climate events.
- **Get the best value from suppliers:**
  Sustainable procurement emphasises engagement with strategic suppliers, leveraging their knowledge and resources to help maximise procurement for sustainability performance.

CASE STUDIES

Procurement plays a critical role in reducing the healthcare sector's emissions by driving the purchasing of lower carbon goods and services and cutting key sources of emissions. Below, we highlight three examples of sustainable procurement in the areas of hospital buildings, pharmaceuticals, and single-use devices. These case studies were presented at the 2023 edition of the European Healthcare Climate Summit, hosted by HCWH Europe.

1

BUILDINGS

ORGANISATION: THE CAPITAL REGION OF DENMARK

LOCATION: COPENHAGEN, DENMARK

REDUCING FACILITIES' OPERATIONAL EMISSIONS - SUSTAINABLE HOSPITALS IN THE CAPITAL REGION OF DENMARK

Globally, 13% of the global healthcare sector's emissions come from facilities' operational emissions.[7] Recognising this, the Capital Region is committed to minimising the environmental impact of hospital construction and operations on the climate. This includes prioritising sustainability considerations in the procurement process as they build or renovate hospitals.

Their current largest project is Denmark's new Children's Hospital, the Mary Elisabeth Hospital. The Mary Elisabeth is an example of new hospital construction that has incorporated sustainable procurement from concept design to construction, in order to create a hospital that is healthier for people and the planet. Procurers have prioritised safe and/or low-carbon materials, such as PVC-free flooring. The design of the building will meet new legal environmental requirements of 12kg CO_2e per m^2. When completed in 2026, the hospital will become a landmark for sustainable construction.

2 PHARMACEUTICALS

ORGANISATION: CONSORTIUM OF HEALTH AND SOCIAL CARE OF CATALONIA

LOCATION: CATALONIA, SPAIN

ENVIRONMENTAL CRITERIA IN THE TENDERING OF DRUGS, MEDICAL DEVICES, AND NON-MEDICAL EQUIPMENT

Pharmaceutical production and use represent up to 25% of healthcare's supply chain emissions.[8] Green public procurement is a process of contracting products and services that looks to reduce damage to the environment during product life cycles. It involves assessing products on environmental criteria and selecting those that perform better on criteria such as waste produced, and emissions generated.

To improve knowledge of the application of environmental criteria in healthcare procurement, the Consortium conducted a study to assess the current level of implementation of green public procurement in their region.[9] They reviewed tenders carried out by the Consortium's central procurement body between 2017 and 2021 and identified those that included environmental criteria in their evaluation criteria. They then measured impact based on compliance with those environmental criteria.

The results showed that out of 117 tenders reviewed, 15 included environmental criteria in their technical specifications: 4 (26.6%) for drugs, 6 (40%) for medical devices, and 5 (33.3%) for non-medical equipment. Although the inclusion of environmental criteria is still relatively low, the study observed a growing trend in their use over the years. This suggests that hospital purchasing power does act as leverage, encouraging suppliers to adhere to sustainability standards.

3 SINGLE-USE DEVICES

ORGANISATION: UNIVERSITY OF GHENT

LOCATION: GHENT, BELGIUM

IMPROVING THE SUSTAINABILITY OF COMMONLY USED MATERIALS IN HOSPITALS

In recent years, a shift from reusable to single use devices, driven in part by the challenges posed by the COVID-19 pandemic, has created a significant demand for raw materials and has led to large amounts of medical waste and associated carbon emissions.

To better understand the climate-related implications of its procurement decisions, the Belgian government funded an exploratory study on the environmental sustainability of commonly used materials in hospitals. The study compared the use of five single-use medical items (kidney trays, blankets, vessel sealing devices, cover caps for thermometers, and vaginal specula) and their reusable alternatives across four parameters (environmental sustainability, safety, costs, and efficiency).[10] For the sustainability parameter, the study considered data on raw materials, manufacturing, transport, (re)use, end-of-life (waste), and carbon footprint.

Researchers concluded that the reusable equivalents of most items were more favourable, although, for a small number, insufficient evidence was available.
The report provides detailed recommendations for hospitals, companies, regulatory bodies, and waste/recycling departments.

For hospitals and procurement teams in particular, key recommendations were to:

- Include validated sustainability requirements in the procurement process of medical materials and devices.
- Give appropriate weight to sustainability characteristics in the decision process for procurement of medical materials alongside the consideration of costs, logistics, etc.
- Inform medical supply companies that sustainability will be an integral part of the decision process when procuring medical material.

RECOMMENDATIONS

Building on these case studies, we propose the following recommendations for hospitals and health systems to reduce emissions from procurement of goods and services:

- **Engage with and encourage suppliers to manage, improve, and disclose their environmental practices. This could include requesting suppliers disclose their carbon footprint and adopt a plan to reduce it, reporting on their progress.**
- **Incorporate environmental criteria and carbon considerations in tender evaluation criteria for drugs, medical equipment, and non-medical equipment. Examples include prioritising products' reusability and durability, selecting energy-efficient medical equipment and technologies, and rewarding suppliers for using renewable energy sources, and meeting environmental criteria.**
- **Educate healthcare staff on the environmental impact of procurement and provide training on identifying and selecting low-carbon products.**
- **Establish a system to monitor and report on carbon emissions from procurement, and regularly assess progress and adjust for continuous improvement.**

CONCLUSIONS

Hospitals and health systems are well placed to take more responsible procurement decisions that safeguard both human and environmental health at all stages of the supply chain. In particular, there are increasing opportunities for the healthcare sector to reduce its carbon emissions through procurement policy and practice. By implementing sustainable procurement criteria and leveraging its purchasing power, the healthcare sector can increase demand for sustainable products, boost innovation, and accelerate the transition to a low carbon economy.

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