Green Public Procurement

Five priorities for sustainable health technology procurement in Europe

About this paper

This paper identifies five priority themes and recommended sustainability assessment criteria for public purchasers in Europe to adopt when procuring medical equipment and health technology solutions. These recommendations draw on existing standards and procurement best practices observed by Philips as a provider to hospitals and governments worldwide and build on our experience as an ESG and sustainability leader in climate action, circular economy and eco-design[1].

By sharing this paper, we aim to reinforce Green Public Procurement (GPP) as a strategic function for policymakers, purchasers and the public they serve. We welcome dialogue with all stakeholders to increase understanding, innovation and partnerships for more sustainable healthcare.

Healthcare systems contribute to 4.4% of net global CO_2 emissions – more than the aviation and shipping industries and equivalent to the annual greenhouse gas emissions from 514 coal-fired power plants[2]. In industrialized nations the emissions associated with healthcare were found to be even higher – up to 7.6% of national emissions[3]. Given the negative impact of climate change on public health, communities and society, we believe that the healthcare industry must urgently increase its efforts to become part of the solution.

In support of the 60 countries committed to strengthening climate resilience and lower the emissions of health systems[4], we see a major role for buyers of health technology[5] to stimulate innovation by enacting green purchasing reforms and raising minimum standards, thereby increasing the recognized 'value' of supplier sustainability commitments[6]. By providing industry partners and suppliers with a clear business case to improve the sustainability of their products and operations, we believe public procurement guidelines can help drive systemic change and enable tangible economic and social benefits.

Call to action:

To enable the healthcare industry to make a meaningful contribution to the 2015 Paris Agreement[7] and 2050 net-zero targets[8], we call on governments, purchasing agencies and group procurement organizations to:

- Improve supplier evaluation criteria for Green Public Procurement across the **five themes** elaborated in this paper:

  1. **Greenhouse gas emissions reduction**

  2. **Circularity**

  3. **Eco-design transparency**

  4. **Digitalization to improve decarbonization and dematerialization**

  5. **Social impact**

- Set 'pre-qualifying gateway' sustainability standards for health technology tenders.

- Assign a significant sustainability weighting when tendering for healthcare equipment and services. Apply the European Union's 15% guideline for GPP award criteria[9] as the minimum.

- Consider adding a sustainability cost factor when assessing vendor bids.

1 Ensure that suppliers report their environmental impact (including emissions) and that they have a greenhouse gas emission (GHG) reduction plan in place

Challenge: The healthcare industry must urgently address greenhouse gas emissions. Significant reductions can be achieved by switching to renewable energy sources[10] and looking at supply chains[11]. Supplier behavior is fundamental to achieving reductions in emissions for healthcare since the supply chain contributes a significant proportion of the overall emissions. For example, 62% of National Health Service emissions in the United Kingdom come from the supply chain in the production, transportation and disposal of goods and services[12]. Emissions from suppliers and their supply chains should be actively measured and reported as part of the drive to achieve net-zero healthcare.

Recommended assessment criteria

a. Ask suppliers if they publicly report GHG emissions annually for Scope 1 (direct emissions) and Scope 2 (indirect emissions)[13]. Consider awarding more points to suppliers who are carbon-neutral in their operations.

b. Ask suppliers if they also report Scope 3 emissions. For suppliers not yet measuring Scope 3 emissions, ask what their plan is to be able to do so, and in the meantime, what efforts are being made to reduce Scope 3 carbon emissions, for example from business travel and transportation of their goods and services.
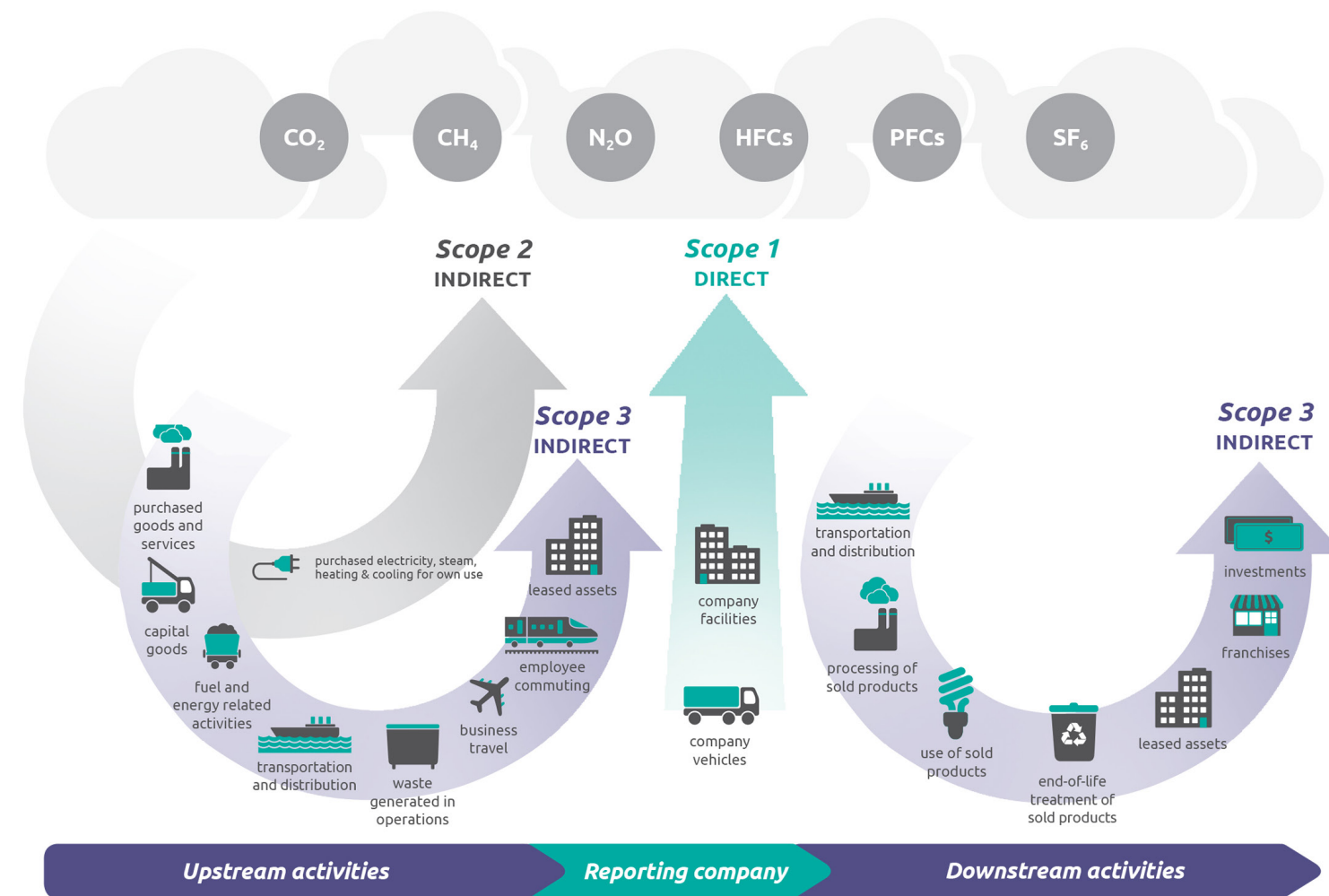

Figure 1: Scheme explaining Scope 1, 2, 3[15]

Recommended assessment criteria

c. Ask suppliers if they have committed to approved Science Based Targets (SBT) to reduce carbon emissions from Scope 1 and 2. Consider asking larger organizations if they have committed to Scope 3 targets in their SBTi-approved GHG emissions reduction plan and for evidence that these targets are included in the supplier's sustainability strategy.

d. Ask if GHG targets align with global warming at 1.5 °C, well below 2 °C, or 2 °C. Consider awarding a scale of points to reflect the fact that targets in line with a 1.5 °C global warming scenario will lead to the largest reduction in carbon emissions.

e. Ask suppliers if renewable energy targets are in place and to share their publicly committed timeline[14]. Consider awarding more points to suppliers who power their operations from 100% renewable sources.

What are Science Based Targets?

Science-based targets provide a clearly defined pathway for companies to reduce greenhouse gas emissions, helping prevent the worst impacts of climate change and future-proof business growth. Targets are considered 'science-based' if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to 1.5°C above pre-industrial levels.

Source: The Science Based Targets initiative (SBTi)
https://sciencebasedtargets.org

2 Focus on circularity for health technology products and solutions

Challenge: Current global material consumption is not sustainable, and estimates suggest the world's population would need 1.7 Earths to support its demands on resources[16]. Healthcare uses 10% of all materials annually[17], and most of the waste produced from the industry goes to landfill or incineration[18]. Applying circular economy strategies that reduce dependence on 'take, make, waste' business models could cut emissions by 39%[19] to 45%[20]. It is therefore critical to scale circular practices across healthcare. Green public procurement can help incentivize and accelerate this transformation.

Recommended assessment criteria:

a. Ask suppliers about options to lease, rent or access products and systems[21]. Consider selecting suppliers who offer these options and other service-based models, for example by enabling legal and/or economic ownership to reside with suppliers. Budgets should also be set up to enable and promote access over ownership.

b. Ask suppliers about products and solutions that help to extend product lifetime, such as hardware and software upgrades and lifetime extension services. In addition, consider asking suppliers how long spare parts are available for.

c. Consider buying refurbished or remanufactured products and systems from the OEM supplier and ask if they can guarantee the quality, latest technology upgrades, and standard warranty and service terms.

d. Ask suppliers if they offer to take back the equipment at end-of-use and ensure materials are responsibly recirculated, e.g., refurbished or recycled[22].

e. Consider choosing solutions that reduce waste from consumables, for example, reusable consumables for multi-patient use.

f. Ask suppliers if they apply circular principles in production, e.g., targets for reducing and recovering waste.
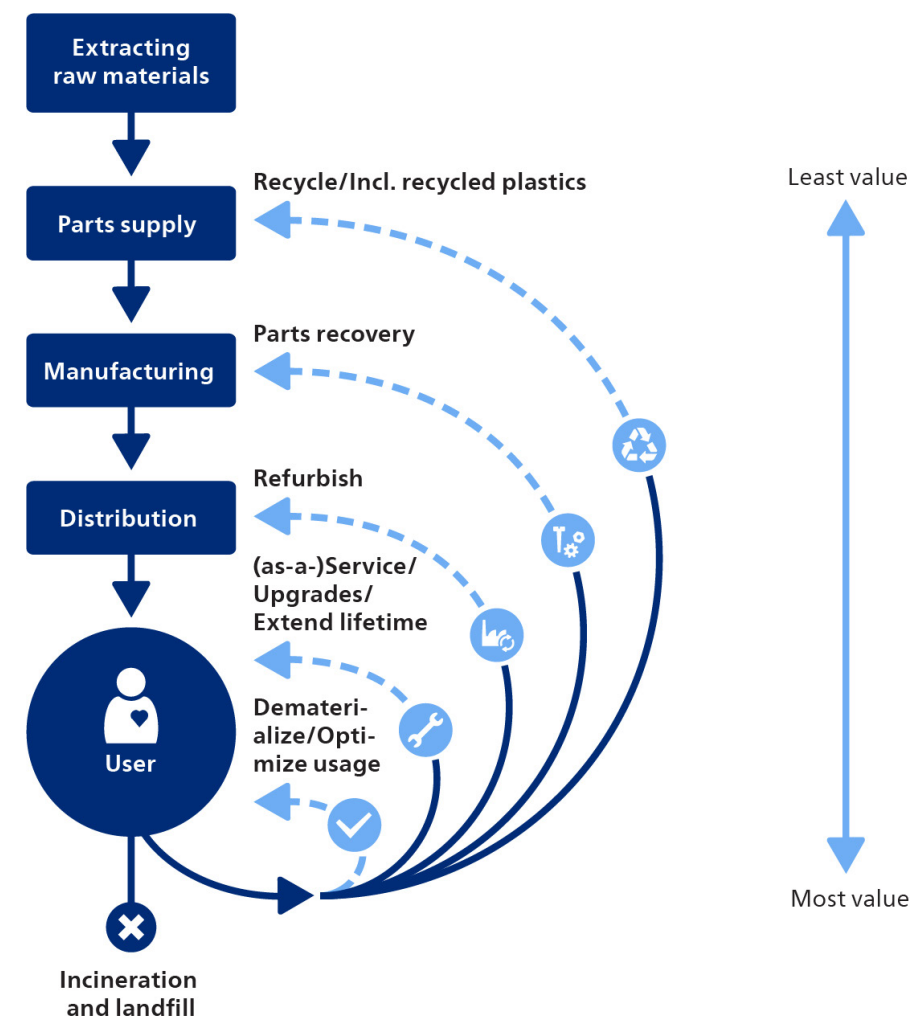

Figure 2: example of circularity paths for health technology systems/equipment

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3 Require supplier transparency on product performance and eco-design for products and equipment resources and workflow efficiency

Challenge: The way we consume materials creates significant environmental challenges. Our consumption behavior contributes to global emissions, and more than 90% of biodiversity loss is due to the extraction and processing of natural resources[23]. Healthcare technology providers have considerable capabilities to innovate and find solutions that reduce the consumption of materials through good eco-design. Information on energy consumption, the use of hazardous substances, scarce resources, materials and packaging across the product life cycle should be reported by suppliers. To play their part, purchasers should ensure eco-design details are evaluated[24] when sourcing healthcare equipment and solutions.

Recommended assessment criteria:

a. Ask suppliers to provide information about the product's average energy consumption including consumption in different modes. For example, in off, low-power and ready to scan[25]. Request yearly/daily energy consumption according to industry standards for average user scenarios (e.g., COCIR[26] for diagnostic imaging equipment). Where an industry standard is unavailable, ask suppliers to provide data according to a defined and transparent user scenario.

b. Where regulations allow the use of recycled materials, ask suppliers about the application of recycled or bio-based plastics in equipment and consumables to help reduce the use of virgin materials. If applicable, ask suppliers to provide details about the amount of non-virgin plastic used, e.g., as a percentage of total plastic in the equipment. It should be acknowledged that the incorporation of recycled plastic is challenging and not expected to be widely available.

c. Ask suppliers to provide information about the sustainability of packaging. This should include questions about the weight of materials, the percentage of recycled content, and if the packaging is recyclable[27].

d. Ask suppliers to provide information about the presence and concentration of specific hazardous substances and Substances of Very High Concern (SVHC) relevant to the products being procured. Refer to the candidate list of SVHC identified under Article 57 of the European Commission REACH Regulation[28].

e. Ask suppliers to provide details on the circular design of the product. This should include questions about the application of sustainable materials (e.g., recycled or bio-based plastics), aspects that link to circularity such as product longevity and warranty, and design for repair, upgradeability and recycling[29].

4 Require suppliers to demonstrate how digital offerings support decarbonization and dematerialization by optimizing resources and workflow efficiency

Challenge: According to the Future Health Index, 57% of healthcare leaders believe digital health interventions can help deliver more environmentally sustainable healthcare[30]. This can be achieved by enabling better outcomes, increasing productivity, and decreasing waste by reducing resource-intensive processes and procedures. For example, telehealth, electronic health records and artificial intelligence (AI) can help reduce carbon emissions. While data privacy remains a sensitive priority, reports estimate that migrating on-premises servers to the cloud could reduce carbon dioxide emissions by 59 million tonnes per year, equivalent to taking 22 million cars off the road[31].

Recommended assessment criteria:

a. Consider purchasing digital solutions that can run on the cloud to enable health systems to migrate to the cloud instead of using servers on the premises. Procurer policies should also allow the use of cloud-based software to enable lower carbon emissions.

b. Choose digital solutions that improve productivity by increasing the utilization, capacity, and lifetime of new and existing capital equipment.

c. Choose digital solutions that enable remote interactions, such as remote and predictive maintenance services and virtual care solutions, to reduce carbon emissions from travel and resource use in resource-intensive settings like hospitals.

d. Choose digital solutions that can help monitor and improve energy consumption and material footprint.

5 Require suppliers to publicly report their social impact

Challenge: Companies have the responsibility to respect human rights and the ability to protect them. A common system of measurement of the impact companies have on society is essential, and this is encompassed by the UN Sustainable Development Goals. The healthcare industry has the further social challenge that half the world's population lacks access to essential health services[32]. More robust, resilient, and equitable health systems are needed to accelerate progress toward universal health coverage. If social impact is incorporated effectively into health-tech procurement it will help reduce health inequalities, drive better environmental performance, and deliver more value[33].

Recommended assessment criteria:

a. Sustainable Development Goals: ask suppliers if the UN Sustainable Development Goals[34] are part of the organization's strategy.

b. ESG Reporting: ask suppliers if they report on Environmental, Social and Governance performance according to the 21 Core metrics of the WEF ESG reporting framework[35].

c. Progress towards Universal Health Coverage: ask suppliers about programs they have in place which aim to increase access to healthcare. Consider awarding more points if programs target underserved communities such as areas with a low Universal Health Coverage service score[32].

d. Human rights, labor standards and anti-corruption: ask suppliers to demonstrate that their production methods, labor standards and anti-corruption practices meet or exceed the standard-setting guidelines provided by the United Nations. For example, the International Bill of Human Rights[36], the International Labour Organization (ILO) Declaration on Fundamental Principles and Rights at Work[37] and the UN Global Compact[38]. In addition, require suppliers to have Labor standards and/or a Modern Slavery statement[39].

e. Conflict minerals: ask suppliers to demonstrate how possible issues are addressed by:

- Sharing their policy for responsible sourcing of minerals
- Demonstrating that their due diligence frameworks meet or exceed OECD guidance[40]
- Publishing a Conflict Minerals Report

f. Tax transparency: suppliers should be able to disclose country-by-country taxes paid in operating locations and in accordance with European Union reporting directives[41].

In summary

At Philips, we consider sustainable procurement one of the critical strategies that care providers and governments can adopt to advance and decarbonize healthcare.

In this paper, and based on existing standards and best practices that Philips has observed as a provider to hospitals and governments, we have elaborated on five key areas where health technology purchasers in Europe can integrate green criteria in the procurement process – to stimulate innovations and advancements in healthcare, increase value for money, and reduce the pressure that health systems place on the global environment.

We recognize that there is no common Green Public Procurement standard.

Governments and policymakers face different challenges and departure points to scale up sustainable procurement practices and secure buy-in from purchasers, markets, vendors and the public they serve. By sharing Philips' perspective, we wish to support learning and dialogue between all stakeholders, and we welcome deeper engagement on sustainable procurement and broader green hospital initiatives. It is our strongly held view that by fostering collaboration between customers, suppliers and industry peers, the healthcare sector can support and enable the transformation to a low-carbon economy and build more productive and resilient delivery of healthcare services.

Get in touch

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