Supplies, and therefore, waste and emissions from pharmaceuticals and other chemicals used for treatments should also decrease through prescribing practices. It involves giving information to patients and clinical staff on the best treatment, with the use of the lowest effective dose for the shortest period of time, including drugs that have the smallest carbon footprint. Optimizing medications also involves addressing unnecessary prescribing, which reduces errors. Low-carbon prescriptions also include the use of alternatives such as psychotherapy, green prescribing, social prescribing, and lifestyle prescriptions.

Soft facility management, including cleaning practices, linen and laundry services, and waste management, also present many opportunities to reduce the use and waste of materials, energy, and chemicals. For example, cleaning can become chemical-free by using innovative microfiber mops and an adapted cleaning technique. This method can be fully applied or partially applied depending on the area of the hospital and safety-related issues. Benefits include cost savings, carbon reduction, decreased toxicity of wastewater, and improved health and well-being of patients and employees due to the reduction of respiratory diseases caused by chemical products.

For all of the above, alternatives keep emerging, and innovative approaches will be necessary to continue this effort.

Measurable Elements of GHI.03.00

1. Ⓓ Hospital leaders and managers develop a written measurable plan including targets and the monitoring thereof to reduce waste, carbon emissions, and the use of environmental resources.
2. Ⓓ The percentage of renewable energy (bought or self-produced) compared to the total energy consumption is identified and reported to the board on a yearly basis.
3. Hospital leaders implement actions to optimize water conservation and report the amount of water conserved to the board on a yearly basis.
4. Hospital leaders and managers can demonstrate yearly progress regarding the reduction of carbon emissions or negative environmental impacts of operations in at least one of the following soft facilities management areas:
   - Waste management
   - Cleaning practices
   - Linen and laundry services
5. Hospital leaders and managers contribute to reducing the carbon intensity of food and catering supplies; for example, by sourcing at least 50% of locally produced food whenever practicable and by providing vegetarian options on a daily basis.
6. Clinical practices are evaluated to reduce the environmental impact.

Procurement and Supply Chain

Standard GHI.04.00

Hospital leaders implement actions to reduce the environmental impact of the supply chain across all operations and identify areas to reduce the unnecessary use of supplies within the hospital.

Intent of GHI.04.00

It is estimated that medicines, medical equipment, and other supply chains can represent between 60% and 80% of a hospital's carbon footprint. This includes production, transport, and use and disposal of goods and services. However, despite those emissions being indirect, hospitals can play an active role in decreasing them. For example, this can be achieved by enhancing the way resources are used (for example, reduce, reuse, or even avoid), substituting for low-carbon and/or reusable initiatives, sourcing locally, working with suppliers to set targets, and leveraging their purchasing power to demand more sustainable products.

A growing number of international initiatives aim to promote sustainable procurement in the health care sector and guide hospitals to adopt sustainable practices and processes. These initiatives, illustrated by various examples and case studies, identify areas to do the following:

- Reduce their use of avoidable resources (for example, reducing the use of nonsurgical gloves where these are not necessary for infection control purposes).
- Improve and optimize the use of their current equipment (for example, conducting life cycle assessment or analysis to optimize the long-term use of imaging systems and other treatment devices). Life cycle assessments can also support decision-making when comparing the environmental impact of single-use items and reusable items, as well as associated cost savings.

The identification of unnecessary and avoidable supplies can take various forms and should demonstrate credible efforts. For example, identification efforts can be demonstrated through related audits and assessment, discussions as noted in minutes of meetings, and research on similar initiatives in other hospitals or organizations. Identification should lead to prioritization and translated into actions for implementation.

In addition to decarbonization, this can lead to improved patient experience and financial savings.

Measurable Elements of GHI.04.00

1. Ⓓ Climate- and environmental sustainability–criteria are included in the hospital procurement guidelines. (*See also* GLD.05.02, ME 3)
2. For any new contract with suppliers or vendors, department managers prioritize suppliers and vendors that have sustainability and carbon emission reduction objectives in place. (*See also* GLD.05.02, ME 3)
3. Hospital leaders and department managers identify opportunities to optimize processes within the hospital by identifying unnecessary and/or avoidable supplies in at least three of the following areas:
   - Pharmaceuticals and other chemicals used for treatments
   - Chemicals used for sterilizing, disinfecting, and cleaning purposes
   - Food and agricultural products
   - Medical devices
   - Hospital equipment and instruments
4. Hospital leaders and department managers implement actions to assess the benefits of reusable items instead of single-use materials in clinical and nonclinical areas. (*See also* PCI.03.01, ME 1)

Infrastructure and Service Resilience

Standard GHI.05.00

Hospital leaders assess the environmental risks and scenarios that may affect service delivery, hospital operations, and patient populations, with plans to comply with local emergency preparedness recommendations and rules, including those required by property insurance coverage.

Intent of GHI.05.00

The climate crisis has been recognized as the greatest threat to human health in the twenty-first century. It causes an increase in noncommunicable and infectious diseases, negatively impacts social and environmental determinants of health, and causes disruptive climate events (for example, floods, wildfires, landslides, strong winds), which can directly impact the health care delivery when and where they occur. For example, consequences may include the following:

- A sudden increase in the demand for health care services if the surrounding community is directly affected
- Damages to the infrastructure and facilities of the hospital