



ENVIRONMENTAL MANAGEMENT AT LANDSPÍTALI UNIVERSITY HOSPITAL

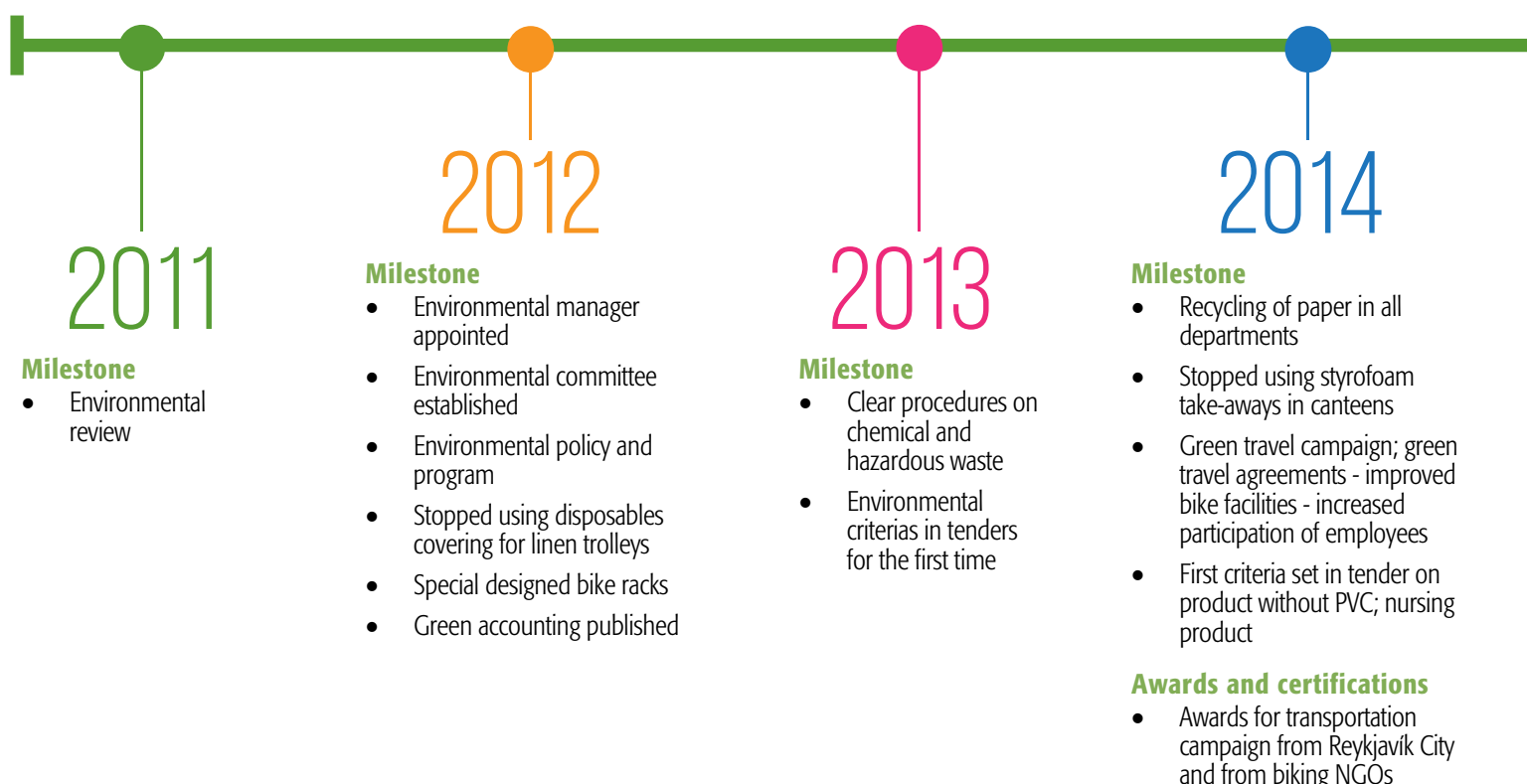
SUMMARY 2012-2017



ENVIRONMENTAL MANAGEMENT AT LANDSPÍTALI UNIVERSITY HOSPITAL

Since 2012, Landspítali has aimed at becoming a role model and a driving force in environmental issues in Iceland. Green travel agreements are offered to employees, work is being done on green procurement, the facilities for cyclists have been improved, recycling has substantially increased and the hospital's kitchen and canteens are ecolabelled. Landspítali set itself ambitious environmental goals, and the results are visible for the environment, safety, health and the economy. The environmental management is solution based, innovative and characterised by employee co-operation, interest and enjoyment.

The hospital has emphasised on visible measures and has the ISO14001 standard as a reference. Legal requirements are complied with, and policies and working procedures are followed up with the support of the executive committee and the environmental committee of the hospital. Emphasis has been placed on nudging, i.e. to make it easy and attractive to be environmentally friendly. There is a good overview of environmental aspects, and they are worked with systematically and followed up through green accounting.



Landspítali is Iceland's largest workplace with roughly 5000 employees; it is also a university hospital that serves the whole country. Activities of the hospital are spread out in 100 buildings at 17 different locations within the Reykjavik area, all with diverse and wide-ranging roles. Daily work at the hospital requires high levels of transportation and travel, a large amount of waste is created, drugs and hazardous chemicals are used, many products and services are purchased, the equipment requires high levels of electricity and a lot of disposable goods and packaging is used. All this has an impact on the environment and health, in one way or another.

Considerable importance is placed on co-operation with staff and stakeholders in the community. Landspítali has taken note of the excellent work done at hospitals in the Nordic countries, received good advice from them and has also shared its experience both nationally and abroad. Despite the circumstances and novelty of the work, the hospital has received a number of awards and certificates for outstanding environmental management both in Iceland and abroad.

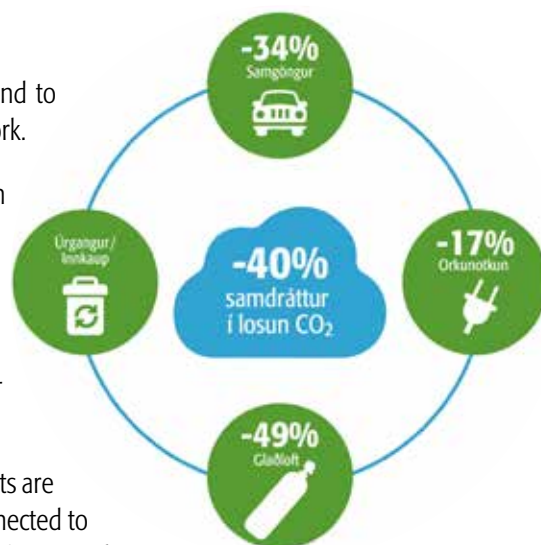
93% OF THE HOSPITAL'S ENERGY COMES FROM RENEWABLE ENERGY, GEOTHERMAL AND HYDRO-ELECTRIC POWER

ENVIRONMENTAL POLICY

The vision of Landspítali is to be a role model in environmental issues and to have social responsibility as a guiding principle in decisions and in daily work.

The Landspítali environmental policy is the guide to this vision, and an environmental program has been followed since 2012. In 2016, the executive committee adopted an ambitious climate target of a 40% reduction in emissions by 2020. The largest sources of the hospital carbon footprint are anaesthetic gases (39%) and employee travel to and from work (31%). Today, 93% of the hospital's energy comes from renewable energy, geothermal and hydroelectric power.

The environmental policy is systematically followed. Well-defined key projects are worked on in teams composed of those who best know about and are connected to the subject. The key projects are, e.g., increased sorting and reduction of waste, clear procedures for hazardous waste, increased green procurement, eco-friendly travel and increased information dissemination on environmental issues. In the green accounting records, key figures that relate to significant environmental aspects are maintained, and they are published annually.



2015

2016

2017

Milestone

- Recycling of plastic in all departments
- Recycling of textile
- Composting in all canteens as well as in kitchen and left over from patients

Awards and certifications

- Nordic Swan Ecolabelling of the hospital kitchen and canteens
- The Environmental award from the Ministry for the Environment

Milestone

- Establishment of Facebook "Environmental issues at Landspítali" for employees
- Climate goal of 40% CO₂ reduction by 2020 set
- Recycling up to 30%
- The Blood bank reuses cooling gel and styrofoam boxes
- Landspítali joins Health Care without Harm and Nordic Center for Sustainable Healthcare

Awards and certifications

- 10 locations of Landspítali receives an official bike certification; Hjólavottun - silver

Milestone

- Disposable bags for specimen transport without PVC
- Stopped buying styrofoam cups
- The first access controlled bike shelter at one of the main location
- Energy certificate from Orkusalan. Power of origin 100% hydro electric

Awards and certifications

- Nordic award "Sustainable healthcare organiser of the year" from NCSH and Bonnier publishing



4 TONS
OF WASTE
IS DAILY
PRODUCED AT
LANDSPITALI,
OF WHICH
1,2
TONS ARE
RECYCLED

RECYCLING
RATIO ROSE
FROM 15%
IN 2012 TO
30% IN 2016

WASTE ISSUES FIRMLY ADDRESSED

At the outset of the environmental management at Landspítali in 2012, emphasis was placed on waste management. Goal was set on 30% recycling. Since then the recycling ratio has risen from 15% in 2012 to 30% in 2016. Now twenty-six categories of waste are sorted at Landspítali. The waste system was conducted by using colouring schemes for the most common waste categories, designing labels, giving presentations and making a video for plastic sorting (<https://vimeo.com/153494133>). All departments were visited, simple and accessible containers were provided, special contact person for environmental issues was nominated at each department and this was all done in good co-operation with employees and suppliers.

Since 2012 many waste categories at Landspítali have improved:

- Paper recycling has increased tenfold, from 11 tons in 2012 to 112 tons in 2016
- Plastic recycling has increased sixfold, from 8 tons in 2012 to 48 tons in 2016
- Organic waste has quadrupled– now all the waste from the kitchen, leftovers from patients and employee is collected. Every week 2,2 tons go into composting
- Oil from cooking goes into fuel production
- Textiles are recycled – 10 tons/year
- Collaboration with suppliers to collect print cartridges for refilling
- A new and clear routine for the handling of chemical waste was implemented in all research departments



FEWER DISPOSABLE ITEMS

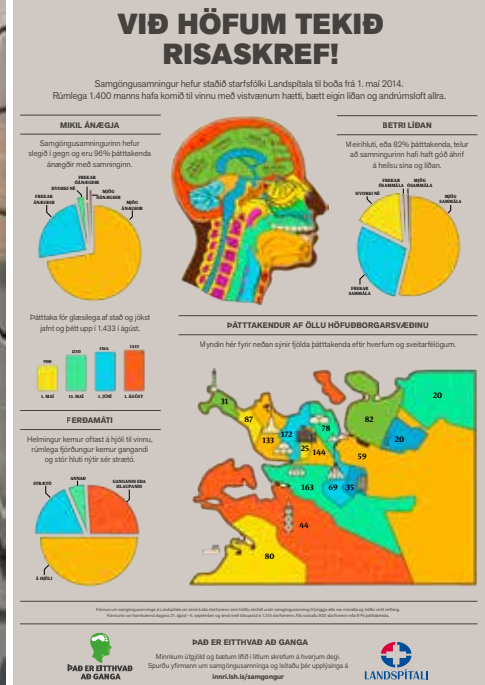
Landspítali has systemically worked on reducing the use of disposable products and preventing wastage. A considerable amount of disposable products are used at the hospital for nursing, treatment, research and various activities. Disposable items can be necessary, for example in infection prevention. Sometimes, however, they can be replaced by reusable products.

Some examples of disposables that Landspítali has minimized:

- In 2014 Landspítali stopped using disposable styrofoam boxes for take-away food; instead, employees use a good quality reusable box without BPA. Annually, this means 123,000 fewer styrofoam boxes are wasted. The reusable food boxes were new to the Icelandic market, and others have implemented them also. Reusable soup boxes are on offer since 2017.
- Efforts are made to reduce disposable examination paper use (since 2016) – compared to the first 6 months of 2016, 2017 shows a decline of 11%. In 2016 6,6 tons were used so the reduction this year will most likely be around 700 kg. The project is a win-win, e.g. safer infection control, less paper dust, money savings and less waste.
- The use of disposable plastic coverings on textile trolleys was discontinued in 2012; instead, reusable textile coverings are used, with the resulting decrease in use of 10 tons/year of plastic and savings of about ISK 6 million annually.
- In 2016 the Blood Bank at Landspítali collected and returned for reuse over 100 big styrofoam boxes and 200 cooling gel packs, instead of throwing them away. Other departments are also being looked at.
- Landspítali stopped buying styrofoam glasses 1st of January 2017.

PRINTING
PAPER
USE HAS
DECREASED
BY 40%
SINCE 2009

123.000
FEWER
STYROFOAM
BOXES
ANNUALLY



GREEN TRAVEL

In 2016 Landspítali's employees travel distances to and from work with car that are equivalent to travelling 4500 times around Iceland in a year. These car trips are the second largest part of Landspítali's carbon footprint.

In 2011 travel survey at Landspítali showed that 21% of the employees travelled eco-friendly to and from work. It also showed a huge interest in travelling more eco-friendly. Subsequently, the hospital started improving the facilities for cyclists and obtaining a discount on bus passes for employees as well as for cycling and outdoor products.

In 2014, a significant change in employee travel was seen after financial incentives were introduced through green travel agreements with employees who travel eco-friendly for at least 60% of their trips. During the summer of 2014, more than 1400 employees had signed a green travel agreement, which means that 28% of employees were travelling eco-friendly to and from work. This equals a decrease in number of cars by 160 on the streets of Reykjavik on each working day and a decrease in CO₂ emissions by 120 tons per year. A travel survey in the autumn 2014 showed that 82% of employees on green travel agreements believed had a beneficial impact on their health and well-being.

The 2016 travel survey showed very positive development; during the summer 40% of Landspítali's employees travel mostly eco-friendly.

Biking at Landspítali has vastly improved since 2012:

- Since 2012, specially designed bike racks have been installed at the hospital's main locations for over 400 bicycles at 25 entrances at 11 of Landspítali's locations, three of which are located in indoors.
- Communication and media have been used at Landspítali for empowering cyclists through posters, videos, news and practical information for cyclists.
- In 2017 a specially designed, access controlled bike shelter for 40 bikes was opened at one of the main location.
- In autumn 2016, 10 locations of Landspítali received an official bicycle certification – silver, for good management and facilities.

Green travel agreement: <https://vimeo.com/91218985>

Bicycle friendly workplace: <https://vimeo.com/183840742>



Takk fyrir að flokka



THE KITCHEN RECEIVES THE NORDIC SWAN ECOLABEL

Landspítali's kitchen is one of the largest kitchens in Iceland and produces about 5000 meals a day for employees, guests and patients. In 2015, the kitchen and its 9 canteens received the Nordic Swan Ecolabel, and the environmental measures taken in the kitchen resulted in significant and positive benefits. For example, vegetarian dishes are now offered daily, the number of guests increased by 30%, guest satisfaction increased by 50% and a number of environmental benefits have been obtained:

- Food waste is well monitored: Efforts are made to reduce waste as much as possible; portions have been adapted, an ordering system for the canteens has been developed and purchasing has been better organised. From January 2017, unsold food servings are sent to Samhjálp (NGO that provides assistance to those in need).
- More organic products: The availability of vegetables and organic food has increased in the kitchen and canteens. There are now 13 types of organic foods, and 7 of them are available daily.
- Fewer plastic and disposable containers: Reusable food and soup boxes or disposable cardboard boxes, as well as plant-based cutlery, are available for guests who want a take-away. Other guests use reusable tableware. Plastic containers are practically eliminated.
- More ecolabelled products are used. Almost all detergents and cleaning products are ecolabelled, as are all toilet paper, office paper and napkins. Detergent management has been improved and co-ordinated in all canteens, and 10 non-ecolabelled detergents have been removed. The number of detergents was reduced from 26 to 16.
- More recycling: Sorting facilities are available for guests in all the 9 canteens, and in the kitchen waste is sorted into seven waste categories and recycled. All food waste is composted, and hospital employees can receive free compost to use in their own gardening.





GREEN PROCUREMENT

Landspítali is a major purchaser, and therefore, there are many opportunities to influence the market availability of environmentally friendly products and services. Purchase of goods and services amount to about ISK 50 million on a daily basis. Number of suppliers is around 3000. Since 2012, environmental criteria have been set in the hospital's tender requests and price inquiries that have resulted in both savings and a better environment. Because green procurement is immature in Iceland Landspítali has paved the way in some fields.

Since 2013, there have been clear environmental criteria in tenders, including packaging, chemical content, energy consumption, noise limit, life-cycle costs, air pollution, durability and product/service compliance with the requirements of recognised ecolabels or equivalent requirements. Icelandic and European environmental criteria have been used. For example, European EU-GPP is always used in medical equipment tenders. In the procurement of all cleaning services, paper, cleaning products and toilet paper for Landspítali, the service or product is always required to be ecolabelled or comply with equivalent requirements.

Here are some examples of green procurement at Landspítali:

- In 2013–2017, environmental criteria have been set in over 30 tenders, over 60 mini-tenders and price inquiries.
- The tender of printing services resulted in various optimisations, ISK 50 millions in savings per year and a large decrease in the use of paper.
- Environmentally friendly shuttles have been purchased, which have reduced fuel costs and carbon emissions.
- For the first time, in 2014, the criteria were set in a tender that the nursing products did not contain PVC, phthalate nor DEHP. Examination gloves are now free of PVC and latex. Special importance has been placed on ensuring that products in close contact with new-borns contain no PVC and DEHP.
- At Landspítali, 120.000 units of PVC disposable bags for specimen transport are used yearly. In co-operation with suppliers, new and improved PVC-free bags have been introduced in 2017, which reduces waste and pollution.
- The hospital's laundry supplies the hospital with linen that is 100% Oeko-Tex, and 13% is EU Ecolabelled.

¹http://ec.europa.eu/environment/gpp/eu_gpp_criteria_en.htm

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POWERFUL COMMUNICATION

It is part of Landspítali's environmental policy to increase awareness on environmental matters through the dissemination of information, education and co-operation with stakeholders. Landspítali as one of the country's largest workplaces can have a major impact on environmental matters by being a role model and sharing its knowledge and experiences.

- There have been a number of educational presentations held within and outside Landspítali concerning e.g. environmental management and policies, increased categorisation of waste and green travel agreements. The environmental efforts have been presented at hundreds of meetings, conferences and seminars in Iceland.
- Several presentations on the environmental efforts have been held abroad: Riga, Latvia, for the Prime Minister's Office at the conference "Northern Future Forum"; Nordic Conference on Sustainable Healthcare – Building Consensus for Greener Healthcare in Stockholm 2017; Health Care without Harm in Berlin 2017.
- Since 2012, news on the environmental activities at Landspítali has been regularly published on the internal and external web sites of the hospital, in the national and social media.
- In 2016, a facebook group was established for employees "Umhverfismál Landspítala" (e. Environmental issues at Landspítali), which is very active, with 3-4 posts weekly and 600 "friends", e.g. CEO, doctors, nurses and office workers. Posts include e.g. internal environmental activities, various news as well as questions and ideas from employees.
- Green accounting has been published every year since 2012 and is available on the hospital's website. The Landspítali green accounting template was used as a prototype for the green accounting system for governmental organisations in Iceland.
- On the Landspítali website, detailed information can be found on the hospital's environmental management, www.landspitali.is/umhverfismal.
- There has been good cooperation between the hospital and its service providers and suppliers in order to obtain information or to request environmentally friendly products and services.
- Landspítali has been working closely with a number of people outside the hospital in environmental projects, including visits to companies and hospitals to learn from experience and share experiences.
- Short videos have been used increasingly for visually communicating useful information to the employees and other stakeholders, e.g. the hospital's environmental management <https://vimeo.com/219314552>, bicycle friendly workplace: <https://vimeo.com/183840742>, green travel agreement: <https://vimeo.com/91218985>, sorting of plastic <https://vimeo.com/153494133>

**SOCIAL
MEDIA USED
EFFECTIVELY
FOR ENVIRON-
MENTAL
INFORMATION**



LOOKING AHEAD

POWERFUL
ENVIRONMENTAL
INITIATIVES
IN A LARGE
WORKPLACE
LIKE
LANDSPÍTALI
CAN HAVE
SIGNIFICANT
INFLUENCE
ON THE
COMMUNITY

Important steps have been taken in making Landspítali's operations environmentally friendly. Many of them have provided clear and diverse benefits to the environment, and the hospital has received a number of awards for them. It has been important to work with employees and business partners within and outside of Iceland.

In the coming months, projects will include enhanced chemical management with the implementation of Eco-online software, implementing organic waste sorting in the wards, pushing suppliers with environmentally friendly solutions, reduction of the use of disposable packaging and food waste, discontinuing the use of heavy fuel, installing charging stations for electric cars and implementing Zipcar at the hospital.

Landspítali will continue to work according to the environmental policy and climate goals that have been set forth for the coming years. This will be done by working with and learn from others and share knowledge inside and outside of the hospital.

Powerful environmental initiatives in a large workplace like Landspítali can have significant influence on the community pathway of improving conditions and the environment for future generations.

