



# Global Green and Healthy Hospitals Annual Report 2016



# ABOUT GGHH

Imagine hospitals, health care facilities, health systems, and health organizations from around the world working together for a healthier, more sustainable planet. . . *This is Global Green and Healthy Hospitals.*

GGHH is an international network of hospitals, health care facilities, health systems, and health organizations dedicated to reducing their environmental footprint and promoting public and environmental health.

With 742 members from 41 countries representing the interests of more than 21,700 hospitals and health centers from every continent, the network, launched in 2011, continues to grow rapidly.

GGHH develops tools and resources to help members reduce their environmental footprint, measure their progress and collaborate with one another to foster large-scale change in the health care sector.

GGHH is a project of Health Care Without Harm.

## THE 10 GOALS



**Leadership**  
Prioritize Environmental Health



**Transportation**  
Improve Transportation Strategies for Patients and Staff



**Chemicals**  
Substitute Harmful Chemicals with Safer Alternatives



**Food**  
Purchase and Serve Sustainably Grown, Healthy Food



**Waste**  
Reduce, Treat and Safely Dispose of Healthcare Waste



**Pharmaceuticals**  
Safely Manage and Dispose of Pharmaceuticals



**Energy**  
Implement Energy Efficiency and Clean, Renewable Energy Generation



**Buildings**  
Support Green and Healthy Hospital Design and Construction



**Water**  
Reduce Hospital Water Consumption and Supply Potable Water



**Purchasing**  
Buy Safer and More Sustainable Products and Materials

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## GGHH WORLDWIDE STAFF 2016

### **AFRICA**

*South Africa* | Luqman Yesufu

### **ASIA AND PACIFIC**

*China* | Ang Zhao, Jiang Chao

*Nepal* | Mahesh Nakarmi, Saraswoti Thakuri,

Urukshya Dongol, Shrawasti Karmacharya,

Prerana Dangol

*Philippines* | Ramón San Pascual, Joyce Lanuza,

Faye Ferrer, Moresa Tolibas, Dianne Mendoza

*Australia* | Fiona Armstrong, Carol Behne

### **EUROPE**

*Belgium* | Anja Leetz, Grazia Cioci, Aidan Long,

Tim Eden

### **LATIN AMERICA**

*Argentina* | Verónica Odriozola, Carolina

Gil Posse, Maria Della Rodolfa, Antonella Risso

*Brazil* | Vital Ribeiro, Victor Kenzo, Isabel Santos

*Costa Rica* | Alejandra Fernandez

### **UNITED STATES**

Janet Howard, Cecilia DeLoach Lynn and the staff of Practice Greenhealth

### **GLOBAL SECRETARIAT**

*United States* | Josh Karliner, Scott

Slotterback, Susan Wilburn, Nick Thorp

*Belgium* | Alejandra Livschitz

*Argentina* | Sonia Fakiel

*United Kingdom* | Ruth Stringer

# REFLECTIONS

In 1996 a group of health and environment professionals came together in the United States to address a profound paradox: the health care sector—whose mission it is to prevent disease, heal and do no harm—was a major polluter in the country, thereby undermining public health.

Out of this meeting Health Care Without Harm was born. The year 2016 marked our 20th anniversary and with it the continuing evolution of our mission to transform health care worldwide so that it reduces its environmental footprint, becomes a community anchor for sustainability, and a leader in the global movement for environmental health and justice.

Global Green and Healthy Hospitals is on the leading edge of this mission. And 2016 was a year of tremendous accomplishment. Our members on every continent achieved significant reductions in their environmental footprints. We rolled out new tools and resources, such as the Hippocrates Data Center, the first global sustainability measurement tool for health care. And we continued to mobilize the network to address the greatest health threat of this century: climate change.

In that regard, we engaged with key governments and international institutions to move the work forward. Our collaborations in countries such as China, India, South Africa and the United States, as well as in the European Union continued to grow. Our work with international institutions such as the WHO, UNDP and the World Bank also expanded.

One of many highlights was a standing-room only event for national and international health officials at the World Health Assembly on health and climate. Sponsored by the governments of the United States and the Philippines (representing the Climate Vulnerable Forum of Nations) the event underscored the critical nature that the health sector has to play in fostering a healthy climate and healthy future.

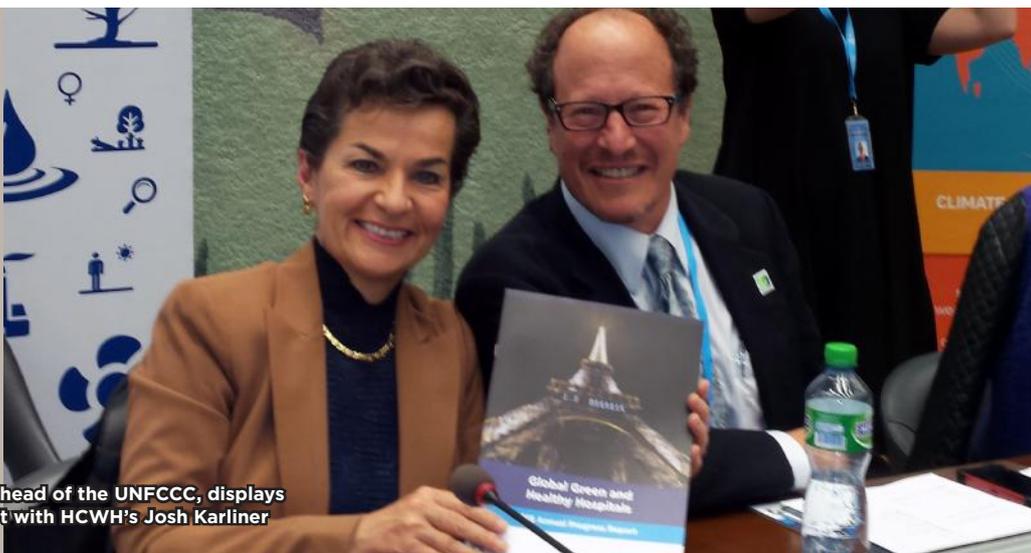
Since that time, governments in both countries have changed and dark storm clouds are gathering on the political horizons of several nations. This makes all of our work more critical than ever.

Health care has a central role and responsibility to help lead the way to a green, low-carbon, climate-resilient future by leveraging its economic, political and ethical clout. Health Care Without Harm and Global Green and Healthy Hospitals stand ready, as always, to work with our members and partners to transform this vision into reality.



**Josh Karliner**

International Director, Program and Strategy  
Health Care Without Harm



**Cristiana Figueres, then head of the UNFCCC, displays last year's Annual Report with HCWH's Josh Karliner**

# TOWARD GREEN, CLIMATE-SMART HEALTH CARE

## GGHH MEMBERS IN THEIR OWN WORDS

*"In China we have launched several research projects to identify a route map to greener health care buildings, operations and service delivery in our national system. We are pleased to . . . share our experiences, and learn from health systems here. We look forward to more cooperation in the future."*

**Yang Hongwei**  
**Deputy Director General of the**  
**China National Health Development**  
**Research Center | China**

*"It's important for healthcare to reduce its carbon footprint. . . and we therefore must be the leaders of this work. . . Our goal is to be fossil-free by 2020."*

**Kristina de Geer**  
**Environmental Manager**  
**Region Skåne | Sweden**

*"The health sector is a powerful convener of business—and has a moral obligation to lead the way. Communicating directly across sectors builds significant power behind climate action, and creates new relationships that support innovation and learning."*

**Brenna Davis**  
**Director of Sustainability**  
**Virginia Mason | United States**

*"We significantly reduced our greenhouse gas emissions from fossil fuel, as we switched to renewable clean energy sources."*

**Jessenia Andia Varas**  
**Manager, Hospital de Andacollo**  
**"Dr. Jose Luis Arraño" | Chile**

*"Kaiser Permanente has a goal of becoming net carbon positive by 2025. Each of Kaiser Permanente's 2025 goals offers an opportunity to raise the bar on environmental responsibility, for Kaiser Permanente and for the broader social and economic sectors in the U.S. and globally."*

**Kathy Gerwig**  
**Vice President Employee Safety,**  
**Health and Wellness and**  
**Environmental Stewardship Officer**  
**Kaiser Permanente | United States**

*"I have used the GGHH published guidelines as reference for our water, electricity, and medical waste projects aimed to reduce the carbon footprint of our government hospitals. It is so important to be linked via GGHH Connect, because you easily realize that what seems to be an insurmountable problem for us, has been implemented and solved by others."*

**Laura Angeletti du Toit**  
**Western Cape Department**  
**of Health | South Africa**

# MEASURING PROGRESS

## GGHH TARGETS AND ACHIEVEMENTS

As Health Care Without Harm celebrates its 20<sup>th</sup> anniversary, we recognize that our success is intimately linked to the work of the people who make up our network of hospitals, health systems and health care organizations.

These are the sustainability leaders and innovators who use the tools and resources we provide to implement change within their institutions.

These are the people who share their solutions and progress with the network and expand their influence by advocating for change in their communities.

Collectively, with decades of sustainability experience, our global team is working with GGHH members to accelerate change around the world.

This report highlights progress our network has made in the past year in four key strategic areas:

- 1. Network Breadth and Reach**
- 2. Network Depth and Member Engagement**
- 3. Measuring of Environmental Footprint Reduction**
- 4. Achieving Large-Scale Change via Broad Health Care Sector Adoption**



GGHH members meeting in South Africa

# TEN FAST FACTS FROM GGHH CASE STUDIES

**AUSTRALIA** | Anaesthetic Department personnel at Western Health in Melbourne voluntarily reduced their desflurane and nitrous oxide use and attempted to use lower flows of gases in general, reducing annual costs by \$22,500 USD and greenhouse gas emissions by 140 tons per year.

**CHILE** | Complejo Hospitalario San José de Maipo audited their energy consumption to prioritize opportunities to reduce energy use and developed a campaign to raise awareness on this issue and to encourage staff to take actions to achieve their energy objectives.

**CHINA** | The National Health Development Research Center is developing a Route Map to foster greater sustainability in national health care delivery, operations and infrastructure.

**NEPAL** | Paropakar Maternity and Women's Hospital, working with GGHH Partner HECAF, transformed their waste management system, reducing medical waste and increasing recycling by 39%. With technical assistance from HCWH and HECAF, they built a pioneering, two-stage biodigestion plant to dispose of organic waste and generate methane that is used as a renewable fuel.

**SPAIN** | Health Department XÀTIVA - ONTINYENT established and implemented a Plan of Action and Awareness for Environmental Improvement, focusing on staff education to improve waste segregation and reduce medical waste, resulting in a 44% reduction in the volume of medical waste over two years.

**SOUTH AFRICA** | Groote Schuur Hospital, Western Cape made changes to the infrastructure of the boiler house and the steam lines that cut the hospital's coal consumption by 48%, reducing greenhouse gas emissions and air pollution as well as using less water to produce steam.

**TAIWAN** | Dalin Tzu Chi Hospital is recycling an average of 82,000 gallons of waste water for use in flushing toilets and watering plants, saving \$26,000 a year and fresh water resources.

**UNITED STATES** | Gundersen Health System's wind farms in Minnesota and Wisconsin generate 9.95 megawatts of electricity, enough to power 2,400 homes a year. The savings are passed on to patients in the form of lower healthcare costs.

## 2016 OUTCOMES

**TARGET:** Produce and publish 100 case studies in multiple languages.

**ACHIEVEMENT:** 120 case studies published and available online.

## 2017 TARGET

At least 140 case studies published.

# NETWORK BREADTH AND REACH

*In 2016 GGHH membership surpassed 700 institutions, strengthening the network's role as the global leader in health care sustainability.*

## MEMBERSHIP

In 2016 GGHH's institutional membership grew by 16%, steadily expanding into six additional countries: Honduras, Italy, Kuwait, Malaysia, Peru and Sri Lanka.

The growth was spread across the world, with new health systems, hospitals, health centers, and organizational members on every continent.

With this growth came an expansion of health care facilities represented by our members. Total representation at the end of 2016 surpassed 21,700, including public and private hospitals, health centers and organizations.

## 2016 OUTCOMES

**TARGET:** Institutions representing the interests of 25,000 hospitals and health centers.

**ACHIEVEMENT:** Institutions representing the interests of over 21,700 hospitals and health centers.

## 2017 TARGET

Institutions representing the interests of 25,000 hospitals and health centers.

## GGHH HAS 742 MEMBERS FROM 41 COUNTRIES

### U.S. & Canada

HCWH's implementation arm, Practice Greenhealth, has 1,400 hospital members in the U.S. In Canada GGHH members include 5 health systems and 2 organizations representing the interests of 878 hospitals and health centers

### Europe

22 hospitals and health centers, 19 health systems and 9 organizations, representing the interests of 6,602 hospitals and health centers

### Global

1 health system and 3 organizations representing the interests of 1,040 hospitals

### Latin America

447 hospitals and health centers, 34 health systems and 14 organizations, representing the interests of 1,592 hospitals and health centers

### Africa

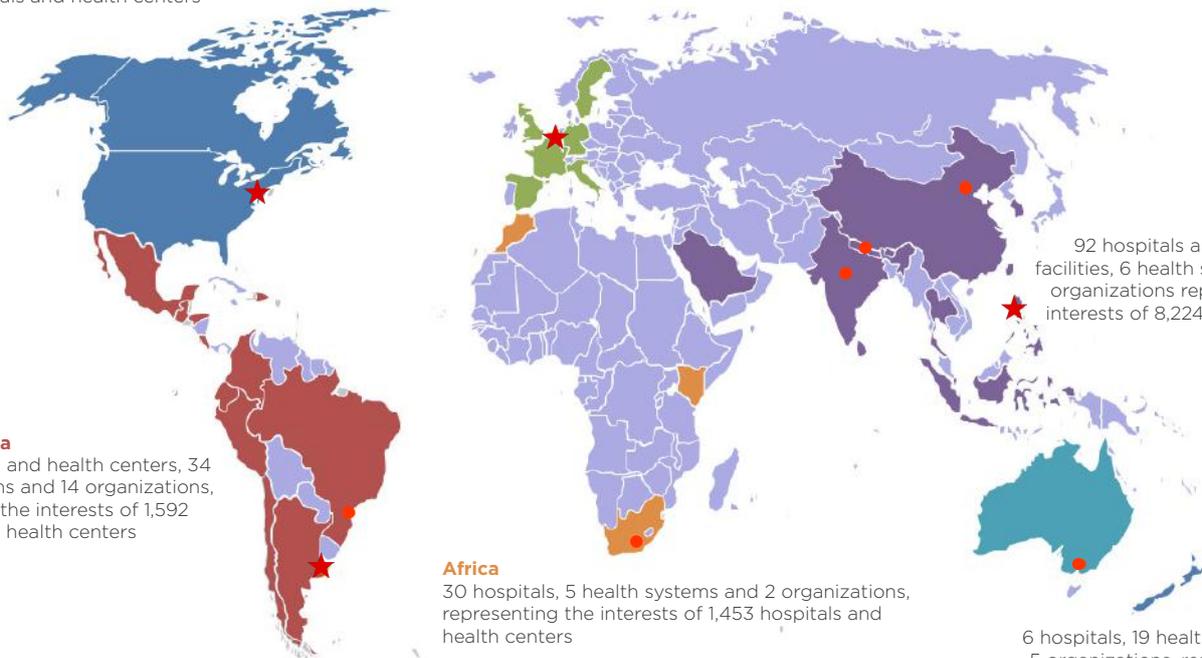
30 hospitals, 5 health systems and 2 organizations, representing the interests of 1,453 hospitals and health centers

### Asia

92 hospitals and health care facilities, 6 health systems and 11 organizations representing the interests of 8,224 hospitals and health centers

### Pacific

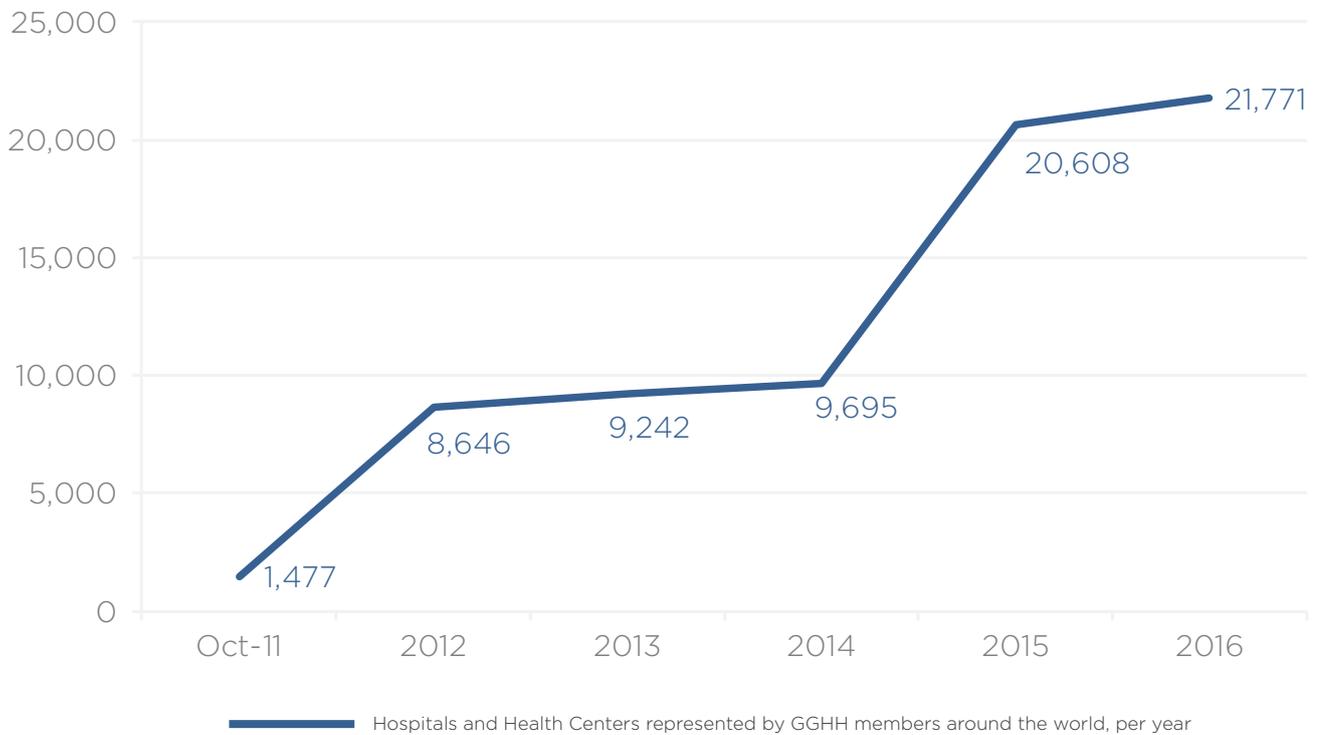
6 hospitals, 19 health systems and 5 organizations, representing the interests of 581 hospitals and health centers



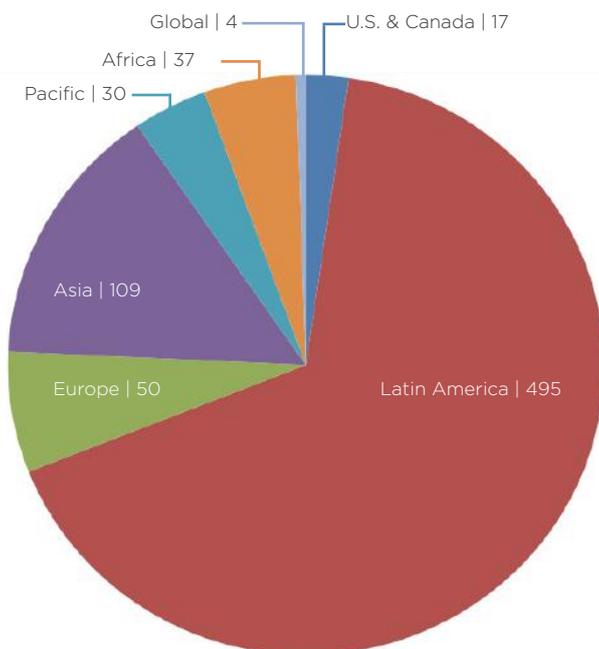
★ HCWH Regional Offices  
● Strategic Partners

AS OF 2016, GGHH HAD 742 MEMBERS FROM 41 COUNTRIES REPRESENTING THE INTERESTS OF OVER 21,700 HOSPITALS AND HEALTH CENTERS

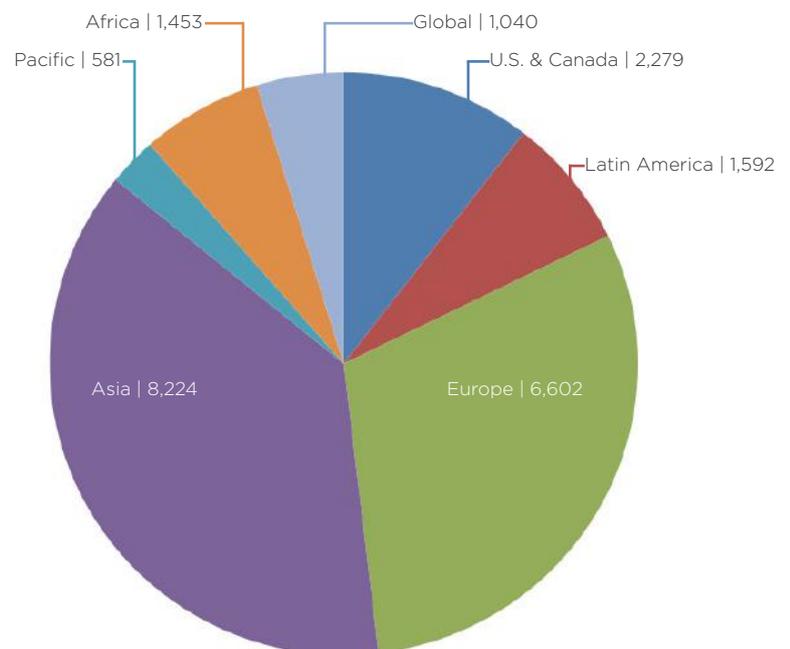
## A Network of Networks



### Member distribution by region



### Hospitals and health centers represented by region



## PUBLIC EVENTS

### 2016 OUTCOMES

(partial list)

#### AUSTRALIA

In October, in a historic meeting, HCWH partner the Climate and Health Alliance co-hosted a roundtable in Parliament House in Canberra that brought together health leaders to advance a discussion about national strategy for climate change, health and well-being.

#### BRAZIL

In September, HCWH's Brazil partner Hospitais Saudáveis held its 9<sup>th</sup> annual two-day conference, attended by more than 700 people. National and international speakers discussed the latest developments in waste management, climate, energy, and eliminating harmful chemicals, along with other GGHH Agenda issues.

#### CHINA

In May, at the 17th China Hospital Construction Forum, GGHH staff and members from the U.S., China and South Korea gave presentations on low-carbon, sustainable health care solutions. The congress, held in Hefei, China, attracted over 3,000 Chinese hospital decision-makers.

In November, at WHO's 9<sup>th</sup> Global Conference on Health Promotion, HCWH's Asia Director presented at the Health Literacy Forum on Water, Sanitation, and Hygiene (WASH). His presentation highlighted the health sector's crucial role in protecting public health through sustainable development.

#### COLOMBIA

In June, in Bogotá, HCWH Latin America hosted the "Second International Workshop on Environmental Health in Health Care Institutions".

#### COSTA RICA

In June in San José, HCWH Latin America co-hosted the conference "Towards a Green and Healthy Health Services Agenda in Costa Rica" organized with the Faculty of Medicine of the National Children's Hospital.

#### EUROPE

In October, HCWH's CleanMed Europe conference was held in Copenhagen, Denmark. The conference included the first GGHH member meeting in the region with representatives from hospitals and health systems from Norway, Sweden, Iceland, and Germany.

#### FINLAND

In May, GGHH Global Secretariat members participated in and presented a low-carbon health care strategy to a donors' meeting on health and climate organized by the World Bank, the Nordic Development Fund and the WHO.

#### HONDURAS

In September, in Tegucigalpa, HCWH Latin America conducted a workshop on "Mercury in the health care sector: successful experiences from Health Care Without Harm and the global movement for elimination".

#### INDONESIA

In August, the third GGHH Asia Regional Conference focused on Asian hospitals working toward climate-resilient health care, and featured best practices from



GGHH Member Meeting, CleanMed Europe, Copenhagen

Indonesia's Minister of Health with HCWH Asia Director, Ramón San Pascual

across the region. Attended by over 400 people (including more than 100 Indonesian hospitals), the conference was co-organized with Health Promoting Hospitals Indonesia, RSUP Dr. Sardjito Hospital, Bakti Husada, Universitas Gadjah Mada and WHO. The event was opened by the Minister of Health and brought together GGHH members and representatives from China, India, Nepal, the Philippines, Singapore, South Korea, Taiwan, Malaysia and Thailand.

### **MEXICO**

In October, in Mexico City, HCWH Latin America organized a GGHH workshop for members at the Federico Gómez Children's Hospital with representatives from eight hospitals, the Mexico City Health Department, the State Center for Epidemiological Surveillance and Disease Control and the State of Mexico.

### **NEPAL**

In April, on the one-year anniversary of the devastating Gorkha earthquake, a conference was held to discuss the lessons learned from the disaster and how the health care sector can become more resilient in the face of natural and manmade disasters. The conference was organized by Health Care Foundation Nepal, HCWH, Nepal's Ministry of Health, WHO and GGHH member Tzu Chi Foundation.

In November, HCWH and Health Care Foundation of Nepal participated in a Health Care Waste Management Workshop in Kathmandu. Organized by WHO, the workshop reviewed the status of health care waste management in the region and made recommendations for improvement.

### **PHILIPPINES**

In March, GGHH participated in the annual Tzu Chi Medical Association (TIMA) Conference in Manila. More than 300 participants, including Tzu Chi health care members from all over Asia, gathered for the three-day event. The conference included a tour of the facilities of GGHH member the Philippine Heart Center.

### **SOUTH AFRICA**

In October, in a side event to the 40th World Hospital Congress of the International Hospital Federation, leaders from African member hospitals and other leading international health care experts came together at the Global Green and Healthy Health Systems Conference. Organized by GGHH and HCWH's South Africa partner groundWork, the event shared approaches to low-carbon and sustainable health care.

### **UNITED STATES**

In May, HCWH U.S. and Practice Greenhealth held CleanMed, the premier U.S. environmental conference for leaders in health care sustainability. Several GGHH members and staff gave presentations at the event in Dallas, Texas.

## **2017 TARGET**

Continue to promote large-scale change in the health sector through participation in multiple regional and international events.



Hospitals attend "Green and Healthy Health Services Agenda" conference in Costa Rica

# NETWORK DEPTH ENGAGEMENT

*GGHH is promoting deep member engagement throughout the network by pursuing a series of strategies to expand collaboration and innovation.*

## GGHH CONNECT

A social platform for members, GGHH Connect is bringing together hospitals, health systems and health organizations to accelerate sustainability initiatives by sharing what they are learning and doing with other GGHH members from around the world.

Since its launch in October 2014, as a collaboration with Cisco Systems and the Skoll Foundation, GGHH Connect has continued to grow and expand.

With over 1,000 accounts, averaging over 1,000 hits per month and providing access to a full suite of tools and resources, GGHH Connect is fast becoming the one-stop-shop for the global health care sustainability community.

*We added several features to GGHH Connect in 2016, including:*

- Responsive design to enable nimble smartphone access.
- Google Translate to enable members to access Connect in over 100 languages.
- Hippocrates Data Center, to enable members to measure and compare their progress on GGHH goals.

## 2016 OUTCOMES

**TARGET:** Establish up to 1,200 accounts for members and experts.

**ACHIEVEMENT:** Over 1,000 accounts established, resulting in robust discussions on GGHH Connect, with members helping each other across the planet.

## 2017 TARGET

1,500 active accounts and a growing collaborative community of innovators and advocates.

## WEBINARS & WEB-BASED EDUCATION PROGRAMS

In 2016 GGHH hosted a dozen global webinars on seven of the 10 GGHH Goals and introduced a major new program, the Hippocrates Data Center. This was complemented by the addition of webinar programs in Asia and Europe, along with ongoing webinars and online courses in Latin America.

## 2016 OUTCOMES

**TARGET:** Continue to build the global webinar series and support the development of webinars in each region.

**ACHIEVEMENT:** Over 1,700 people from more than 65 countries attended 31 GGHH global and regional webinars in 2016.

750 people participated in 11 webinars on energy, food, climate change, water and waste organized by HCWH's Latin America team.

HCWH Europe hosted four webinars that were attended by 190 people from 38 countries.

HCWH Asia hosted four webinars that were attended by 150 people from 14 countries.

## 2017 TARGET

Continue to build the global and regional webinar series and online courses as vehicles to recruit, educate and mobilize members.

## LATIN AMERICA | ENERGY EFFICIENCY AND RENEWABLE ENERGY COURSE

Expanding on the waste and safe chemicals courses provided in 2015, Health Care Without Harm Latin America (Salud sin Daño), with support of the Energy and Sustainability Observatory in Argentina, created a seven-week virtual course on Energy Efficiency and Renewable Energy Challenges and Opportunities for Health Facilities.

The course is aimed at technical and operational staff of public and private health care institutions, as well as health care architects and engineers, decision makers, advanced university students and others.

At the end of the program, students who participate for 30 hours in the course and successfully complete an evaluation receive a certificate from Health Care Without Harm. The initial program was attended by 15 health care professionals from Argentina, Colombia and Uruguay, along with representatives from seven hospitals, the Argentine Ministry of Health, the Colombian Secretary of Education and two private institutions.

## SOUTH AFRICA | CONTINUING PROFESSIONAL DEVELOPMENT ACCREDITATION FOR GGHH

Health care practitioners have a responsibility to continually update their professional knowledge and skills for the benefit of the patient. To this end, the Health Professionals Council of South Africa (HPCSA) has implemented a Continuing Professional Development (CPD) program.

Every health practitioner is required to accumulate 30 Continuing Education Units (CEUs) per twelve-month period, and five of the units must be on ethics, human rights and medical law. As a result of HCWH partner groundWork's efforts, GGHH's program is now accredited by the Health Professionals Council of South Africa so that health practitioners who attend a GGHH workshop receive six CPU points.

# MEASURING FOOTPRINT REDUCTION



In late 2016, GGHH launched the Hippocrates Data Center. Hippocrates is the first international platform designed for the health sector to measure actions that reduce its environmental footprint.

Hippocrates is a new, cutting-edge resource that puts the power of data management, goal benchmarking, and progress tracking into the hands of each GGHH member.

Housed on GGHH Connect, Hippocrates allows members to track, store, and visualize their data on a secure, web-based platform.

Data collection tools are currently available for waste, energy, and climate (2020 Challenge) with more to be released in the future.

*"When you have limited time and what seems like endless data, Hippocrates helps make sense of it all. Data collection helps tell our story and standardizes the process. Collecting data is a crucial step, helping us all achieve our sustainability goals!"*

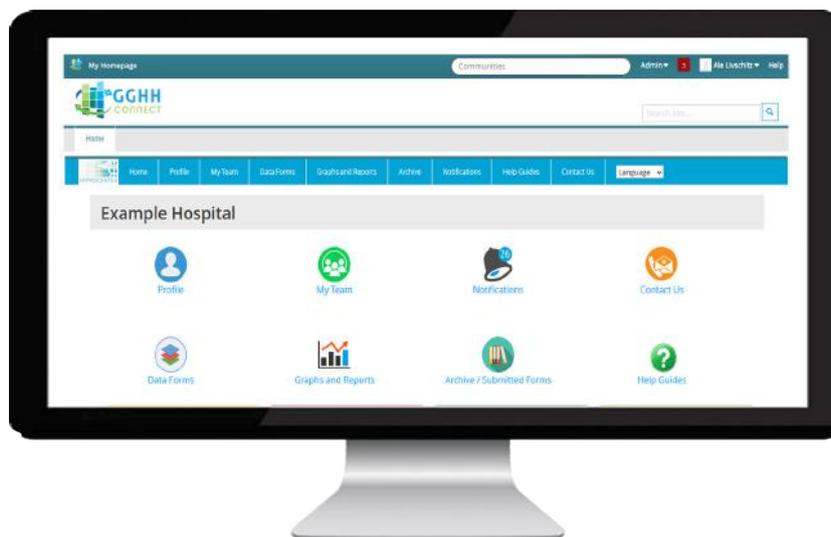
**Debbie Wilson**  
**Counties Manukau District Health Board**  
**New Zealand**

## FEATURES

- **Data forms** for the GGHH Sustainability Goals that allow members to submit data from their institutions, analyze the impacts and success of projects, and identify opportunities.
- **Dashboards** with graphs and charts to visualize impacts, performance, and progress achieved over time.
- **Data archives** to store, export and download all data submissions and reports.
- **Team management** for multiple staff members from the same institution to access and collaborate on data submission and analysis.
- **Multilingual access** in English, Spanish, and Portuguese. Hippocrates also syncs with Google Translate for viewing and use in over 100 other languages.

# Introducing the Hippocrates Data Center

*A new, cutting-edge resource that puts the power of data management into GGHH members' hands.*



## 2016 OUTCOMES

**TARGET:** At least 1,500 hospitals and health centers are incorporated into or linked with measurement systems on greenhouse gas emissions.

**ACHIEVEMENT:** 2020 Challenge participants, representing over 9,000 hospitals and health centers, are providing data in the Hippocrates Data Center.

They are providing their climate change targets and emissions data, as well as data on their Climate Change Resilience and Leadership Actions.

## 2017 TARGETS

Expand the Hippocrates Data Center to include tools for tracking Safer Chemicals actions and the ability for members to view their progress in relation to that of other participants in their country, region, and around the globe.

Develop and implement a series of Challenges for Waste, Energy, Chemicals and Purchasing that encourage greater GGHH member engagement on Hippocrates.

# LARGE-SCALE CHANGE TOWARD LOW-CARBON HEALTH CARE

*Climate change poses the greatest health threat of the 21<sup>st</sup> Century, as well as the greatest health opportunity. A top priority for GGHH is to mobilize the health sector's leadership on the local, national and global levels to address this challenge.*

## 2020 HEALTH CARE CLIMATE CHALLENGE

Since the 2015 launch of the 2020 Health Care Climate Challenge, 131 institutions, representing the interests of over 9,000 hospitals and health centers from 20 countries around the world, have joined.

Participants commit to address this global issue by:

- reducing their own carbon impacts,
- preparing for climate impacts, and
- leading the way to a low-carbon future.

Using the Hippocrates Data Center, participants establish baselines and report on progress.

## 2020 CHALLENGE HIGHLIGHTS FROM 2016

Forty Brazilian hospitals joined the 2020 Challenge at the annual Hospitais Saudáveis conference, committing to carbon reduction and climate leadership in the country.

## 2020 HEALTH CARE CLIMATE CHALLENGE AWARDS

For the second year, GGHH recognized

the achievements of participants in the 2020 Challenge with Climate Champion Awards. Twenty-eight organizations from around the globe received awards for their dedication to and success in the three pillars of the Challenge. From Morocco to Sweden, Canada to Australia, and points in between, the 2016 Climate Champion award winners are innovating and investing to transform the health sector and foster a healthy future for the planet.

## 2016 OUTCOMES

### TARGET:

Increase the number of 2020 participants by 50 percent from 67 more than 100. Measure significant reductions in greenhouse gas emissions.

**ACHIEVEMENT:** 131 participants in the 2020 Challenge, representing the interests of over 9,000 hospitals and health centers, reported commitments to reduce their greenhouse gas emissions by over 12.3 million tons by 2020. This is the equivalent to saving 2.8 million barrels of oil, or installing over 3,000 wind turbines.



Forty Brazilian hospitals joined the 2020 Challenge at the annual Hospitais Saudáveis conference

## 2017 TARGET

At least 200 participants in the 2020 Challenge, representing the interests of 15,000 health facilities, continue to build momentum for health care engagement on climate change and set increasingly ambitious emissions reduction targets.

## ENGAGING IN GLOBAL CLIMATE POLICY

### WORLD HEALTH ASSEMBLY

HCWH worked with the government of the United States and the government of the Philippines (representing the Climate Vulnerable Forum of nations) to organize a side event at the 69th World Health Assembly in Geneva in June.

### ASIA REGIONAL FORUM

In October, HCWH presented a low-carbon health care framework at the 4<sup>th</sup> ministerial Regional Forum on Environment and Health in Southeast and East Asian Countries organized by WHO and UNEP and attended by 40 governments.

### COP 22 MARRAKESH | CLIMATE NEGOTIATIONS

Health Care Without Harm and GGHH participated in various events at the COP22 Climate Negotiations in Marrakesh, Morocco.

HCWH staff presented the 2020 Health Care Climate Challenge and our work to engage and unite the global health sector to develop low-carbon health care and act as a leading voice to protect the health of the planet at Health Action Day. The event, hosted by the WHO, the French Ambassador for Climate Change, and Morocco's Minister Delegate in Charge of Environment, showcased innovative programs aimed at addressing and mitigating the health impacts of climate change.

In addition, Health Care Without Harm and GGHH member the Mohammed VI University Hospital hosted an international conference on Climate and Health Care parallel to COP22.

The event, the first of its kind to be held in the country, brought together health sector leaders from across Morocco, Europe, and beyond to share strategies for the health sector to mitigate its own climate impacts, develop low-carbon models of care, and to use their voices, both individually and collectively, to advocate for policies to address climate change and public health and to achieve the goals set out in the Paris agreement.



World Health Assembly side event

# 2016 Sustainability Benchmark Report

## Practice Greenhealth, United States

GGHH U.S. affiliate Practice Greenhealth continued to deliver environmental solutions to more than 1,300 hospital members. As a result, their members are dramatically reducing U.S. health care's environmental footprint through safer products, reduced air emissions, elimination of toxins, healthier working environments, and energy and water efficiency.

### HIGHLIGHTS OF MEMBER ACHIEVEMENTS INCLUDE:

#### WASTE

Participating hospitals saved more than \$2.9 million in 2015 on solid waste recycling alone—diverting more than 77,000 tons of material from the landfill.

#### GREENING OPERATING ROOMS

Focusing on greening operating rooms provides financial savings, while reducing a hospital's environmental footprint. Hospitals in this program saved more than \$370,000 annually.

#### LEANER ENERGY

Hospitals continued to reduce their energy use, saving \$23 million USD and significantly reducing their greenhouse gas emissions.

#### BUILDINGS

Practice Greenhealth members reported that 69 building projects, covering 1.3 million square meters, were certified by the U.S. Green Building Council LEED standards.

#### FOOD

Nearly two-thirds of participating hospitals developed policies and plans for serving healthy and sustainable foods.

#### SAFER CHEMICALS

78% of hospitals participating in Practice Greenhealth's safer chemicals program report having chemical or purchasing programs that identify specific chemicals of concern.



# LARGE-SCALE CHANGE

## BROAD HEALTH SECTOR ADOPTION

*We also accomplish large-scale change in the health sector by working with members to facilitate national and international policy change and to drive leadership for environmental health.*

### NATIONAL AND SYSTEM ADOPTION

Our collaborations with public, private and non-profit health systems accelerate the integration of the GGHH Agenda into these systems, and into the many hospitals and health centers they operate.

In 2016, while there were no new national system memberships, 24 public and private health systems joined GGHH, representing over 850 hospitals and health centers. In addition, GGHH facilitated collaborations with national health systems helping other nations move toward green and low-carbon health care.

An example of this is our work to help China chart the course for developing a national green health system. We are working with China's National Health and Family Planning Commission (NHFPC) and National Health

Development Research Center (NHDR). Our other partners in this project include several U.S. health systems and the Sustainable Development Unit of the U.K.'s National Health Service.

### 2016 OUTCOMES

**TARGET:** One more national health system and 20 more hospital systems join and adopt GGHH Agenda.

**ACHIEVEMENT:** Significant work was accomplished to promote the GGHH Agenda as a potential framework for green health care nationally in China.

### 2017 TARGET

Launch long-term collaboration with China's health sector; engage three major health systems in India; ten more health systems globally.



COP22 | HCWH and GGHH member the Mohammed VI University Hospital hosted a conference on Climate and Health Care

# Kaiser Permanente's 2025 Environmental Stewardship Goals

## Raising the Bar on Environmental Sustainability

Kaiser Permanente is the largest non-profit health system in the United States, a member of GGHH's U.S. affiliate, Practice Greenhealth, and a participant in the 2020 Challenge.

Kaiser recognizes that healthy communities and a healthy environment are critical to the health and wellness of every person. Creating these has been central to their mission.

Kaiser Permanente's Environmental Stewardship program helps advance their mission and vision for total health —an approach that emphasizes the social, environmental, behavioral and clinical aspects that shape one's well being.



Each of Kaiser Permanente's 2025 goals offers an opportunity to raise the bar on environmental responsibility, not just for Kaiser Permanente but for the broader social and economic sectors in the U.S. and globally.

Kaiser Permanente hopes to inspire all to create a future where total health is at the core of what they do.



### CLIMATE ACTION

Become "carbon net positive" by buying enough clean energy and carbon offsets to remove more greenhouse gases from the atmosphere than emitted.



### SUSTAINABLE FOOD

Buy all food locally or from farms and producers that use sustainable practices, including using antibiotics responsibly.



### WASTE REDUCTION

Recycle, reuse or compost 100% of non-hazardous waste.



### WATER CONSERVATION

Reduce the amount of water used by 25% per square foot.



### SAFER PRODUCTS

Increase purchase of products and materials meeting environmental standards to 50%.



### MANAGEMENT & ACCOUNTABILITY

Meet international standards for environmental management.



### COLLABORATION

Pursue new collaborations to reduce environmental risks to foodsheds, watersheds and air basins supplying the communities Kaiser serves.

# GGHH EXCHANGE

## CHINA - NORTH AMERICA

### STUDY TOUR

In September 2016, a delegation of leaders from the Chinese health sector met with Health Care Without Harm and several major U.S. health systems to identify strategies to address climate change and foster green, environmentally sustainable, climate-resilient health care in both countries. The visit was supported in part by the U.S. State Department's People to People Exchange program.

Hosted by HCWH, the Chinese delegation met with health system sustainability leaders from across the U.S. The delegation was led by the China National Health Development Research Center, a think tank and policy formulation group that is part of the National Health and Family Planning Commission. The delegation also included high-ranking representatives from three other departments of NHFPC.

The delegation from China participated in a daylong roundtable meeting to dialogue with HCWH and leading U.S. health systems, including Dignity Health; Gundersen Health System; Kaiser Permanente; Partners Healthcare; University of California, San Francisco Medical Center (UCSF); and Virginia Mason Medical Center.

The visit resulted in pledges of ongoing cooperation between U.S. and Chinese health systems, and with a Green Health Care Forum planned to take place in Beijing in early 2017.

After the meetings in the U.S., the Chinese delegation traveled to Canada to meet with GGHH members in Vancouver, British Columbia, including FraserHealth, Providence Health Care Vancouver, CoastalHealth and the Provincial Health Services Authority. The Canadian health systems discussed how they are moving toward carbon neutrality.



Leaders from the Chinese health sector met with HCWH and several major U.S. health systems

# GGHH FINANCES

## 2016 INCOME

GGHH income in 2016 came primarily from the following sources:

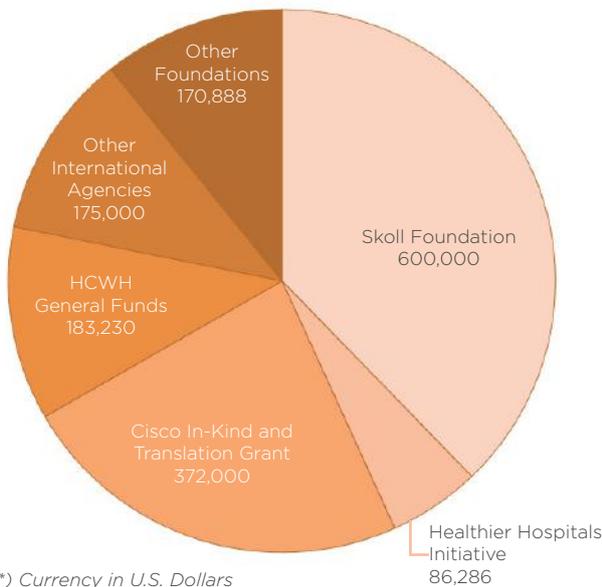
The Skoll Foundation, which has generously invested in the development of GGHH over the past several years.

Cisco Systems, which has made a multiple-year, in-kind donation to develop GGHH Connect and provided funding for translation and the development of Hippocrates.

The United Nations Foundation, which supports our collaboration on green procurement.

Several large hospital systems and philanthropic foundations also fund Practice Greenhealth, which carries out GGHH's mission in the U.S.

Local entities, who also co-finance the activities of our members and partners in many regions of the world.



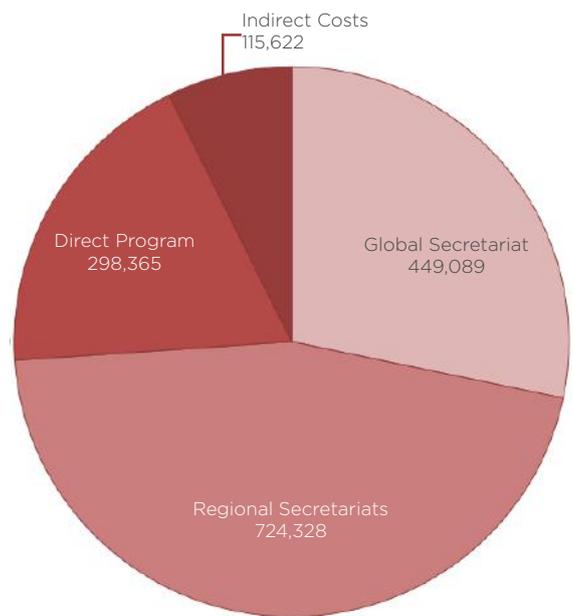
## 2016

Support for the implementation of Network programs, activities and development at national and regional levels consumes most of GGHH's income.

A portion of GGHH's income also finances a Global Secretariat that coordinates the Network and provides support for members around the world.

## 2017 TARGETS

- A. Grow our budget.
- B. Build new income streams.
- C. Diversify our funding base.



(\*) Currency in U.S. Dollars

## GENERATING REVENUE

In 2016 GGHH began an inquiry to identify opportunities to generate a portion of its revenue from its membership, and from the products and services it develops.

In 2016 this work focused on information-gathering and analysis of a wide range of income opportunities, with continued development, evaluation and implementation scheduled for 2017.

# About Health Care Without Harm

Global Green and Healthy Hospitals is a project of Health Care Without Harm (HCWH).

HCWH works to transform health care worldwide so that it reduces its environmental footprint, becomes a community anchor for sustainability and a leader in the global movement for environmental health and justice.

HCWH's vision is that health care mobilizes its ethical, economic and political influence to create an ecologically sustainable, equitable and healthy world.

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## PHOTO CREDITS

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[noharm.org](http://noharm.org)



[www.greenhospitals.net](http://www.greenhospitals.net)