Climate Innovations from Health Systems Attending COP21

Africa

Western Cape Government Health | South Africa (2020 Challenge Participant)
Western Cape Government Health is the agency responsible for the delivery of health services to the six million citizens in its province in South Africa. These services are provided in facilities that include 53 hospitals, 255 primary healthcare facilities, 61 ambulance stations, 18 forensic pathology laboratories, plus other health-related facilities. The Western Cape Government is very active both in relation to climate change mitigation strategies as well as climate change adaptation with commitments to reduce their carbon footprint from energy consumption at government hospitals by 10% in 2020 and 30% in 2050 based on 2015 levels.

Asia

Yonsei University Health System | South Korea (2020 Challenge Participant)
Yonsei University Health System (YUHS) is one of the premier health care providers in Korea. They manage facilities that serve 15,000 patients per day in the capital city of Seoul. As the first health system or hospital in Korea to take on environmental sustainability and climate change mitigation, YUHS has been a leader in developing this field since they began on their work in 2010. They have set targets to reduce the greenhouse gas emissions from their facilities by 27% by the year 2020.

YUHS leadership played a key role in the establishment of the Korea Society of Green Hospitals in 2013, bringing together 30 hospitals from around the country dedicated to addressing the environmental impacts of the health sector.

Tzu Chi Medical Foundation | Taiwan (2020 Challenge Participant)
Established in 1966, Tzu Chi Medical Foundation is one of the largest NGOs in Taiwan. Dedicated to improving social and community services, one of the key missions of Tzu Chi Foundation is environmental protection, with a focus on the mitigation of climate change, waste reduction and recycling. They advocate for individuals to take collective action to reduce their carbon footprint by leading a simple lifestyle and adopting plant-based diets that can lead to healthy solutions to climate change problems. The organization manages several hospitals and health care facilities around Taiwan.

Europe

BUND | Germany
BUND (Friends of the Earth Germany) is one of the most influential non-profit organizations in Germany with over 480,000 members and supporters. Their is to develop and influence environmental policies under the main focus areas of climate protection and the preservation of biodiversity.

With their BUND label for energy saving hospitals, they have created a specific program to move the health sector in Germany to increase their energy efficiency and reduce their energy use and output.
of carbon dioxide. In the past 14 years, BUND has awarded this label to 44 hospitals in the country for their work on climate protection.

**French Hospital Federation | France**
The French Hospital Federation (FHF), created in 1924, represents over 1,000 hospitals and approximately 3,800 public health institutions. Built around the shared values of equal access to quality care for all; dedicated innovation and excellence in care, partnership, education, and research; and consistency of care, the FHF is the true “common house hospital.”

**Region Skåne | Sweden**
Region Skåne is the County Council of Skåne County in Sweden whose primary responsibility is managing the regional healthcare system, made up of 9 hospitals, and public transport within the region. In 2009, Region Skåne set a goal for its buildings, public transportation and vehicles to be fossil fuel free by 2020.

By 2014, Region Skåne had seen great progress towards its goal: reporting 72% fossil fuel free energy use in buildings, transport and public transport for the year. Investment in six wind turbines that provide close to half the energy needs of the region has been a major contribution to closing in on their goal of fossil fuel independence.

**Santa’Orsola Hospital | Italy**
The Public Health Authority “Ospedaliero – Universitaria Policlinico Sant’Orsola-Malpighi” of Bologna, Italy manages a health complex of 30 buildings in the centre of the city that serves close to 4,000,000 patients annually. Sant’Orsola Hospital has been addressing sustainability and working to reduce their impact on climate change through two main focus areas: energy and water. Efficiency improvements and upgrades to machinery and technology throughout their facilities allow them to reduce their energy usage, conserve water and lower related greenhouse gas emissions.

The Sustainable Development Unit (SDU) is a strategic national unit working on behalf of the health and care system in England to develop, embed and promote sustainable development in order to reduce emissions, save money and improve the health of people and communities.

They aim to reach a 34% reduction of carbon emissions across the system by 2020 (on a 1990 baseline). In addition, the SDU is providing support to local leadership to improve the health, resiliency and sustainability of people and places around the country. With an eye towards future preparedness, they have regularly-updated extreme weather plans to be prepared for events such as heat waves, flooding and cold.

**Vivantes International Medicine | Germany**
Vivantes International Medicine, Germany’s largest state-owned healthcare group, offers medicine and medical care to Berlin and beyond.

Since 2003, Klinikum Neukoelln, one of their main hospitals in Berlin has achieved a 40% reduction of carbon emissions equal to over 100,000 tons of CO2. An energy strategy along with investments in energy efficient technology improvements as well initiatives implemented by hospital staff allowed the hospital to reach these accomplishments. In addition, the hospital has focused on sustainability in other sectors as well with a 20% reduction in water use, and 7% reduction of waste.
Latin America

Albert Einstein Hospital | Brazil (2020 Challenge Participant)
Located in Sao Paulo, Brazil, Albert Einstein Hospital is a 647-bed facility at the forefront of low carbon health care in South America. Since being the first hospital to join the Brazilian GHG Protocol Program in 2010, they have developed and implemented a sustainability master plan through a number of energy initiatives, resulting in a 41% reduction of annual greenhouse gas emissions.

Emissions related to anaesthetic gases have been a top focus for the hospital as they accounted for over 50% of its overall annual carbon dioxide output. Since identifying and targeting this source of emissions, Albert Einstein hospital has created an interdisciplinary team to increase awareness of the issue resulting in reduction of the use of N₂O for anaesthetic procedures by 23%.

North America

All of the following participants from North America are members of the Health Care Climate Council organized by Health Care Without Harm.

Dignity Health | United States (2020 Challenge Participant)
The fifth largest health care system in the United States, Dignity Health operates 380 health care facilities in 17 states. Over the past 5 years, they have dramatically reduced their annual carbon emissions and developed programs that have diverted over 350 tons of waste from entering landfills. This work will continue to develop in the coming years as Dignity Health has set targets to significantly increase its use of renewable energy and reduce their annual greenhouse gas emissions by 40% by 2020.

Using its voice and wide reaching grassroots network, Dignity Health strategically weighs in on key climate bills and regulations at the local, state and federal levels with elected leaders. They partner and collaborate with organizations and other institutions from the health sector to advocate for policies to mitigate and address the impacts of climate change.

Gundersen Health | United States (2020 Challenge Participant)
Gundersen Health has been a leader, both nationally and globally, in the low carbon health care movement for many years. By producing more renewable energy than it consumed in October of 2014, Gundersen became the first health system in the United States to achieve energy independence. In addition they have decreased their greenhouse gas emissions by 83% since 2008.

Kaiser Permanente | United States (2020 Challenge Participant)
Kaiser Permanente is one of the largest not-for-profit health plans in the United States serving 10 million people around the country at its 38 hospitals and 619 medical offices. They have been at the forefront of embracing clean energy solutions, developing standards for sustainable building in health care, and exploring ways to reduce their energy consumption. On a public policy level, Kaiser has been an on-going supporter of policies and legislation that aim to find solution to global warming.

Through investments and initiatives to improve the energy efficiency of their facilities and increase their use of energy from renewable sources such as solar and wind Kaiser is aiming to reduce their greenhouse gas emissions across the system by 30% by 2020.
Partners HealthCare | United States (2020 Challenge Participant)
Partners HealthCare is a private non-profit American health system focused on reducing energy consumption and greenhouse gas emissions from their facilities. They have set targets to reduce their emissions from energy consumption by 25% in 2020 and 80% in 2050 based upon 2008 levels.

A major advocate for health sector leadership on climate change at both the local and national level, Partners is a key member of the Boston Green Ribbon Commission, regularly participates in testimonies and roundtable discussions with government officials in Washington, DC, and partners with other leading hospitals and health systems to spread knowledge on how to move towards low-carbon health care.

Virginia Mason | United States (2020 Challenge Participant)
Virginia Mason is a health system based in the city of Seattle in Washington State. As the leader of the state group, Washington Business for Climate Action, they have driven the effort to create the Washington Climate Declaration, a “rolling call to action, urging the public, policymakers and other business leaders to seize the opportunity to advance Washington’s economic and energy security by tackling climate change.”

Their Seattle Hospital and Medical Center has implemented comprehensive efforts to reduce their energy, natural gas, and water use. They have set a target to reduce their greenhouse gas emissions by 30% by the year 2020.

Pacific

South Western Sydney Local Health District | Australia
South Western Sydney Local Health District has undertaken a number of effective measures to reduce energy and water consumption including: upgrading air-conditioning, installing energy efficient lighting, flow restrictors to washbasins and showers. These initiatives generated significant financial savings and reduced annual CO2 emissions by 6,370 tonnes.

Global

Bupa
Bupa is a global health and care company that offers health insurance, medical subscription and other health and care funding products in addition to running its own hospitals and health care facilities to 29m customers in 190 countries. With no shareholders, Bupa invests their profits around the world to provide more and better healthcare.

Bupa is working to cut its carbon emissions around the world. It has invested over £50m and launched over 900 low carbon and renewable energy projects at its facilities in the United Kingdom, Spain, Australia, New Zealand, India, Hong Kong, and Poland. Projects include installing solar panels and LED lighting. The projects will save BUPA about $6 million, and reduce its carbon emissions at two-thirds of its buildings. It was the first private health care concern to receive a Carbon Trust Standard certification for its emissions reductions and for the quality of the carbon data it collected.