

José Manuel Barroso
President
European Commission
B-1049 Brussels
BELGIUM

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European healthcare sector demands an ambitious 2030 climate and energy policy framework

Dear President Barroso,

Copied to: Vice-President Rehn, Vice-President Tajani, Vice-President Almunia, Commissioner Hedegaard, Commissioner Potočník, Commissioner Oettinger

Ahead of the scheduled release of the White Paper on the 2030 climate and energy framework, Health Care Without Harm Europe, being one voice of the European healthcare sector urges the European Commission to agree on a comprehensive 2030 policy framework with binding and ambitious targets for greenhouse gas emissions reduction, renewable energy and energy savings.

Medical professionals and leading health institutions in Europe and globally are increasingly concerned about the impacts of climate change on health and the healthcare sector. On 16th November 2013, in parallel to the UNFCCC COP 19 negotiations in Warsaw, the Global Climate and Health Alliance¹ held the second Climate and Health Summit where stakeholders emphasised the link between climate change and negative health consequences, such as extreme weather related conditions, heat related illnesses, and infectious, respiratory and cardiovascular diseases, with severe economic impacts also for EU Member States due to mortality and morbidity².

The approximately 15,000 European hospitals have a high demand for heating and electricity and require a large amount of energy for water heating, ventilation, air conditioning and steam. They collectively account for some 5% of EU CO₂ emissions per annum³, a figure similar to the international aviation and maritime transport activities in Europe that also contribute to the future burden and costs of the impact of climate change on public health and health systems in Europe.

¹ <http://www.climateandhealthalliance.org>. The Global Climate and Health Alliance was formed in Durban in 2011 to tackle climate change and to protect and promote public health. Members: Climate and Health Council, Health & Environment Alliance, Health Care Without Harm, International Federation of Medical Students' Associations, Climate and Health Alliance, fhi 360, NHS Sustainable Development Unit, C3, New Zealand Climate & Health Council

² By 2100 premature deaths due to climate change will be between 1,5 a 3 million/year according to the Study of the University of North Carolina (24 September 2013). Climate change will affect, in profoundly adverse ways, some of the most fundamental pre-requisites for good health: clean air and water, sufficient food, adequate shelter and freedom from disease. (World Health Organization, Protecting Health from Climate Change, Connecting Science, Policy and People: http://whqlibdoc.who.int/publications/2009/9789241598880_eng.pdf)

³ State of the Art Report: Low Carbon Buildings in the Healthcare sector, published by the LCB-HEALTHCARE European Public Procurement Network (www.lowcarbon-healthcare.eu), April 2011

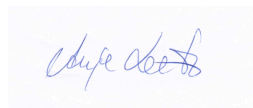
On the other hand, the healthcare sector is already taking measures to address its climate footprint exploring options to generate an increasing share of their energy needs from renewable sources and to improve their energy efficiency with encouraging results in many Member States. In Germany, some 40 hospitals have received the “energy-saving hospital”⁴ label developed by BUND Berlin (Friends of the Earth, Berlin). Overall, 55 000 tons of CO₂ emissions per annum have been saved, by reductions of 18 000 MWh per year of electricity and 130.000 MWh per year of heat. Alone those few hospitals bearing the label have already saved more than 9 million Euros per year and one has saved up to 2.1 million Euros per year.

The Hospital de Mollet, a new hospital built near Barcelona in 2010, is designed with a strong focus on eco-construction and sustainable management: the development includes a geothermal heat pump system that provides around 30% of the total energy needs of the hospital. The system provides both heating and cooling energy loops to the hospital with significant savings in the use of natural gas for heating. With the combination of energy saving design features and renewables, the use of fossil fuel (natural gas) is 65% lower than would be typical for a conventional hospital design of this size. The largest proportion of this (42%) is due to the heat pump system, which reduced the need for gas boilers. It also reduces emissions from the use of fossil fuels by 834 tons of CO₂ per annum. Further to these examples, you will find other best practices from Sweden and the Germany⁵ in the annex to this letter.

The huge potential for reducing emissions in one sector alone can only be achieved with a strong 2030 package. For example, the healthcare sector, as an enormous consumer and user of energy, needs clear guidance and support to continue the effort to decarbonise their operations, being able to switch to renewables, such as geothermal, solar and combined heat and power plants. This is why Health Care Without Harm Europe is calling for at least 55% greenhouse gas emission reductions within the EU, a 45% renewable energy share, and 40% energy savings by 2030. Such a commitment would, among others, bring substantial health benefits and healthcare savings for Europe. In fact, it will lead Europe to low carbon energy systems, away from dirty coal use that increases the health burden for the EU citizens and costs for healthcare systems in EU Member States.

Many thanks for your consideration.

Yours sincerely,



Anja Leetz
Executive Director
Health Care Without Harm Europe

HCWH Europe (<http://noharm-europe.org>) is a non-profit European coalition of hospitals, healthcare systems, medical associations, healthcare professionals, local authorities, research and academic institutions and environmental and health organisations in Europe. Our mission is to transform the European healthcare sector so that it becomes ecologically sustainable and no longer a source of harm to the environment and ultimately to human health.

⁴ Source: <http://www.energiesparendes-krankenhaus.de>

⁵ More case studies on the Netherlands, Italy, Spain and the UK available on the website of the RES-Hospital project (<http://www.res-hospitals.eu/library>) that is co-funded by the Intelligent Energy Europe programme and participants from seven countries. The aim of the project is to encourage hospitals to be more strategic and sustainable about both energy reduction and production including the wider exploitation of renewable energy opportunities.

Annex I: Germany

Case Study: Energy Savings

The 295-bed Enzkreis Kliniken hospital in Mühlacker, Germany, has reduced carbon emissions by 40%, saving approximately 2.300 tons of carbon dioxide (CO₂) annually. For this work the hospital has received the label of “energy-saving hospital” from the German environmental group, BUND. The BUND label is an award for outstanding engagement in the area of energy saving and climate protection. To qualify, two out of four criteria have to be fulfilled, covering reductions in CO₂ output of 25% or more, continuing reductions in energy consumption, long-term optimal energy consumption in new buildings and the implementation of an energy management system.

The hospital’s programme included the following actions:

Combined heat and power supply

A combined heat and power plant (CHP) (output 524 Kw electric and 640 kW thermal) achieves an efficiency of 90%. Installation of new energy efficient compressors for pressured air saves 30% energy compared with the older ones. New lights in the administrative wing gave energy savings of approximately 30 - 35%. Renovation of clean air technology equipment and installation of heat recovery systems gave 10 - 15% energy savings. Installation of new high-efficiency variable-speed pumps in the heating system gave power savings of 30 - 40% compared with conventional pumps.

Energy savings through building renovation

Renovation work included installation of a 12 cm layer of insulation to the façade and 16 cm of insulation to the roof. Energy-efficient vinyl windows replaced 100 aluminium windows.

Energy supply by the sun

An 800 m² photovoltaic system with a power rating of 90 kW has been installed on the south side of the hospital (equivalent to around 20 household-scale installations). Any surplus electricity generated can be fed into the grid system. The collector panels also offer shade to the patient rooms. In addition, the hospital offers their roof for another photovoltaic plant. This 220 m² facility is operated by the town energy supplier for Mühlacker and has a power rating of 26 kW.

Energy management

The technical energy management system ensures continuous monitoring of the heat supply based on automated data collection and building control. The operator can react quickly to disturbances and enable optimum operation. The hospital administration is briefed annually on the energy consumption of the buildings. Opportunities for energy savings and efficiency are presented to the management by the technical department. Regular meetings for the efficient operation of the technical equipment are held with the technical staff. Some energy consumers (residential homes, geriatric rehabilitation clinic) are informed about their energy consumption and educated about energy efficiency in these areas.

So far 40 hospitals in Germany have received the “energy-saving hospital” label. Overall, 55.000 tons of CO₂ emissions per year have been saved, by reductions of 18.000 MWh per year of electricity and 130.000 MWh per year of heat. Up to 2.1 million Euros per year have been saved in one hospital and more than 9 million Euros per year have been saved by all 40 hospitals with the BUND label.

Source: <http://www.energiesparendes-krankenhaus.de>

Annex II: Sweden

Case Study: linking adaptation and mitigation

The region of Skåne in southern Sweden has been working on environmental issues for many years with the recognition that a sustainable environment must be central to their future. The goals for the region are to reduce greenhouse gas emissions (mitigation) and to adapt to climate change while promoting a sustainable society in collaboration with citizens, organisations and business interests.

Skåne region has responsibility for regional development, public transport and health care, including nine hospitals. The region has agreed on an environmental programme for 2010-2020, which includes the goal of becoming fossil fuel-free by 2020, with clear targets to steer this. By 2012, 60% of heating should come from renewable sources and 50% of all transport should be using renewable sources of fuel. By 2016, these goals rise to 80% for heating and 75% for transport. As of 2012 the buses in Skåne are running largely on gas. Some 50% of the gas used is biogas from food waste and the remainder is compressed natural gas.

As part of their mitigation effort all nine hospitals had to obtain the environmental management certification ISO 14001 by 2009. In addition all electricity used in the region's real estate has to be eco-labelled.

Together with the city of Malmö, Skåne region is engaging in a "Climate Friendly Health and Care" (CLIRE) project, funded by the EU LIFE+ programme. This will demonstrate how carbon emissions from the healthcare sector can be reduced by 50%. There are four sub-projects to be completed by 2015, one of which looks at energy reduction of a 16,160 square metre building at Skåne University Hospital in Malmö. Measures include replacement of fans, thermostats and pumps with more efficient ones and the improvement of the ventilation and heating systems. The energy efficiency measures will save 436,000 kWh/year for heating and 519,000 kWh/year for electricity.

It is worth noting that Sweden has developed a heat warning system, coming into action on forecasts of high maximum temperatures on more than three consecutive days (level 1 >27°C, level 2 > 30°C, level 3 > 33°C). The adaptation action however is required at local level.

Adaptation measures in the region include preparedness for climate related impacts, such as heat-waves. Close collaboration is in place between local organisations, helping to contribute medical expertise to long-term measures aiming to reduce heat stress during heat-waves, tackling health problems from damp buildings and flooding and dealing with new water-borne infections. Other projects include designing adequate warning systems, identifying susceptible groups, informing concerned individuals and their families and providing instruction to those caring for elderly and disabled people in their homes or in care homes. Since the region is multi-ethnic the need for translation has also been identified.

<http://www.miljo.skane.se/eng/start/english.htm>

http://www.miljo.skane.se/eng/a/bilagor/Environmental_Prog_2010.pdf

<http://www.clire.se/>