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Bureau of Health Promotion
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The role of Health Professionals and Hospitals in Promoting National and Global Carbon Reduction Policies

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Dr. Carbon ZERO's green life

- Dr. Carbon Zero introduced energy efficient lighting, heating/cooling, reduce wastes,....
- Replaced all mercury type blood pressure measuring devices to non-mercury type
- Using phthalate or bisphenol A free materials
- Recommends diet and exercise which gives co-benefits to health and planet when seeing obese / diabetes patients



Dr. Carbon ZERO's green life

- He changed his own dietary pattern into less carbon footprint (vegetables, grains, dairy products, chickens rather than pork or beef)
- Using bikes or public transportation for commuting
- Dr. Zero made an article about the relationship between climate-friendly diet / lifestyle and obesity / diabetes



Dr. Carbon ZERO's green life

- He also has interests in the strong hypothesis that obesity / diabetes are related to certain kinds of chemicals around us
- Dr. Carbon Zero has joined NMA to help making policies for advocating, education, leadership roles in mitigating and adapting climate change

World Medical Association (WMA)

Foundation and Development

- Established in 1947 with 27 members of Europe's organized medicine
- The human tragedies from World War II heightened the need for a coalition of NMAs

Internationally united physician organization representing more than 960,000 physicians around the world

World Medical Association (WMA)

Mission

Promotion of medical ethics

- Advocate physician's professional independence
- Strive for the highest possible standard of medical care and ethics
- Adopted a series of declarations on medical ethics

Action on social issues

- Human Rights
- Patient-physician relations
- Medical education
- Environmental protection

WMA's Objectives on climate change

Pressing for bringing health to the
forefront of global climate change debates

Encouraging NMA's and physicians to engage in
the protection of health from climate change

WMA's commitment to climate change

WMA Statement on the Role of Physicians in Environmental Issues (1988):

- WMA committed itself to engage in environmental issues
- Defining physicians' role to deal with health aspects of climate change

WMA's commitment to climate change

WMA Work Group on Health and Climate Change

- Established in 2008 to draft policies to address health effects of climate change
- The WMA Seminar on Climate Change and Health Care (Sept. 1st , 2009, Copenhagen)
- WMA Delhi Declaration on Health and Climate Change (adopted in 2009)
- WMA Environmental Degradation and Sound Management of Chemicals (adopted in 2010)

Principles

- ✓ What is good for environment is also good for health of the people.
- ✓ What is good for your health is also good for the earth.

Leadership of Organized Medicine on Climate Change

Encouraging NMAs

- to press their governments to take fully consideration into health impact of climate change as well as public health benefits of climate change mitigation activities

(WMA launched a lobbying action with NMAs such as “model letters” in 2010 to make health an inherent component of governmental climate talks)

Leadership of Organized Medicine on Climate Change

- to get physicians involved in the commitment for a healthy climate
 - strengthening professional education on environmental health and physicians' obligation and responsibilities for the commitment
 - getting physicians engaged in networks and groups that can work together
 - raising physicians' involvement in the development of policies to protect the health from climate change

Leadership of Organized Medicine on Climate Change

- to foster studies and research on:
 - burden of disease caused by climate change
 - impact of climate change on the most vulnerable population
 - patient environmental impact assessments to evaluate patients' risk from climate change
 - basic statistics on carbon footprint in health care sector

Leadership of Organized Medicine on Climate Change

Strengthening collaboration with other health organizations and NGOs

- collaborating in their examination of the human health effects of climate change, their prevention, treatment for individuals and communities
- expanding collective potential to protect health from climate change

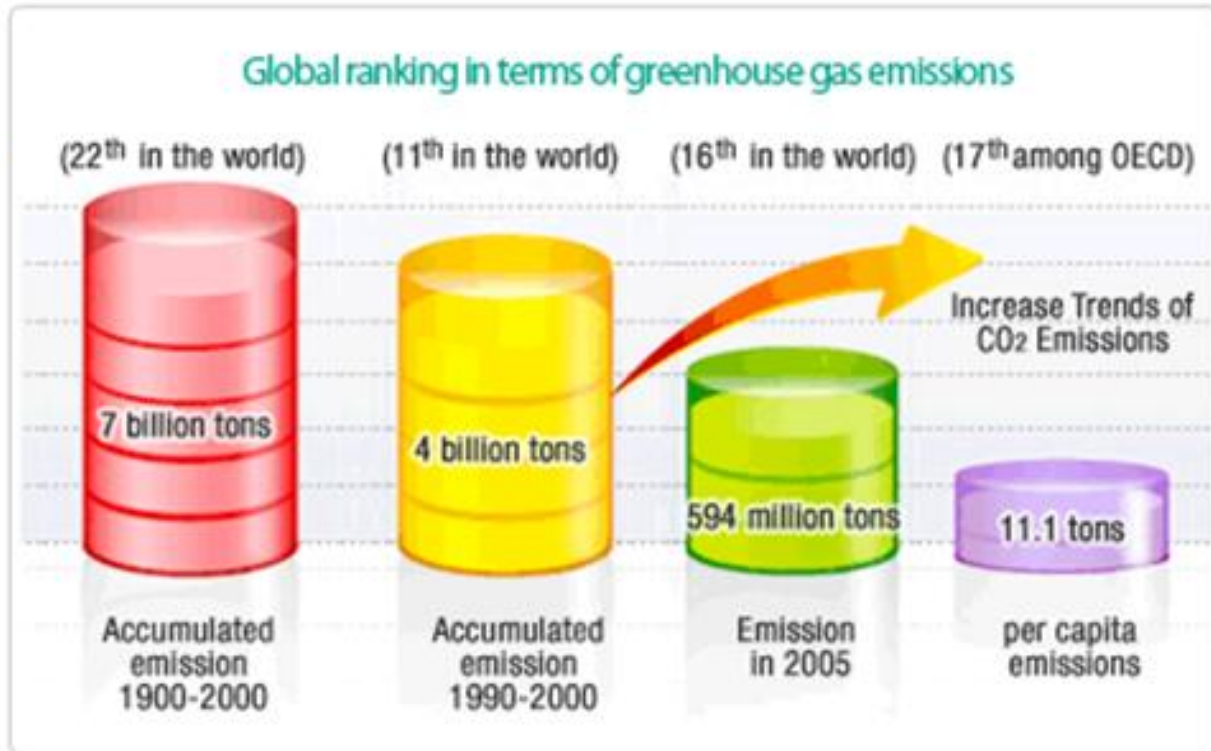
Korea: the 9th biggest greenhouse gas emitter

Sharp increase in CO₂ emissions for the past 15 years due to manufacturing-based industrial development (99% increase from 1990 to 2005, Ranked 1st among OECD countries in terms of rate of increase)

43.3 billion tons (CO₂) worldwide



Release ratio: 1.2%
(16th in the world)



Concepts of Green Hospital

The Green Guide for Healthcare(2006)

Opportunities to enhance environmental performance in the following domains

**: site selection, water conservation,
energy efficiency, recycled
and renewable materials,
alternative transportation,
Day-lighting, organic food use ..**

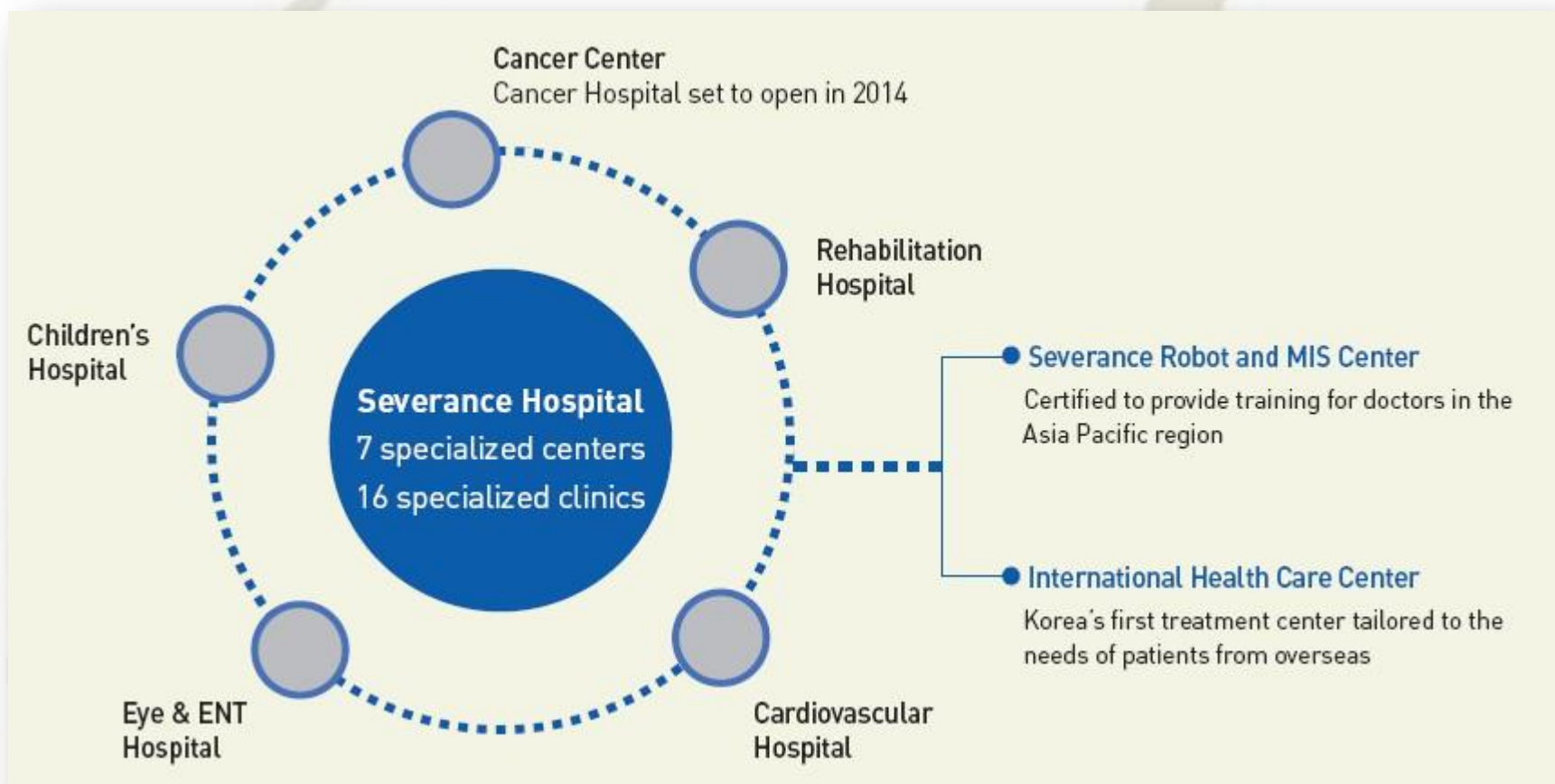
Source : The Green Guide for Healthcare(2006)

“The history of Yonsei University Health System is the history of medicine in Korea.”

- Yonsei University Health System (YUHS) was founded in 1885 as the first modern medical institution in Korea by the American medical missionary, Dr. Horace N. Allen.



- Five hospitals : Severance Hospital, Gangnam Severance Hospital, Yongin Severance Hospital, Severance Mental Health Hospital, Dental Hospital
- **Severans Hospital**



Current status

7,000 employees (2,000
physicians)
3,700 beds
3 million outpatients annually
1 million inpatients annually
a building size of 18,000 Pyung
($59,508\text{m}^2=640,538\text{ft}^2$)
a total floor area of 140,000
Pyung ($462,840\text{m}^2=4.98$ million
 ft^2)



Joint Commission International (JCI)

- Severans Hospital becomes Korea's first hospital to receive Joint Commission International accreditation in 2007.
- JCI is to evaluate healthcare organizations throughout the world using an established set of standards designed to improve the quality of medical care and ensure patient safety.



JOINT COMMISSION
INTERNATIONAL
ACCREDITED
ORGANIZATION
RESOURCE CENTER



Green Severans Hospital

: Backgrounds

1. SOCIAL RESPONSIBILITY

- ✓ To prevent global warming from being aggravated
- ✓ For the 'low-carbon' economy

2. GLOBAL AND NATIONAL REGULATIONS

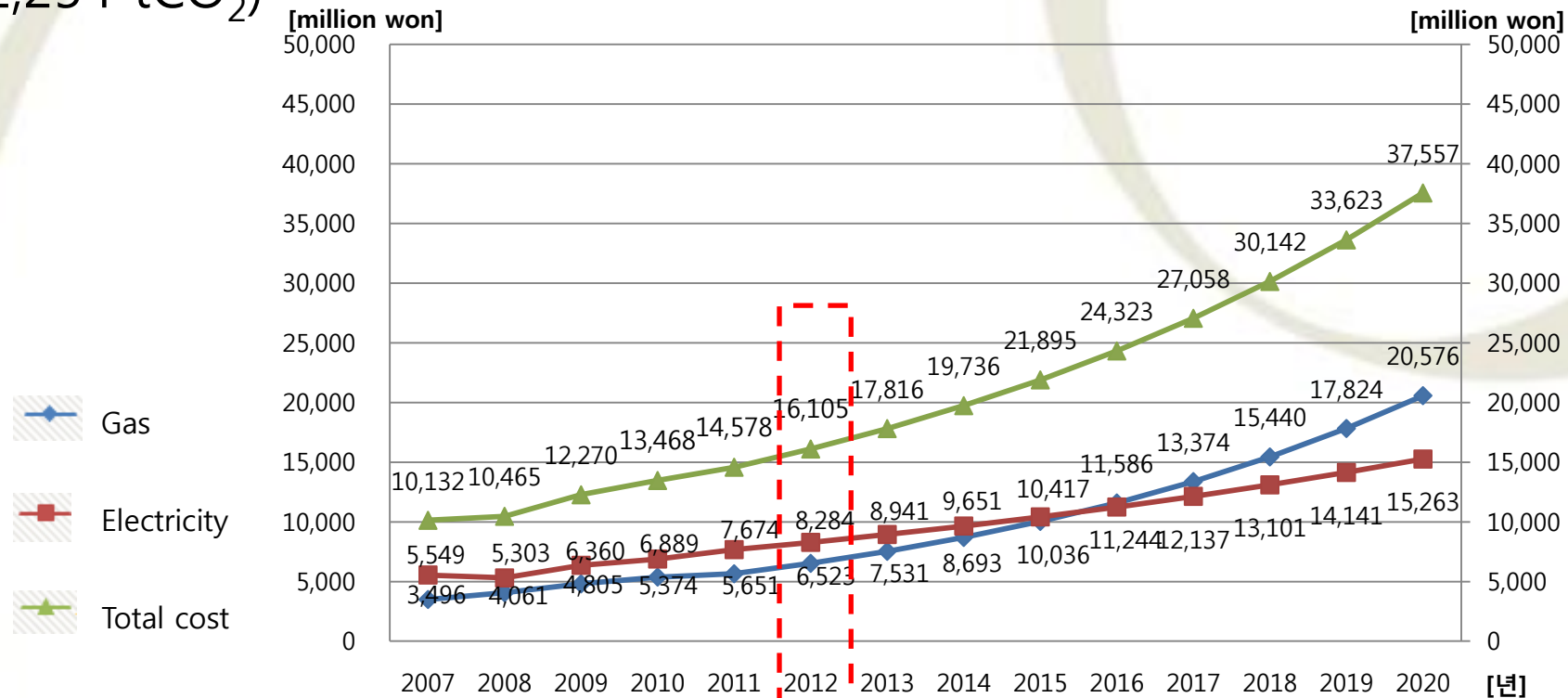
- ✓ The Basic Act on Low Carbon Green Growth
- ✓ Greenhouse gas reduction target

3. COMPETITIVENESS IN MANAGING HOSPITAL

- ✓ Energy cost increasing

Practical strategies

- Energy cost increasing by 9-10% annually
- The permissible amount of greenhouse gas emission in 2012 : 55,724 tCO₂
- Greenhouse gas emission reduction target in 2012 : 2.2% (1,254 tCO₂)



Practical strategies

Building Energy Management System (BEMS)

Construction of IT-based computing system

Improvement of energy efficiency

Reduction activities – “Green Severans
10”

실천! Green Severance 10

“우리의 습관을 바꾸는 것! 녹색 성장의 기본입니다”



Using individual cups



Sleep mode of PC and monitor



Turning off multi-taps, lights, and air-conditioners when unnecessary



Reducing leftover food



Thorough recycling



Saving tap water



Paperless: using electronic equipment and reusable paper



Long underwear in winter

No tie in summer



Going up and coming down

the stairs



Commuting by public

transportations

“Green Severans”



- ✓ For the environmental preservation, Severans hospital is setting the temperature in winter at 20-23°C.

In light of green hospital,
our philosophy is.....

人 + 二 = 仁

Love others.
Do not have
others do what
you don't want
to do. – Confucius

Thank you for your
attention!



Jeju island, Korea