

IFHE (IFHE-EU) working group ENERGY.

IFHE-EU organized a questionnaire about energy consumption versus building constructions and technical infrastructures. What exists now, how about insulating building (walls, basements and roof), which kind of energy is used, energy consumption of medical devices,...

We have to think about:

1. How reducing energy-invoice: This item concerns energy-efficient installations and medical apparatus, the site-layout (orientation of the building), windows, building materials for walls, basement and roof.

2. Future :

One of the big challenges is creating an energy-less (free ?) consumption by using 'green' principles. The environmental safety is very important: the impact of nuclear and conventional power plants.

There are a lot of 'alternative' energy sources like wind, water, sun, technical 'energy-saving' installations (like cold water or ice-water storage for rooms medical devices, heat pumps, wood-pellets, lightning,..). Costs-benefit considerations are discussion points.

In healthcare we always need energy (day and night). Technical aspects, energy consumption behavior and the consumption of medical devices are also very important in reducing energy consumption.

We think it is good to create a common factor (figure): one of the best factors is the CO^2/m^2 ($\text{kg CO}^2/\text{m}^2$) usable surface heated/cooled. Also the NOx level is important (see explained benchmark)

This way of working will be easier to make a proposal to the different local governments

The proposal will take care of: building concept, energy management, kind of energy sources versus CO^2 level and versus pay-back period of the investments, controlling energy consumption, defining temperatures in different rooms, environmental considerations according to the depletion of earth energy sources and may be financial compensation (f.i. compensation for good CO^2 parameter)

To finish we will give some objectives (targets): reducing CO^2 and energy-checklist (very useful for existing buildings who will decrease energy consumption).

Paul Merlevede, engineer and safety coordinator

IFHE – WHO liaison

Secretary IFHE-EU

paulmerlevede@hotmail.com

mobile 0032478221751

IFHE-EU: International Federation of Hospital Engineers in Europe (sub-structure of IFHE)