Hospital Universitari Mollet, a Net Zero center

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Fundació Sanitària Mollet is a non-profit organization that offers social and health services in Vallès Central, Barcelona, Catalonia, Spain

**Our purpose:** Improve the lives of our people
Committed to sustainable quality

For the FSM, one of the institutional principles is Green Culture and Environmental Sustainability, which is manifested through the commitment of senior management and the involvement of process leaders, making this culture reach all employees.

- OSHAS 18000
- ISO 14001 Gestió ambiental
- ISO 14001 Gestió energètica
- ISO 9001 Residencial
- ISO 9001 Laboratori
- IQNet “RS10”
- EFQM 400+
- ISO Entitat saludable
- EFQM 500+
- Joint Commission International
- Excellence Award Green Hospitals IHF
- Excellence Award for Healthcare Workers’ Wellbeing · IHF
Introduction: Why?

Health sector, if compared with the pollution of a country, would be equivalent to the 5th most polluting country in the world.

Hospitals are responsible for 4.4% of total CO2 emissions in Europe.
From FSM and over the course of 14 years, we have worked to progress **reducing the impact of our activity on the environment and our carbon footprint.**

1. Structures
2. Processes
3. Governance
4. Culture
1. Structures

Light wells and sustainable architecture

Radiant ceilings and sustainable roofs

Collection and use of rainwater

40% less consumption for lighting

Thermal insulation and acoustic control

Water consumption has been reduced from 32,000m$^3$ to 26,000m$^3$ per year.
1. Structures

- Geotermic energy
  - 148 wells that reduce air conditioning energy consumption by 30%

- 100% renewable electrical energy
  - Certified renewable energy

- Recycling and waste management
  - From 9 to 25 types of managed waste
1. Structures

Photovoltaic cover

1,368 solar panels in 6,500m²
saving of 120 tons of CO₂
emissions >15% on average of the
total energy consumed by the hospital

We plant 1 tree every day
Analysis of the processes of the Acute care hospital was carried out with the aim of identifying the factors with the greatest impact on CO2 emissions and the possibility of improvement.

The involvement of all professionals was decisive in determining the most feasible actions with the greatest impact to reduce the carbon footprint.
2. Processes

Reduction of in hospital days

- 1 day of hospitalization generates 7kg of solid waste
- If unnecessary stays are reduced, the environmental impact is also reduced

Home hospitalization

Fast-track for hip and knee prostheses
2. Processes

Avoid unnecessary travel

7% of the emissions

Virtual visits have increased by 24%

New Rehabilitation YouTube channel to improve treatment follow-up from home

High-efficiency visits
2. Processes

Avoid unnecessary tests. Promoting right care
High impact of diagnostic tests on energy consumption and waste generation

Semi-automatic medicine cabinets throughout the FSM: patient safety with impact
The generation of medication waste is reduced by 29%
2. Processes

GreenLab

Efficiency and waste reduction

Capture filters for anesthetic gases

prevent their release into the atmosphere.
A SUSTAINABLE HOSPITAL

**STRUCTURES**
1. Radiant ceilings and sustainable roofs
2. Courts of lights and sustainable architecture
3. Solar panels
4. Control panel
5. 100% renewable electrical energy
6. Rainwater collection
7. Waste management
8. Geothermal
9. The Oak of Vallès (social)
10. Natural environment (Gallecs)

**PROCESSES**

Reduction in hospitalization days:
1. Prioritization of hospitalization at home
2. Fast-track for knee and hip prostheses

Reduction of travel and sustainable mobility
3. High-performance urology consultation
4. Teleconsultation
5. Recuperat's online project
6. Parking and loading of bicycles and scooters for professionals
7. Electric car and parking

Waste reduction
8. Semi-automatic medicine cabinets
9. Returnable cafeteria containers
10. Reusable surgical clothes
11. Installation of water fountains

More efficient systems
12. Diagnostic suitability
13. Capture of anesthetic gases

Circular economy
14. Gallecs products in the dining room
3. Governance

Institutional ethics and governance

Motivation: Institutional Principles

- Ethical thinking
  Unfolding the ethical proposal

- Trust
  Hand in hand with quality (EFQM, JCI)

- Green Culture
  Commitment to climate action

- Pro activity
  Anticipating the future
4. Culture

RESULTS

- **49%**
  Professionals participation

- **9.41/10**
  Knowledge about what the FSM is doing in environmental matters

- **8.72/10**
  “It is a priority for the FSM to achieve 0 emissions”

- **43%**
  Use new technologies to avoid unnecessary travel

- **44%**
  Professionals have been trained to manage the health effects of heat waves and tropical diseases
Given that activity at the hospital has increased over the last 11 years due to an increase in the population it serves. Nonetheless, electricity consumption has decreased by 26.37%.

The hospital has achieved a significant reduction in emissions (scope 1 & 2): 91% over 12 years of activity.

The water consumption has decreased by 36.36%, thanks to improvements in resource management, installing irrigation systems with lower water consumption, rainwater control and flow reducing equipment in all the hospital showers. 15% of the roof is landscaped or covered in plants.
The Green Hospital project, active for a decade, prioritizes sustainable facilities, processes, and green culture.

For these reasons, in the last 14 years the Mollet University Hospital has achieved a 85% reduction in direct CO2 emissions and offset the rest.

Today we are a Net Zero Hospital.
Thank you

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