# Climate and environment: challenges for hospitals and healthcare services

### Team Estonia

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# Our Tour



- eEstonia, Health Insurance Fund, Health and Welfare Information System
- East Tallinn Central Hospital
- East Viru Central Hospital
- North Estonia Medical Centre
- Tartu University Hospital
- South Estonia Hospital
- Pärnu Hospital
- Haapsalu Neurological Rehab Centre

Over 500 miles travelled around the country!



hope

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# **Current Situation**

- Decreasing population
- Aging population
- Health staff migration (outward)



- Climate changes
- And the more recent geopolitical situation

- Shortage of resources
- Planning equity and access to care services
- Changing health needs and increase in preventative/awareness campaigns



### **Master Plans**

#### **Hospital Master Plan**

- Established in 2019
- Highlighting key areas
- Outside factors like corona virus, Ukraine war

#### **Resilience and Recovery Fund**

- Supporting recovery from corona
- Address environmental concerns
- 42% spent on green transition
- 22% reserved for digital transition



# European Green Deal: Focus Estonia

#### **Green Deal Goals**

- Reduce emissions by 24% by 2030
- Reduce reliance on oil and gas



#### **Focus Estonia**

- Green energy
- How to support continuity of vital services
- How to sustain electricity supply

Green business focuses on areas such as:

- Modernizing processes
- Modernizing systems
- Supporting the move to paperless working
- Supporting further enhancements to digital systems
- Closing the digital divide across rural and urban areas



### National Level: Digitalization in Healthcare

#### About

- Estonia has the best digital health system
- 99% of state services are online
  - E-Health Record
  - E-Ambulance
  - E-Prescription

### How it impacts the environment

- Reduction in patient travel
- Reduction in clinicians travel
- Reduction in paper printing
- Utilization of accommodation
- Results in more efficient use of resources
- Increased Health literacy



### National Level: Digitalization in Healthcare

#### **Digital infrastructure in Hospitals**





### Organizational Level: Waste Management

#### About

- National Goal in waste:
  - Recycle as much as possible
  - Avoid production of Waste
- The state, enterprises and citizens must all contribute to reach the goals

#### How to reduce Waste

- Changing structures and equipment in wards, kitchens and food production (e.g. Organic Waste Disposal System)
- Collecting Waste

#### **Other initiatives:**

- Dishwashing liquids with Eco labels
- Usage of bread end
- Developing new diets
- No more disposable take away food packages (cuploop System)



# Organizational Level: Waste Management

#### **Critical Care Unit**



#### **Collecting and Sorting Waste**





# Organizational Level: Waste Management

#### Waste sorting





### Individual Level: **Green Teams / Innovation Ambassadors**

#### About

- Organized group
- Volunteer members
- Advocate change within the organization
- Embedded in hospitals infrastructure: Intranet, Posters, Stickers
- Open for all staff to engage and submit ideas

#### How

- Reducing use of water bottles
- Health Paths, Activity
- Recycling of IT equipment
- Reducing printing levels



### Individual Level: Green Teams / Innovation Ambassadors

#### **Activity Paths**



#### Stairs vs. elevator







### Conclusion

- Energy along with healthcare should be seen as an investment into peoples and society health
- Successful digital landscape: depending on the green plan
- Holistic plan for the green agenda



# Thank you!

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