## Barmherzige Brüder Austria – Responsibility for Creation

Gerald Santer, EMAS Environmental Representative

#### Laudato Si



"There is a growing awareness of the environment and the care of nature, and a sincere, painful concern is growing about what is happening to our planet."



#### Barmherzige Brüder / St. John of God international





## EMAS-certified locations of Barmherzige Brüder Austria

- KH St. Veit 2015
- Kainbach 2018
- > KH Linz 2018
- ➢ KH Graz 2019
- KH Salzburg 2019
- ➢ KH Klagenfurt 2019
- KH Eisenstadt 2019
- KH Wien 2020
- Kritzendorf 2020
- Schärding 2021
- Franziskusschwestern Linz 2021



## Why is EMAS very important for our hospitals?

- Cost reductions
- Increased legal security
- Increased environmental awareness of employees
- Specific public relations internally and externally
- Validated environmental declarations
- Increased transparency
- Information exchange within locations and other EMAS organizations
- Periodic management reviews with executive leadership



# Environmental Protection at Barmherzige Brüder Austria



#### Goals and Key Measures by 2030 (Selected)

- $\geq$  98% CO<sub>2</sub> reduction by 2030 (baseline: 2017 Scope 1 & 2)
- Master plan: Building physics assessments of all existing facilities
- Renewable or waste heat-based heating at all Austrian sites
- New builds & renovations meet top sustainability standards (e.g. klimaaktiv GOLD)
- Cooling via district cooling / low-emission networks
- Adoption of new technologies (e.g. hydrogen, energy storage)
- Switch to low-impact anaesthetic gases & gas recycling



#### Environmental Cockpit – all sites

#### Current status: CO<sub>2</sub> reduction approx. -57.39% (Scope 1 & 2)

#### How we achieved -57% CO<sub>2</sub> (2017-2024, Scope 1 & 2):

- · Phased out heating oil and natural gas
- · Introduced anaesthetic gas recycling
- Switched to Austria's real electricity CO<sub>2</sub> mix
  - Temporarily used 0 kg CO<sub>2</sub> for electricity
- · Sustainable use of our own forest for heating





The Road to 2030: -98% CO<sub>2</sub> reduction vs. 2017 – a tough path ahead for the hospitals



#### Energy Management and Monitoring EUDT – all sites

#### **Energy consumption in real time**

#### Heatmap – "operation room"- energy consumption











BARMHERZIGE BRUD

## Cutting CO<sub>2</sub> Emissions through Anaesthetic Gas Recycling

- Global Warming Potential (GWP) over 100 years
- Desflurane: GWP 2,540
- Nitrous Oxide (N<sub>2</sub>O): GWP 300 (lifetime: 114 years)
- Isoflurane: GWP 510
- Sevoflurane: GWP 130

#### Real-World Impact – Example hospital Salzburg

- $\Rightarrow$  96.75 L Sevoflurane saved through low-flow anaesthesia & recycling
- = 6,666 kg  $CO_2$  avoided
- = 2,560 litres of heating oil
- = local Annual heating of a single-family home





#### Sustainable Mobility – exampel Hospital Linz

- Developing a mobility concept
- Staff mobility survey and distance analysis conducted
- Focus: Feasibility of cycling for daily commute
- Data shows many live within cycling distance

#### ✓ Immediate actions taken:

- Expansion of secure bike cages
- Additional bike parking spaces
- Installation of service stations (air pumps & basic tools)







## Climate friendly food supply

#### **Wienerschnitzel mit Pommes**





#### Käsespätzle







## Environmental Coaches - checklist

checklist:				
date:				
unit:	stroke unit, Krankenhaus der Barmherzigen Brüder, Salzburg			
environmentalcoach	name	singatu		

Questions tob e answered		Yes	No	n.r.*	detai	
	1	Are all unnecessary lights turned off?				
	2	Are windows closed when the ventilation system is on?				
	3	Are doors closed when the ventilation system is on?				
	4	Is waste separation carried out properly in the area during spot checks?				
	5	Are all unnecessary computers shut down?				
	6	Are all unnecessary electrical devices (printers, coffee machines, etc.) switched off? No standby mode!				
	7	Are all unnecessary medical devices (e.g. ultrasound machines, monitors, etc.) turned off?				
	8	Are unused charging cables unplugged (e.g. phone chargers, etc.)?				
	9	Have products belonging to patients who have been discharged been removed from the refrigerator?				
	10	Is oxygen turned off in patient rooms when not needed?				
	11	Is meal portion size adjusted to the patient's needs or canceled on surgery days?				
	12	Is the stock level in staff refrigerators adjusted to actual demand?				
	Vo	rschläge für Maßnahmen:				





## Let's clean up initiative!





#### Sustainable living and working "guideline" – EMAS Practice

- Environmental awareness is part of daily life: From waste separation and energy-saving routines to staff education and resident involvement, sustainability is actively lived.
- Creative upcycling instead of waste: Old materials are turned into useful and decorative items – from handmade paper to insect hotels and herb gardens.
- Less plastic, smarter products: Eco-friendly alternatives like detergent sheets, reusable containers, and reduced packaging are already in use.
- **Sustainability meets inclusion:** Clear visuals, simplified language, and participatory methods ensure everyone can contribute regardless of ability.



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