



ONE Health, ONE planet! How can EMAS help healthcare centres improve humans and planet's Health?

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EU Circular Talks

Servei de Prevenció i Medi Ambient



Towards a sustainable Health care

20/05/2025



CONSORCI
HOSPITALARI
DE VIC

Content



1. Committed to humans and planet's health
2. Actions and Achievements
3. Challenges and Opportunities

1. Committed to humans and planet's health



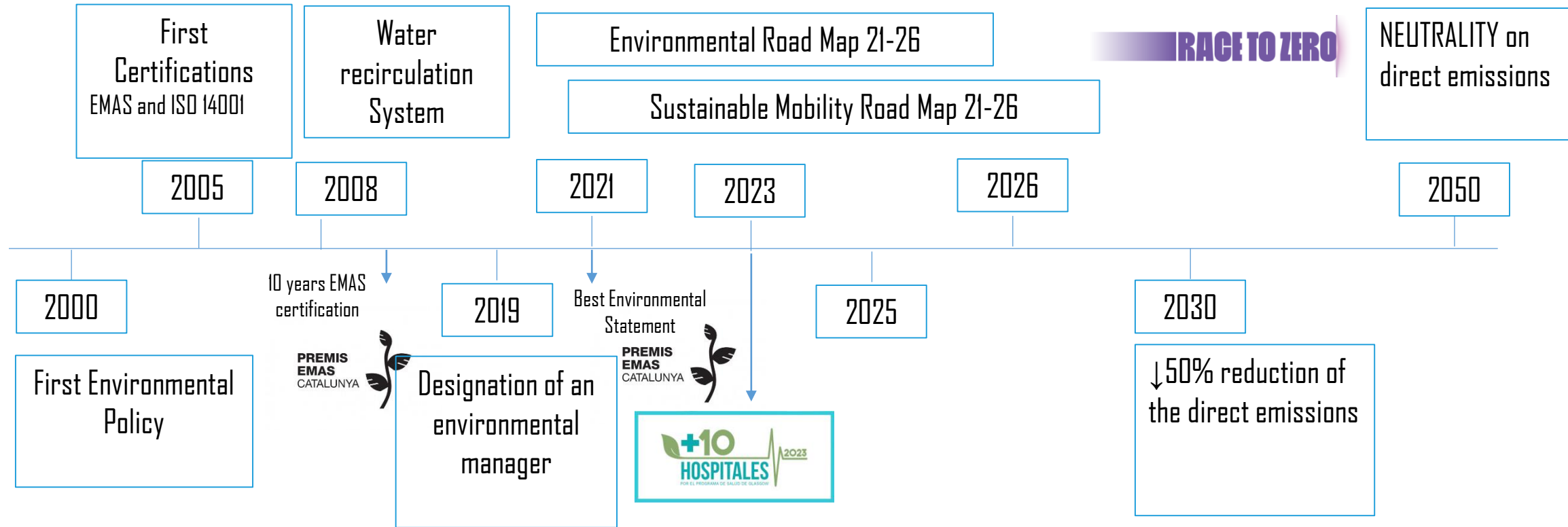
Committed to humans and planet's health

First Certifications

- ISO 14001 (19/09/2005)
- EMAS (30/09/2005)



Progress and Milestones in Environmental Management



Our commitment to sustainability continues



Environmental Road Map 2021-2026

-  Energy efficiency
-  Water saving
-  Hazardous product minimization
-  Circular Economy
-  Sustainable procurement
-  One Health Approach



-  Carbon footprint reduction
-  Reduction of pollutants
-  Landfill waste minimization
-  Friendly hospital
-  Economic savings
-  Alignment with the SDGs

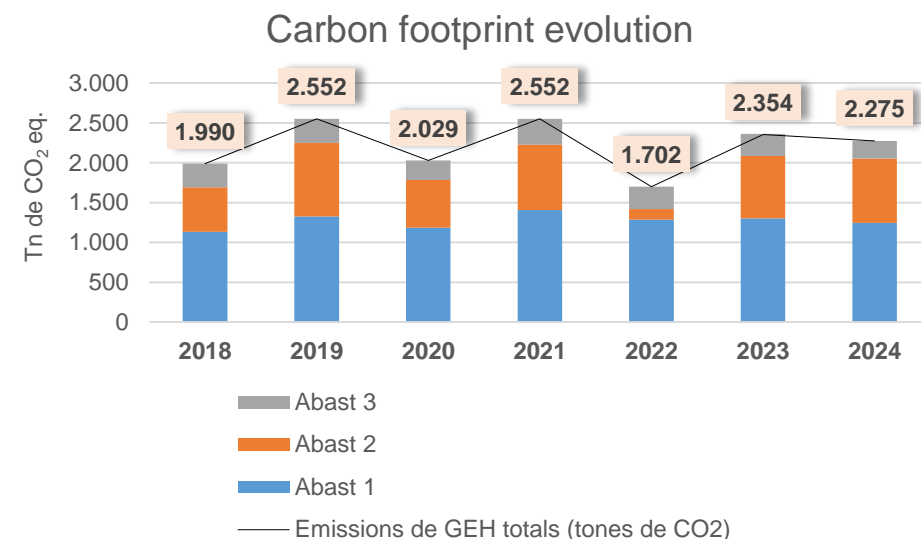
KPI Environmental Scorecard

	Aspect	Nº	Indicador	Unitat	Resultat 2023 fins Juny	Resultat 2024 fins Juny	Comparatiu 2024 vs 2023 fins Juny	Valor 2024	Objectius 2024	Δ 2024 respecte Objectius 2024
RESOURCES	Energy	1	(EE+NG) per superfície construïda	KWh/m²	124,4 kWh/m2	123,9 kWh/m2	-0,37%	239,0 kWh/m2	240 kWh/m2	-0,44%
		2	Energia procedent de fonts renovables respecte el consum total	%	14,24%	13,31%	-6,51%	12,07%	13,00%	-7,17%
	Water	3	Consum d'aigua per AP (*)	m³/AP	0,120 m3/AP	0,112 m3/AP	-6,54%	0,117 m3/AP	0,121 m3/AP	-2,95%
		3.1	Consum d'aigua per m2	m³/m²	0,058 m3/m2	0,062 m3/m2	6,05%	0,705 m3/AP	0,735 m3/AP	-4,10%
WASTE	Waste	4	Residu total per AP (*)	g/AP	1,50 g/AP	0,93 g/AP	-37,86%	1,52 g/AP	1,58 g/AP	-4,05%
		4.1	Residus Totals	t	271,25 t	171,44 t	-36,80%	521,86 g/AP	615,48 g/AP	-15,21%
		5	Residus valoritzat respecte el total generat	%	17,35%	36,48%	110,25%	28%	41%	-30,77%
		6	Residus perillosos per llit i dia	kg/llit-dia	0,56 kg/llit-dia	0,51 kg/llit-dia	-9,19%	0,58 kg/llit-dia	0,61 kg/llit-dia	-4,48%
CONSUMPTION	Plastic: gloves, bags, horeca	7	Consum de plàstic per AP (*)	g/ AP	153,8 g/AP	132,0 g/AP	-14,16%	133,7 g/AP	152,3 g/AP	-12,20%
		7.1	Consum de plàstic (kg)	kg	27.848,5 kg	24.238,5 kg	-12,96%	47.067,4 kg	40.900,0 kg	15,08%
	Paper	8	Consum de paper per AP (*)	g/ AP	36,1 g/AP	33,2 g/AP	-8,15%	37,0 g/AP	39,0 g/AP	-5,14%
		8.1	Consum de paper (kg)	kg	6.492,4 kg	1.011,9 kg	-84,41%	12.875,6 kg	13.200,0 kg	-2,46%
CARBON FOOTPRINT	Carbon footprint (no mobility)	12	Emissions de GEH per AP (INDICADOR ANUAL)	kg CO₂/AP	4,3 kg CO2/AP	8,7 kg CO2/AP	102,07%	6,6 kg CO2/AP	4,5 kg CO2/AP	47,24%

Carbon Footprint

RACE TO ZERO

Emissions de gasos d'efecte hivernacle del CHV (tones CO2) CHV	2019	2020	2021	2022	2023	2024	Δ 24-23
Emissions directes de CO2 (abast 1)							
Gas natural	1.211	1.122	1.347	1.231	1.249	1.193	-4,5%
Gasoil dels vehicles	13,6	14,3	11,6	11,4	5,8	2,3	-61,1%
Benzina dels vehicles			5,2	5,7	6,4	6,7	4,5%
Gasoil del grup electrogen	1,3	0,2	3,6	0,0	0,0	0,0	
Km recorreguts pels treballadors	100	47	41	39	41	44	7,0%
Total emissions abast 1	1.326	1.184	1.408	1.287	1.302	1.245	-4,4%
Emissions indirectes de CO2 (abast 2)							
Electricitat	924	600	819	133	785	809	
Total emissions abast 2	924	600	819	133	785	809	3,0%
Altres emissions indirectes de CO2 (abast 3)							
Residus	285	229	308	266	258	205	-20,6%
Vidre	0,34	0,15	0,13	0,13	0,06	0,04	-22,5%
Envasos lleugers	4,93	2,00	0,92	1,74	4,13	4,13	0,0%
Paper i cartró	3,24	4,72	1,30	1,23	4,53	4,53	0,0%
Matèria orgànica	19	28	36	37	38	21	-45,0%
Rebuig	258	194	269	226	211	175	-17,1%
Aigua	16,50	16,25	16,58	16,39	16,76	16,43	-1,9%
Mobilitat professionals (casa-treball)			1.523,00				
Mobilitat visitants			2.670,00				
Total emissions abast 3	301	245	324	282	274	221	-19,5%
Emissions de GEH totals (tones de CO2) sense mobilitat	2.552	2.029	2.552	1.702	2.362	2.275	-3,7%
Emissions per AP (Activitat Ponderada)	6,93	6,63	6,85	5,00	6,53	6,13	-6,1%



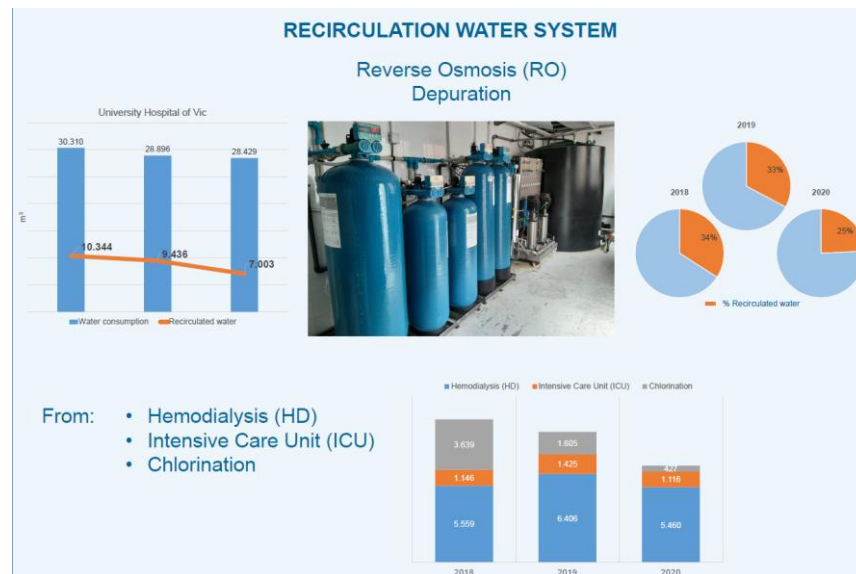
2. Main actions and Achievements



Main actions and achievements in Mitigation



Water reuse



Recirculation of haemodialysis and ICU water through an osmosis System with annual savings equivalent to 55.000 showers



Reduction

20% - 30% of the water consumed

Main actions and achievements in Circular Economy

Reusable drinking bottles

As part of the first phase of the Plastic Reduction Plan at CHV, we launched a campaign to reduce plastic packaging by installing new water fountains accessible to all departments and units, and by distributing a reusable bottle to all staff members across our centres.



En un mes, s'han estalviat més de 700 ampolles de plàstic de litre i mig, i prop de 400 de mig litre.



Reduction

14.561 units 1,5 L

3.036 Kg plastic

18 Ton of CO₂/year

Main actions and achievements in Circular Economy

Reusable gowns

The incorporation of 17.500 reusable gowns (up to 30 times) was a success during the pandemic, as it enabled more cost-effective access to PPE and reduced environmental impact, resulting in savings of €400,000€



Reduction

210 Ton of plastic

74 Ton of CO₂/year

Main actions and achievements in Circular Economy

Reusable laundry bags



Bed sheets



Trousers



Towels



Reduction

4,06 Ton of plastic

7,4 Ton of CO₂/year

Main actions and achievements in Circular Economy



A tandem project

We give a second life to damaged clothing from our centres through the Dr. Trueta Foundation

Dimecres, 9 de novembre de 2022

As part of our commitment to the circular economy, we launched an environmental and social collaboration with the Dr. Trueta Foundation, which has made reusable bags to us to replace the plastic bags used.

At the Dr. Trueta Foundation, employees are people with severe intellectual disabilities (over 65% disability). Employment is a key factor in their Integration, empowering them and enhancing their abilities.

This has been a project we've experienced closely – even with visits from professionals to the Foundations' facilities, where they could see first-hand both the volume of waste we generate, and the remarkable work carried by the Foundation.



Representants del CHV i de la Fundació Dr. Trueta en el lliurament de les bosses de roba



Reduction

30 kg of plastic

50 Kg of CO₂/year

Main actions and achievements in Circular Economy



Replacement of single-use absorbent pads in the pneumatic tube system



**With reusable protective cloths
In collaboration with Fundació Dr
Trueta**

Main actions and achievements in Circular Economy



Reusable bags made from our textile waste



We are providing textile bags instead of plastic bags to patients who come to the pharmacy to collect their medication.

This is a project is being carried out in collaboration with COLEO, a company that uses textile waste as raw material to produce new thread and new clothing.



Reduction

We save 1000 plastic/ 15 days

Main actions and achievements in Circular Economy



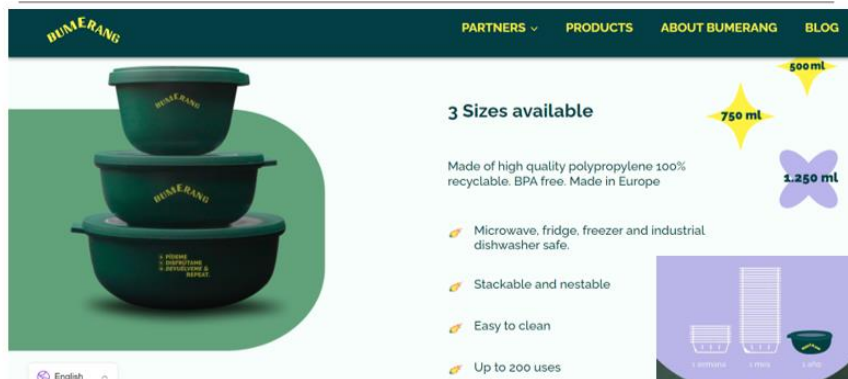
Catering with Bumerang

- A reusable lunchbox System, developed by a start-up that supplies containers of various sizes and manages their collection and cleaning. The initiative has also encouraged staff to use their own reusable containers.
- Too Good to Go app to make use of surplus food by offering lower-cost “Surprise” menus.



Dimarts, 11 d'octubre de 2022

Boris45 i el CHV hem posat en marxa un servei de carmanyola reutilitzable perquè puguem demanar el menú per emportar del menjador de personal sense generar residus. També tindreu l'opció de portar la vostra carmanyola de casa, a més de, com sempre, quedar-vos a menjar a l'espai.



“
La introducció de les carmanyoles Bumerang a l'Hospital Universitari de Vic és una iniciativa sorgida als grups de treball de la 'Jornada d'Aliances per la Innovació 2022' que varem organitzar al juny

PUBLICADA PER
Direcció de Serveis i SAS



Reduction

14,653 containers

484 kg of plastic

2,2 Ton of CO₂/year



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Main actions and achievements in Circular Economy



Reusable containers for biological waste

- By avoiding the destruction of 300 containers each month, this initiative saves 9.000 €/year
- Before the pandemic, sanitary regulations did not allow the reuse of these containers. This change is one of the few positive outcomes the pandemic brought.



Reduction

21 Ton of CO₂/year



Main actions and achievements in Mitigation



Energy efficiency and renewables



Solar panels installed on all available rooftop space:

- 13% o energy demand
- Saving 246 tons of CO2

CHV guidelines for Sustainable Construction



Main actions and achievements in Mitigation



Sustainable Mobility



Sustainable Mobility Pla aligned with ATM guidelines and awarness [Campaing](#) for staff and users.



Carpooling Pilot Project in collaboration with University of Vic and Osonament

Main actions and achievements in Mitigation



Electric Carsharing Fleet

Flexible and Zero-emission mobility for home care services: PADES and home rehabilitation



8 electric vehicles under a carsharing model (hourly, on-demand rental), available to the públic during unused time slots. This initiative has a dual dimension by involving a key stakeholder group: the local community

Main actions and achievements in Circular Economy

CARBON FOOTPRINT MITIGATION	QuantitY	Carbon coefficient	tones CO2 saved
Electric Energy certified from renewable source (MWh)	3,740	0,259	969
Photovoltaic autogenerated (MWh)	901	0,259	233
Recirculated water(m3)	5,361	0,385	2
1,5 l Reusable drinking bottles	3	6	18
Reusable bags for clean clothes	3,65	1,75	6,39
Reusable bags for dirty clothes	0,374	1,5	0,56
Reusable bags for surgical shoes	0,031	1,75	0,05
TOTAL			7,00
Bumerang catering	0,429	3,8	1,63
Reusable waste containers 60L Bio (unit)	2.624	5,23	21
TOTAL			1.106

Our Environmental
Statements available on the
[CHVweb site](#) :

DECLARACIÓ AMBIENTAL Gener-Desembre 2023

HOSPITAL UNIVERSITARI
DE VIC /
OSONA SALUT MENTAL
CLÍNICA DE VIC
HOSPITAL SANT JAUME
DE MANLLEU /
RESIDÈNCIA AURA



3. Challenges and Opportunities



Challenges and opportunities

AI-powered energy management platform
designed to enhance and maximise savings

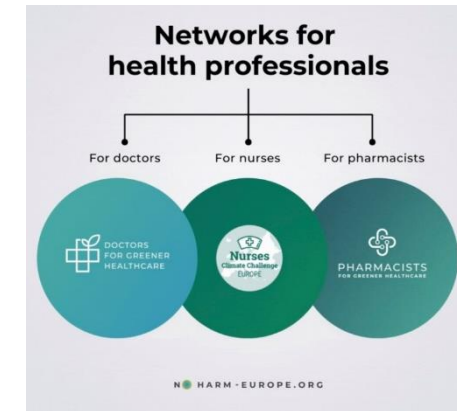
“Life Resystal” Programme of the Global Green and Healthy Hospitals Network, funded by European Union

We are part of a group of hospitals scaling up the programme’s resources. We have access to all deliverables (guides, software tools, presentations, etc.) to test and provide feedback.

There is an **urgent** need to develop a climate change adaptation strategy.

Engaging all professionals in the necessary transition towards a Circular Economy

Shifting from a single-use culture to one based on reuse



CHV Health and Nature

Reconnecting with nature through the nearby Puig dels Jueus, together with the local council

Thank you
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