

How can Innovative Cleaning Robots,
Enhancing Hygiene and Productivity,
with truly Plastic & Waste free cleaning,
solving parts of your Challenges?



“Let's define ***The Challenge,,***
Growing pressures to do more with less:



- Tight budgets
- Lack of Staff
- Prevent H.A.I.'s & MRSA
- Strict Zero Waste targets

How can cleaning robots, help to prevent HAI's, fill in the shortage of staff and clean Zero-Waste?





GAUSIUM

**Our Global
working population
Is declining”**



Think about **FIFTY SHADES OF GREY!**

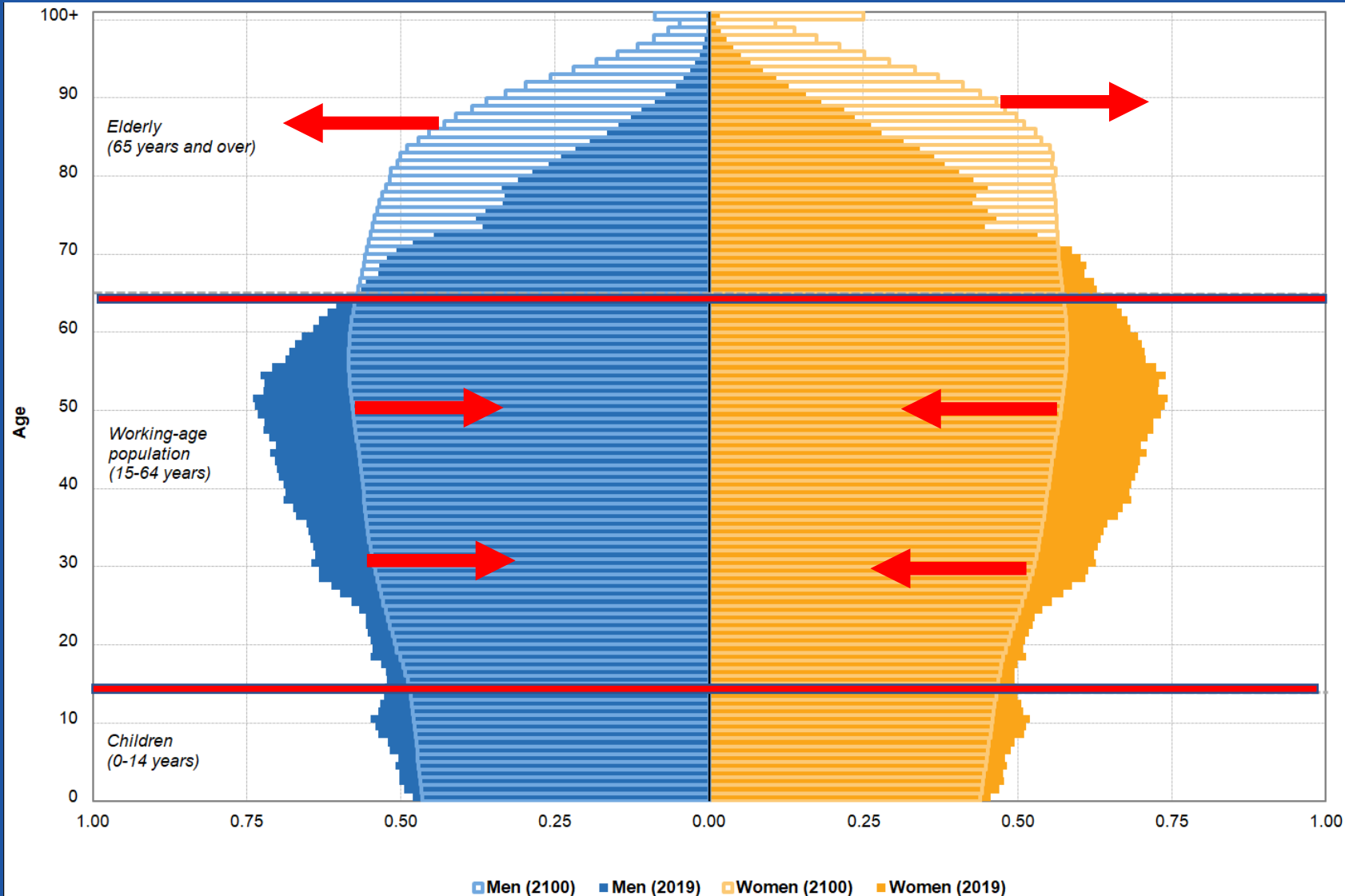


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The population pyramids show the decreasing % from 2019 until 2100

15 to 65
years old

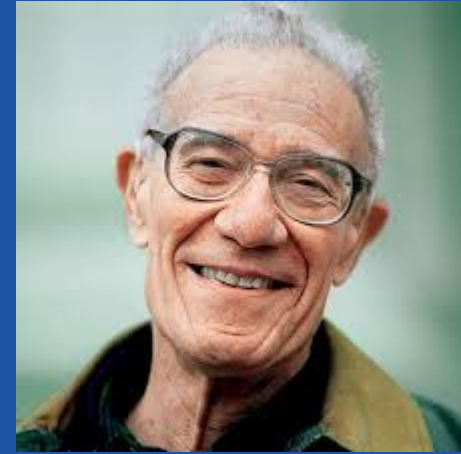


15 to 65
years old



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Nobel price winner Professor
and Economist Bob Solow, stated:



***“YOU CAN SEE THE COMPUTER AGE
EVERYWHERE, EXCEPT IN THE
PRODUCTIVITY STATISTICS”***

4% in the “1980” to 0,3 % today



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Time to Integrate smart Cleaning robots with a **Short ROI *making* cleaners operators!**

- 80% more productivity & cost reduction
- Solving part of the shortage of cleaning staff
- Dealing less with recruitment issues
- Reducing stress, workload and RSI-related injuries

Robolution by Gausium





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Which type “robots could help NHS?



**Compact class, with
workstation and auto-
Squeegee rinsing**

**Also can be used manual
for incidents .**



**Midsized class
Omnie / 50 with
workstation**

How do they work?

In a Nursing home, vacuum,
scrubbing and drying



In a Hospital, sweeping,
scrubbing and drying



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Successful, Global case studies implementing Robots, mostly started with a Proof of Concept



- ✓ Cleaning at daytime, or at nights
- ✓ Full floor tasks or “AI-Spot cleaning!?”
- ✓ “Click on-off Squeegees and magnetics pads, avoiding Cross contamination
- ✓ Taking elevators & automated doors

Optional

- ✓ Wheel disinfection-mats
- ✓ UVC lights preventing a Biofilm

Beside the human tragedy, what are the extra cost of Cross contamination?

- Infected patients stay about 8,3 days longer
- The estimated extra cost are £ 3033 a patient
- Healthcare workers & others can get exposed as well

“Consistent Autonomous cleaning can help reduce this risk, keeping patients, workers and the budget healthy!,,



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How interesting is the ROI ?

A profit warning for £ 90.000

E.G. a Nursing home;

Vacuum, Scrub & dry 2 tasks total 16.146, Sq. Ft. Daily.

1. £ 20,00 Labor cost (all in)
 2. 260 days a year
 3. £ 2.236 cost for Phantas (£ 11.179:5) a year
 4. £ 1.118 Estimated maintenance cost a year
- £ 4.654 Total cost a year

£ 22.694 traditional cost a year same tasks.

£ 18.040 less cost , -79,5 % a year!

ROI of 5 to 6 months!

Saving over £ 90.000 in five years!



ROI calculation Robot sample

date: 9-9-2025

Floor surface in square meters >

1500

1500

1500

Phantas does average 550 sqm an hour=

2,7

2,7

2,7 (hours)

*Fill in according your situation

Phantas

walk behind
Scrubber Dry

Manual
Vacuum

Combined Cost
Vacuum & Scrubbing

English

labor cost

Hours to work (labour time)

pauze

Hour rate (salary)

additional night sift cost

*Average hour rate/night shift rate with 80% of the time

(*Including employer overhead cost beyond Pay)

Cost of the machine

Depreciation in five years

Maintenance cost (average 5% to 10% a year)

Energy cost and chemicals

Cleaning days a year

Times of cleaning each cleaning day

Cleaning cost (salary) a year

Depreciation a year

Maintenance cost a year

Cost for damages-repairs on building, inventory, machine self etc.

Cleaning cost a year

Cleaning cost a year vacuum and Scrubbing

(no rights can be taken from this example)

cost savings with Robot in Euro's a year.

cost savings with Robot in % compared to Phantas

ROI in months

£ 5,00

0,00

£ 0,25

£ 20,00

£ -

£ 20,00

£ 11.179,00

£ 2.235,80

£ 1.117,90

similar

260,00

1,00

11.179,00 €

£ 1.300,00

£ 2.235,80

£ 1.117,90

- €

4.653,70 €

£ 18.040,30

79,49

4,5

41,00 €

1,80

£ 0,25

£ 20,00

£ -

£ 20,00

£ 3.500,00

£ 700,00

£ 350,00

similar

260,00

1,00

£ 10.660,00

£ 700,00

£ 350,00

£ 250,00

£ 11.960,00

<Combined vacuum/scrubbing)

Within half a year!

We all know what this picture means..



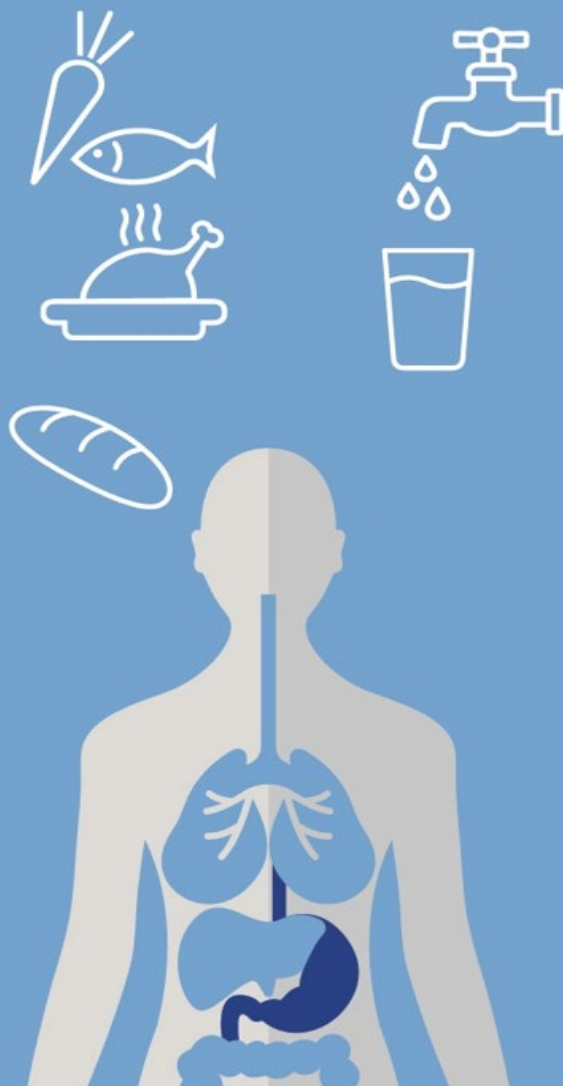
Micro and Nano-plastics can make people sick!

25% OF PLASTIC WASTE COMES FROM CLEANING BOTTLES / POUCHES



MICROPLASTICS CAN ENTER THE BODY

THROUGH INHALATION AND INGESTION



MICROPLASTICS ARE DIVERSE IN SHAPE AND COMPOSITION



FIBERS



FRAGMENTS



FOAM



BEADS

POSSIBLE HEALTH EFFECTS OF MICROPLASTICS?

CHRONIC INFLAMMATION OF LUNGS AND INTESTINES, CELLULAR DAMAGE



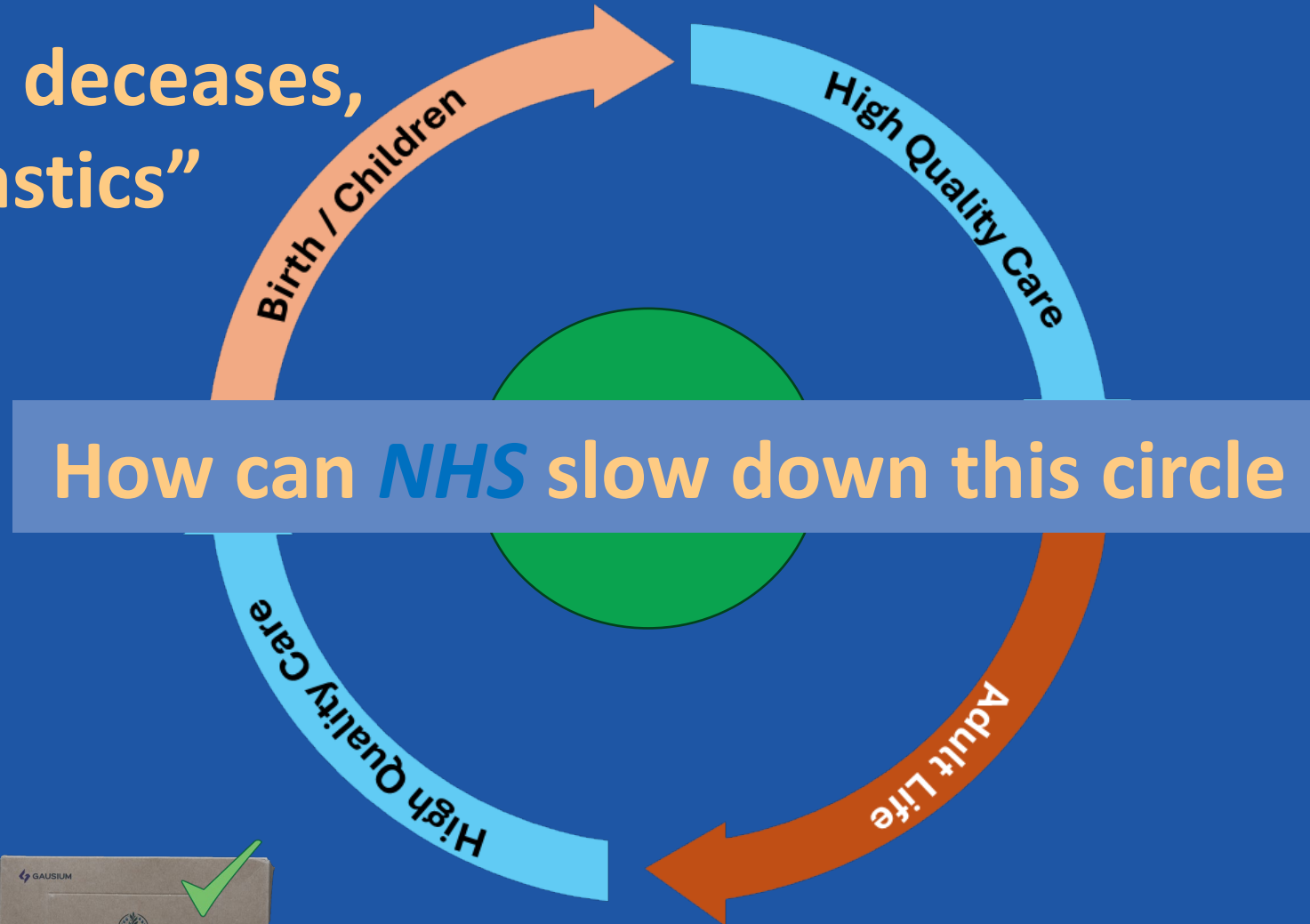
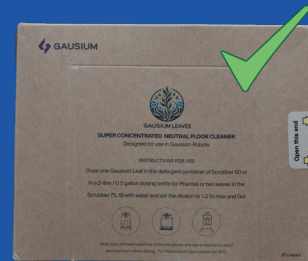
The circle of life = The circle of NHS

By helping prevent some deceases,
using less “Single use plastics”

Eliminated Daily & Single use
plastic cleaning bottles & pouches
and PVOH based capsules & Sheets



Use recyclable carton packaging,
Stop transporting 95% water
in liquid chemicals!



How to Clean Zero waste & 100% Plastic Free?



GAUSIUM LEAVES

By Re-invention of Cleaning agents!

Developed in the UK; Seaweed-Cellulose-Leaves

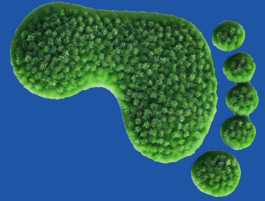
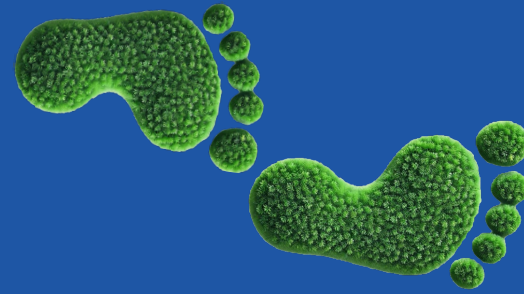
- ✓ Eliminating all single use plastics, 100% MNP's free!
- ✓ Effective on contamination, save on all floors
- ✓ 100% PVOH (Fossil based Polyvinyl Alcohol) free!
- ✓ Unique, instant water-soluble Seaweed bound leaves
- ✓ One 8-gram concentrated leaf, makes 2,3-liter concentrate,
- ✓ Further diluted to 1-2 %, reducing cost in use up to 80%!
- ✓ Exact dosing with or without dosing equipment
- ✓ A zero-waste recyclable carton packaging
- ✓ A safe (pH 6.8) formula for sealed or unsealed floors
- ✓ Reducing build up in joints and odors in wastewater tanks

Who did hear solutions that could reduce part of your challenges?

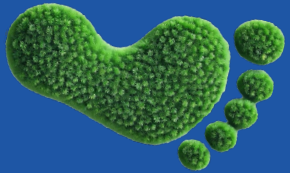
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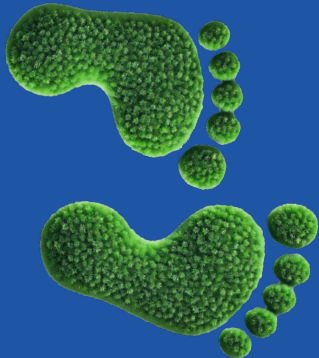
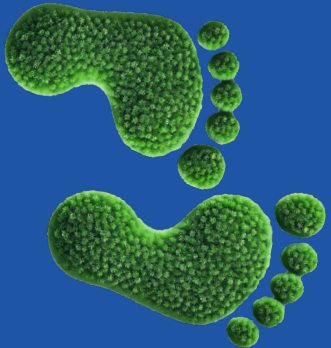
What are the next



Start with robotic floor-cleaning,
help prevent H.A.I.s' & labor shortage,
clean 100% Plastic free & Zero waste.



Expand plastic & Zero waste cleaning to
Interior, Sanitary, Kitchen & Personal Care.



Let's walk this journey together,
for a healthier future!



Let's no longer wash our hands in
innocence with plastic on our fingers!

FM today ask for automated solutions,
free from plastics, waste and PVOH!



Thanks for listen,
Peter Kwestro

Q & A