

OXY ZEN

Design that breathes science.

An intelligent photobioreactor that regenerates indoor air.

OXY ZEN

CO₂ IN · O₂ OUT

We breathe BADLY. And we DON'T notice.

90%

of our time
is spent indoors



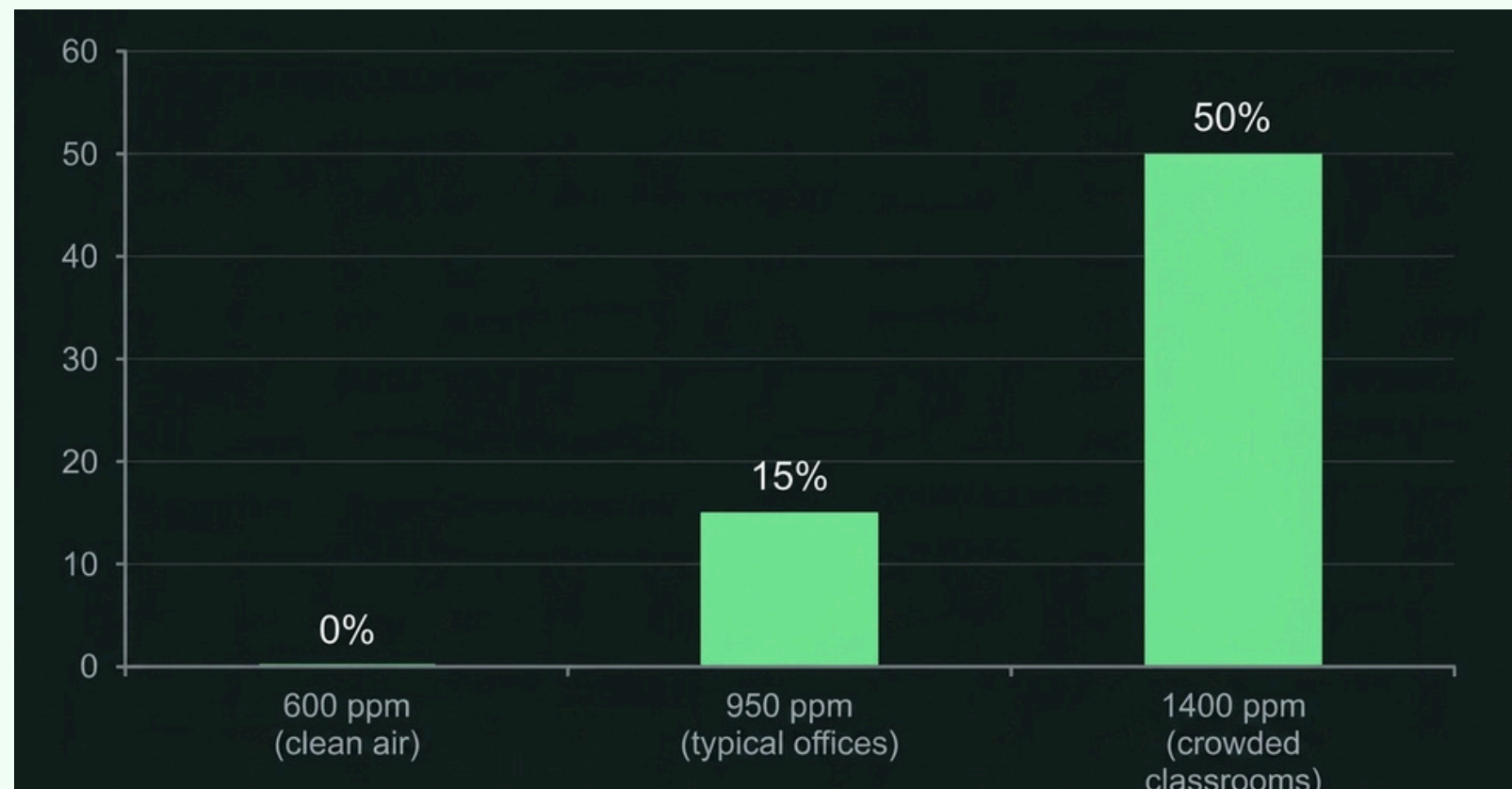
Air up to 5× more polluted

Indoors, concentrations of some pollutants can be 2 to 5 times higher than outdoors.



Brain under stress

Harvard studies show that high CO₂ levels reduce decision-making ability by up to 50% at 1,400 ppm.



Milan breathes BADLY. And we KNOW it.

66

days

above the PM10 limit
recorded in Milan in 2025
(legal limit: 35).

21

$\mu\text{g}/\text{m}^3$

PM2.5 annual mean in Milan
in 2024 — above the WHO
threshold of 5 $\mu\text{g}/\text{m}^3$.

111

days

exceeding WHO PM2.5
limits out of 181 analysed in
the first half of 2025.

OXY ZEN



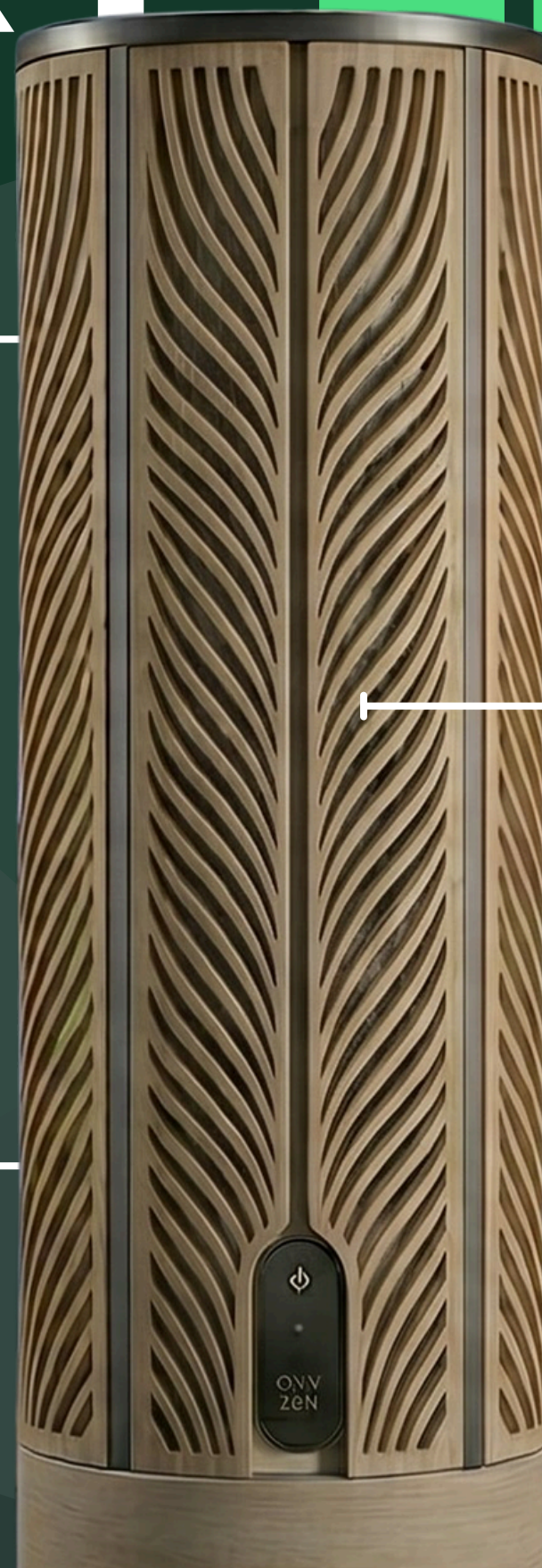
PLUG-AND-PLAY

A living totem
that regenerates the air.

ITALIAN DESIGN



ZERO FILTERS



CHLORELLA VULGARIS: small, but revolutionary.



10-50*

more efficient than land plants
at capturing CO₂



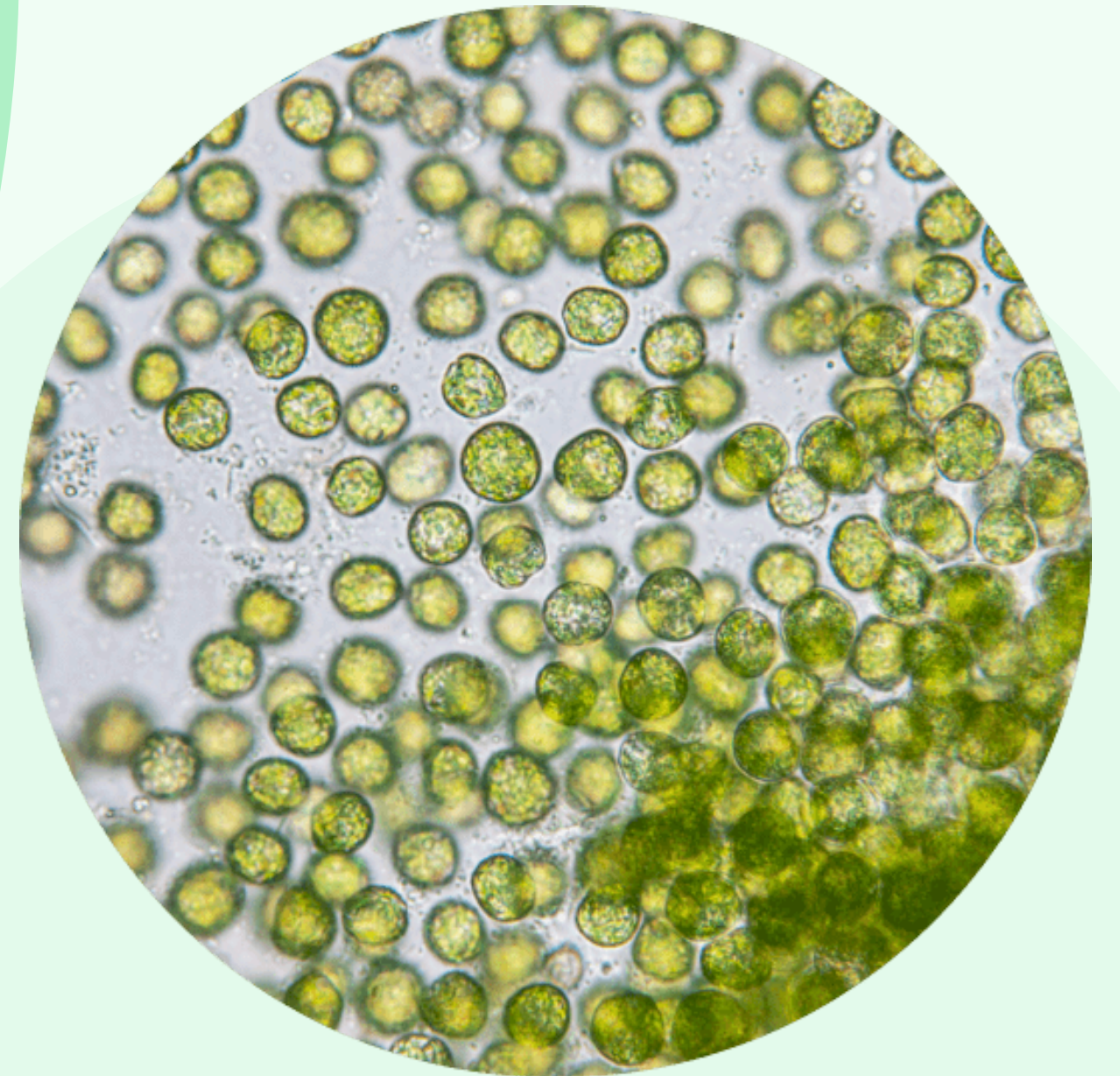
20%

photosynthetic efficiency in
controlled culture (vs 3-6% for land plants)



100%

reusable: excess biomass becomes
fertiliser or bio-material



Sources: Lewis & Clark Env. Law (2024); MDPI Environments (2023); studies on photosynthetic efficiency of Chlorella spp.

Tree layers, one soul.

Outer shell

Fine wood, anodised aluminium and parametric perforations. Italian design.

Middle layer

Matrix LED pulsing with a biophilic effect. Visible only on demand.

Biological heart

High-efficiency glass reactor containing algae



OXY ZEN belongs where air is an asset.

PRIMARY TARGET



Luxury hotels

lobby, lounge, spa: air is part of the guest experience



Corporate executive HQs

conference rooms, executive floors, representative spaces



Showrooms & flagship stores

fashion, design, automotive: the totem is statement + function

SAFETY FIRST



Physical containment

steel tray with perimeter sensor: detects leaks on first contact.



Volumetric monitoring

Ultrasonic sensor: if the level drops too fast, the AI flags an anomaly.



Automatic response

Compressor valve closure in milliseconds: machine made safe.

The future of air *is biological.*



OXY ZEN · Bio-Intelligence & Italian Design