



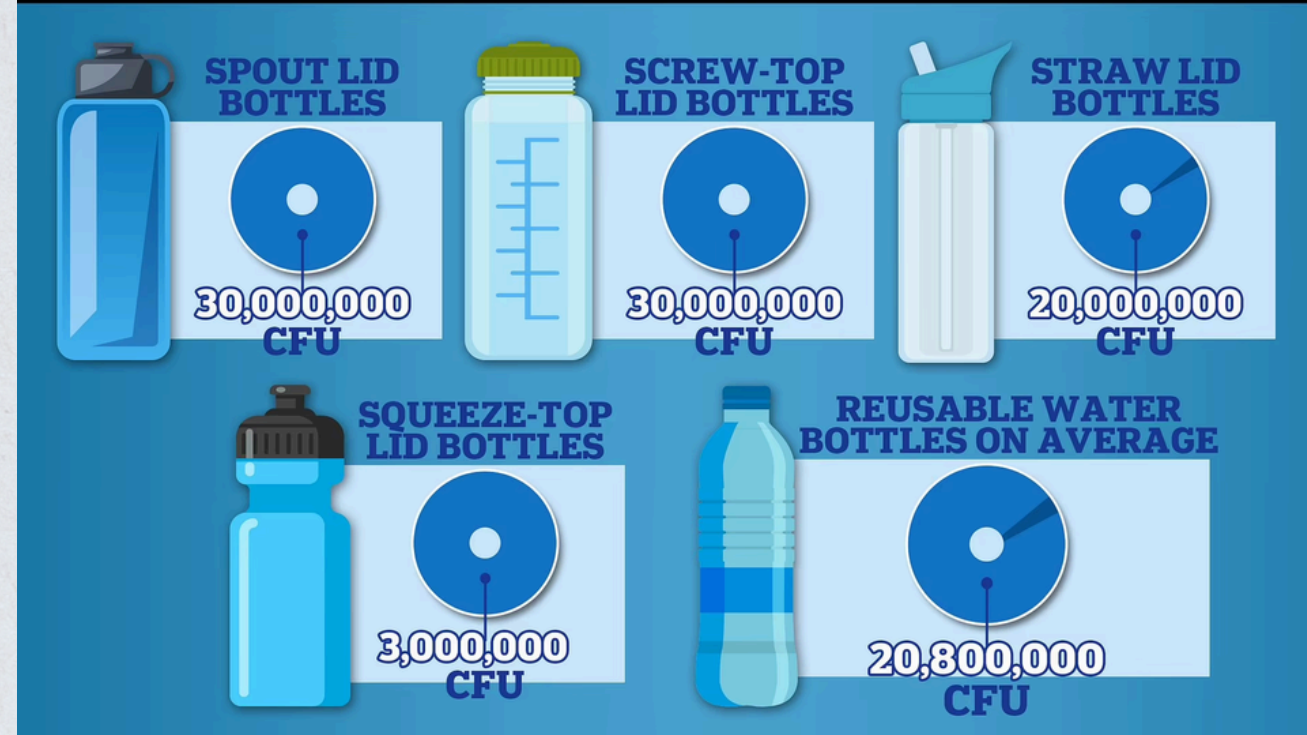
TRAQUA





Problem Statement

BACTERIA FOUND IN FOUR POPULAR TYPES OF REUSABLE WATER BOTTLES



Study Finds Microplastics In 93% Of Bottled Water

Lowest & highest number of plastic particles found per liter of bottled water (location & brand)

Brand	Manufacturer	Country Tested	Concentration
Nestle Pure Life	Nestle	USA, India	6-10,390
Bisleri	Bisleri International	India	0-5,230
Gerolsteiner	Gerolsteiner Brunnen	Germany	9-5,160
Aqua	Danone	France	0-4,713
Epura	PepsiCo	USA	0-2,267
Aquafina	PepsiCo	USA, India	2-1,295
Minalba	Grupo Edson Queiroz	Brazil	0-863
Wahaha	Hangzhou Wahaha Group	China	1-731
Dasani	Coca-Cola	USA, India	2-335
Evian	Danone	France	0-256
San Pellegrino	Nestle	Italy	0-74



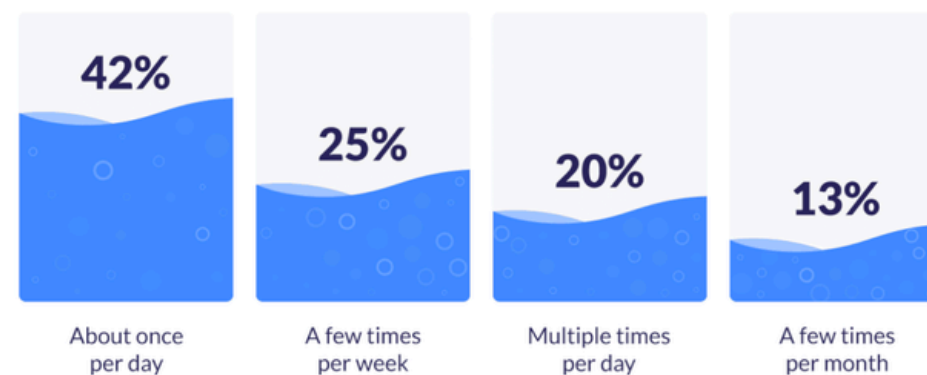
n=259 bottles from 11 brands across nine countries. Plastic discovered included polypropylene, nylon, and polyethylene terephthalate.



Source: Orb Media



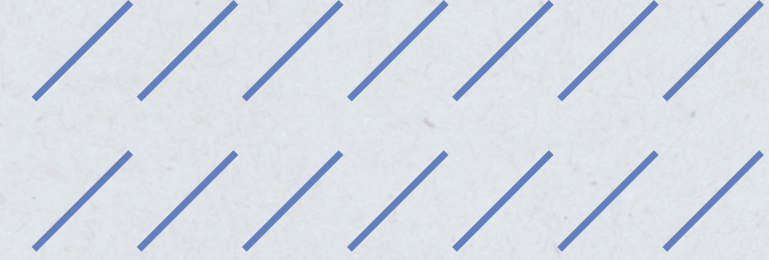
How frequently do you clean your water bottle?



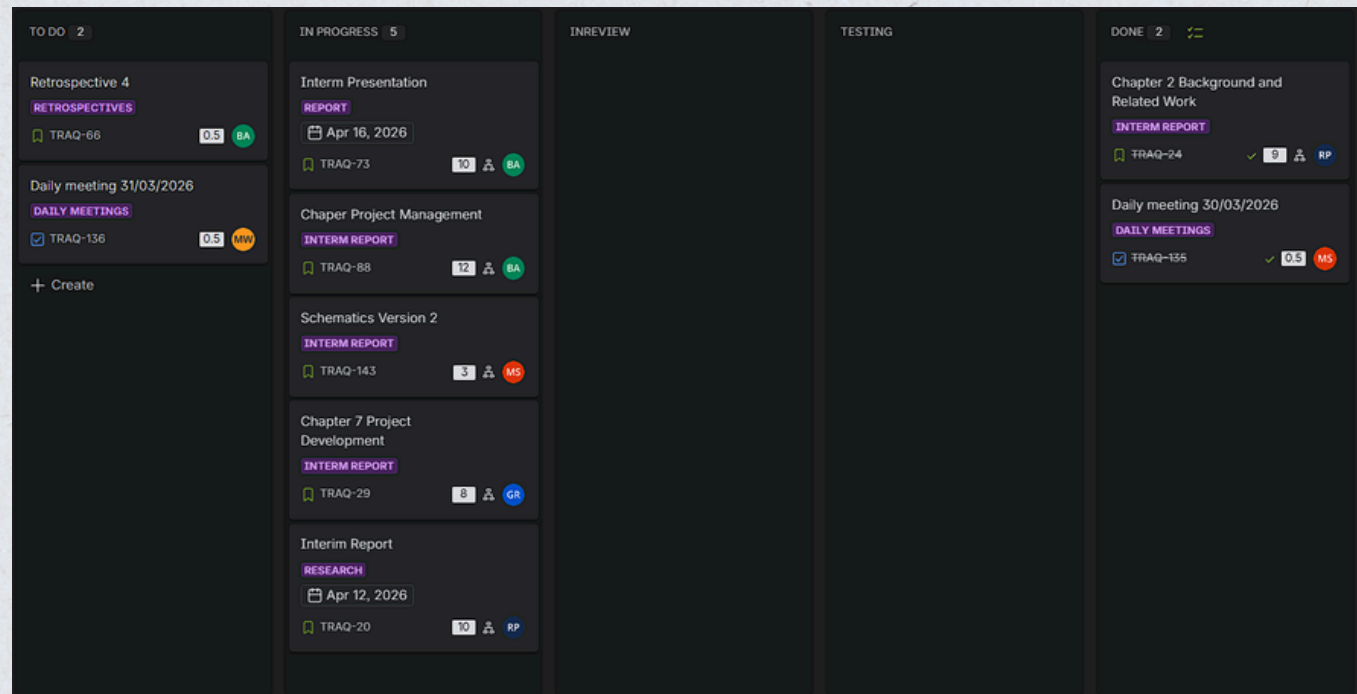
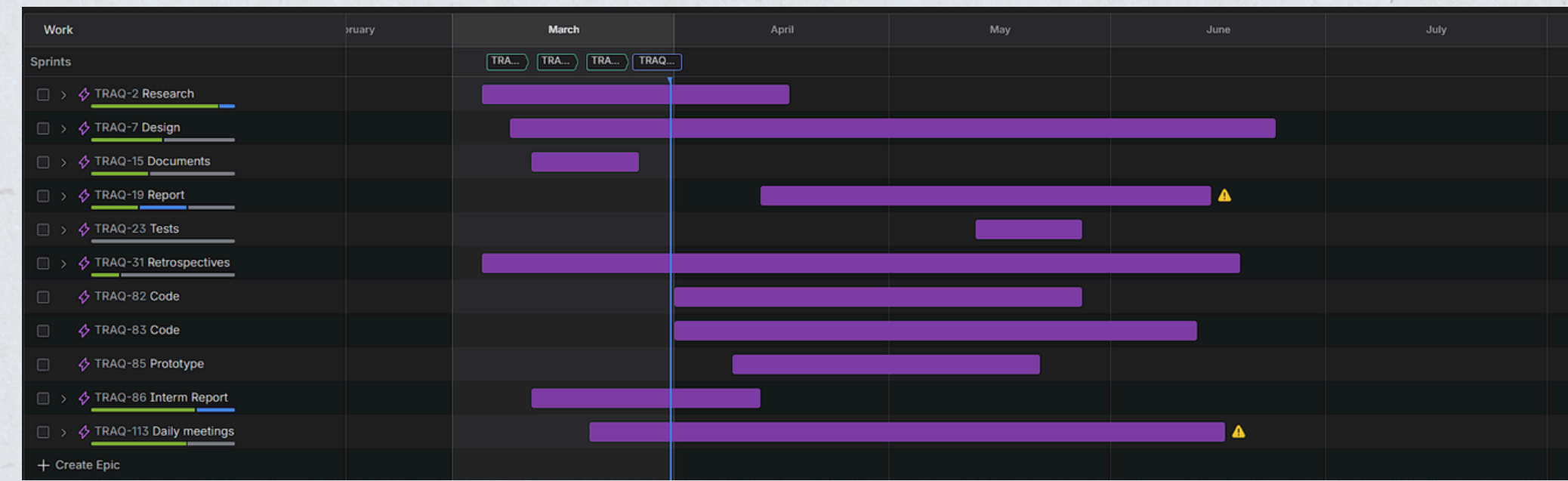
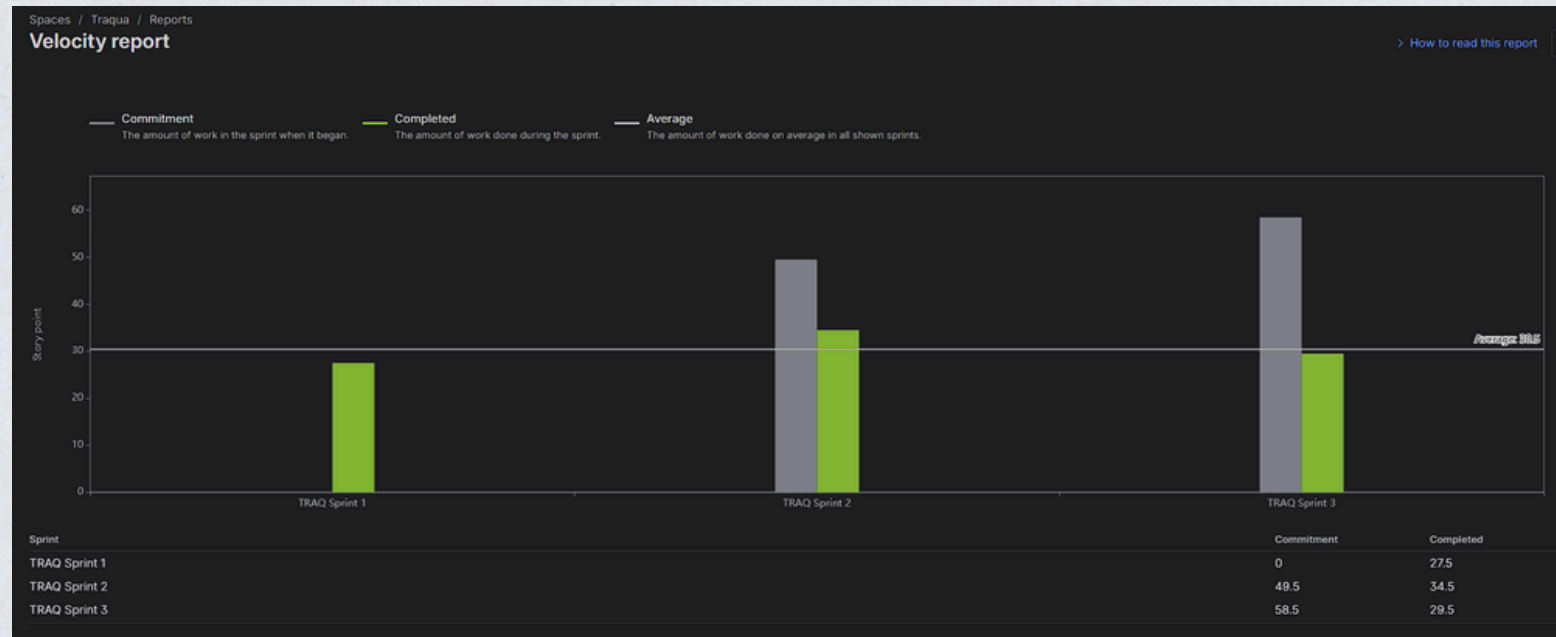
Gen Zers cleaned their water bottles **the least often**, with **16%** cleaning theirs only a few times per month.

Source: 2022 WaterFilterGuru.com Study





Project Management





State of the Art



Hydration:



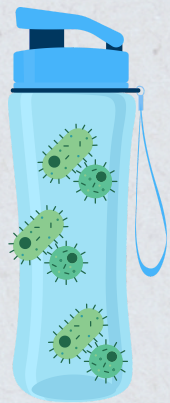
- electrolyte balance, temperature regulation
- quantity, quality and how regular

Effects of tracking:



- tracking + reminders support water intake

Hygiene:

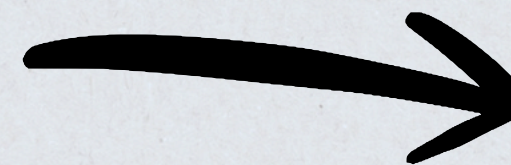


- 20 % of bottles with a risky level of microorganism
- UV-C kills 99 % of bacteria

Minerals:



- keep electrolyte balance stable





Marketing Plan

Know your water. Trust your bottle.

- Active people
- Health Enthusiasts & Eco-Conscious Professionals
- Premium pricing: ~€250 retail + app subscription model
- Distributed via official website, Amazon & premium retail stores
- Promoted through university pilot, social media & fitness influencers
- Gamification features drive daily engagement and retention

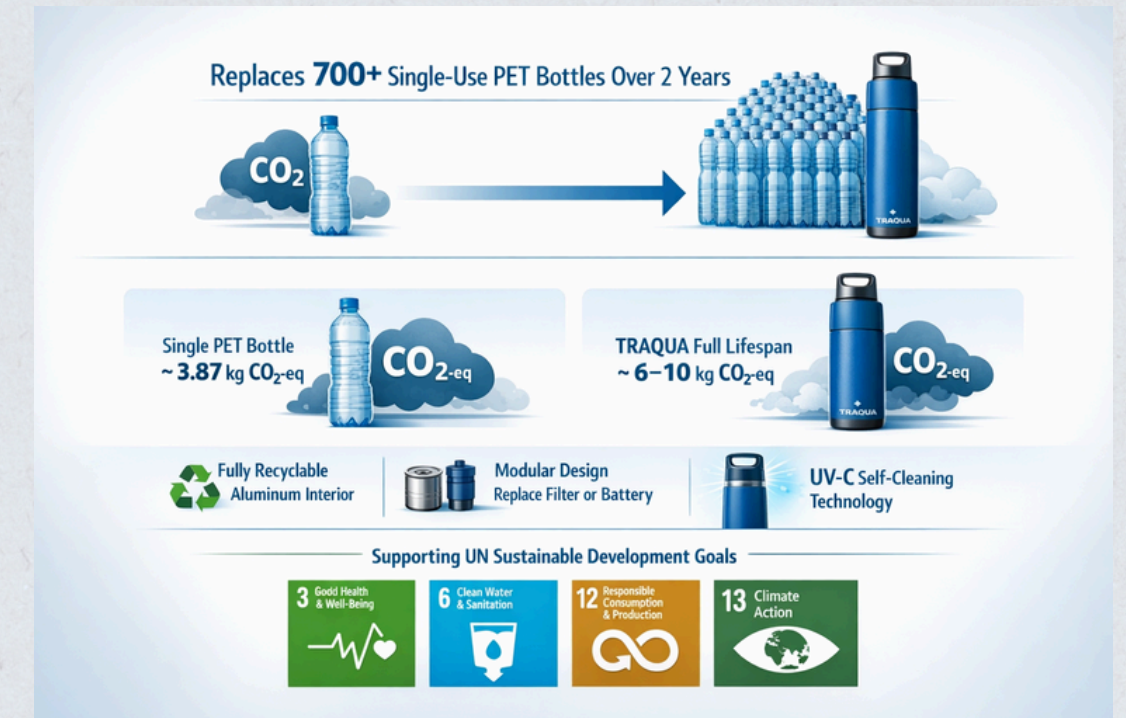




Sustainability

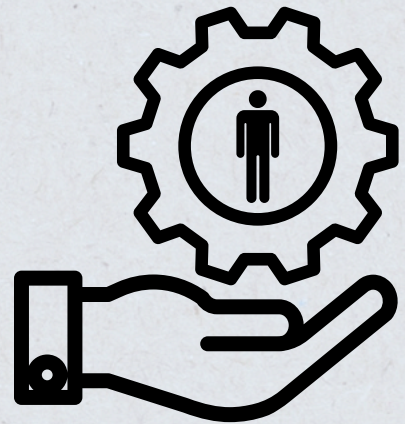
Reducing plastic, one bottle at a time.

- Replaces 700+ single-use PET bottles over 2 years
- Single PET bottle = ~3.87 kg CO₂-eq vs TRAQUA's full lifespan ~6–10 kg CO₂-eq
- Aluminium interior is fully recyclable
- Modular design replace filter or battery, not the whole bottle
- UV-C self-cleaning extends product lifetime and reduces waste
- Supports UN SDGs 3, 6, 12 and 13



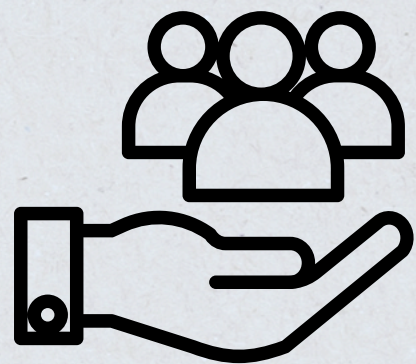


Ethical



Engeneering ethics

- safety: UV-C, foodsafe
- communication, transparency



Marketing ethics

- Sales
- Pricing
- Branding

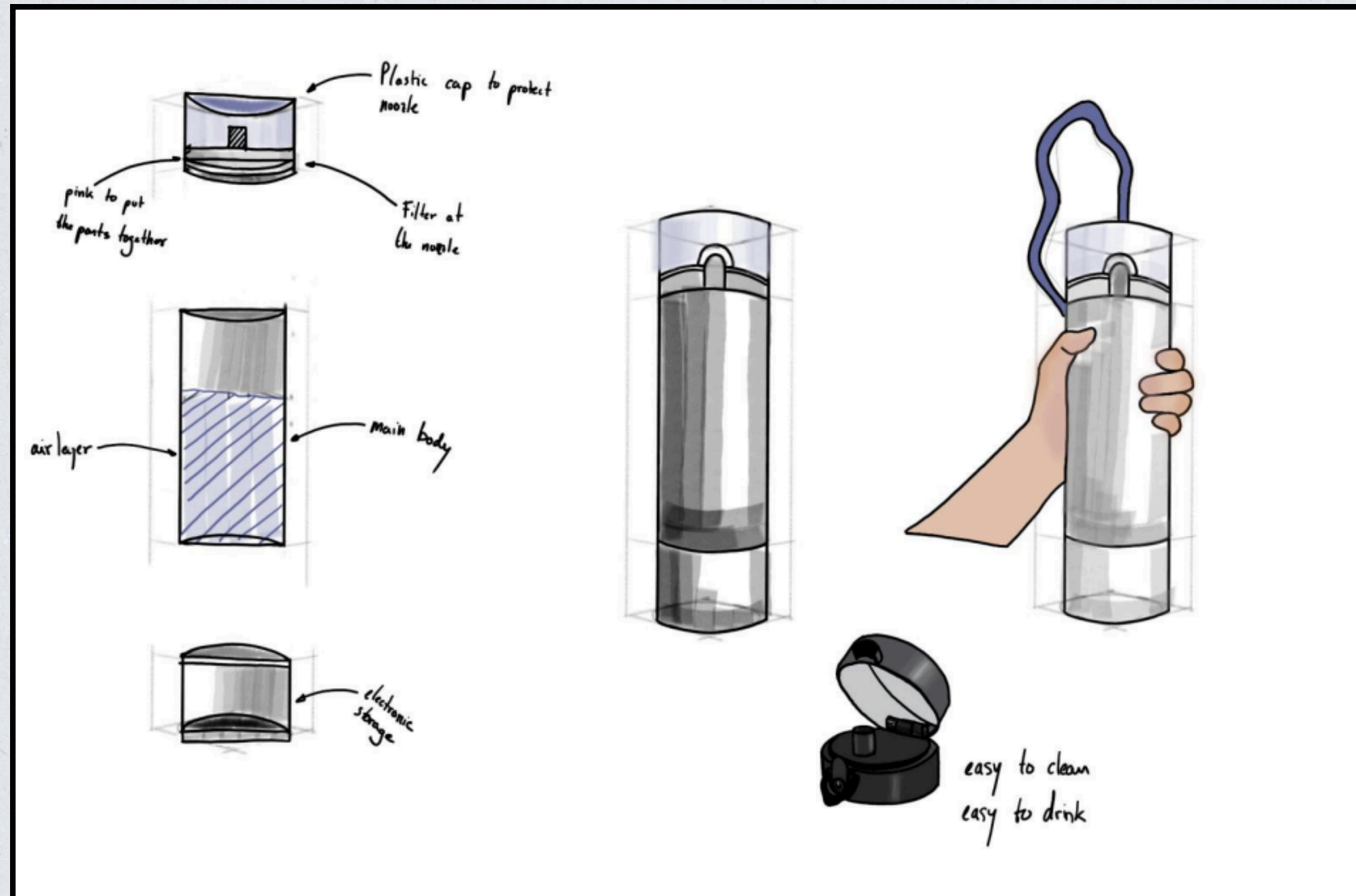


Environmental ethics

- Ecological balance
- Avoid greenwashing



Solution



Know your water.
Trust your bottle.

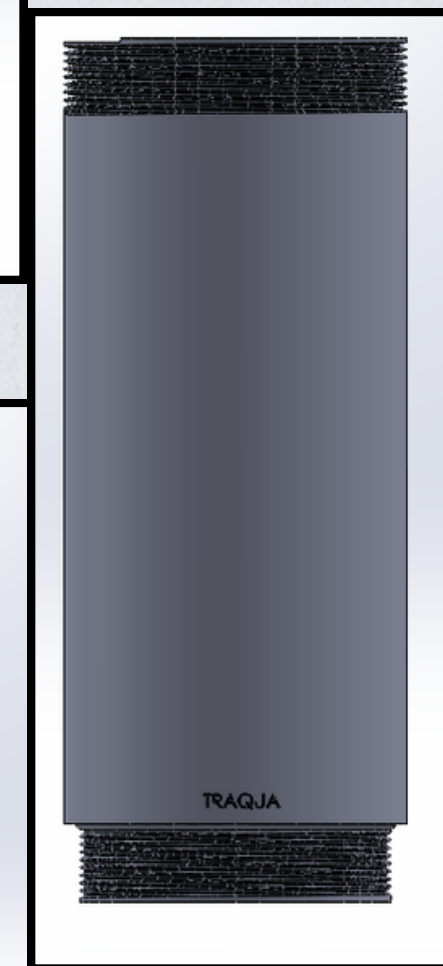
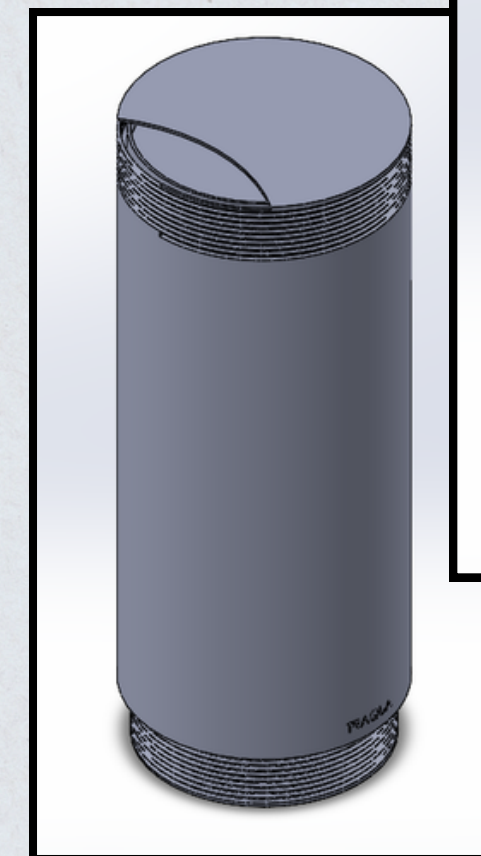
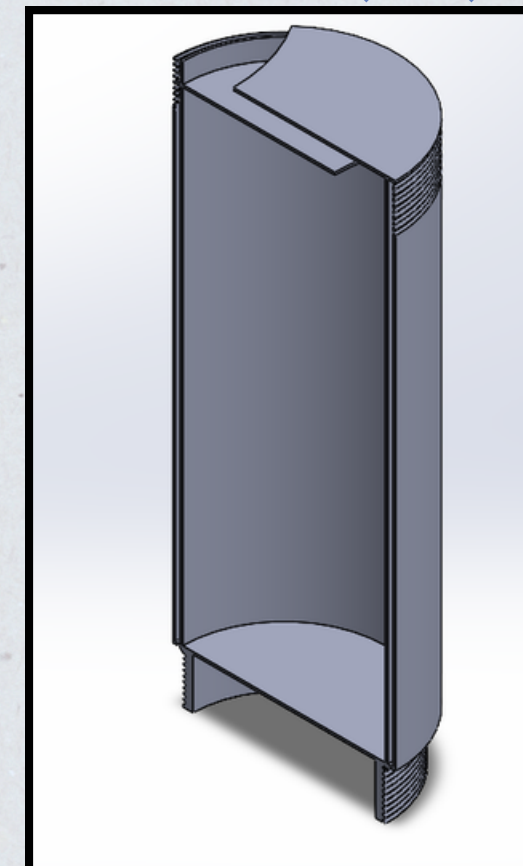
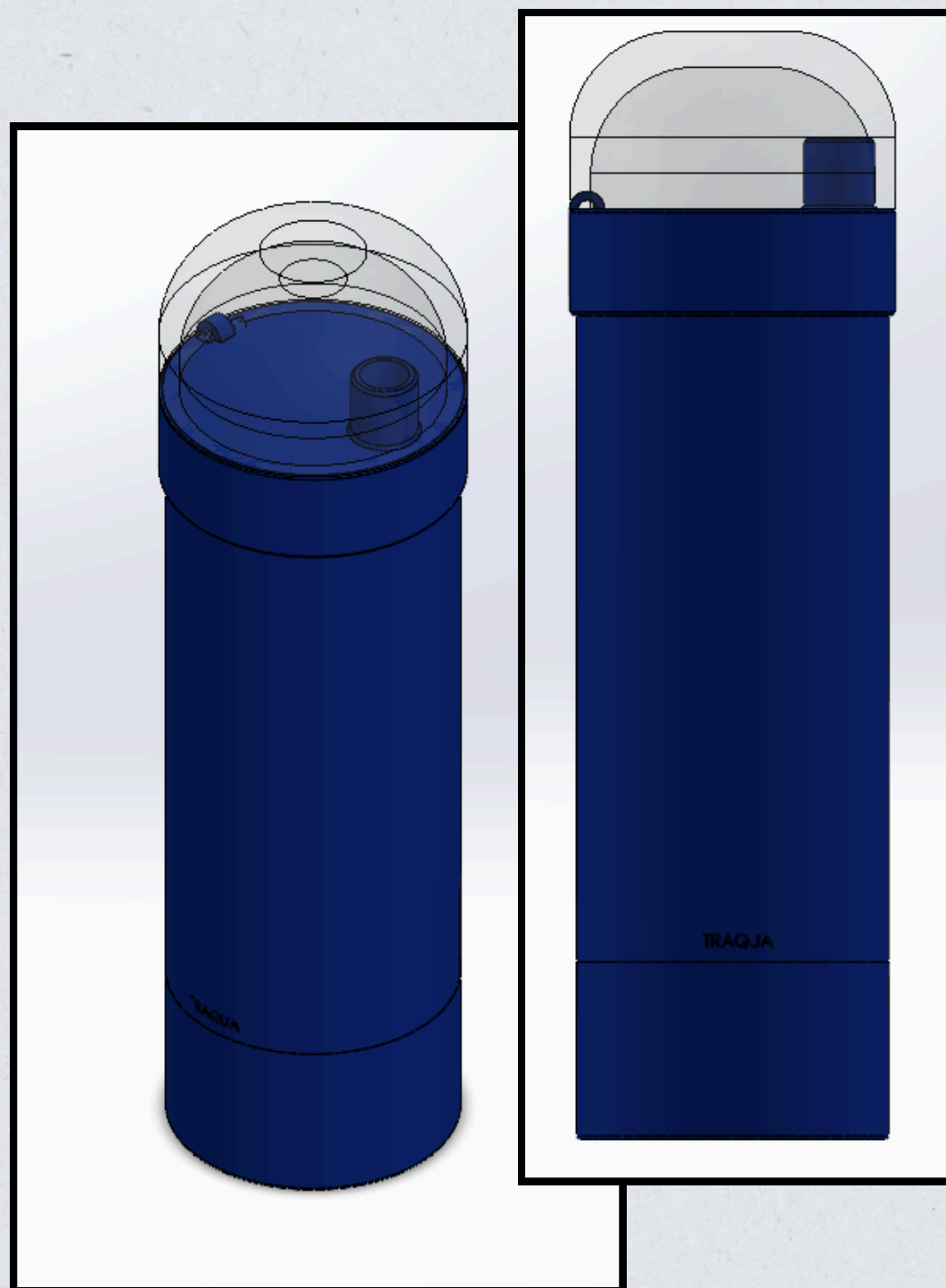
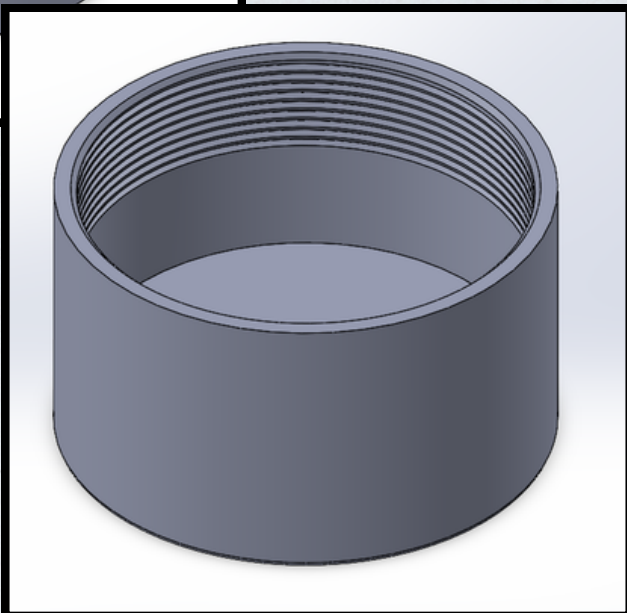
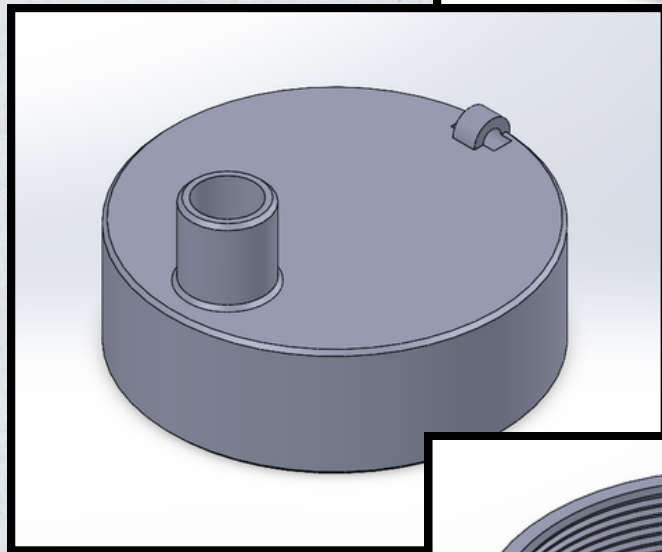
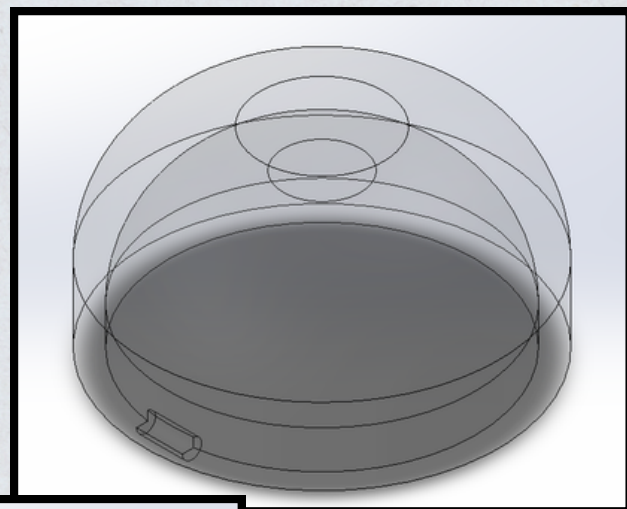


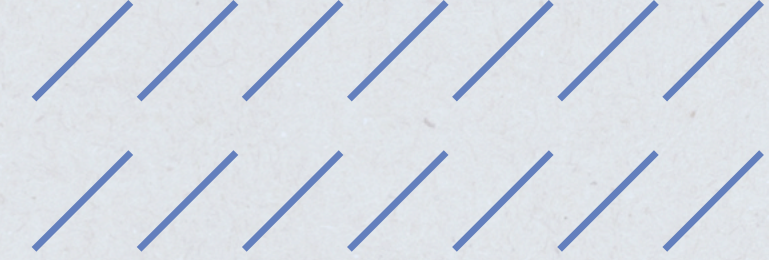
For the people,
for the future
Order now at www.TRAQUA.com





Structural drawings





Smart system

TRACK

App for constant reminders and daily goals

MEASURE

Measure the amount of water consumed

CLEAN

UV-C bottle cleaning & water filtering



3-piece-system



Conclusion



- System integrates hardware and smart features
- Budget exceeded due to supplier choices
- Improvements: cost, power efficiency, design
- Strong potential for real-world product