Septopure®

Unique technology to treat 100% liquid waste (faecal sludge)

PURECO
THE PURE ECO

Worldwide water challanges

Water scarcity (by 2030, half of the world's population will live in areas under severe water stress)

Lack of sanitation (2.5 billion people affected)

Polluted water is released untreated into the environment (85% globally)

Water infrastructure development in Europe also faces financing challenges. The reconstruction of ageing water infrastructure is underfunded. Less than 1% of existing infrastructure is renewed each year.

- ✓ Current water management practices are not sustainable
- ✓ Neither locally-regionally nor globally

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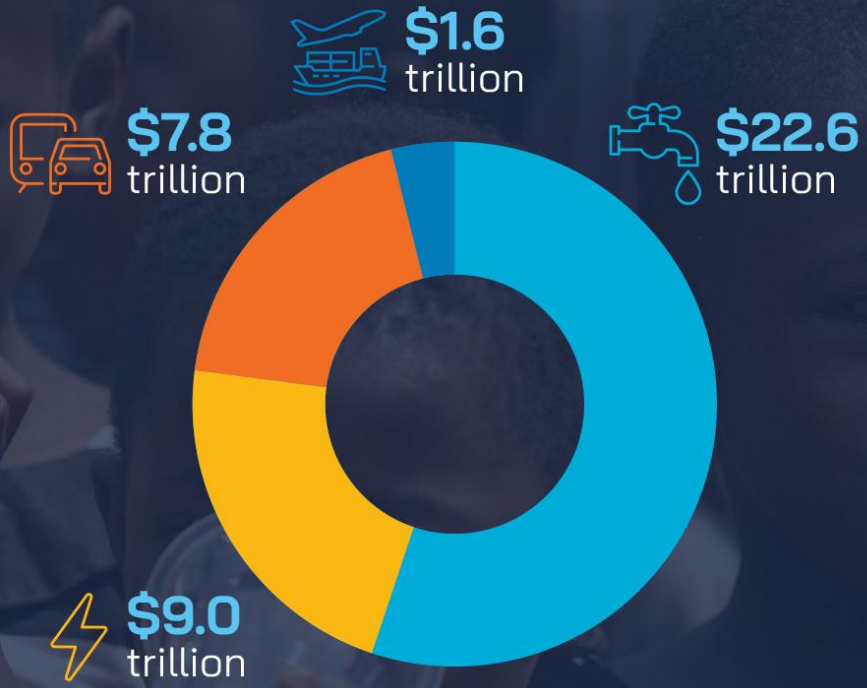

Urban infrastructure investment needs during the next 25 years

Water Energy Road/Rail Air/Seaport

Global infrastructure development and reconstruction needs based on global urbanization trends.

Trillion: 1 000 000 000 000 (one million million; 10^{12})

Source: UNEP City Level Decoupling 2013 http://www.unep.org/resourcepanel/portals/24102/pdfs/Cities-Full_Report.pdf

Worldwide water challanges

- 22 600 billion USD >> impossible to be funded and invested
- Dividing the 22 600 billion USD by the number of the population (6 billion in 2050) living in cities as indicated in the report, we are coming to 3 500–4 000 USD/capita investment needs

If the world's richest regions full scale and inclusive water infrastructure development is unbankable, then how do we expect it to be worldwide?

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Septopure® technology to treat 100% faecal sludge

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UN – SDG

United Nations | Department of Economic and Social Affairs
Sustainable Development

Home | SDG Knowledge | Intergovernmental Processes | HLPF | SIDS | Partnerships | Engage | News | About

Affordable wastewater treatment technology to treat 100% liquid waste (faecal sludge) for a value of less than €45 per capita and less than €10 per capita/year supply cost

Pureco Ltd. (Private sector)
#SDGAction50199

DESCRIPTION | SDGS & TARGETS | DELIVERABLES & TIMELINE | RESOURCES MOBILIZED | PROGRESS REPORTS | FEEDBACK

Description

If the EU WFD model for water infrastructure development is expected to be put in place in countries, and regions where no sewer network exists, the cost of this (20+ thousand Billions USD) is non-financeable from the available resources due to the affordability limitations (3% of the family income). Developing collection pipeline networks would make up 80-90% of a given project.

In these cities where the construction of sewer network is not possible (due to financial and other reasons), but the generated wastewater must be treated to avoid environmental and health problems, near-to-consumer technologies (Septopure® technology) can be the solution to treat 100% liquid waste in a safe but affordable and sustainable way.

Action Network

SDG ACCELERATION ACTIONS

Share

Timeline

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The United Nations listed Septopure® as an SDG acceleration technology

https://sdgs.un.org/partnerships/affordable-wastewater-treatment-technology-treat-100-liquid-waste-faecal-sludge-value

Settlements with no sewerage network

- 7-10% is collected and adequately treated
- Untreated wastewater is discharged into surface water
- It causes health risks

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Challenges

- 100% faecal sludge
- High concentration, contamination
- Local conditions (terrain, capacity, focus)

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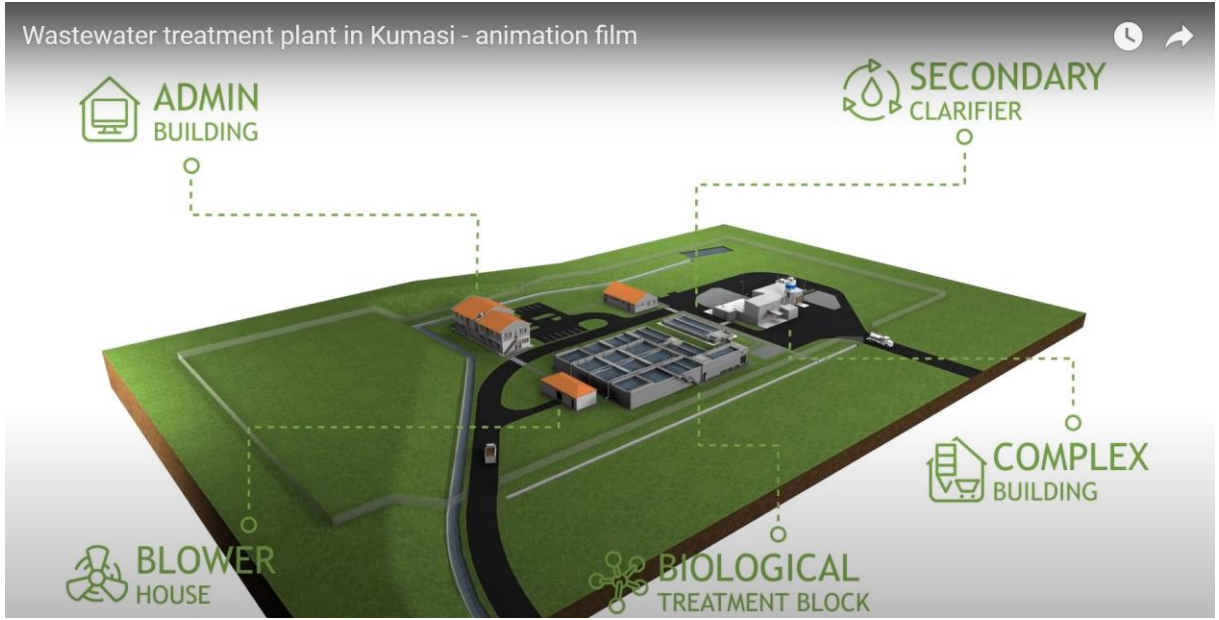
How it works? – Animation video



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KOMATSU


N.D.A SANITATION
NTERCITY STC COACH
WE TAKE YOU THERE SAFELY


KUMASI WASTEWATER
TREATMENT PLANT


PURECO VENTUS C
BOAT SANITATION

Septopure® parameters

Influent parameters		Influent Average concentration	Influent MAX concentration	Average removal efficiency	Effluent, treated wastewater limit values (mg/l)
BOD_5	mg/l	2 112	4 763	99,2%	< 50
COD_{kr}	mg/l	7 535	21 200	96,7%	<250
Total suspended solids (TSS)	mg/l	4 187	11 050	98,4%	< 50
Ammonia-N	mg/l	389	670	99,8%	< 2
Total nitrogen	mg/l	891,5	1 780	87 %	< 50
Total phosphorus	mg/l	79,5	140	99,5%	< 2

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Pureco Educational Partnership Program (PEPP)

100,000 EUR is offered for two main topics

- Awareness raising among the Ghanaian children >> Pipe-it-up board game (40,000 EUR)
- 1,000 copies of board games were provided to the Zoomlion Foundation, aim: educate and sensitise children towards water

- Training the Ghanaian engineers (having the operational part sustainable as well) >> online training during COVID, Budapest based training in the future (60,000 EUR)

Ghanaian Child Sanitation Diplomat visit in Budapest, Hungyary (financed also from PEPP)

Pureco-Social Responsibility


ZOOMLION
PURECO
ZOOMKIDS

Tamale


NISSAN


INFLUENT CHAMBER
INFLUENT CHAMBER

Takoradi

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Sod-cutting ceremony video

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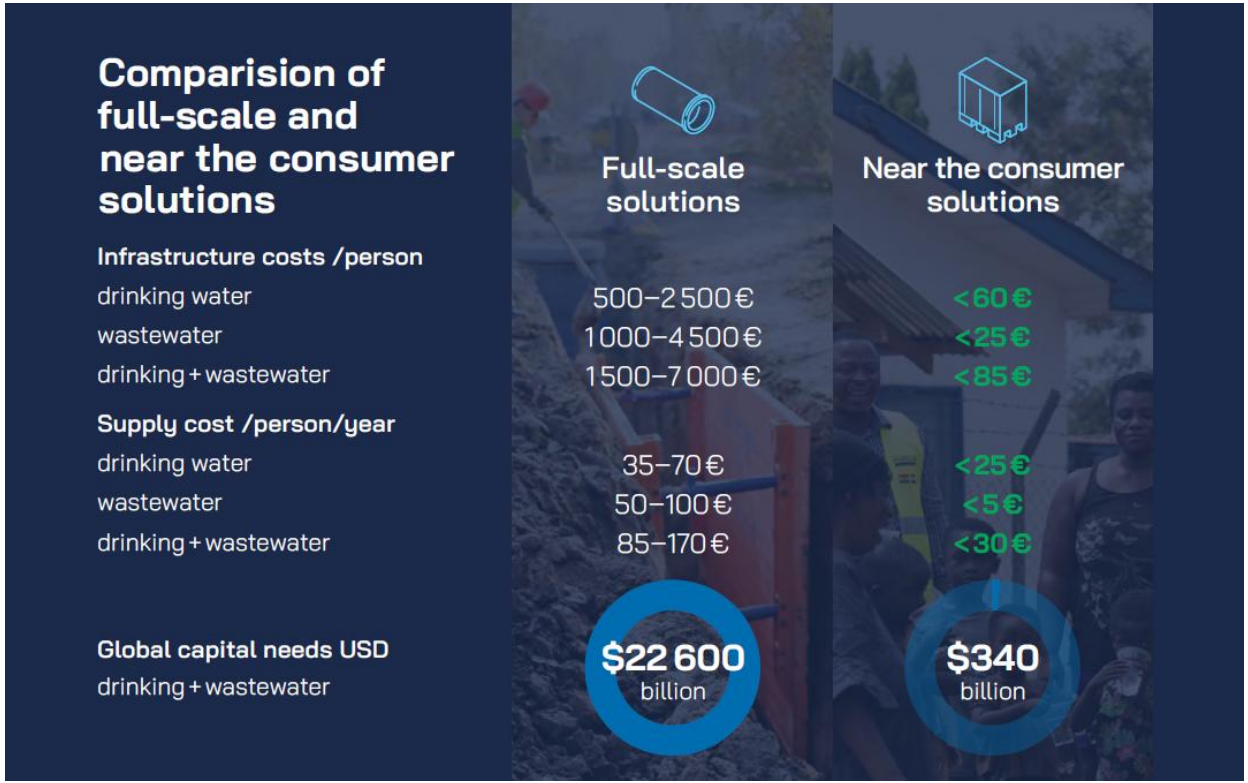
THINK
SAFETY
FIRST


PROCESS WATER HOUSE

Why are near-the-consumer solutions cost-effective?



- No need to build networks
- Investment capital required can be reduced by 90-95%
- Return on investment
- Quick help where you need it.

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Thank you for your attention!

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Links, more information

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