

The world's most cost efficient, high productive, patented effluent water processing system\*

\*without any chemicals, membranes or filters

Below are just a few examples of products processed by Aqua Tuta



Distilleries



Hydrocarbons



Algae

Hotels/Resorts



Heavy Metals



Wastewater



Beer/Soft Drinks



Coffee/Sugar

#### Effluents

- Effluent processing involves large volumes of water, wastewater and tracts of land
- Effluents have high COD/BOD, pH, etc.
- Effluents can xpose significant threat to natural ecosystems if discharged without the correct treatment, effluents being rich in nutrients and other contaminants
- Remedial action for water bodies difficult to be focused from a management and conservation point
- Wastewater from effluent processing is heavily polluted with organic matter, etc.
- The release of high amounts of contaminants into water bodies creates serious health and environmental problems and may lead to an upsurge in wastewater treatment cost\*
- Contaminants are being heavily restricted year upon year



Example of heavy metal effluent treated with Aqua Tuta Left: Treated. Right: Untreated containing for example molybdenum and mercury

2019

# Limitation of conventional systems of wastewater treatment





- High CAPEX
- High OPEX
- Chemicals
- Air Compressors
- Filters
- High footprint/large tracts of land required



### Aqua Tuta wastewater processing technology

- Extremely small footprint 2m<sup>2</sup>
- Up to 240m<sup>3</sup>/24h
- Continuous processing
- Aqua Tuta will adapt to more restrictive regulations
- CAPEX USD 4 cents/metric ton
- Non chemicals
- No membranes



### Advantages of Aqua Tuta Technology

The Aqua Tuta process recycles the effluents to clean water and as a by-product automatically separates organic matter that can be used as natural, sustainable fertilizer.

Aqua Tuta advantages:

- Lowest CAPEX
- Lowest OPEX
- Lowest annual maintenance
- Lowest square meter requirement/m3.
- High volume processing in cubic meters/module
- Fastest effluent processing time.
- Automatic separation of organic matter
- Easy to use
- Low threshold to operate.
- Sustainable
- NON CHEMICAL
- NO MEMBRANES



#### Aqua Tuta<sup>™</sup> Patented Technology

- AQUA TUTA<sup>™</sup>'s technology, though extremely powerful, has the smallest area footprint in the industry.
- AQUA TUTA<sup>™</sup> is the most cost efficient (CAPEX and OPEX) technology called **convective reaction**, with wide-ranging applications in water processing.
- Convective reaction's water processing treatment removes contaminants that are generally more difficult to remove by filtration, chemical or membrane treatment systems -- contaminants such as suspended solids, high levels of COD and BOD, phosphates, nitrogen, organic acids, heavy metals etc.
- AQUA TUTA™'s groundbreaking advancement in cost efficiency (CAPEX and OPEX) dramatically reduces the cost.



Installation USA

#### AT-10 molecule crusher

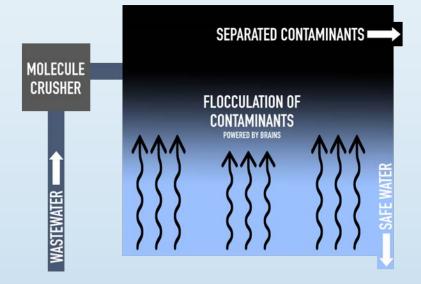
#### AT-10 brains





#### How Aqua Tuta works

- 1. Effluent is pumped through a molecule crusher that facilitates the flocculation of contaminants
- 2. Effluent enters the treatment deposit
- 3. 7,200 signals/s are transmitted from the brains through the effluents, separating the contaminants upwards
- 4. Contaminants flocculated upwards are skimmed off by rotating paddles
- 5. Automatically separated organic materials, like N and P, are disposed of via the chute
- 6. Safe water is released through the valve at the bottom



#### Coffee and sugar effluent lagoons

Aqua Tuta treated coffee and sugar effluents recycled to lagoons





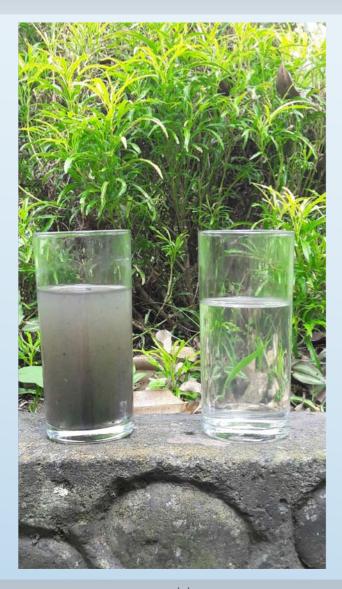
#### One example of an effluent treated by the Aqua Tuta waste water processing.

#### Heavy metal effluents treated in the USA by Aqua Tuta





#### Coffee Effluents Colombia



# AT-10 at work with the smallest m<sup>2</sup> footprint, even in a jungle environment





#### International Spanish Hotel Installation in Mallorca





### Thank you!

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