

FluxGen

Sustainable Technologies

De-Risking Industries and Buildings from Water
Crisis



Microsoft
for Startups

CERTIFIED TECHNOLOGY & IMPLEMENTATION PARTNER BY GOVERNMENT OF INDIA UNDER AMRUT 2.0



Risks faced by Industries

Financial Risk

- Increasing cost of water as groundwater is depleting and groundwater extraction is chargeable if overused (as per CGWA and local municipalities)
- Cost of chilling, boiling, pumping, purification, RO raises 'true cost of water'
- Cost of waste water disposal (zero liquid discharge), now mandatory as per the CPCB

Business Continuity Risk

- Industries are facing complete or partial shut-downs because of unavailability of water

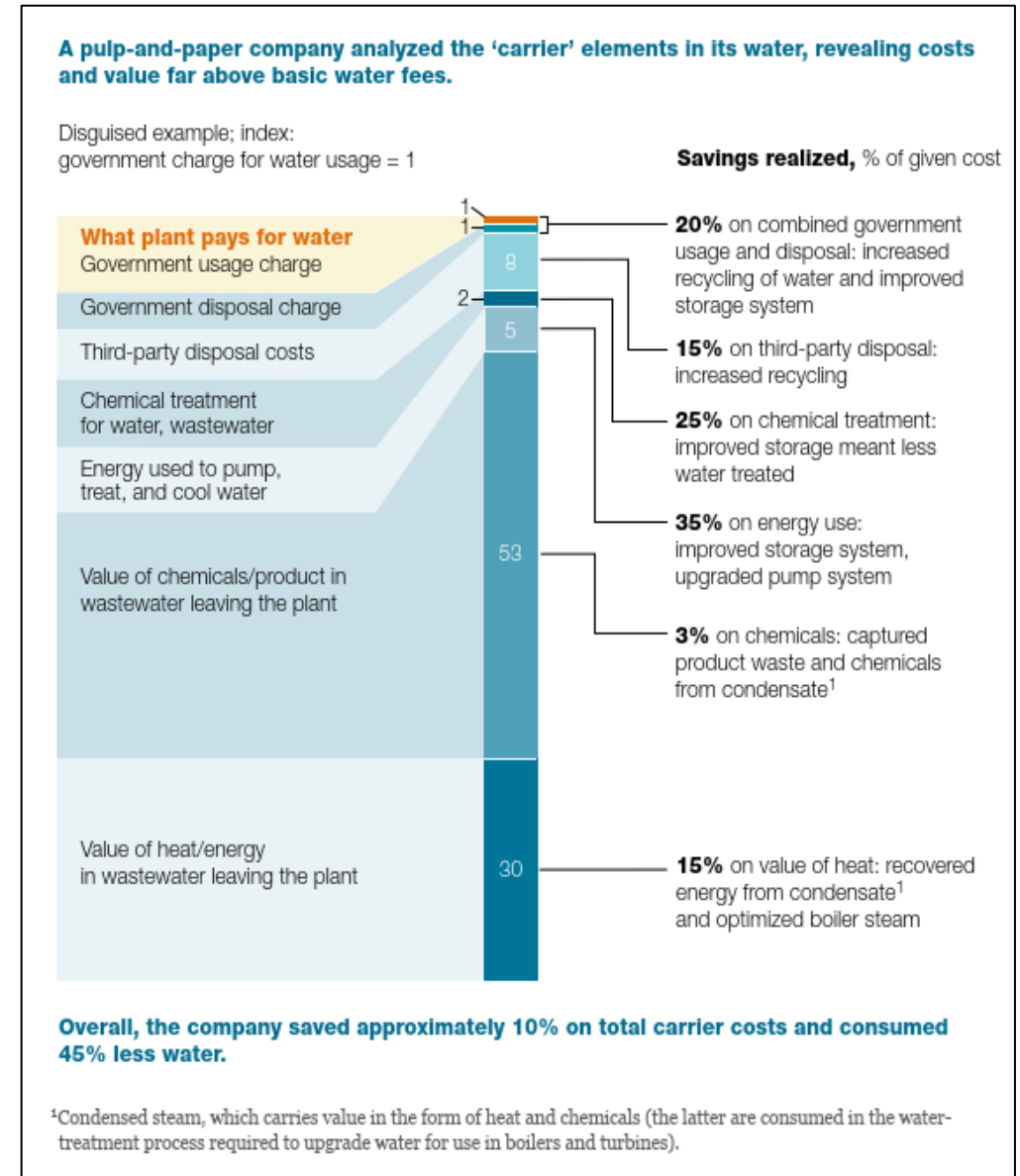
Compliance Risk

- CGWA – monitors groundwater extraction; consumption to be reduced else harsh penalties
- BRSR – the 1,000 top SEBI listed companies have to disclose water footprint data for every product (food or non-food) on their labels



The Paradox of Water Pricing

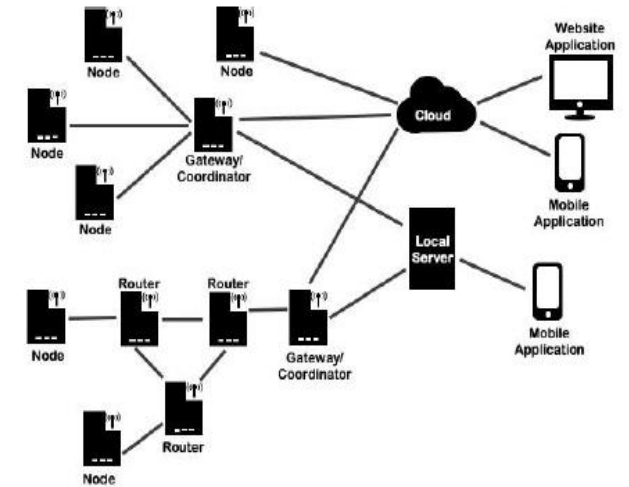
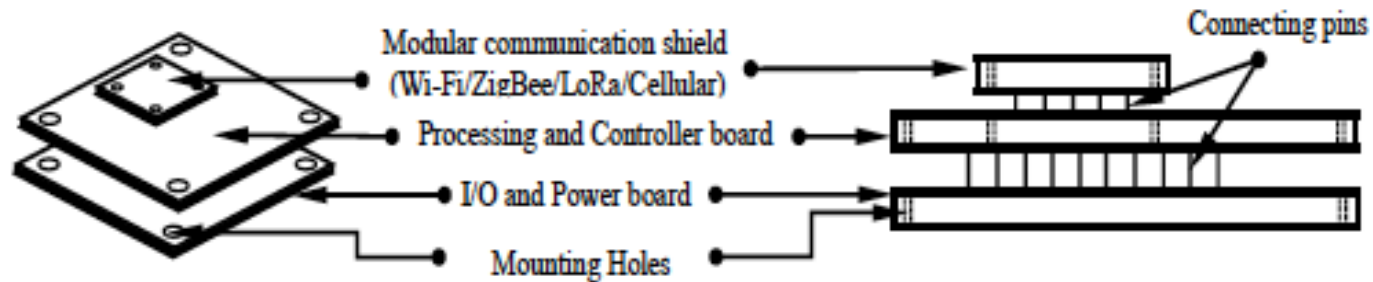
- The *price* of water almost never equals its *value* and rarely covers its *costs*
- When considered as a “carrier” of production inputs and outputs, the **cost of water increases** as much as **100 times** the nominal cost of water
- Optimizing water use can therefore yield significant benefits.



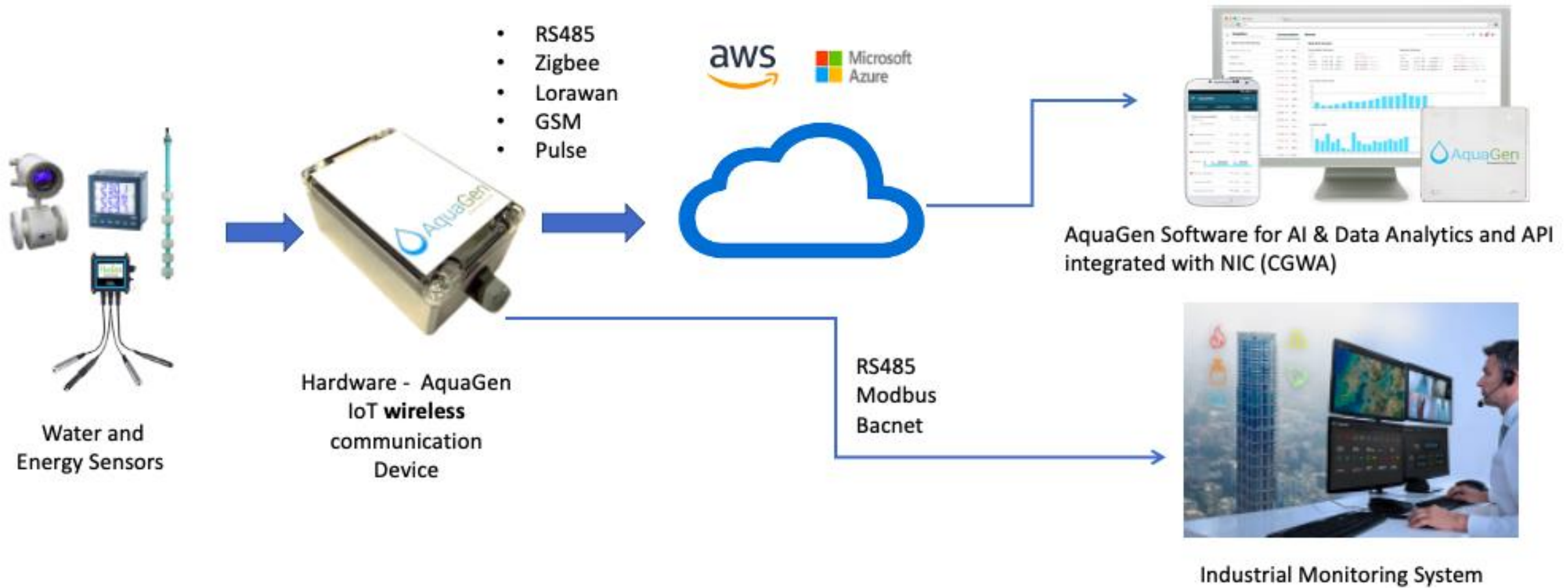
FluxGen's Intellectual Property

A MODULAR SYSTEM COMPRISING PROCESSING AND CONTROLLER UNIT TO SINGLE OUT WIRELESS COMMUNICATION TECH

Patent Application No: 202041053076



Architecture



Solution

Monitoring water flow, levels and quality in real-time, using IOT and Artificial Intelligence

Monitoring energy consumption by water infrastructure

Identifying inefficiencies in the water network

Prescriptive alerts, e.g. scheduling water pumping at night to minimize electricity costs

Comprehensive reporting for all aspects concerning water

Reduces water wastage and leakage by up to 30% of consumption



AI Based Analytics On The Go



Wireless Cloud Integration



Easy Integration with Existing System



Secured Data Transmission

SENSORS

Electromagnetic
water flow meters

Turbine water flow
meters

Wall mount
Ultrasonic clamp on
water flow meters

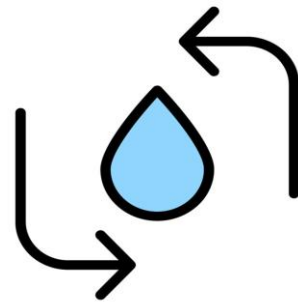
Ultrasonic Inline
water flow meters

Float switch based
water level sensors

Ultrasonic level sensors

Pressure based level
sensors

How WE DO IT ?



**Complete
Water
Balancing**



**Understand
Production
processes related
to water
consumption**



**AquaGen provides
insights into
Production vs water
Consumption data**



**Optimise
water
consumption**

Complete
water
balancing
through live
dashboard

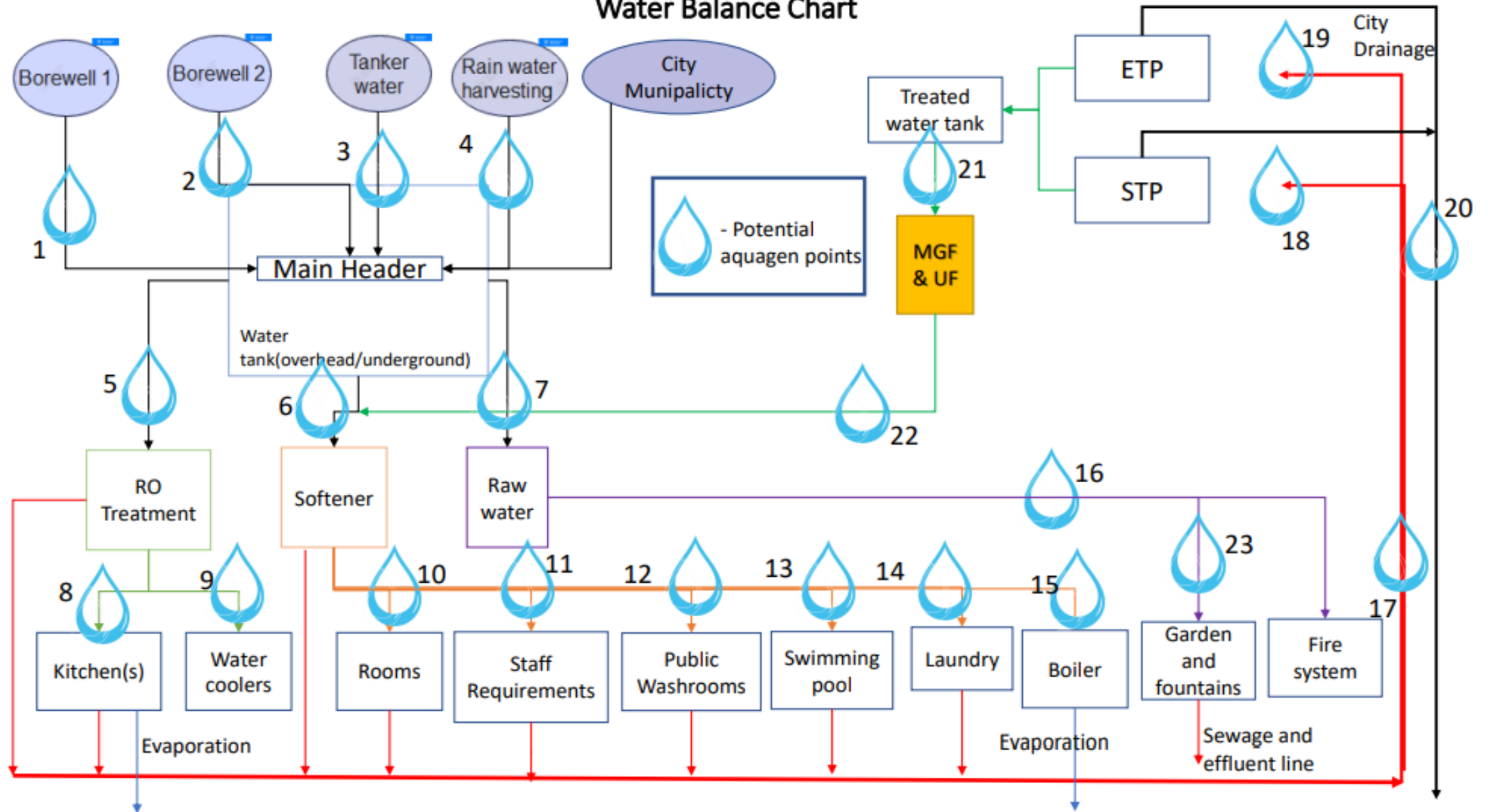
Identify
patterns &
outliers ,set
thresholds

Identify the
cause of
consumption

Benchmark
the potential
consumption
points

Use
predictive
alerts

Water Balance Chart



AFDIL PEENYA (Success Stories)



AFDIL is a pharmaceutical company based in Bengaluru & Mumbai. AquaGen is installed in the production unit in Peenya which has production capacity of 20 crore tablets a month

Services Offered by FluxGen



End to End water management system with Real time monitoring of 22 water points



Analytics and Alerts

Notify



Water Leakage



Water Wastage



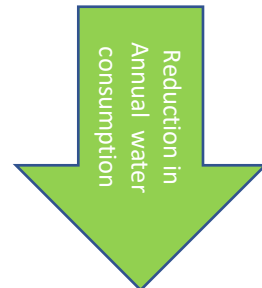
Excessive Usage



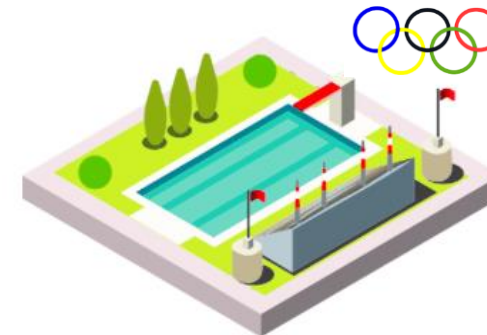
Production vs Water Consumption comparison



15%



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Water Savings equivalent to fill 20 Olympic Size Swimming pools

Lactalis India (Thirumala) (Success Stories)



Thirumala has been maintaining its position as a fastest growing brand with presence in major states of India such as Tamil Nadu, Karnataka, Andhra Pradesh, Telangana, Kerala, Madhya Pradesh, Uttar Pradesh, and West Bengal.

Services Offered by FluxGen



End to End water management system with Real time monitoring of 11 water points



Analytics and Alerts

Notify



Water Leakage



Water Wastage

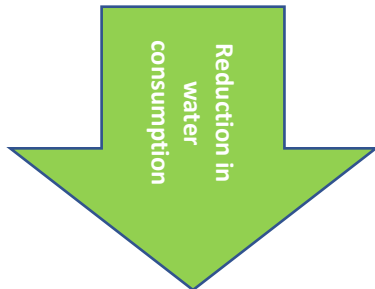


Excessive Usage

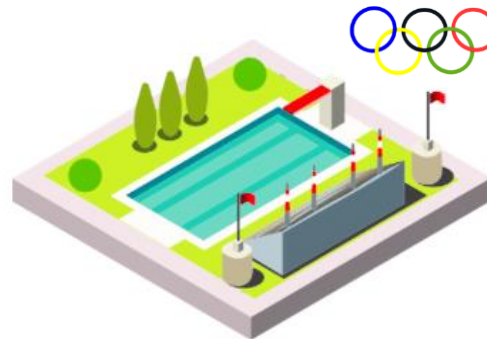


Milk to Water Ratio

20%

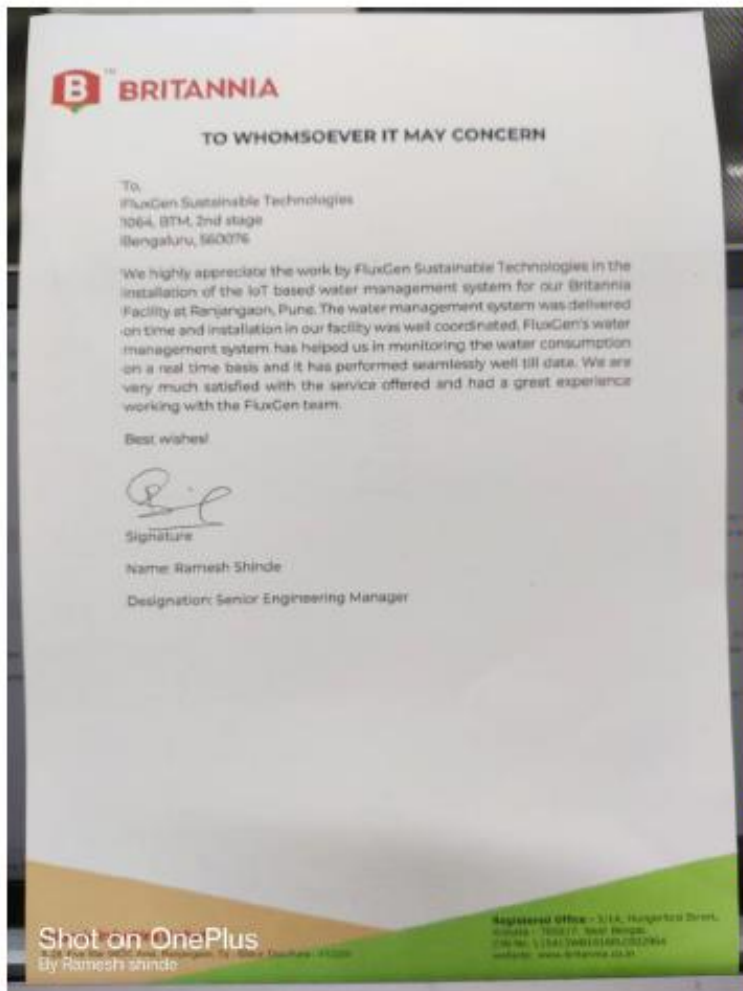


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Water Savings equivalent to fill 113 Olympic Size Swimming pools

Britannia testimonial



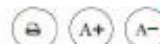
Tata Steel Mining Collaboration

- <https://infra.economictimes.indiatimes.com/news/water/tata-steel-mining-to-conduct-water-audits-at-its-five-facilities-in-odisha/93316559>

Tata Steel Mining to conduct water audits at its five facilities in Odisha

Tata Steel Mining Ltd on Tuesday said it has decided to conduct water audits at five of its operational facilities in Odisha to ensure more efficient use of the resource and its conservation.

PTI • August 03, 2022, 12:19 IST



Bhubaneswar: Tata Steel Mining Ltd on Tuesday said it has decided to conduct water audits at five of its operational facilities in Odisha to ensure more efficient use of the resource and its conservation. The company has partnered with New Delhi-based The

Energy and Resources Institute (TERI) for the proposed exercise.

The initiative focuses on comprehensive water audits involving the use and balance of the resource, quality profiling, identification of water losses and leakages, the company said in a statement.

It also said this will enable TSML to develop an integrated industrial water management strategy that optimises efficient use of water and improves productivity of the resource at its units.

TSML has also tied up with FluxGen Engineering Technologies, a Karnataka-based company working on water solutions, to install AquaGen mechanism to reduce consumption of the resource, the statement said.

AquaGen is a SaaS (software as a service) platform that will give a secure and single-window access system to digital data of the entire water infrastructure on parameters such as water flow and bore-well water level.

Speaking on these initiatives, TSML Managing Director Pankaj Kumar Satija said, "Water being a critical national resource, we are focusing on zero down groundwater withdrawal and a 30 per cent reduction in surface water intake by 2030."

Our Customers



Awards and Recognition



BuildFor2030
Hackathon Hero

Microsoft (Global)



IoT Startup of the
Year Award

IoT Congress
India



Most Promising
Startup of the Year

IESA Vision
Summit



Parivartan Grant

HDFC



Best Indian Social
Enterprise Award

Action for India



Startup Innovation
Award

Nokia India,
Innovation Day



AI Enabled Water Management system



Water leakage detection



Water wastage detection



Excessive water usage detection

