Enggrob
& Singh

Dryp.™

Smart Water Management

A Product for Data Monitoring & Proactive Management of Water Infrastructure

Easy • Simple • Open • Low-cost

European Technology

Enggrob & Singh

Contents of Presentation

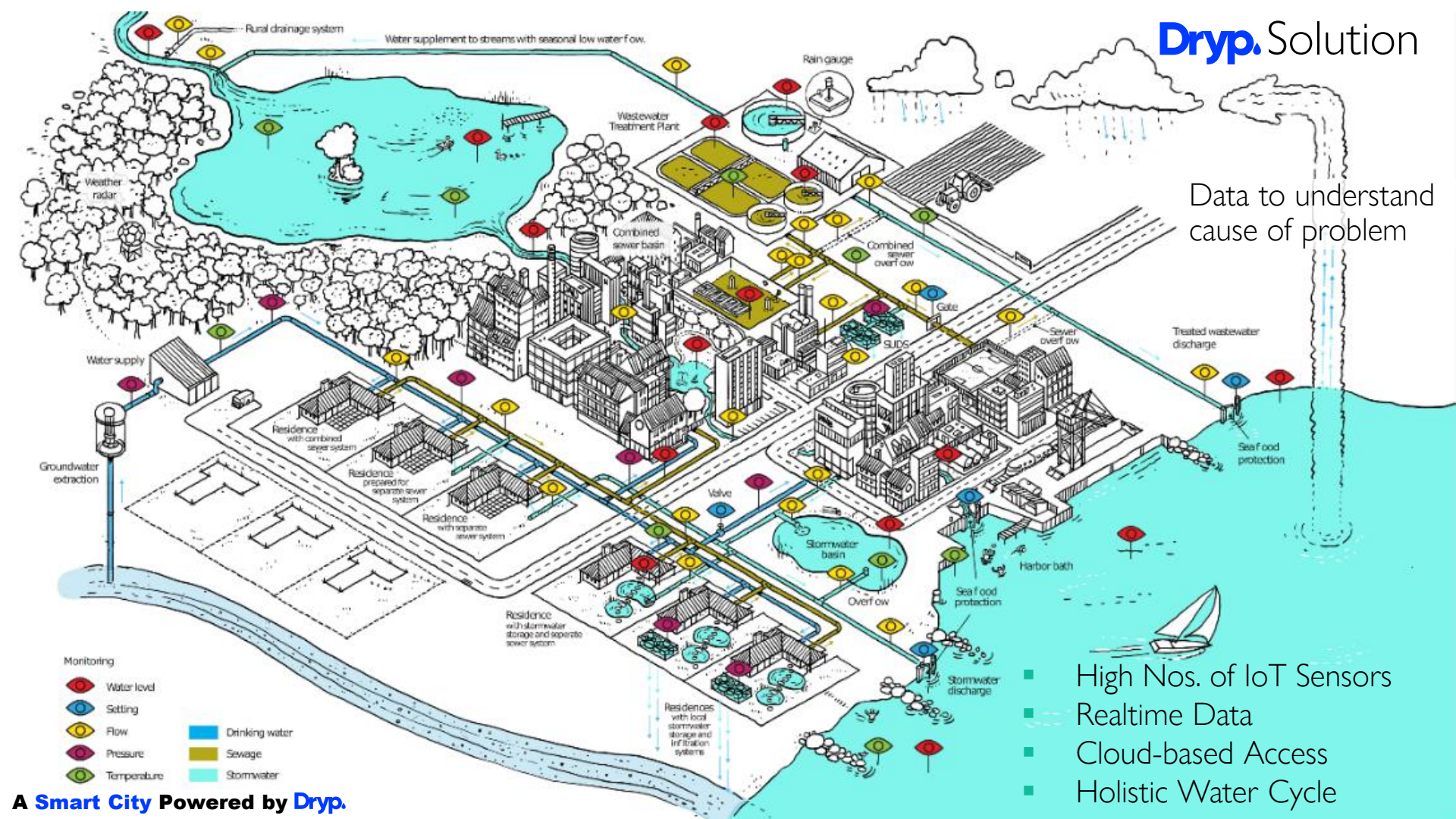
- Problem & Cause
- Solution & How it Works
- How to get Started & Results (demo & free trials)
- Costs & Resource Requirements
- Benefits & Long-term

Enggrob & Singh

Problem & Cause

- Non-revenue water → No water balance
- Wastage → Leaks and overflows
- Intermittent water supply → Lack of holistic pressure management
- Urban flooding → Inefficient rainwater runoff
- Groundwater decline → No conjunctive use of surface and ground water
- …and many other water issues

Dryp. Solution

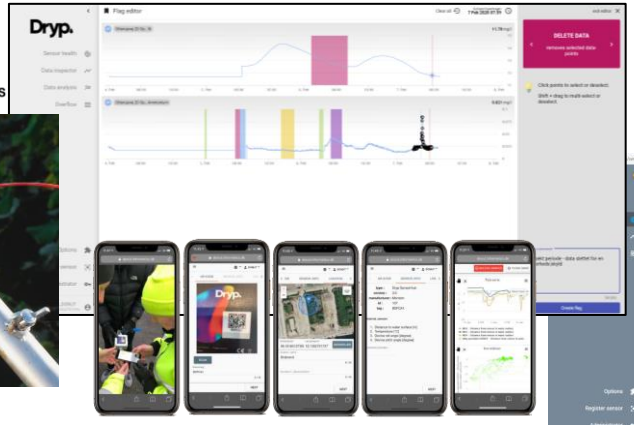


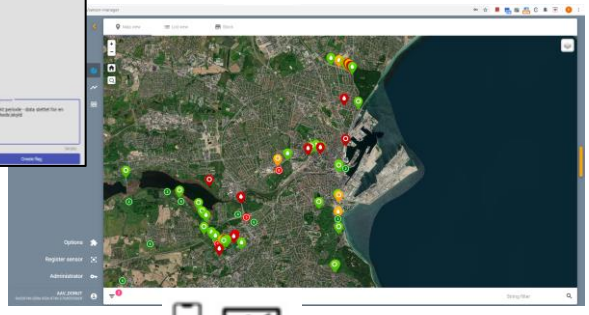
Data to understand cause of problem

- High Nos. of IoT Sensors
- Realtime Data
- Cloud-based Access
- Holistic Water Cycle

A Smart City Powered by Dryp.

How Dryp. Works





HARDWARE	CONNECTIVITY	CLOUD	INSTALLATION AND APPLICATION
High-resolution water level sensor	Global connectivity	Data availability and visualization	Plug ‘n’ play installation
Variable and adaptable measurement frequency	Two way communication	Automated data validation	Self-configuration capabiliities
Long battery life	Variable and adaptable transmission frequency	Data API for full control	Self-calibration and diagnosis
Edge processing	Optimized for the challenging underground transmission conditions	User defined thresholds	Intelligent alarm system
Optimized for the challenging conditions in the water sector		Data integration: GIS, weather and other sources	Device management and automated health monitoring
		Predictive capabilities utilizing machine learning	Data-driven overview of man-made and natural water systems

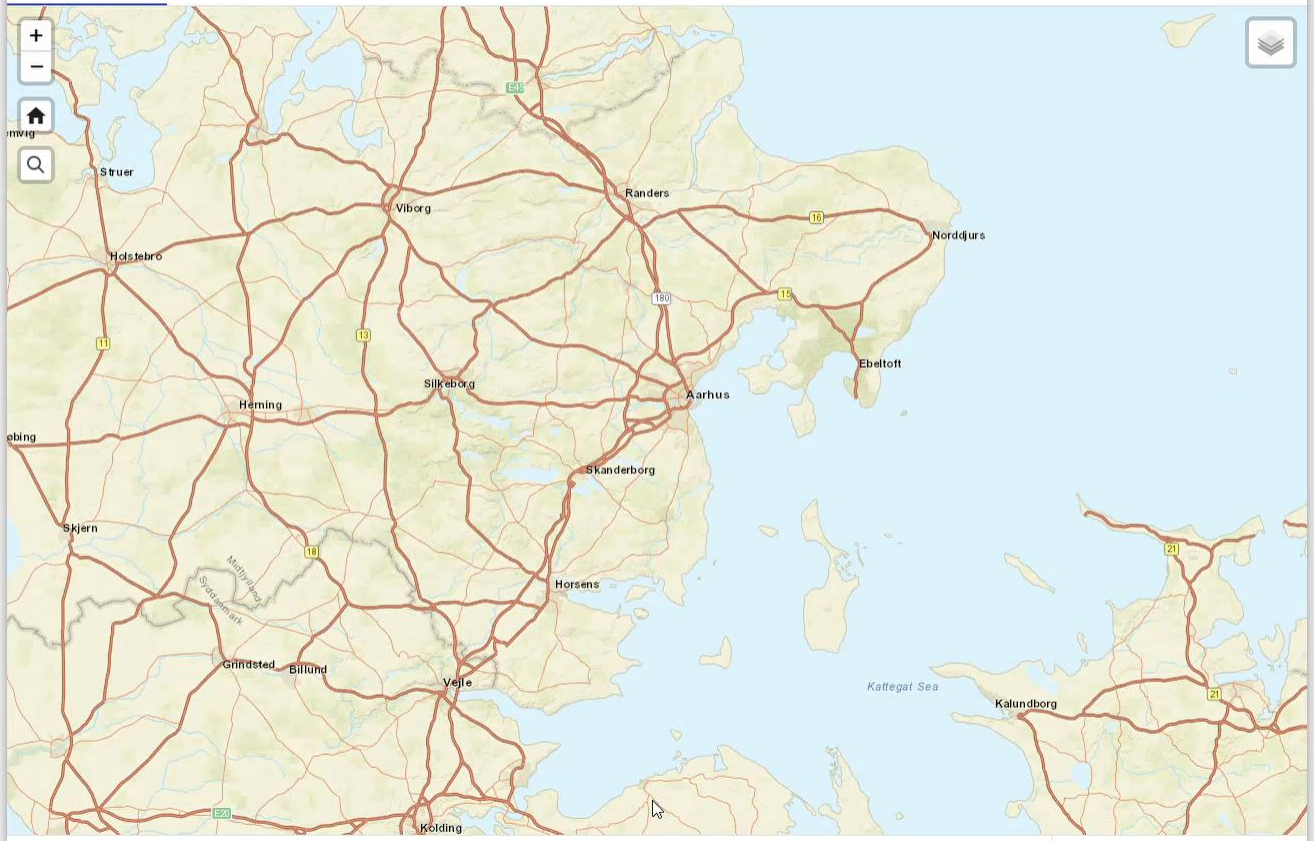
Dryp.

- Sensor health
- Data analysis
- Overflow
- Options
- Register sensor
- Administrator

AAV_DONUT
9e02014b-200e-433e-874b-376df2938d3f

Map view | List view

Displaying rows
0 of 189



SOURCES

Please select sources from map or list -view

Date range
1.10.2019 - 11.10.2019

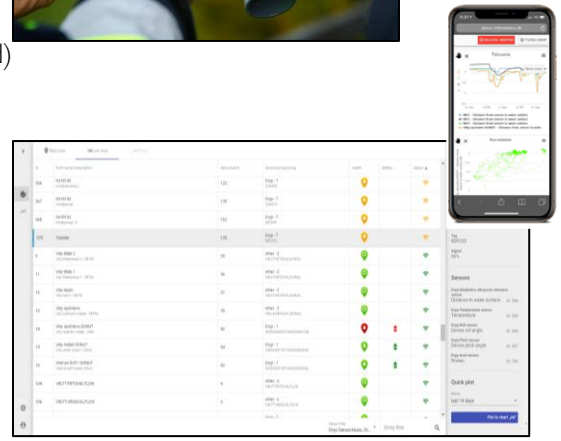
Parameter filter

String filter

How to Get Started with Dryp.

Enggrob & Singh

- Get PoC Start-package with 10 water level sensors
- Scan QR code on each sensor, and it is registered (plug 'n' play, self-configured and -calibrated)
- Log into your web service (Smartphone or PC) and view via preconfigured dashboard



Expand and Customise your Own System

- Add any other flow-, pressure-, level- or other sensor though standard connectivity protocols
- Log into your web service (Smartphone or PC) and view via preconfigured dashboards
- Your own IT vendor can further customise analyses and dashboards through open source APIs

Enggrob & Singh

Costs of Standard Package

- Standard Start-package for Proof of Concept – 10 ultrasonic water level sensors – 3 workshops over 6 months – online support
- Price for sensors and SaaS services – INR 50,000 per month – Minimum 12 months
- Thereafter INR 5,000 per sensor per month for SaaS service incl. support

Alternative packages

- **Small** – 5 ultrasonic water level sensors – INR 25,000 per month (min. 12 months)
- **Medium** – 10 ultrasonic water level sensors – INR 50,000 per month (min. 12 months)
- **Large** – 20 ultrasonic water level sensors – INR 100,000 per month (min. 12 months)
- Consulting assistance in planning, setting up, linking to e.g. Smart City system – separate project quotation as per specifications*)
- Consulting assistance in customisation or in O&M – separate project quotation as per specifications*)

*) Not needed if you have own inhouse water experts and/or IT staff with available time

Enggrob & Singh

Your own Resources

- Water domain expert*), who can plan DRYP sensor deployment and DRYP application for better Decision Support or Automation
- IT supporter*) who can establish internet connection, link to internal IT databases etc.
- Installation (on rod, under bridge structure or similar) of sensor, and security measures against theft etc.
- Additional sensors and/or other online data such as rainfall, river gauge levels etc.
- IT equipment and routers to link to internet/cloud services

*) Additional consulting services can be provided if needed

Enggrob & Singh

Benefits & Longterm gains of Dryp.

- From day-1 own information and decision support system
- Expansion of water utility digitalisation with your own speed (and budget)
- Open source, meaning any local consultant can customise
- Can integrate with any existing SCADA system or Smart City system
- 3-tier support (local consultant, national IT consultant, international SaaS)

Simple !

Low-cost !

Open source !

Easy !

Contact information

- (Local agency)
- Mr. Manav Singal (manavs@audertec.com)
- Mr. Tarunpreet Singh (tarunpreet@audertec.com)
- Mr. Neelabh Singh (neelabh.singh@enswater.com)
- Mr. Hans Enggrob (hans.enggrob@enswater.com)

Thank you!

More brochures online: https://www.dryp.global/solutions

Enggrob & Singh