20th AfWA International Congress and Exhibition 2020
Breaking new grounds to accelerate access to water and sanitation for all in Africa

UCD SMART VILLAGE
& MULTI-UCD

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What is UCD and what is a UCD packaged plant?

- UCD: Unité Compacte Degrémont

- 17 Million euros of turnover Landing 2019
- > 1,100,000 cubic meter per day produced
- 231 Of compact units installed up to date in Emerging countries Worldwide
- 37 Countries in the world
- 27 Full time employees
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- What is UCD and what is a UCD packaged plant?

Small or large capacities, single or multi package plants (x40)

A worldwide market

A dedicated and motivated team within SUEZ
What is UCD and what is a UCD packaged plant?

One video tells more than 1000 words…
What is UCD and what is a UCD packaged plant?
Our new challenge, called UCD SMART VILLAGE: provide global solutions for access to water, sanitation and essential services to decentralized population

**Drinking water:**

UCD FAST: a new product highly standardized, play-and-play, off the shelf, with energy savings, for 15 to 50 m3/h capacity

- 15 m3/h prototype
- UCD FAST 40’ for 50 m3/h
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- New possibilities are offered:
  - Energy autonomy thanks to shelter with solar panel
  - Digital and smart tools for operation monitoring
SUEZ is able to supply each step of a complete water treatment line including:

- In-house pumping station floating on rivers or dams
- Conventional water treatment
- Drinking water pumping station
- Storage in water tower or tank on a hill
- Public fountain
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Water treatment plant UCD FAST
- Robust and reliable treatment principles
- Plug & play technology
- Easy to operate and maintain
- High lifetime due to design and materials
- Autonomous in energy with solar panels (option)
- Can be supplied with a Geodet (option)
- Can be supplied with a drinking water transfer station

Surface water pumping station
- For pumping in river, lake, dam
- Robust and reliable operating principles
- Adapted to many bank topographies
- Floating barge adapted to water level variation
- Innovative solutions for cleaning and maintenance
- Autonomous in energy with solar panels (option)

Metallic water tower
- Drinking water storage prior to distribution
- Buffer storage for peak periods
- Maintain a constant pressure for distribution

Water kiosk in villages / towns
- Various technologies are available
- Consumers use pay-per-phone or pre-paid cards
- Many kiosks can be connected to the water tower
- Connection to consumer homes can also be provided
New possibilities are offered:

- Public fountain can be smart with pay-by-phone or pre-paid cards, and data reporting, or can be traditional with a fountain operator.
Sanitation:

For isolated areas where no sewage network exists, UCD aims to develop a micro anaerobic digestion of feces.

Objectives:
1. Fix the issue of sanitation management
2. Generate energy through biogas production
- For sanitation:

The main requirements to create a virtuous circle:
- Organize collection of feces from latrines in accordance with local habits and logistic possibilities
- Implement a treatment must be simple, robust and efficiency
- Make available for population the generated biogas for cooking, lighting or electricity production
- Make available fertilizer with reduced pathogens
- **Organic matter up-cycling:**
  After sanitation treatment is validated, anaerobic digestion will be tested on organic matter up-cycling

Objectives:
1. Produce energy as biogas from organic wastes
2. Make it available for population and create possibilities of micro-exchanges with drinking water production line: for example, vouchers of biogas – water - electricity
Demonstrators:

Thanks to important investments of the SUEZ innovation program, 2 demonstrators will be implemented in Ivory Coast to test in real conditions:

- The drinking water global treatment line in 2020
- The sanitation and organic treatment with anaerobic digestion in 2021
The UCD team is available for any further information on UCD SMART VILLAGE or UCD package plants.

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YOU ARE WELCOME