Wastewater, and the Role of Utilities to Achieve the SDGs

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THE CHALLENGE TODAY

- 1 in 3 people, or 2.4 billion, are still without sanitation facilities

- More than 80 percent of wastewater is discharged untreated into water bodies
SANITATION

Urban sanitation and wastewater challenge

2.4 billion people without sanitation facilities
- 946 million defecate in the open
- 842,000 deaths each year

BRAZIL 39 million
NIGERIA 103 million
INDIA 818 million
PAKISTAN 98 million
CHINA 607 million
DEM. REP. CONGO 50 million
ETHIOPIA 71 million
INDONESIA 109 million
TANZANIA 32 million
SANITATION

Economic impacts of poor sanitation

The economic impacts of poor sanitation are enormous and extend to areas such as education, environment and tourism.

Global economic loss:
USD 260 billion per year


INDIA $53.8 billion
LAO PDR $193 million
VIETNAM $780 million
PHILIPPINES $1.4 billion
CAMBODIA $448 million
INDONESIA $6.3 billion
SANITATION

TOTAL OVERALL SHORTAGE 696,000*

*This overall shortage excludes the Philippines as that country did not segregate into the same categories. The segregation of shortages according to job categories was only done in nine countries in phase 2, and hence rounded total figures are presented.
THE CHALLENGE TODAY

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WASTEWATER
A WORLD IN WHICH WATER IS WISELY MANAGED

Universal access to adequate and equitable sanitation

Halving the proportion of untreated wastewater

Substantially increasing recycling and safe reuse

How do we get there?

2.4 billion people without access to sanitation

80% of wastewater untreated

80% of wastewater untreated
EXAMPLES OF UTILITIES LEADING THE WAY

How do we get there?
UGANDA – CITY AND UTILITY PARTNERSHIP TO ACCELERATE SUCCESS

- Free joint call center for better services
- Public-private-partnership and certification system with pit emptiers
- Sludge reuse and energy recovery from treatment plants
- GIS mapping and home visits
NETHERLANDS – REUSE THAT CHANGED THE REGULATION

• Production 1000 ton P for fertilizer (3 ton/day)
• 400 000 EUR savings per year
• Authorised by law
AUSTRALIA – WASTEWATER MINING

- Irrigation of parks & recreational areas
- Aquifer Reserves
- Toilet flushing
- Washing cars

Purple pipes with reclaimed water
DENMARK – PARTNERSHIPS FOR AN INDUSTRIAL SYMBIOSIS

• Commercial agreements between industrial partners
• Over 30 resource streams today

• Resource savings, for example 3 million m3 water
• Economic savings, 1 million EUR per year
• Reducing CO2 emissions, with 275 000 tons per year
THANK YOU

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