

Think Infrastructure Partnerships

www.besix-concessions.com



IDA Panel Discussion

Direction of TE Reuse



UNDER THE PATRONAGE OF THE EGYPTIAN PRIME MINISTER

11TH WATER DESALINATION CONFERENCE IN THE ARAB COUNTRIES UNDER THE THEME: NATIONALIZATION OF DESALINATION INDUSTRY IN THE ARAB WORLD

18- 19 April 2017

INTERCONTINENTAL CITY STARS - CAIRO - ARAB REPUBLIC OF EGYPT



Date 18 April 2017



Location ARWADEX conference – Intercontinental City – CAIRO, EGYPT Presenter Ghassan EJJEH







WATER REUSE

GENERAL



Water

• Demand in the GCC & ME

- Limited water resources
- Inefficient use of TE
- Deteriorating Groundwater
- Weak regulatory framework



 BESIX Owned/Managed Assets produce 35% of UAE TE

- Reuse options
 - Recreational
 - Irrigation
 - Agriculture
 - Industrial
 - Domestic
 - Potable (through aquifer storage/recharge)





AJMAN SEWERAGE

ASPCL



- Public Private Partnership-BESIX-Gov't of Ajman -VEOLIA
- 250 km of sewers, 22 pumping stations, WWTP and TDF
- 25 years operations & maintenance (incl. customer service)

 Operator – Moalajah – achieved major power savings and;

BESIX Concessions & Assets

- Reliable TE quality -61.000 m3/day :
 - BOD: 1mg/l
 - TSS: 4 mg/l
 - Turbidity: 5 NTU
- Expanding Reuse for Irrigation and Industrial/Commercial



SAFI OPERATIONS



050-300167





SAFI DOES IT WORK?



- Project structure: trailblazer in the region- 600 tankers per day.
- Global Water Summit 2012 Rome: Distinction Award "Water Reuse Project of the Year 2012"
- Reliability and quality assurance- ISO 9001:2015 certified
- Financially feasible:
 - Capex and Opex funded by income from selling "polished water"
 - No recourse to direct subsidies from central bodies
 - ...thus really guaranteeing its sustainability on the long run!
- Collaboration & support Ajman Municipality Environmental Dept





SAFI NOT DRINKING WATER REUSE

Safi SAFI water for:

- Non-potable use in labour camps
- Customers with single tank



الهيئة العيامة للشيؤون الأسيلامية والأوقياف

Safi Council of Leading Islamic scholars (CLIS) of Saudi Arabia (1978)

"[...] considered as pure water [...] if its treatment using advanced technical procedures is capable of removing its impurities with regard to taste, color and smell [...]"

Safi? Fatwa, UAE (2013)

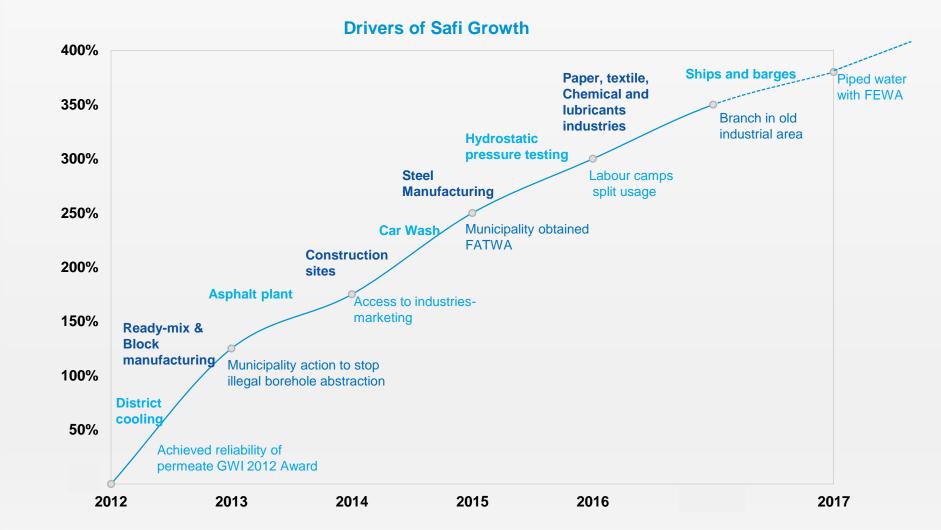
"[...] water [from SAFI] can be used for washing and for wodo'o"

Safi Ensure that water is not used for drinking



SAFI GROWTH







CONTACT HOW CAN WE SUPPORT YOU ?



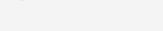


Eng. Ghassan EJJEH

Senior Vice President – BESIX Group



+971 50 628 2559



gejjeh@besix.com



Eryl EDWARDS

Commercial Manager – BESIX Concessions & Assets





eedwards@besix.ae



DISCLAIMER

This presentation has been prepared by BESIX for informational purposes only. Although the information contained in this presentation has been obtained from sources which BESIX believes to be reliable, it has not been independently verified and no representation or warranty, express or implied, is made and no responsibility is or will be accepted by BESIX as to or in relation to the accuracy, reliability or completeness of any such information.

Opinions expressed herein reflect the judgement of BESIX as of the date of this presentation and may be subject to change without notice if BESIX becomes aware of any information, whether specific or general, which may have a material impact on any such opinions.

BESIX will not be responsible for any consequences resulting from the use of this presentation as well as the reliance upon any opinion or statement contained herein or for any omission.

This presentation is confidential and may not be reproduced (in whole or in part) nor summarised or distributed without the prior written permission of BESIX.

© BESIX. All rights reserved.