



Zakito District Cooling

Participation proposition for Van Oord





Zakito District Cooling and Deep Seawater Industry

A possible new economic pillar for island nations

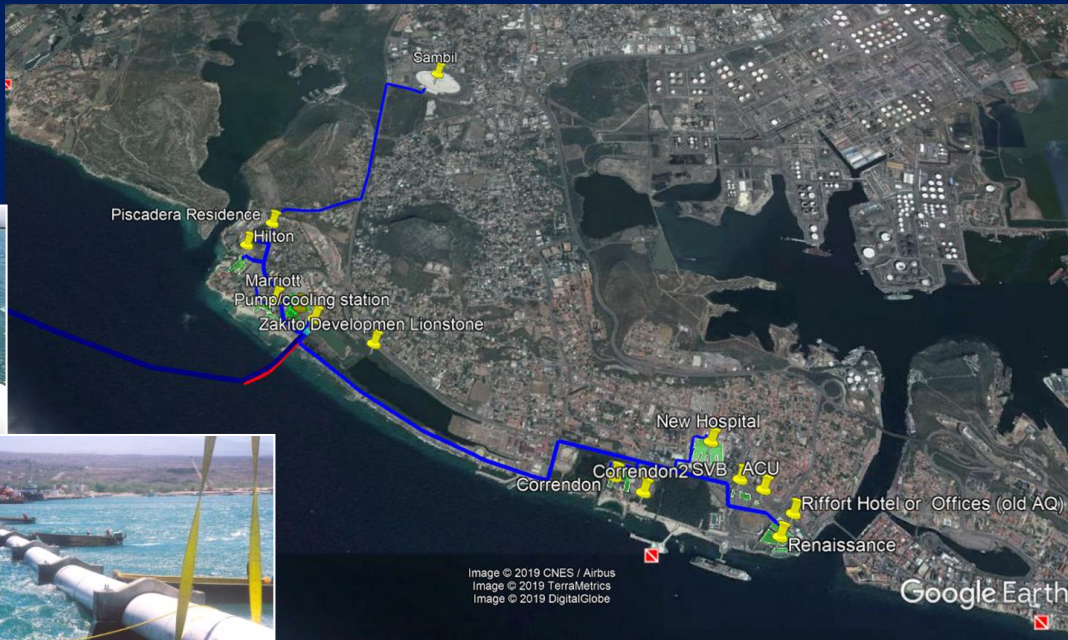


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Characteristics of deep seawater

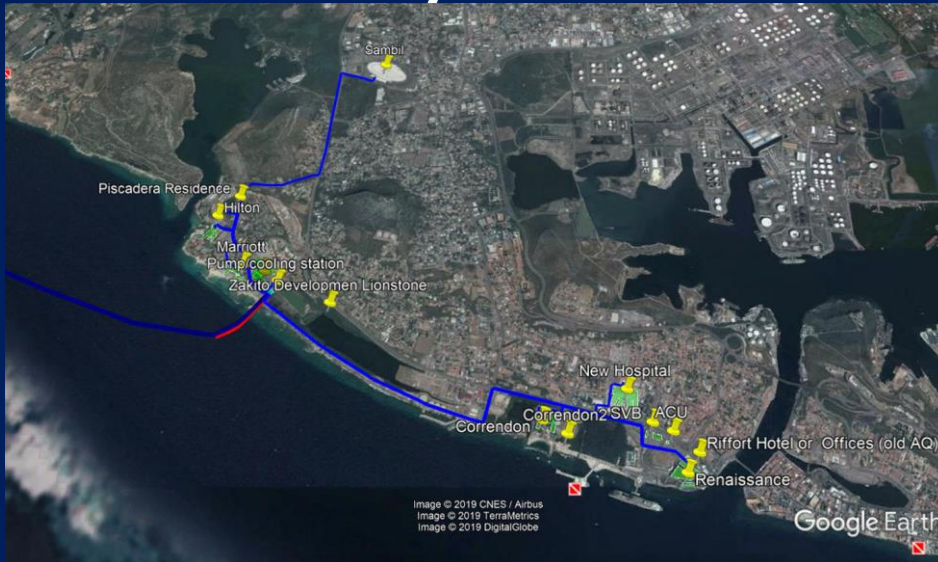
- The deep seawater (ca 850m)
- The deep seawater which originates from the North Pool take ca **400 years** to reach Curacao and **2000 years** to reach Hawaii, and is thus free of our resent surface pollution.
- Contrary to surface water, deep sea water temperature remains fairly constant between **5-6 Celsius**.
- Because the sun light does not reach the depths of the ocean, photosynthesis does not take place, leaving **nutrient rich water ideal for aquaculture**.
- The amount of bacteria and organic matter is also considerably lower than in the surface water, and thus **very sterile**.
- These unique properties open the possibilities for various business opportunities, which can create value from the water of the deep sea.
- Deep Seawater platform is finalizing the SBI Policy plan for the government.
- Initial project could be the Deep seawater Industry at Isla West in combination with Eco Industrial Park (and Living Lab)





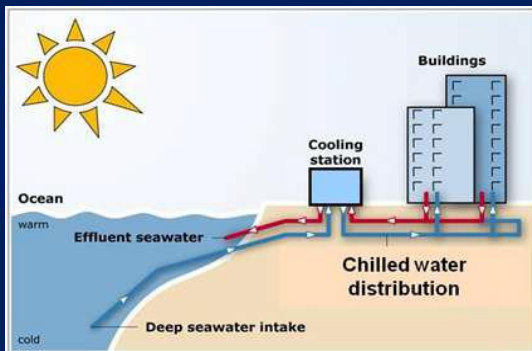
Zakito District Cooling

Naturally cool™



General Information

- Intake sea pipe Length 6,5 km Dept 850 m, Diameter 1000 mm
- Capacity 3.000 TR (10 MWth)
- Production based on naturally cooled deep sea water, a distribution network piping system to hotels and the hospital
- Intake temperature 6 degree C
- Total investment: ca. 50MUSD
- Currently on hold due to the Covid pandemic and resulting challenges
- Plans start of construction in 2022 subject to financial closure



Key Figures:

- A reliable, hurricane and tsunami proof, sustainable.
- Reducing the energy consumption and CO2 emissions for cooling by more than 95%
- Cheaper and stable (non-volatile) cooling cost
- HFC phase down: 100%
- Increases asset value of the properties (Zakito Vision) and enhances opportunity for corporate branding (like LEED)



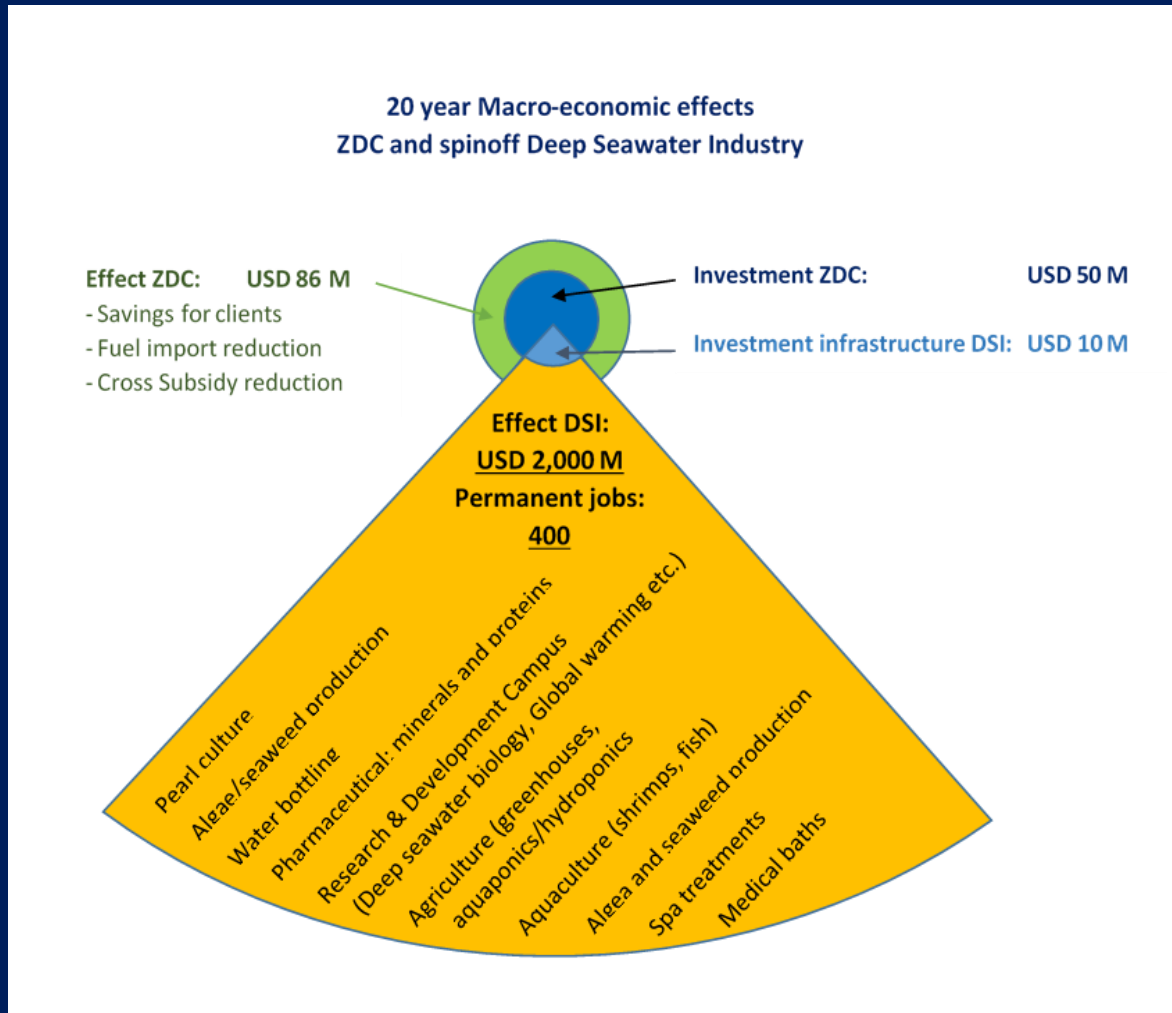
Deep Seawater Industry

A possible new economic pillar for island nations.

- Agriculture (greenhouse)
- Aquaculture
- Algae/seaweed production,
- Pharmaceutical and cosmetics
- Research & Development



20 year Macro-economic effects of ZakitoDC and spinoff Deep Seawater Industry





Opportunities and Needs for relaisation

- Status ZDC and DSI:
 - ZDC: Permits attained, Support of the local government, Design and Procurement finished, Clients committed interest,
 - DSI platform established and Draft DSI Policy plan ready.
- Opportunity for Curacao:
 - ZDC reduces Energy consumption and CO2 for cooling by ca. 98%
 - Construction ZDC and DSI can be parallel and ZDC can be operational 24 months after FC.
 - Job creation:
 - Short term (ZDC construction) 100,
 - Long term (DSI) ca 400-600 permanent jobs.
 - Indirect macro economical benefits (20 years) for Curacao:
 - ZDC ca. USD 80M (Curacao Medical Center will save ca USD 0.5M annually)
 - DSI ca. USD 2,000M
 - Curacao as centre of excellence for the Caribbean
- Potential for Consortium:
 - Coastal Areas and Island Nations World Wide
 - Already ca 2 billion USD regional Caribbean market.
- Why is the project not reaching FC:
 - Banks/Investors perceive Curacao, hospitality Clients (Covid) and scale of the project as high risk.
- What's Needed to start construction of the project:
 - Government Guarantees (Garantie Ondernemingsfinanciering, Groeifaciliteit, Groeifonds) or Bridge financing for investors/partners for the time it takes to get all clients connected (volloop risico).



Thank you!

Questions?



Zakito District Cooling

The Zakito District Cooling system and the subsequent potential for a Deep Seawater Industry, an insurance for our future energy and food supply, now and for generations to come.

