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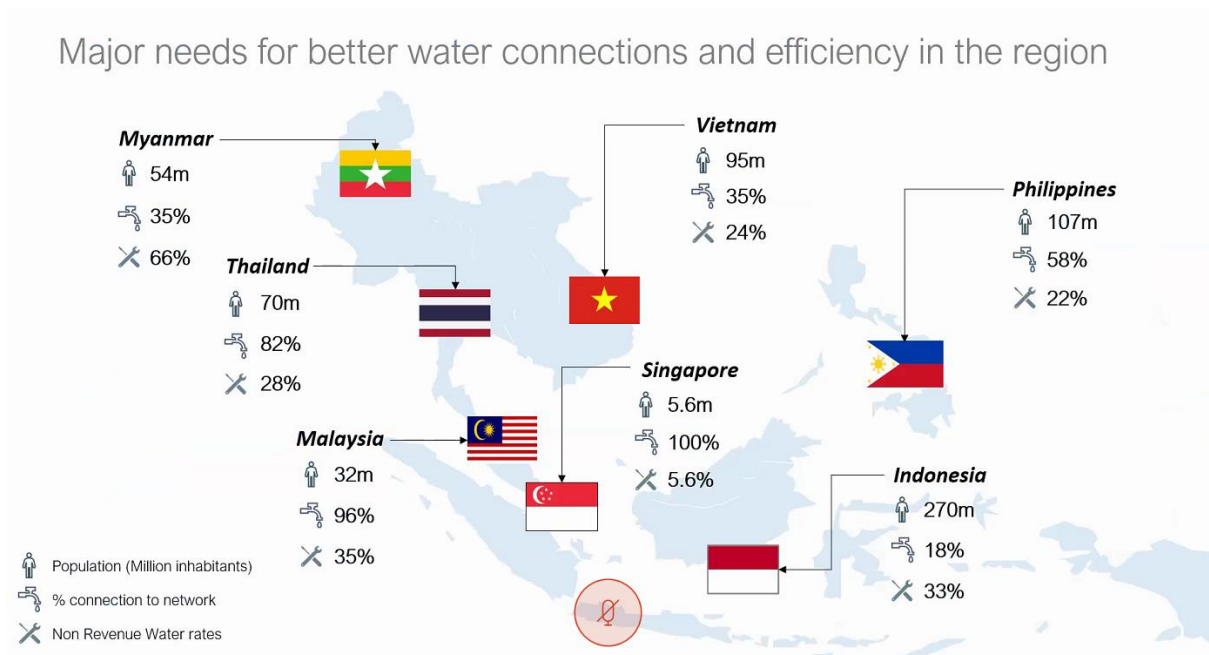
# The Future of Infrastructure

## 1. Where is the water market headed to?

### The ideas to keep in the future of the infrastructures (of water):

- Increase the resilience of the cities/countries.
- Preserve the natural water resources and bring new resources, adding circularity.
- Quality & safety of Infrastructures to ensure a long-life.
- Operation and Updating key infrastructures.
- The role of PPPs in developing new infrastructures.
- To incorporate new technologies (Digital, Artificial Intelligence) to improve the quality, costs and efficiency.
- Increasing compliance standards for wastewater discharge (e.g., clear examples in the Philippines)
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## 2. Focus on improving basic water & wastewater needs in Southeast Asia specially to combat Covid-19



Source of map: GWI

Access to safe and clean water, sanitation and hygiene are fundamental to combating the spread of Covid-19 and preserving the health and well-being of lives. Accelerating access to water and water services is important.

### 3. Sustainable Development at the heart of Infrastructure Projects

#### Fighting Climate Change

- <https://www.suez.com/en/who-we-are/a-committed-group/fight-climate-change>
  - SUEZ's 1.5 C trajectory & building climate responsible models (carbon solutions)

#### Preserving biodiversity

- <https://www.suez.com/en/who-we-are/a-committed-group/preserving-biodiversity>

#### Protect the oceans

- <https://www.suez.com/en/who-we-are/a-committed-group/protect-the-oceans>

### 4. Focus on digitalization to optimize costs of operation

- **Digital tools are transforming utilities.** This is true for utilities in general, and **it's particularly impacting the water industry.**
- In the water industry, we **use digital and smart technologies across the entire value chain** (from production, distribution and customer services).
- **Digitalization is an important part of the Shaping SUEZ 2030 strategic plan.** At SUEZ, we have a digitalization framework that involves technologies, processes, customers, business models, procurement strategies, partnerships, and alliances.
  - Plus, within our Group we have a global business unit called "Smart & Environmental Solutions" dedicated to "digitalization".

#### 2 objectives to digitalization:

##### 1. Optimization (assets management, network optimization, leak detection, etc).

- Digitalization help **achieve goals with less financial resources.**
  - Reduce operating costs
  - Boost the performance of assets (Scada system).
- Digital transformation offers the water industry an opportunity to **provide reliable and sustainable water supply** by optimising distribution systems, treatment efficiency and asset management.

##### 2. Transformation

- Digital transformation offers the water industry an opportunity to **provide reliable and sustainable water supply** by optimising distribution systems, treatment efficiency and asset management.
- The digital revolution is going forward, and it will make cities **more performing, more resilient and in the end more attractive.**  
➔ Change the way we relate to customers (digit payment, remote water meter reading)
- Digitalization helps water utilities designing systemic strategies to meet water resilience and sustainability goals. ➔ Enhance the concept of sustainability.

#### Video Link:

- <https://www.youtube.com/watch?v=3DEryp4cW0c>

#### Online article:

- <https://www.suez.com/en/who-we-are/innovating-for-the-future/using-digital-tools-at-the-service-of-the-environment>
- [https://waterwastewaterasia.com/suez-consolidates-portfolio-of-digital-solutions-with-new-acquisition-of-inflowmatix/?utm\\_source=rss&utm\\_medium=rss&utm\\_campaign=suez-consolidates-portfolio-of-digital-solutions-with-new-acquisition-of-inflowmatix](https://waterwastewaterasia.com/suez-consolidates-portfolio-of-digital-solutions-with-new-acquisition-of-inflowmatix/?utm_source=rss&utm_medium=rss&utm_campaign=suez-consolidates-portfolio-of-digital-solutions-with-new-acquisition-of-inflowmatix)

## 5. Examples of SUEZ Digital Solutions & References

### Example of SUEZ Solutions: ON Connect metering

- SUEZ has developed several **smart water meter solutions, ON' connect™**,
- These smart meters help track water consumption real-time and provide new services to cities and their inhabitants.

#### Benefits:

- Increase and adjust billing frequency (seasonal pricing)
- Highlight consumption and metering anomalies (leaks, backflow, blocked meters and slow meters detection)
- Reduce customer litigations (invoices, fraud, tax relief)
- Challenge leak detection on the network and improve global water network performance.
- Help recover cost for water investments and make it attractive to investors.

### STORMWATER MANAGEMENT – AQUADVANCED® Urban Drainage

- Another powerful application of smart solutions in Network is relating to **stormwater management** (particularly an important topic in South East Asia). **This product combines the model of your storm-water network with meteorological data to better anticipate potential weak points and prevent flooding.**

#### Implementation in Singapore:

- Client: **Public Utilities Board (PUB)**
- SUEZ implemented and expanded its **AQUADVANCED® Urban Drainage software** to assist in the real-time management of the open-channel stormwater network of the Marina catchment.
- The system provides optimal strategies to **anticipate the operations of Marina Barrage**, helps anticipate flash floods in the city, and monitors water quality in the reservoirs and canals.

#### Value created for the client:

- By allowing the levels of Marina Reservoir to be monitored more closely, the system helps **reduce flood risks** while maintaining reserves for water supply.
- Thanks to the flood operations dashboard, better monitoring and **anticipation of flash floods** is achieved.
- By detecting anomalies and assisting with event analysis, the system **helps reducing the reaction time** in dealing with water quality issues.

## 6. Added value of SMART Water Utilities

<p><b>SAFETY</b></p> <ul style="list-style-type: none"> <li>• Forecast natural or accidental events (floods and pollution)</li> <li>• Improve reliability of operations on a daily basis and during a crisis</li> <li>• Comply with regulatory requirements</li> <li>• Secure the drinking water supply</li> </ul>	<p><b>INFORMATION</b></p> <ul style="list-style-type: none"> <li>• Communicate and inform stakeholders in real-time</li> <li>• Improve the understanding of on-going operations</li> <li>• Reinforce control over operator commitments</li> </ul>
<p><b>ENVIRONMENT</b></p> <ul style="list-style-type: none"> <li>• Reduce water losses</li> <li>• Preserve the quality of the natural environment</li> <li>• Commit to an energy performance</li> </ul>	<p><b>ECONOMY</b></p> <ul style="list-style-type: none"> <li>• Optimise the output from plants or network installations</li> <li>• Rationalise operational costs and investments</li> <li>• Increase the value of existing assets</li> </ul>