



XVII WORLD WATER CONGRESS

CENTRALIZATION OF YOUTH INITIATIVES IN DIGITALIZING AND CIRCULARING WATER SUSTAINABILITY

Indonesian Green Action Forum Special Session





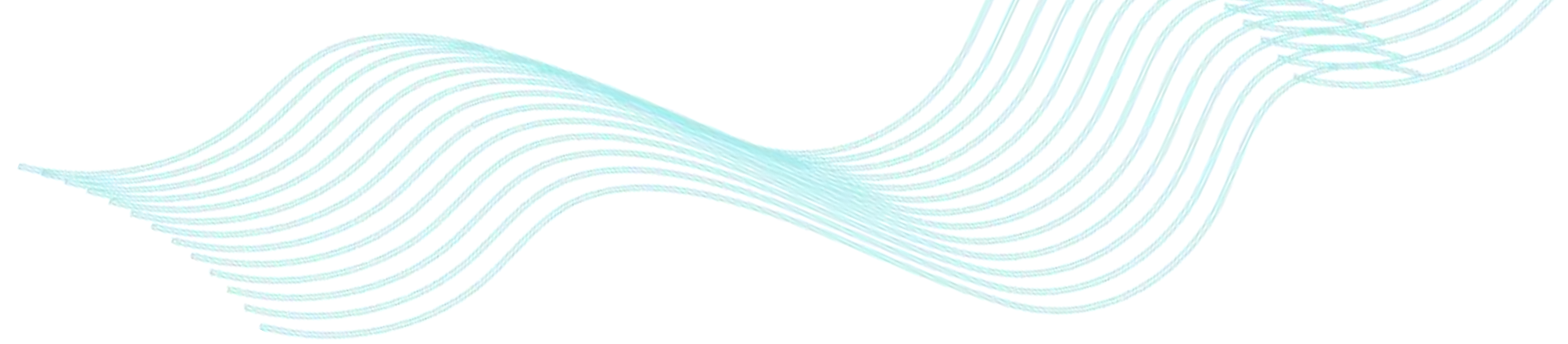
OPENING REMARKS



PRESENTATION

Youth Events for 10th World Water Forum

Dr. Neil Andika



PRESENTATION

**Identifying Key Water Priorities
(Hydrodiplomacy) for Youth, Bringing to
the 10th World Water Forum**

Ms. Luca Jendrek



XVIII WORLD WATER CONGRESS SPECIAL YOUTH
SESSION

KEY WATER PRIORITIES (HYDRODIPLOMACY) FOR YOUTH

THAT WE BRING TO THE 10TH WORLD WATER FORUM



Luca Jendrek

European Youth Delegate at World Water
Council



**“YOUNG PEOPLE ARE
STRATEGIC AND INTEGRAL
STAKEHOLDERS IN ALL
WATER PROCESSES.”**


10TH WORLD WATER
FORUM



PROPOSED PRIORITIES

in Governance, Cooperation and Hydro-diplomacy

 Inclusive Fair
Collaboration

 Transparency and
Integrity

 Stakeholder
Communication

 Inclusive Transboundary
Water Cooperation

 Equitable And Reasonable
Utilization

 Cross Sectoral Dialogue
and Cooperation

FINALIZED PRIORITIES

in Governance, Cooperation and Hydro-diplomacy

- Enhance international collaboration
- Foster decentralized cooperation
- Strengthen cross-sectoral dialogue and cooperation
- Ensure active stakeholder involvement and public participation
- Develop and enforce transparent and accountable institutions and legal frameworks among all players



REPUBLIC OF INDONESIA



WHY WE NEED YOUTH IN HYDRO DIPLOMACY (AS WELL)?



ENABLERS



STAKEHOLDERS



COMMUNITY



SKILLFUL

XVIII WORLD WATER CONGRESS SPECIAL YOUTH
SESSION

THANK YOU!

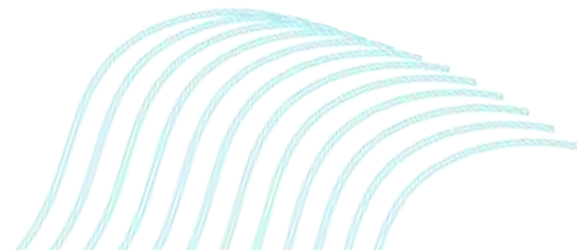




PRESENTATION

Youth in Water Sustainability

Mr. Shawn Seah





A Sustainable Water Future

Mr. Shawn Seah

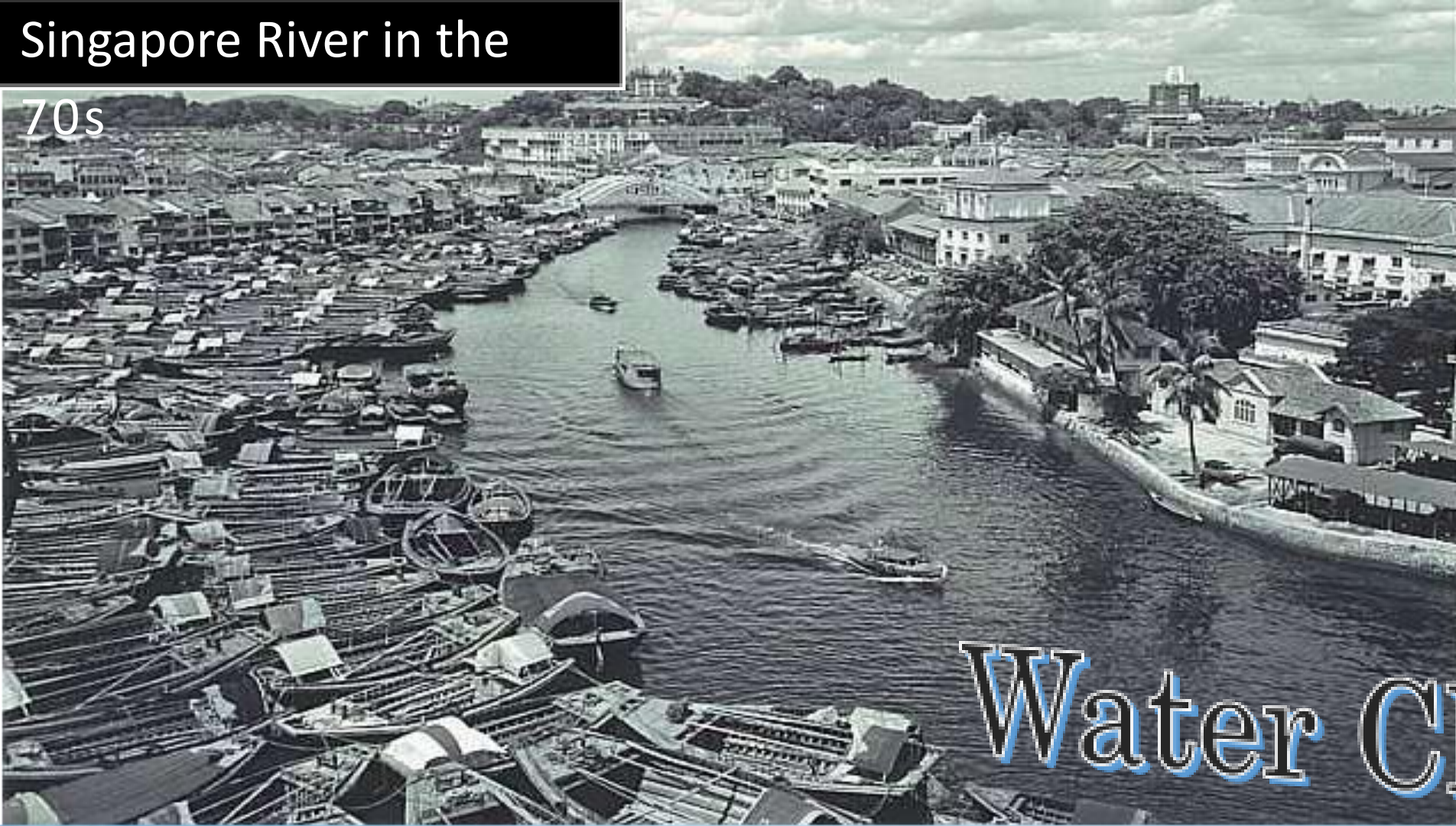
PUB, Singapore

UN Environment (SEAYEN)

11 September 2023

Singapore River in the

70s



Water Rationing in

1963



Water Challenges



Marina

Global Water Leader



Bedok NEWater Visitor

“At PUB, sustainability is central to our mission –to ensure a sustainable water supply for Singapore, tame stormwater and protect her coastline from rising sea levels”



THE SMART PUB ROADMAP

Transforming PUB into the Smart Utility of the Future



SMART DRAINAGE GRID

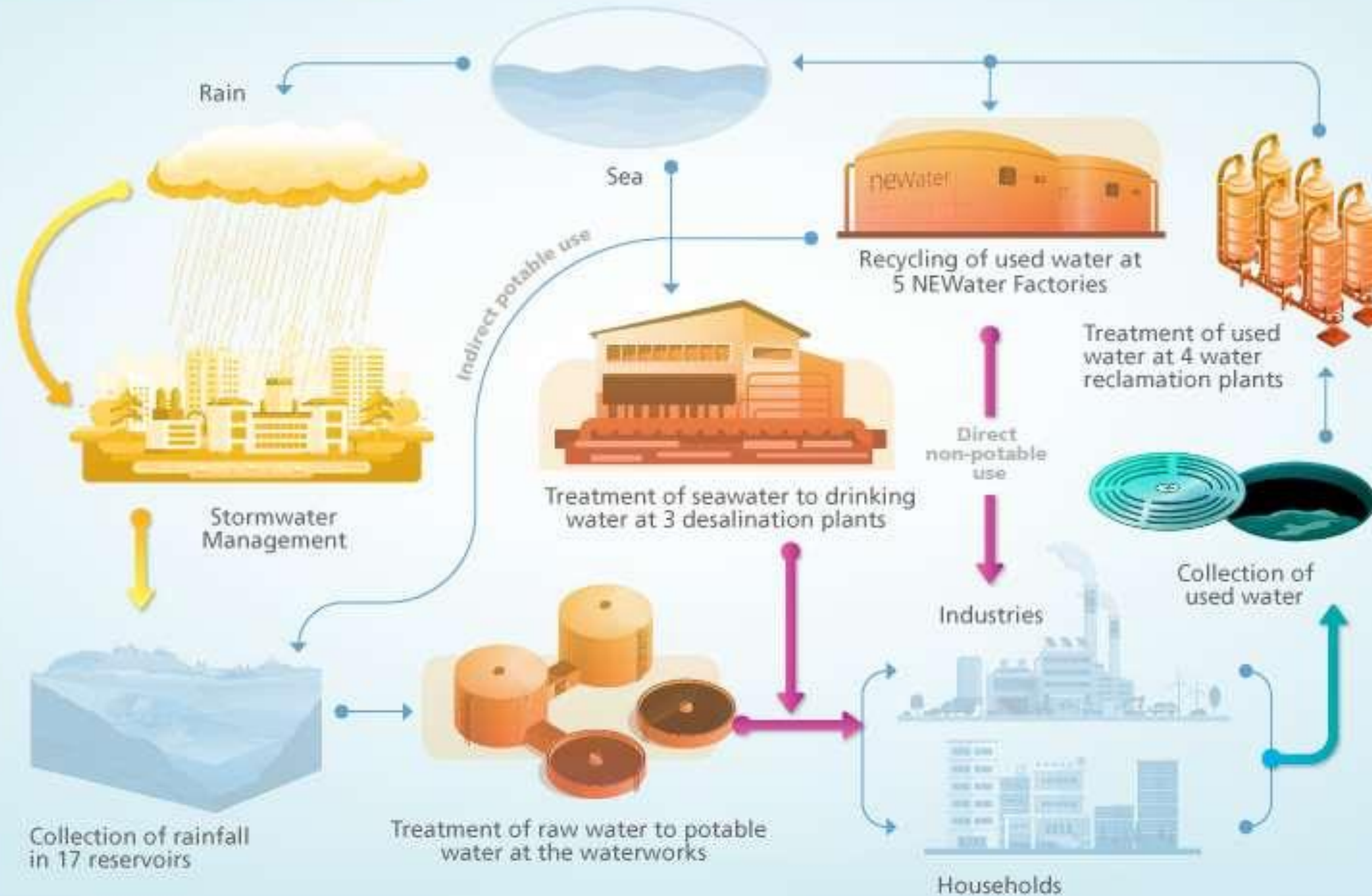
- Hydrometeorological and water quality monitoring
- Strategic planning and maintenance of infrastructure

SMART PLANTS

- Data-driven Decision Support with machine learning
- Autonomous systems to perform manual, high risk jobs
- Diagnostic troubleshooting

SMART WATER GRID

- Extensive monitoring of network pressure, flow and water quality
- Pre-emptive leak detection
- Predictive load dispatch: Using demand forecasting enabled by pervasive sensing and data analytics



DIGITAL OPERATIONS SUPPORT

- 360° situational awareness and system oversight with improved operations dashboards and mobile connectivity
- Reducing wastage and enhancing resilience with data analytics
- Enhancing productivity by automating manual workflows
- Encouraging collaboration and knowledge sharing through digital platforms

SMART SEWER GRID

- Pre-emptive asset repair and replacement
- Monitoring network and tunnel structural integrity
- Illegal discharge tracing and modelling

A Culture of Innovation and Digital Literacy

PUB'S R&D APPROACH

Upstream Fundamental Research

Partner with tertiary and research institutes in R&D projects with direct interest in PUB's operations

Pilot Scale Studies

Test laboratory-proven concepts in actual field conditions via an appropriately-sized unit

Demo Plant Studies

PUB may consider a demonstration-scale study with a pilot plant that will be put into operation to test for operational and process challenges, if any

The 9 technology domains of interests are:



Watershed Management



Water Treatment, Desalination And Reuse



Used Water Treatment



Water Quality and Security



Network Management



Industrial Water Solutions



Digitalisation



Coastal Protection and Climate Change Adaptation



Waste Reduction and Resource Recovery

COMMITMENT

Ensure **continuous innovation** in our work

PERFORMANCE



Worked on **724 R&D projects** with a total value of **\$837 mil** since 2002

COMMITMENT

Ensure **robust IT and cybersecurity** management

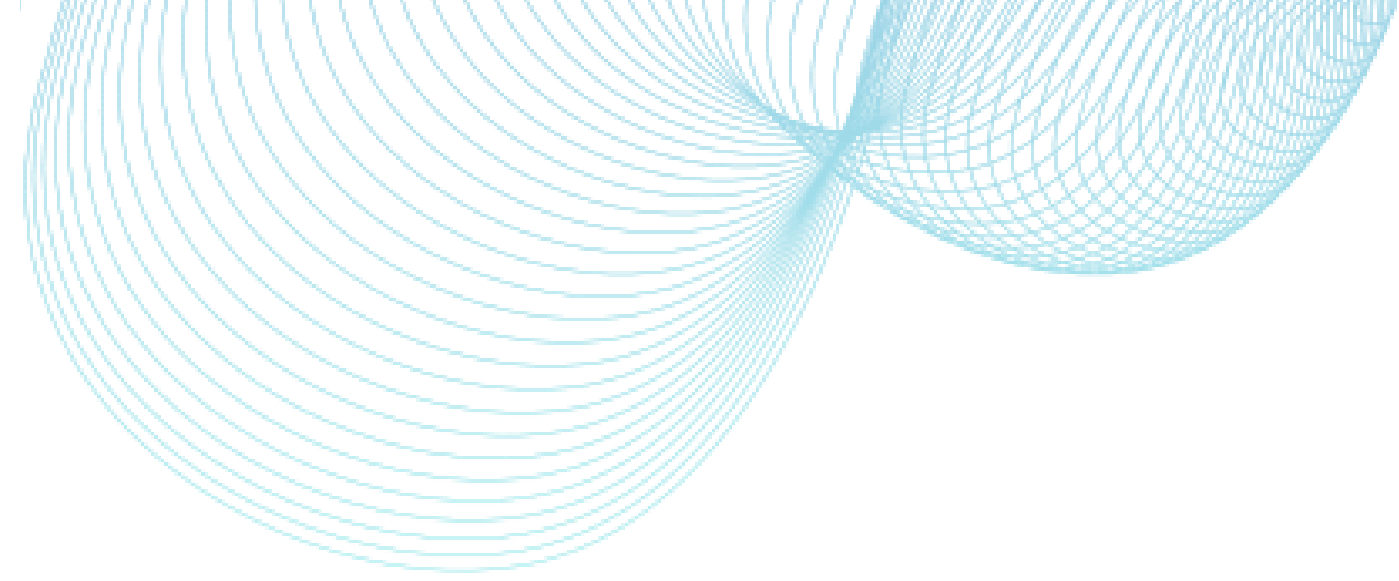
PERFORMANCE



100% completion of cybersecurity literacy training (CSC Learn course) in FY2021

Thank
You

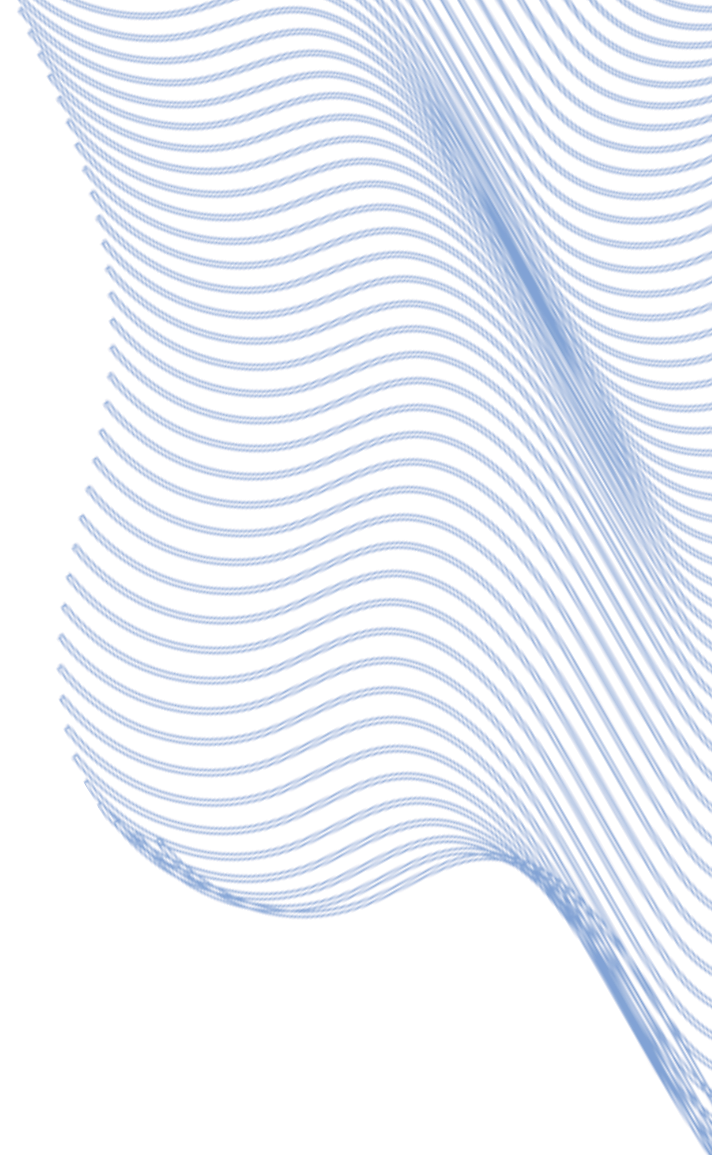




PRESENTATION

**Youth Mobilisation by UNESCO for 10th
World Water Forum**

Dr. Ai Sugiura





INTERACTIVE SESSION



CLOSING