ANNUAL REPORT 2022

Building Connections and Grow Business in a Digital World

THEWATERAGENCY

Contents

Introduction by The Water Agency Managing Director

> ***We have grown our organisation, diversified the knowledge and skills in our team, invested in personal training, strengthened the organisational foundation, expanded our network of partners and clients, and developed several new, exciting programs and platforms. On that last point, I couldn't be more enthusiastic about what I think they will bring us in 2023!***

For many of us working in the international water sector, 2022 was the year we had been looking forward to! Getting back out on the road; meeting again with our clients, partners and good friends across the Asia region; visiting our project locations; engaging face-to-face with stakeholders and communities; and, last but not least, for us to see our TWA colleagues again! For us at The Water Agency, as an organisation dedicated to "making connections", it felt like being born again ☺

At the same time, the terrible reality facing our colleagues in Myanmar keeps casting a dark cloud over our heads. But we don't give up. We keep fighting for them and the communities vulnerable to climate and water-related disasters they support. We are forever grateful to those that stay by our side us during this difficult time.

The past year has been a year of investment for TWA. We have grown our organisation, diversified the knowledge and skills in our team, invested in personal training, strengthened the organisational foundation, expanded our network of partners and clients, and developed several new, exciting programs and platforms. On that last point, I couldn't be more enthusiastic about what I think they will bring us in 2023! Just to introduce three of them briefly:

Asia Raincraft is a youth and community-engagement program using Minecraft as a serious game to co-design street and neighbourhood-level climate adaptation interventions. This year, we fully developed the methodology of the program, creating a portfolio of interactive Minecraft Education education modules (for example on drainage, household water, greening of houses and streets, flooding, etc.) which can be customised to fit different types of cities and neighbourhoods, depending on the issues they face. At a time that community participation and social inclusivity have become serious criteria for international water and climate projects (fortunately!), we already see a lot of interest for Asia Raincraft.

Asia Water Academy is an online platform dedicated to interdisciplinary and practice-oriented education of (young) water professionals in Asia. This year, we built the platform to support an online water and environment education program for water professionals in Myanmar who have lost most of their opportunities to learn and develop themselves. Going forward in the year ahead, we aim to expand the courses on Asia Water Academy and bring these to many more water professionals across Asia, empowering them with the practical knowledge and skills to face the water and climate-related challenges in their daily work.

Valuing Water for Business in Asia is a business education program on water targeted specifically at private companies in Asia. As we know, many companies already struggle with the impacts of flooding, droughts and water pollution and many more are very concerned about the impact it will have for them in the near future. At the same time, few companies have the knowledge to understand what that impact is, e.g. on their competitive position, on their bottom-line, on their supply chains, on staff productivity, etc. The Valuing Water for Business in Asia program connects water and business to raise the necessary awareness and education that helps companies to gain this insight – and develop a 'water-proof' strategy.

As I conclude this introduction to our Annual Report 2022, I would like to express my sincere gratitude to my colleagues in Viet Nam, Myanmar and Indonesia for being such a great and dedicated team and to all our clients and partners who have inspired and supported us this year.

Looking forward to making a lot of CONNECTIONS in the year ahead!

Gregor van Essen
Managing Director, The Water Agency

December 2022

Annual Report 2022: Building connections and grow business in a digital world

The year 2022 was the recovery year not only for the water sector but also for all of us. Working internally with our diverse team, we have explored ways to communicate better and grow together. Being thousands of kilometers and flights away from each other, we find a digital home that allows us to connect and support our team on the ground.

We learn how to connect to everyone worldwide, making distance smaller than ever, communicating through digital platforms, and doing projects that benefit local communities and stakeholders.

As a social enterprise with our heart and main operations in the water sector in Asia, we love to share about the work we do, the activities of the company during this past year and the impact we are aiming to make.

Therefore, we present this Annual Portfolio which will give an overview of the company's overall performance throughout and until 2022. It is important to note that this document is accessible to all interested parties. Let's connect and open doors of opportunities!

This annual portfolio has several sections which explained as follows.

About The Water Agency

Provides an elaborate explanation of the company, includes company profile, our water hubs, business lines, and signature programs.

Contribution to groundwater problem-solving in Southeast Asia

Provides an evaluation and reflection on the company's internal analysis of one aspect of the water sector in the region in the respective year.

Our impacts at a glance

This section highlights the company's key achievements and impacts throughout 2022.

Project highlights

This section summarises each company project in 2022 across our Water Hubs in Southeast Asia.

It is our vision and mission for water to be a valued and shared force of life for all people in Asia Pacific. To achieve this, we work every day to develop Water Hubs that connect, engage and inspire people and organisations to collaborate, share knowledge and create solutions that address the region's most pressing water issues.

1

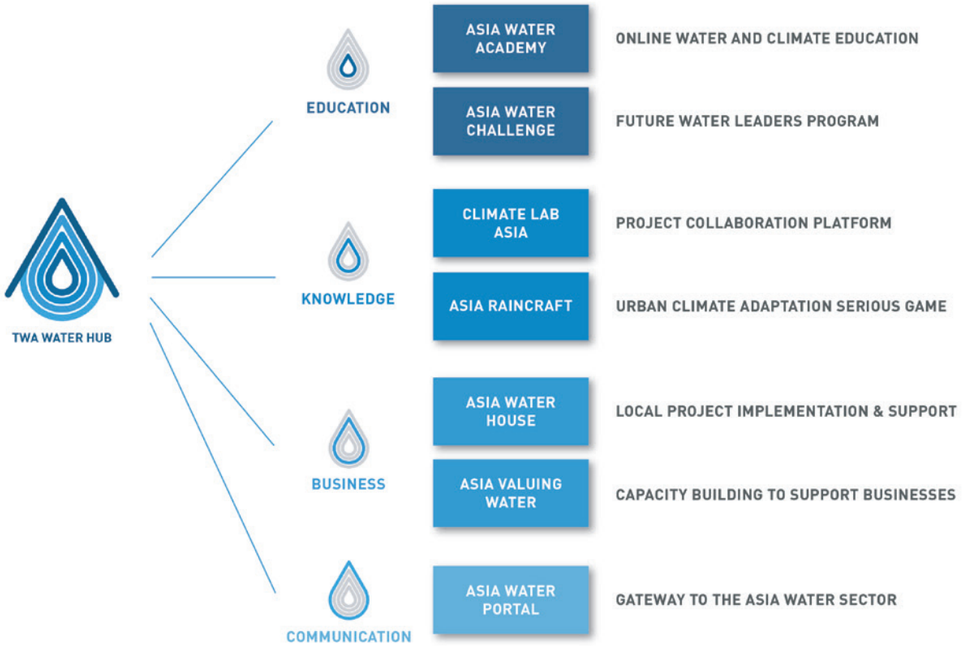
INTRODUCTION

This section explains about who we are, where we are active, and what we do in general.

The Water Agency: Who we are

The Water Agency is a social enterprise that aims to connect people and organisations to collaborate for clean and safe water in Asia. The company was founded and legally incorporated in 2016 in the Netherlands. Unlike a conventional water company, we offers "soft skills" in the water sector that ensures that water technology and infrastructure developments are connected to the community and will benefit them.

The company is currently active in Asia-Pacific with three branch offices (so-called Water Hubs), Myanmar, Indonesia, and Viet Nam, and international liaison offices in The Netherlands and Australia. Through these Water Hubs, the company leads and supports water projects in the region. Above anything else, we share the passion for water and the ambition to connect and inspire people towards a bright water future.



The Water Agency - Business Lines and Signature Programs

The company's services are divided into four business lines. Interestingly, each business line has signature programs that are targeted at a different audience.

Education

Water education, training and capacity building, bringing together international and local professionals, students and young professionals.

Knowledge

Peer-to-peer knowledge sharing and learning between local and international experts, providing a unique perspective on local water issues.

Business

Develop business opportunities, make new connections, identify partners and build partnerships.

Communication

Platform connecting local and international professionals through online and offline media and publications.

Apart from offering services, The Water Agency also consistently innovates programs and tools which allow stakeholders to engage better to support sustainable water projects. The company is always looking for partners interested in collaborating to implement these programs.

Asia Water Academy

An online water, environment, and climate education platform for young professionals in Asia who seek to improve their skills and knowledge through interdisciplinary and practical courses.

Asia Water Challenge

An innovative competition that inspires young talents to contribute to water challenges in their country.

Climate Lab Asia

An online workspace for people and organisations working on climate adaptation projects in Asia.

Asia Raincraft

A serious gaming tool to unlock local communities' power as a new frontier to address urban water and climate change challenges by empowering them to design and implement solutions at a household, street, and neighborhood level.

Asia Water House

Assistance for public, private, and non-governmental organisations in implementing their projects on the ground. Assistance includes stakeholder engagements and setting up an enabling environment for smooth project implementation and build a sense of belonging for the community and local stakeholders.

Asia Valuing Water

Business education and capacity-building program on water explicitly targeted at private companies in Asia. Aim to connect water and business to raise the necessary awareness and education about water.

Asia Water Portal

Online communication platforms to disseminate information and updates to interested parties regarding the development of the water sector in the region.

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PERFORMANCE HIGHLIGHTS

This section provides evaluation and reflection on the company's internal analysis on water sector and company's impact in 2022.

Contribution to groundwater problem-solving in Southeast Asia

United Nations (UN)-Water chose groundwater as a topic to highlight for 2022 World Water Day, which is celebrated on 22 March every year. Groundwater is often overlooked because it is underground and invisible. Many people take it for granted. In many countries, groundwater remains the primary water resource. UN-Water notes that almost half of the drinking water worldwide, 40% for agriculture, and about 1/3 of the water supply for industry come from groundwater sources[1].

The groundwater issue is often associated with drought and clean and safe water access. However, let's look more comprehensively. This issue has a broad dimension to urban development and community well-being. Groundwater is related to at least eight (8) other matters or topics: climate change, natural disaster and human rights, groundwater in settlements, food and energy nexus, environment, governance, sanitation, health, and pollution. Even though groundwater is invisible, its benefits, issues, and impacts are inevitable. Therefore, valuing groundwater and using it sustainably remain essential to ensure clean and safe access to a water resource for everyone.

Following this topic, The Water Agency's annual portfolio this year will highlight the state of groundwater issues in three countries in Southeast Asia, which are Indonesia, Viet Nam, and Myanmar. These three countries are chosen because of the operational locations of the company in the region. The contributions of the company in groundwater problem-solving in these countries follow it.

Highlights of Groundwater Issues in Indonesia, Viet Nam, and Myanmar

As stated earlier, groundwater remains the primary water resource for urban and rural populations in Southeast Asian countries. As the largest archipelagic country in the world and surrounded by abundant water resources, Indonesia is still facing a challenge in providing a water supply that meets the demands. The country has an excellent groundwater potential from its basins, with about 520 billion m3/ year[2].

However, groundwater availability spreads unevenly across the country. Areas such as Java, Bali, and Nusa Tenggara have limited groundwater and face water scarcity. In addition, groundwater availability depends on climate events and hydrogeological situations. The climate events of Indonesia are influenced by the El Nino Southern Oscillation (ENSO), with two primary phenomena: El Nino and La Nina. El Nino makes the dry season longer. On the other hand, La Nina makes the rainy season longer. Groundwater quantity changes seasonally.

Viet Nam also fails to meet the increasing water supply demand due to rapid urbanization in the country. The country is currently the 13th most populous country in the world. However, the population is distributed unevenly and somewhat concentrated in areas along Mekong Delta, Ha Noi, and HCMC. The total water consumption for these areas is 9,856 m3/ person/ year, which is extraordinary compared with the international standard of 1,700 m3/ person/ year.

Urban areas are highly dependent on groundwater, and the level of groundwater extraction is alarming. In 2009, the groundwater level in Ha Noi decreased by 1 meter per year. The groundwater level in HCMC decreased up to 30 meters per year in a similar year[3].

Myanmar experiences similar issues to Indonesia and Viet Nam but with a different cause. The political instability in the country has significant impacts on water infrastructures. Large cities, such as Yangoon, Nay Pyi Taw, and Mawlamyine, have insufficient water services (water supply, sanitation, drainage, and wastewater treatment).

Many of the population must independently fulfill water demands by extracting groundwater by installing private pumps or making a well. The country also faces water resource contamination because water quality checks and monitoring remain absent. This issue occurs in the groundwater of the Ayeryawady delta and around the Sittaung River[4].

Highlights of The Water Agency's Groundwater-related Works

Groundwater issues in Southeast Asia call for the company to contribute to solving the problems. No silver bullet can solve the issues overnight. Still, the company and its team tried their best to work with and help communities. This year, we proudly highlight two projects that directly contribute to and impact groundwater problem-solving. These two projects are the UNESCO Water Resilience Challenge 2022 in Indonesia and Viet Nam and Mekong Salt lab in Viet Nam.

- **UNESCO Water Resilience Challenge 2022: Groundwater**

This project is part of the company's signature program of Asia Water Challenge. In collaboration with UNESCO Jakarta and Ha Noi, the company conducted a capacity-building initiative to create young water and climate leaders in two countries. Each participant is divided into groups and assigned to give innovative solutions to groundwater issues in two biosphere reserves. This year's challenge differs from previous challenges because the result is not technical but an awareness strategy. Many people take groundwater for granted and do not use them sustainably. Through this challenge, we would like to educate the young generation regarding the issue and makes them agent of change in society.

- **Mekong Salt Lab**

Viet Nam is among the world's very vulnerable countries to climate change. Its primary economic activities are located in coastal areas prone to sea-level rise, causing salination problems. This issue has made water security issues since groundwater remains the primary water resource for irrigation in Mekong Delta. Therefore, the project aims to support farmers and their communities to adapt to seawater intrusion due to climate change impacts. In collaboration with local and international experts, the project also allows the knowledge exchange between them in terms of finding quick wins actions to help mitigate and adapt to salination issues of groundwater.

[1] UN Water (2022). Groundwater Overview: Making the invisible visible. Geneva: International Groundwater Resources Assessment Centre.
[2] ADB (2016). Indonesia Country Water Assessment. Metro Manila: ADB
[3] ADB (2009). Water, Vital for Viet Nam's Future. Manila: ADB.
[4] ADB (2013). Myanmar: Urban development and water sector assessment, strategy, and road map. Mandaluyong: ADB.

Our impact at a glance

Project location

30+ cities and growing

Until 2022, we have projects located in more than 30 cities worldwide, including big cities in Southeast Asia, such as Jakarta, Surabaya, Ha Noi, Ho Chi Minh City, and Yangon. We also have projects in smaller cities such as Pekalongan and Dong Nai, as we believe water education and knowledge should be equal for all.

Community involvement

Our main objectives as a company is to connect and inspire people, which allow us to work closely with local communities in every project that we do. Since our first project, we have been engaged more than 70 communities to collaborate with us in solving water issues. We believe that working with communities is essential in ensuring what we do reflects their particular needs.

70+ communities

2518

SUBSCRIBERS

Number of subscribers of our communication platform, Asia Water Portal, in three countries (Indonesia, Myanmar, and Viet Nam) until 2022

MYANMAR Water Portal · INDONESIA Water Portal · VIETNAM Water Portal

Number of youth who have been engaged in Water Challenge throughout Asia until 2022

600+

Number of international and local partners that have been collaborating with us until 2022

100+

Asia Water Challenge

We have organised **more than 10 Water Challenges** as a part of the youth capacity-building program. The program engaged students and young professionals from various backgrounds to contribute ideas for sustainable water.

SDG impact

In running projects, we always go hand-in-hand with the Sustainable Development Goals (SDGs) as the universal call of action to combat urgent environmental, political, and economic challenges.

Our vision and mission support the SDG 6 of Clean Water and Sanitation. We have dedicated services to education, which support the SDG 4 of Quality Education and also SDG 5 of Gender Equality, as we always give the same opportunity for both men and women. We try to engage the local community as part of the stakeholders to support SDG 10 and encourage them to be more sustainable as a part of SDG 11. We focus on water management and sustainability, which are connected to SDG 12 and SDG 13. Finally, SDG 17 is running in our blood as our company value is to bring together companies and organisations to solve water challenges.

3

PROJECTS AND ACTIVITIES

This section explains about The Water Agency's projects and activities throughout the year of 2022.

Can Tho Raincraft Pilot

Location : **Can Tho, Mekong Delta, Viet Nam**

Duration : **September - on going**

Client : **-**

EDUCATION **KNOWLEDGE**

Partners :

Can Tho is a central city of the Mekong Delta and also one of the regions seriously affected by climate change. Therefore, this requires a quick action plan from the city side to find out solutions to adapt to the current situation.

Can Tho Raincraft Pilot is one of the efforts that give Can Tho students the opportunity to contribute their ideas to this renovation activity. The program will direct students to nature-based solutions through training series on relevant topics, working directly with domestic and foreign experts and building up the creative solutions in the Minecraft platfrom.

Campus 2- Can Tho University, will be used as a pilot model for the whole city due to its topographical characteristics and obvious manifestations due to the impact of climate change and urban planning.

The UNESCO Water Resilience Challenge is a capacity-building initiative that encourages and challenges the future generation, particularly students from different universities and majors/study programs, to offer concepts and ideas for their own take on sustainable water management solutions. The UNESCO Water Resilience Challenge, now in its second year, is being held in two nations—Indonesia and Viet Nam—and has as its focus groundwater.

The two goals of the UNESCO Water Resilience Challenge 2022: Groundwater are to engage young people and educate them about the value of biosphere ecosystems and sustainable groundwater management; and to develop concepts and ideas for novel ways to increase public awareness of groundwater use in specific locations.

The program was conducted in two phases, from 26 August to 23 September 2022. Phase I was held online from 26 August until 16 September 2022, and Phase II was held offline from 18 – 23 September 2022. The program aimed to enhance the competence of participating students and young professionals throughout the out-of-classroom experience with actual cases on the ground, collaboration, site visits, local experts' input, and mentorship.

UNESCO Water Resilience Challenge 2022: Groundwater

Location : **Merapi-Merbabu-Menoreh Biosphere Reserve, Indonesia & Dong Nai Biosphere Reserve, Viet Nam**

Duration : **August - September**

Client : **UNESCO Jakarta & UNESCO Ha Noi**

EDUCATION

Partners :

Pekalongan Batik Wastewater

Location **Pekalongan, Central Java, Indonesia**

Duration **May - December**

Client **RVO**

BUSINESS

Partners :

Batik industry workshops are spread throughout Pekalongan City, often in small household workshops. To some extent, this industry plays a part in significant overexploitation and pollution of water. Since batik textile workshops use large amounts of water, the sector contributes to the depletion of groundwater and, with that, to land subsidence, making the city more vulnerable to coastal flooding.

The Water Agency is commissioned by the Dutch government to run matchmaking activities that will help the local batik communities, government agencies, and the sustainability of the batik sector. Areas of the matchmaking activities are regarding the industry's water footprint; addressing the production, management, and treatment of wastewater; and exploring the possibility to reuse treated wastewater and reduce groundwater use.

The project's main activities started with determining the local requirements for matchmaking and opportunities for possible solutions, then continued with identifying and selecting the appropriate solutions that are needed and supported by the local stakeholders. Starting from May until December 2022, The Water Agency works closely with the local stakeholders in Pekalongan City.

The Mekong Salt Lab will be set up in line with the Mekong Delta priorities set by the national and provincial governments. It will provide critical capabilities to support farming communities to adapt to increasing salinity.

Seawater intrusion is one of the most critical challenges in the Mekong delta that the beneficial partner – Tra Vinh University (TVU), is helping to address. Salinity is having a significant effect on the livelihoods of millions of farmers. It is threatening the future of most coastal provinces, as the saltwater penetrates deeper land inward every year. Creating the Mekong Salt Lab will help us to be more effective to: (1) Further develop our expertise on salinity mitigation and adaptation; (2) Transfer this interdisciplinary expertise to farmers to help them adapt more quickly; (3) Exchange knowledge and work together with local stakeholders and international partners.

With hybrid training programs, the Dutch expertise group had a site visit in local farmer communities, gaining a great understanding of the project objectives & output. TVU managers are eager for the Mekong Salt Lab Center establishment, and these lectures gave a chance to get exchange knowledge or best practice case studies from international partners.

Mekong Salt Lab

Location : **Tra Vinh, Viet Nam**

Duration : **March - on going**

Client : **Nuffic**

EDUCATION **KNOWLEDGE**

Partners :

K2K Capacity Building Program

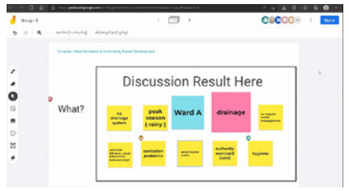
Location : **Myanmar**

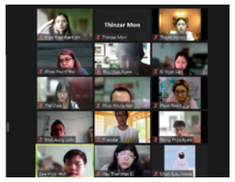
Duration : **March - August**

Client : **RVO**

EDUCATION KNOWLEDGE

Partners :

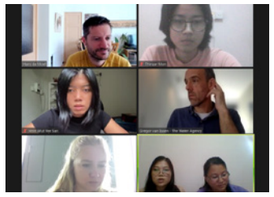




The K2K (Capacity Development of Knowledge to Knowledge) Internship Program was held in August with funding support from Netherlands Enterprise Agency (RVO) / Embassy of the Kingdom of the Netherlands (EKN). The spirit of this program is to let the students learn about the Integrated Water Resources Management (IWRM) approach to enhancing collaboration among different sectors, focusing on the Urban Water theme and Water logistics as per Partners in Business (PIB) themes.

The program's objectives are to enhance the student's knowledge development on IWRM, gain international working experiences learned by the experts' sharing section, and learn and improve their skills through assignments about new techniques for infrastructures. The program runs as a 6-month internship plan in which the first two months are allocated to lectures and project knowledge sharing, and the last four months are for the assignments.

All lectures, assignments and reviews are organised through an online collaboration platform and Zoom. The Water Agency collaborated with the program for knowledge sharing about Thaketa Climate Adaptation Pilot Project and mentoring for the group assignments.



The Water Agency collaborated with the VU Amsterdam University to provide a platform for Online Water Education (WE are WATER EDUCATION Program) based on practice-oriented and interdisciplinary (Locally & Internationally) contributed by Myanmar and International Experts in times of Myanmar crisis. With the support of the NUFFIC Orange Knowledge (TMT++) Program, the platforms created for online learning are called Asia Water Academy and Climate Lab Asia.

Millions of government, private sector and academia professionals are working to address the region's many critical water, environmental and climate challenges. But sometimes, there seems to be a gap in the up-to-date theoretical and practical knowledge to solve these issues. Asia Water Academy(WE are WATER EDUCATION program) fills this gap by offering online courses on interdisciplinary and practice-oriented topics. Many courses are self-paced and offered for free or at a small fee to be accessible and affordable for everyone.

The Batch-I program for Myanmar started on 1st September 2022 and successfully ended on 30th November 2022. The program will then continue until March 2023.

WE are Water Education

Location : **Myanmar**

Duration : **February - ongoing**

Client : **Nuffic**

EDUCATION KNOWLEDGE

Partners :

Welang River Basin Management Academy

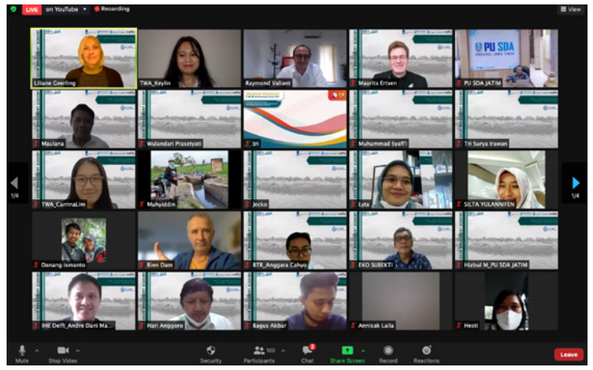
Location : **Welang, Pasuruan, East Java, Indonesia**

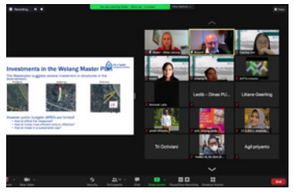
Duration : **April 2021 - April 2022**

Client : **Nuffic and RVO**

EDUCATION KNOWLEDGE

Partners :





Welang River Basin Management Academy (RBMA) is a tailor-made online training to support the knowledge transfer and capacity building for the young staff of the Water Resource Department of the East Java Provincial Government. A collaboration with the East Java Government office, the Netherlands Ministry of Infrastructure and Water Management, Nuffic, and executed by HZ University and The Water Agency, the training used Welang Masterplan as the learning ground, reflecting on the real situation and challenges in the river.

The main goal of the training is to facilitate knowledge transfer and transformation. RBMA has a big potential to be replicated as a training program for the new generation of young staff on the Integrated River Basin Management concept and to provide opportunities for lifelong learning following the Sustainable Development Goals 4 agenda. The program consisted of 29 lectures divided into five blocks, followed by the final block on practical work. The knowledge earned from the previous blocks is then incorporated into building a solution deck for the final practical work.

Contact us

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