

HITACHI YOUNG LEADERS INITIATIVE 2022 SOCIAL INITIATIVE 2022 INITIATIVE 2022</li

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18TH JULY TO 21ST JULY 2022

Post Event Report





The Hitachi Young Leaders Initiative (HYLI) reflects Hitachi's long-term commitment to Asia. Established in 1996, HYLI is a regional thought leadership and social responsibility programme organised by Hitachi with the aim of helping Asia identify its future leaders by providing a platform for bright university students. At the initiative, four of the best and brightest university students from each participating country meet to discuss current regional and global issues. They also exchange views with prominent speakers who are the Asian leaders of today, representing governments, business and academic.

Key objectives of HYLI are:

- Further develop the student delegate's perception and understanding of regional and global issues that impact society
- Encourage Asian solidarity among potential young leaders by addressing regional challenges together
- Promote cross-cultural understanding through education, common activities and shared experiences
- · Create a platform for the exchange of views from different perspectives
- Provide a network for potential future Asian leaders

Since its inauguration in Singapore in 1996, HYLI has offered over 370 students, including more than 50 Singapore alumni, the unique opportunity to broaden their outlook while promoting Asian values and cross-cultural understanding. HYLI is participated by countries across Asia namely Indonesia, Malaysia, Japan, the Philippines, Singapore, Thailand, Vietnam from the 8th HYLI (2007) and Myanmar from the 13th HYLI (2015). At every HYLI, up to four student delegates are handpicked by the selection panels in each of the eight countries.

HYLI was held under the theme of "Social Innovation in the New Normal" for this year's edition. Under the core theme, there were a total of four plenary sessions focusing on (1) Future Cities, (2) Clean Energy, (3) Water Solutions, and (4) Human Health. For more information on HYLI, please visit the <u>HYLI website</u> and follow our <u>HYLI Facebook page</u>.





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The 16th edition of HYLI was meant to help student delegates realise that, as custodians of the future, Asian youths will have to adapt and take the lead to transform disruptions, such as Covid-19, into opportunities through social innovation in the new normal.





- Identify the positive and negative impacts of social innovation in the new normal in the areas of (1) Future Cities; (2) Clean Energy; (3) Water Solutions; and (4) Human Health in their country.
- Create an infographic based on their research.

Day 1 18 July 2022



Understand the social innovations in the areas of: (1) Future Cities; (2) Clean Energy; (3) Water Solutions; and (4) Human Health.

Day 2 Day 3 19–20 July 2022





- Experience a multi-sensory farm tour at Edible Garden City, and take a peek behind the scenes of Singapore's burgeoning urban farming industry.
- Visit Coney Island, a history-rich ecologically sustainable park in Singapore that houses a wide variety of habitats.
- Understand the challenges behind each sub-theme and attend workshops that help the student delegates understand how to find solutions for these challenges.

Day 4 21 July 2022



Student delegates present their perspectives in groups to an esteemed advisory panel and receive feedback on their ideas on how to use social innovation to improve the future in ASEAN and Japan, specifically in the four sub-themes.

HYLI 2022 STUDENT DELEGATES' LEARNING JOURNEY



Executive Summary

The coronavirus pandemic has brought about paradigm shifts and revealed startling realities about our societies and economies. In the light of the shocks experienced and uncertainties ahead, we need to build back better through innovation for future resilience. The Covid-19 pandemic has re-emphasised the importance of social innovation in incubating technologies needed for navigating the shocks and shifts in Asian societies. While Asian governments at the national and local levels have introduced a variety of measures to fight the Covid-19 transmission, the impact of the pandemic has gone beyond health. Social innovation is needed to support more vulnerable populations such as the elderly, the chronically ill and people living with disabilities who have been particularly affected due to the social and economic disruption of the pandemic. As custodians of the future, Asian youths will have to be adaptable and take the lead to transform disruptions into opportunities through social innovation.

After a year's delay due to Covid-19 travel restrictions, HYLI took place in Singapore from 18 to 21 July 2022, with a total of 30 student delegates from eight countries. The event organisers and participants took advantage of this face-to-face event to interact, form friendships and exchange ideas.

HYLI's 2022 theme, "Social Innovation in the New Normal," invited delegates to share more about the developments and challenges in their home countries. Of particular focus during the four-day event, which was held at Marina Bay Sands, were the challenges that had emerged over the last few years in the "new normal," a term used to refer to the changed world in the wake of the pandemic and seismic political changes. The students attended a series of plenary sessions, workshops, and discussions which culminated in group presentations on their proposed alternatives for a sustainable future.

Delegates were given a once-in-a-lifetime opportunity to tap on the wealth of knowledge from prominent guests. Speeches by Guest-of-Honour Minister Low Yen Ling (Minister of State, Ministry of Trade and Industry & Ministry of Culture, Community and Youth), Mr. Toshiaki Higashihara (Director, Board of Directors, Executive Chairman, Representative Executive Officer, Hitachi, Ltd.), and Mr. Yoshiaki Takahashi (Deputy Chief of Mission, Minister, Embassy of Japan in Singapore) exhorted the delegates to make the most of their time at HYLI, and also to mix with delegates from other countries so that they could see the world from a wider perspective. The four plenary sessions, and even the meal breaks, gave delegates opportunities to pose questions to and mingle with government officials, business leaders, academics, and NGO representatives, many of whom are experts in social innovation-related fields.

Other than the plenary sessions, delegates made field visits to interesting places in Singapore. The first was to Edible Garden City, a social enterprise championing food sustainability and resilience, where delegates learnt about vermicomposting, urban farming, and therapeutic horticulture. The second field trip was to Coney Island, a nature park in northwest Singapore, where delegates enjoyed a guided tour of the nature park's sustainability features and were regaled with tales about its colourful history.

After two afternoons of workshops and research on HYLI 2022's sub-themes – Future Cities, Clean Energy, Water Solutions, and Human Health – delegates, who were divided into four groups, identified some of the current gaps in these issues in the region and came up with innovative solutions. They presented their detailed proposals to an advisory panel comprising industry experts, who responded with probing questions and detailed feedback.

HYLI closed with a cultural night, during which students went on a colourful experiential journey of the eight countries represented. They entertained one another with folk songs and dance performances, and told myths and legends from their countries. Delegates also partook in a literal taste of their new friends' cultures through the sharing of traditional dishes.

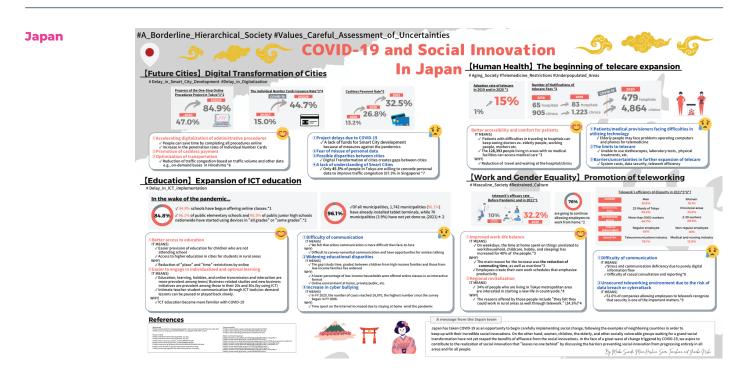
HYLI has been a holistic event that equipped the delegates with tools and networks, that could help them bring about social innovations and effect positive change in their communities, countries, and the region, with the aim of realising a sustainable society and an improved quality of life.





Prior to their arrival at HYLI, student delegates prepared an infographic on social innovation of their respective countries during Covid-19. The eight countries represented were Indonesia, Japan, Malaysia, Myanmar, the Philippines, Singapore, Thailand, and Vietnam.

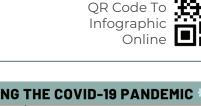




HYLI 2022 STUDENT DELEGATES' LEARNING JOURNEY

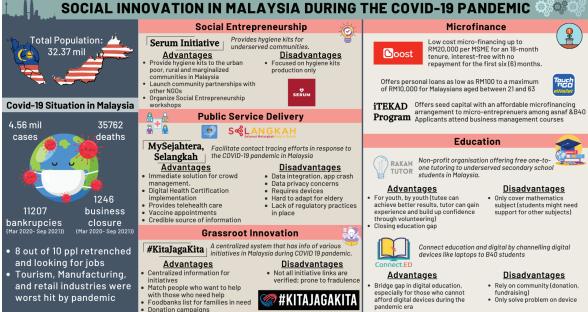






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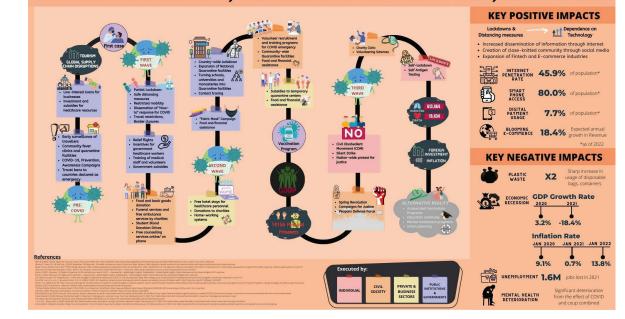




Myanmar

SOCIAL INNOVATION ALONG THE TIMELINE OF MYANMAR DURING THE PANDEMIC

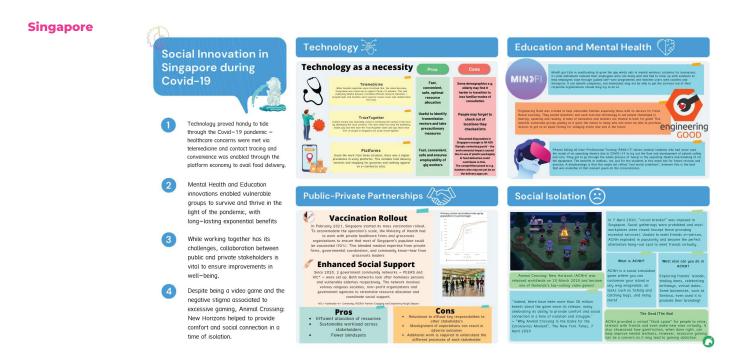
BY HYLL2022 MALAYSIAN DELEGATES: Kumanan A/L N Govaichelvan . Matthew Ooi Xia









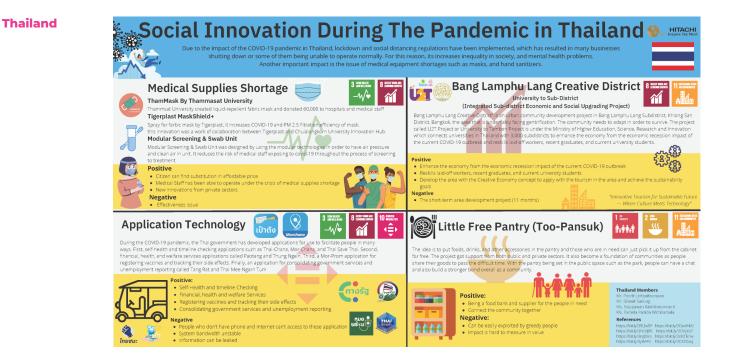


HYLI 2022 STUDENT DELEGATES' LEARNING JOURNEY





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Vietnam





Welcome Remarks

Mr. Toshiaki Higashihara

Director, Board of Directors, Executive Chairman, Representative Executive Officer, Hitachi, Ltd.



As the 2021 HYLI session had to be postponed due to disruptions by Covid-19, Mr. Toshiaki Higashihara opened his speech by sharing how pleased he was that HYLI was finally able to be held in person this year. To him, it was special to hold the event, now in its 16th iteration, back in Singapore, as this was where Hitachi first launched the programme in 1996.

Started by Hitachi to nurture future leaders in the region, HYLI has seen the participation of more than 370 students over the years. This year's theme was "Social Innovation in the New Normal," with sub-themes of Future Cities, Clean Energy, Water Solutions, and Human Health. Mr. Higashihara hoped that this year's delegates would respond to these topics by exploring how technology and social innovation might drive societal transformation towards a sustainable future.

In April 2022, Hitachi released its 2024 Mid-term Management Plan, which focused on the company's social innovations to leverage data and technology. The plan was consistent with Hitachi's aim to realise a sustainable society and promote individual wellbeing while respecting planetary boundaries. But Mr. Higashihara said that these objectives could not be achieved through Hitachi's efforts alone. They were only possible if the company took a social issue-oriented approach and promoted open innovation involving everybody in society. That was why diversity, equity, and inclusion are such important values to Hitachi, as he explained.

In closing, he encouraged the student delegates to embrace the diverse perspectives of their international cohort, who had all come together with the same objective – to create a better future. He hoped that delegates would take ownership in creating the world that they would like to live in.

Opening Address

Mr. Yoshiaki Takahashi

Deputy Chief of Mission, Minister, Embassy of Japan in Singapore



In his opening address, Mr. Yoshiaki Takahashi expressed his deep appreciation to Hitachi for its continuing support of HYLI, which he saw as a meaningful initiative.

Acknowledging the importance of economic growth, he stressed that we should not forget about sustainability. ASEAN countries face challenges such as urbanisation and infrastructure development that required innovative solutions. Mr. Takahashi believed that Japan, as a good neighbour, could contribute to the decarbonisation of other countries by the free sharing of its technologies, experience, knowhow, and finance skills.

He noted that next year marked the 50th anniversary of the ASEAN–Japan friendship and cooperation. Earlier this year, Japan announced the Asia–Japan Investing for the Future (AJIF) initiative, through which Japan supported new future-oriented investments in rapidly changing ASEAN economies. Investment areas included efforts to increase awareness of sustainability in urban and rural areas.

In this way, Japan hoped to lead in various cooperative relationships for sustainable energy with the rest of the world. Mr. Takahashi said he also hoped that HYLI 2022 would engage young leaders from ASEAN countries and Japan, and contribute to deepening their relationship in the future.

DAY 1 SPEECHES



Guest-of-Honour Address

Ms. Low Yen Ling

Minister of State, Ministry of Trade and Industry & Ministry of Culture, Community and Youth



Ms. Low thanked Mr. Higashihara and his colleagues from Hitachi for inviting her to be the Guest-of-Honour at the opening of HYLI 2022. She also welcomed the others in attendance, especially the student delegates, acknowledging how energised she felt to be among the leaders who would be building a better tomorrow.

She used the analogy of surfing to represent how delegates could overcome their obstacles and ensure a resilient and sustainable future. Firstly, good surfers got ready for the waves ahead of time and had a plan to overcome possible challenges. To secure a better and greener future for Singaporeans, the government initiated the Green Plan, a whole-of-nation movement launched in February 2021 that was closely aligned to the UN SDGs.

Secondly, Ms. Low said, seasoned surfers were able to catch the wave and ride on its energy and momentum at the best moment. The disruptions caused by the Covid-19 pandemic made all of us in ASEAN and Japan more adaptable to change. In Singapore, investments of time and resources had been made to enable individuals and businesses to become more future-ready and industry-relevant, especially in the area of sustainability. To help Singaporeans enter the promising green economy, the government aimed to equip the workforce with the necessary skills in emerging and potential areas of growth.

Thirdly, Ms. Low said that surfers looked beyond what is directly in front of them and had a long-range view of their surroundings. In this sense, she urged Singaporeans to capture the many opportunities beyond our borders by working with neighbouring countries, especially those in ASEAN and Japan, and remain open to the world.

Ms. Low concluded her address by urging delegates to make friends with those from other countries and to draw on the knowledge of the distinguished speakers. She believed that the delegates' fresh perspectives and energy and the collaborations facilitated during these four days would give them tremendous opportunities to create a sustainable and resilient future.

Keynote Speech

Tan Sri Datuk Dr. Rebecca Sta Maria

Executive Director, Asia-Pacific Economic Cooperation (APEC) Secretariat



In her keynote speech, Dr. Rebecca, who has been involved with HYLI for many years, shared how encouraged she was to see how the initiative has been growing and impacting the lives of so many young people across the region.

APEC needed to address sustainable development urgently, she said. She then brought up the issue of marine pollution. Referring to articles about the two sperm whales that were found dead with masses of plastic waste in their stomachs, she showed that waste was not a local issue as it could become an international problem. She asked: What were we doing to address sustainable growth? And what more do we need to do as a region?

Sustainable development has always been an important part of APEC's DNA. When APEC economic leaders met for the first time in November 1993, they issued an Economic Vision Statement that included pledges to manage renewable sources and protect the future of the people. The Bio-Circular Green (BCG) economy, which had been promoted by Thailand, the host of APEC this year, was an economic model that encouraged members to efficiently use resources, maintain and restore ecosystems, and reduce waste to build sustainability.

In conclusion, she said while the sheer number of issues confronting the region and the world can be daunting, there were also opportunities for us to make the changes we want to see in our world. And with effective partnerships, such as those between ASEAN and Japan, between the private and public sectors, as well as other key stakeholders – including the youth of the region – we could be the active force that drove these changes.



Opening Plenary Remarks

Mr. Kojin Nakakita

Vice President and Executive Officer, Hitachi, Ltd. Chairman, Hitachi Asia Ltd. Chairman, Hitachi India Pvt. Ltd.



In his opening remarks, Mr. Nakakita advised the delegates to do their utmost to pursue their dreams. He shared that when he was 15, he went to Canada and then to the United States to study and to pursue his dream of becoming a professional hockey player. However, when he broke his knee, he had to give up on his dream.

After that, he returned to Japan, started work at Hitachi, and has been a happy employee for 34 years. While it was regrettable that he was could not pursue his original dream, his experience living overseas broadened his world view and gave him insights into a fast-changing world. This helped with his work at Hitachi.

Many Japanese, he said, lived in fear due to the prevalence of natural disasters such as floods and earthquakes. After the 2011 tsunami, Tokyo lacked electricity for almost two weeks and even today, the northern territory of Japan still has not completely recovered. People took energy supply for granted until they had to live with the loss of it.

Wrapping up, Mr Nakakita advised the HYLI delegates to make friends over the next few days. He hoped that they would share ideas towards building a more secure and sustainable future. Finally, he urged them to pursue their dreams.

Closing Remarks

Ms. Megumu Tsuda Corporate Officer General Manager, Sustainability Promotion Division, Hitachi, Ltd.



Diversity enhances creativity, said Ms. Megumu Tsuda. This was the conclusion drawn from an experiment conducted at Columbia University that she told the delegates about, in which participants were tasked to solve a series of fictional murders. The participants were divided into three groups: the first was an individual; the second was a group of four long-term friends; and the third was a group with three friends and a stranger with no previous affiliation to the group.

It was the third group that had the highest solve rate. The individual who worked alone solved the fewest murders. This experiment proved, said Ms. Tsuda, that we came up with more innovative solutions to complex problems if we were surrounded by people who thought differently. And that was why diversity mattered so much to cultivating creativity and imagination.

In closing, she encouraged the HYLI delegates to venture beyond their comfort zones to share ideas with talented delegates from other countries. Because, she said, with diversity came innovation.

DAY 1 SPEECHES



Plenary Session I: Future Cities



Dr. Khee Poh Lam Provost's Chair Professor of Architecture and the Built Environment, National University of Singapore



Mr. Chintan Raveshia Cities Business Leader, Southeast Asia and Markets & Clients Leader, Singapore, Arup



Mr. Poon King Wang Director, Lee Kuan Yew Centre for Innovative Cities (LKYCIC), Singapore University of Technology and Design (SUTD)



Mr. Theo Scherman General Manager, Environmental Business Division APAC, Hitachi Asia Ltd.



Moderated by **Ms. Dian S. Anderson** Associate Director, EB Impact

This session focused on the 11th SDG, which is to make cities and human settlements inclusive, safe, resilient, and sustainable. The four invited panellists came together to discuss how the deep planning of future smart cities could help its inhabitants to become more resilient in dealing with major challenges such as extreme poverty, climate degradation, and natural disasters.

Mr. Chintan Raveshia kicked off the discussion by sharing what he thought were the best considerations and practices in planning a future city. Firstly, there needed to be equity so that everyone had equal access to opportunities and resources. Secondly, there needed to be climate goals, so that our actions contributed to a sustainable way of living. And thirdly, love had to be present, in that everyone should have a sense of emotional connection with their city.

As an architect and an educator, Dr. Khee Poh Lam argued that we needed to rethink and reimagine how cities could be different from how they were today. Cities were not just about glass, steel, and concrete; they should be a combination of both the urban and the rural. Cities should be able to support quality life for all their citizens. Finally, he encouraged delegates not to lock their perspectives within their own specialised fields, but instead to look across to other disciplines and open their minds to imagine how cities could be better in the future.

Elaborating on how to plan better cities, Mr. Theo Scherman said that we needed to balance two considerations. The first was to figure out how we could create new and better aspects to our cities, such as in transportation and energy generation. The second was to work out how we could afford to make these changes and sustain them in the long run.

Mr. Poon King Wang said that during the Covid-19 pandemic, while many people profited, there were many others who struggled and fell behind. He reminded the delegates that when building cities in the future, we had to ensure that the new, sustainable technologies help as many people benefit and thrive as possible.

Dr. Lam pointed out that cities needed to be holistic and take into account people's physiological, psychological, sociological, and economic needs. The most attention had, historically, been given to meeting the economic needs of people. It was only in the last 10 years that concerns about health and wellbeing gained greater traction.

Mr. Scherman agreed wholeheartedly and said that Hitachi has been focusing on technologies with a positive impact on people. The young leaders of today should take advantage of such technologies.

The challenge for cities, in Mr. Raveshia's view, was to balance internationalisation with identity. Cities needed to attract talent from around the world, but they also had to provide their citizens with a sense of identity. Leaders also needed to find the balance between top-down governance – such as by enforcing laws in response to the pandemic – and creating trust in the community so that there is space for creative innovation. In this respect, it was important for cities to learn from one another and share knowledge.

Avoiding the three Ds – disruption, disappointment and disconnect – would guide leaders who were trying to transform cities, said Mr. Poon. People disliked disruption unless they felt they were going to see benefits. If there were no benefits, that would lead to disappointment. And disappointment would cause people to feel disconnected, making them angry instead of engaged.

Dr. Lam quoted Winston Churchill: "We shape our buildings; thereafter, they shape us." Whatever we built, he explained, would impact people for generations to come. So we needed to carefully consider what we were building.

HIGHLIGHTS FROM PLENARY DISCUSSIONS



Q&A session

The Q&A session began with a question on what future cities needed a perfect balance of. For Mr. Poon, it was a country's ability to pull together its natural endowments, population, institutions, and infrastructure to have a successful outcome for its citizens. Every country was different.

In response to a question about social innovation and how it could inspire citizens from rural areas to accept and work towards urbanisation, Dr Lam said his point that the traditional definitions of rural and urban needed to change. We needed to reimagine hybrids of rural and urban such as vertical farming, and to embrace technologies that can make cities self-sufficient.

Smart cities, in Mr. Scherman's view, meant different things for different countries. But the same key traits remained: stability, as well as food, water, and energy security. A city's leaders and its people needed to figure out their priorities and from there, work out how to manage these priorities with more intelligent technology in their future cities.





Plenary Session II: **Clean Energy**



Dr. Lee Poh Seng Executive Director, Energy Studies Institute (ESI)



Mr. Robin Pho Founder and CEO, Right People Renewable Energy (RPRE)



Mr. Alain Mahieu Manager Sustainability Solutions, ENGIE Impact



Ms. Yvonne Toh Managing Director, Hitachi Energy Singapore Pte. Ltd.



Moderated by Mr. Liang Lei Correspondent, Eco-Business

To set the context for the second plenary session, which focused on social innovation in clean energy – SDG 7 – moderator Mr. Liang Lei said that while 96% of those living in Asia Pacific countries had access to electricity, 170 million people did not. With climate change, the challenge was to ensure that people had access not only to electricity, but to clean electricity in a region still dominated by fossil fuels. He asked the panellists how they saw the two major disruptors in the last two years - the Russia-Ukraine conflict and the Covid-19 pandemic – affecting the clean energy transition in Asia.

Dr. Lee Poh Seng pointed out that because of energy supply issues and rising energy prices, the region needed to prioritise clean energy to ensure long-term sustainability.

Mr. Robin Pho said that Indonesia contained many archipelago islands that were not connected to the main electricity grid. The needs of the people there - energy needs included - were basic. Their main priority was survival, and not whether the sources of energy were clean or not. For the people in such areas to access clean energy, organisations and governments needed to improve the whole infrastructure and ecosystem before focusing on the right type of energy supply.

Mr. Alain Mahieu saw the pandemic and the Russia–Ukraine conflict as uncertainties that triggered the need for a different way of thinking. Companies were realising that renewable energy, with its stable pricing, provided security against political changes and price shocks.

For Ms. Yvonne Toh, the crises of the past two years has shown us that there was an urgent need to speed up our renewable energy projects. The International Energy Authority had warned of the possibility that the energy crisis could worsen towards the end of the year when Europe goes into winter. As a result, some countries were looking into diversifying their energy sources and fast-tracking their energy transition projects.

Mr. Pho brought that in the triple bottom line - people, planets, and profit - people should come first, especially when it came to social innovation. Companies who preached inclusivity and diversity, such as in providing job opportunities to people with disabilities and refugees, not being gender or age-conscious when hiring, needed to walk the talk with their actions.

Mr. Mahieu talked about the iShack project, with which he worked, as an example of clean energy. A social enterprise in South Africa that ran completely financially independently, it created a platform that anyone with a mobile phone could rent a solar panel and buy electricity through a prepaid system. It was easily accessible because of the high mobile phone penetration rate in the country, and because it was a community programme that people were emotionally attached to, the theft rate of the solar panels was extremely low.

Countries needed to consider their respective strengths and weaknesses, and take advantage of them when collaborating, said Ms. Toh. Singapore might be physically small and possess few natural resources, but it had the knowledge and the capital to invest in renewable energy projects, such as in hydropower-rich Laos. Countries in the region needed to form relationships to cooperate and help each other realise their clean energy targets.

HIGHLIGHTS FROM PLENARY DISCUSSIONS



Q&A session

A delegate asked the panellists what they thought of nuclear energy. Mr. Liang clarified that while it is not a renewable resource, nuclear energy was low-carbon, but there was no permanent solution to the issue of nuclear waste.

Dr. Lee said that nuclear energy had its place, but since a wide range of energy options were available, no single solution should be considered a silver bullet. He felt that there were many technical governance issues that needed to be addressed with nuclear energy. These issues needed to be treated sensitively because of the risks associated with nuclear energy as well as the association with nuclear weapons. ASEAN, as a whole, might benefit from the creation of a centralised nuclear power generation facility, and he once again circled back to the importance of collaboration between countries, a theme that was echoed by other panellists during the session.

When asked about how a country could effectively transition from fossil fuels to electric energy, Ms. Toh believed it needed to work from multiple angles. First, government policies needed to incentivise energy transition projects. Second, the infrastructure needed to be ready to support these energy transitions, such as for electric vehicles. Third, partnerships between neighbouring countries were vital.

Then came a question about how locals in off-grid communities could be persuaded to use technologies that they are unfamiliar, Mr. Mahieu responded that people needed to be educated that there were renewable energy solutions that were cheaper than traditional technologies. Education and engagement with such communities were extremely necessary.

Rounding off the session, Mr. Liang expressed his hope that what had been discussed could serve as inspiration for the delegates' projects over the next few days at HYLI.





Plenary Session III: Water Solutions



Dr. Adil M. Dhalla Managing Director, START Centre COO, NEWRI



Ms. Dawn McGregor Business Engagement Lead, China Water Risk



Mr. Nimesh Modak Managing Director, Imagine H2O Asia



Mr. Tang Chay Wee Chief Operating Officer, Hitachi Asia Ltd. Chief Marketing Officer, APAC Water & Environment Business and APAC Strategic Management Office



Moderated by **Mr. Ami Firdaus** Programme Manager, Eco-Business

The world was far from ensuring clean water and sanitation for all – SDG 6 – even before Covid-19 struck, according to the UN. The problem is especially visible in the Asia Pacific, home to 60% of the world's population and which lives on 36% of Earth's water resources.

Mr. Nimesh Modak pointed out that the pandemic put a spotlight on how non-negotiable SDG 6 was for public health – when the pandemic struck, 40% of the world did not have access to hand-washing facilities to keep the virus at bay. Those disproportionately affected by water insecurity were the most vulnerable to this health crisis, such as school children.

Ms. Dawn McGregor explained that water has value because it was completely interwoven into our lives – economies, health, innovation, tech, etc. Water was needed to produce energy, to manufacture products such as clothes, as well as for food and agriculture. The world was suffering from water extremes due to climate change, with flooding in some places and droughts in others. SDG 6 was thus not just about water supplies, but being more aware and prudent about our water footprints.

Mr. Tang Chay Wee said that ensuring proper sanitation was more important than access to clean water, as uncontrolled pollution could in turn taint clean water.

Water is often under-priced in Asia, said Ms. McGregor, when asked about the "value" of water. That meant utilities might not have enough money to scale up wastewater facilities while providing water to a growing population, even though clean water was a human right. She added that water should be seen as a business risk that could affect supply chains and revenue streams. Many manufacturing hubs existed in places with water stress such as China, India, and Bangladesh. Big firms like Google and Microsoft had been setting water-neutrality and water-positive targets – similar to pledges for reducing carbon emissions – by using less fresh water and restoring natural watersheds.

While water was often considered a natural resource, pumps and pipes to bring clean water to homes could be expensive, said Dr. Adil M. Dhalla, and non-profits could help by addressing water leakage and theft. By-products from water treatment could also be turned into fertilisers to create value from waste.

Mr. Modak said that wastewater plants could also generate biogas. There was an opportunity to provide decentralised water treatment services to service fast-growing informal settlements across Asia, but solutions needed to be tailored. He cited how start-ups had had to scrap automation from their plans because local communities wanted offline tools and greater involvement in projects.

Mr. Tang suggested that working with and training locals, along with commitment from all stakeholders, were key in ensuring that solutions would work in the long run. Mr. Dhalla added that community buy-in was important, such as in the case of reclaimed water in Singapore, which some had been hesitant to drink a decade ago, but nowadays, as children were schooled about the technology, they were more receptive to the idea.

Ms. McGregor pointed out that innovators needed to ensure their solutions did not worsen climate change, as rising global temperatures were already causing more water-based disasters like floods.

At the same time, companies are now incorporating the concerns of local communities into water management plans, as they realise the importance of their buy-in to business continuity. This trend will create more opportunities for social innovation, she said.

HIGHLIGHTS FROM PLENARY DISCUSSIONS



Q&A session

Responding to a query on how governments could be made to understand the importance of clean water, Mr. Tang said people needed to band together to share information on water conservation online. The multitude of water problems meant that policymakers also required time to find the right solutions. Dr. Dhalla added that governments needed to know not just the price tag of water, but also the costs of not having clean water that arose from more healthcare and sewage problems.

In Mr. Modak's view, authorities should find ways to better communicate the value of water. He added that governments were listening more to people now as problems such as pollution and rising sea levels have become more visible.

On a question of how developed countries could help developing countries tackle water pollution, Mr. Modak said more money was needed and more climate funds should be directed towards water issues. He added that developed nations could learn from developing ones too, citing how a million people in Central Valley in western United States had no access to clean drinking water. Mr. McGregor said Asia should look to develop innovative solutions using private finance, instead of copying existing water solutions from developed nations.

In response to a question on the problem of water mafias and inequitable water delivery in slums, Mr. Modak responded that the lack of utility coverage was an issue in such communities. While social enterprises can help fill access gaps, these businesses themselves need more funding and resources from the private sector. To prevent water mafias from entering the market in the first place, Dr. Dhalla said communities should be built with water access in mind.

Rounding up the session, Mr. Modak pointed to how concrete surfaces in Chennai, India, and the lack of water storage meant that the potentially valuable supply of water resources from monsoon rains were not captured. The right solutions can mean finding resources from what has been overlooked as waste.





Plenary Session IV: Human Health



Dr. Jean Liu Assistant Professor (Psychology), Yale– NUS College, Consultant, World Health Organization



Ms. Elaine Tan Director, Research, Centre for Liveable Cities



Moderated by **Ms. Meaghan See** Director of Partnerships, Eco-Business

Southeast Asia is facing a growing range of healthcare challenges, including an ageing population and the rise in the incidence of chronic diseases. Climate change and underdeveloped healthcare infrastructures provided room for the private sector to play key roles in healthcare improvement. Especially since the pandemic, public health authorities were reconsidering approaches on looking beyond the public health sector for innovative solutions to problems related to good health and wellbeing – SDG 3.

Public health required a whole-of-society approach with an ecosystem of stakeholders, according to Ms. Elaine Tan. As an example, she pointed to how the Singapore government worked with hotels to house foreign workers and quarantine infected people during Covid-19. The private sector had the agility, resources, and competency to help in public health, while the public proved to be able to mobilise itself in times of crisis, she added. However, public-private partnerships faced challenges like competing agendas and vested interests, and she added that a good understanding of what different stakeholders wanted was important to ensure success.

Dr. Jean Liu added that such conflicts could be seen in high prices for cancer drugs and the lack of vaccine equity during Covid-19. On the effects of the social environment on health, Dr. Liu pointed to how factors such as tobacco use, diet, and lifestyle habits could increase the risk of developing illnesses like cancer, chronic heart issues, and diabetes.

Ms. Tan said urban density was viewed negatively because of how easily diseases could spread between people, but cities could also offer solutions by baking in features for better disease containment plans, strategies to disperse populations, as well as increasing access to parks and amenities.

Technologies like automated disinfecting systems and contactless infrastructure could help make towns more disease-proof, Ms. Tan added. While creating more co-working spaces closer to homes could allow those without conducive environments at home to better adapt to the increasingly popular hybrid work environment.

Dr. Liu felt that cities needed to relook staffing for healthcare systems, as some faced manpower issues after foreign workers went home amid the pandemic. After a huge push for digital medical services during Covid-19, cities now also need to think about which services to keep and which should revert to in-person formats, she added.

The mental health of the elderly population also came to the fore during Covid-19, as concerned families isolated themselves from older members to avoid passing the infection, Dr. Liu said. Ms. Tan added that authorities could start looking out for future elderly hotspots earlier based on demographic data, to make sure services such as day care centres and clinics could be made available in time.

A key gap to fill in public health was understanding how services needed to be tailored to different demographic groups within a city. Dr Liu cited, as an example, how migrant workers may have language barriers and lack stable jobs.

Ms. Tan said both hard infrastructure, such as new amenities, and soft infrastructure, such as volunteers, are needed for a robust public health system. She added that people with rare genetic diseases should also receive more attention.

HIGHLIGHTS FROM PLENARY DISCUSSIONS



Q&A session

Mental health took centre stage during the Q&A. One of the audience members asked if mental health services should be provided via smartphones. There are benefits to this, Dr. Liu said, such as in reducing the wait time to see a psychiatrist in person. She added that services like cognitive behavior therapies and mindfulness exercises are app-friendly.

But compliance rates of mobile therapy programmes are low, and sometimes users may need an in-person session, Dr. Liu said. Some programmes, such as those requiring patients to rate their moods regularly, are also not optimised for mobile applications. And making social connections in-person, she said, remains a big part of wellbeing.

Ms. Tan added that mobile applications could work well as a first point-of-contact for mental health services despite their limitations.

Public health innovations also need to cater to populations who may not have ready access to technology. Dr. Liu recalled how, when she wanted to conduct online surveys with foreign workers staying in dormitories during Singapore's Covid-19 lockdown, she had to rent internet routers for them to ensure everyone had access to the web.

Ms. Tan said it was important to help those who were not tech-savvy get acquainted with digital services, such as by teaching senior citizens how to use telemedicine services. There was a growing elderly population who were familiar with smartphone technology, but the user interface of services catered to them could still be improved, she added.

On the technology front, authorities also needed to look at ways to collect better data, track pandemics, and optimise medical artificial intelligence systems, said Dr. Liu.

Responding to a question on why people were slow to note the importance of mental health, Dr. Liu said more countries today were keen to integrate mental and general health services. There were also more efforts to incorporate mental health services into insurance plans, Liu said. Governments needed to take the lead to remove stigma from discussions around mental health.





On the mornings of the second and third day of the event, delegates went on field visits to two places to see HYLI 2022's theme, Social Innovation in the New Normal, in action.







Edible Garden City

The second day of HYLI 2022 began with delegates going on a site visit to Edible Garden City (EGC). The delegates embarked on a tour to view the different features of EGC before participating in a microgreens workshop.

EGC staff shared how waste is turned into "farmers' gold" by African Nightcrawlers (eudrilus eugeniae) and Malaysian Blue Worms (perionyx excavates) through vermicomposting. African Nightcrawlers, for instance, can eat 1.5 times their own weight in a day and can digest paper, leaves, and some vegetables such as cucumbers. However, they require a habitat of 19 to 28 degrees Celsius and cannot digest food items like garlic, onion, ginger, or cooked food and meats.

Food waste is instead fed to black soldier fly larvae, which, according to the guide, "eat anything". Mating pairs can produce about 800 eggs between them, while the larvae are sources of melanin and other extracts that are used in products such as facial care products. The larvae are also fed to chickens and these larvae have been approved by the Singapore Food Agency as edible food and an alternative protein.

Delegates were shown how seven layers of edible plants could be grown in a small space. Sweet potatoes were grown underground while the leaves flourished alongside Pepper and Indian Borage. Mulch covered the soil, which helped retain moisture. Further up, plants such as Ulam Raja and Banana grew tall. A display of permaculture and food forest concepts, the different layers worked together to survive.

Delegates learned about EGC's indoor farming, where a nutrient film technique was core to the hydroponic approach for growing vegetables in shipping containers. This enabled the City to grow up to 80 kilograms of vegetables a month and enabled intensified urban farming. The technique has a relatively reduced carbon footprint compared to traditional farming methods, is not too expensive, and can bring vegetables from farm to table in three months.

The visit ended with a workshop on microgreens, during which delegates dug deep into how edible plants can be grown in urban homes because they are more nutritious, can be consumed when they are at a younger (and smaller) stage, and only require LAWN (light, air, water, and nutrients).



HIGHLIGHTS FROM FIELD ACTIVITIES IN SINGAPORE









Coney Island

Day three of HYLI 2022 began with a site visit to Coney Island, off the coast of Punggol. Delegates were brought through an immersive historical and biodiversity tour of the island by an experienced guide.

The island was originally named Pulau Serangoon after the Malay name of a shoreline bird that was commonly found in the area, and was also known in the early 20th century as Haw Par Island when it was owned by Aw Boon Haw and Aw Boon Par (the owners of Haw Par Villa and the Tiger Balm brand). It was then sold in 1950 to a businessman who developed the island into a leisure resort called Singapore Coney Island. It was billed as "Singapore's first island health resort," and people had to take a boat from the mainland to access the facilities available there such as a dance hall, a restaurant and bar, as well as seaside accommodation. Coney Island Park, in its current iteration, was eventually opened in 2015.

Delegates were then brought through the park to learn more about its sustainability features. The guide explained that Coney Island's rustic park amenities were built using residual material from citywide pruning operations, an example of circularity in sustainable urban development.

Delegates were also shown various flora and fauna, and told the stories behind them, which ranged from Singapore's culinary heritage to its wartime history. Several charismatic creatures were also spotted and storied, from the crowd favourite, the Smooth-coated Otters, to the Malayan Water Monitor and the Purple Heron. The guide shared that the Malayan Water Monitor – which can grow up to three metres long – is the world's second largest lizard, smaller only than the Komodo Dragon of Indonesia. Stories of the famous island cow, which was unfortunately no longer around, were also recounted; it had stoked the imaginations of Singaporeans who wondered how it ended up alone on the island.

The site visit concluded with a group photo on the picturesque seaside steps at the north face of the island. Delegates also took many photos with the new friends they had made over the past three days of bonding, as they came to realise that they had only a short time left together.







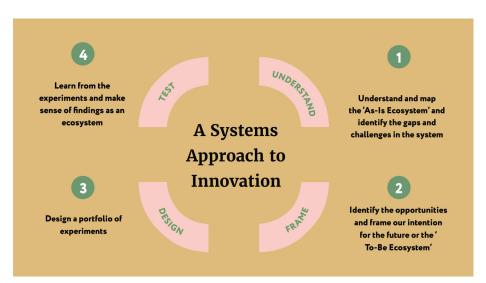
The 30 delegates were divided into four groups, each focusing on one Sustainable Development Goal (SDG) that was a sub-theme of HYLI 2022:

- **SDG 3** Health and Wellbeing
- SDG 6 Clean Water and Sanitation
- SDG 7 Affordable and Clean Energy
- **SDG 11** Sustainable Cities and Communities

SDG Challenge

The workshops were designed to take the groups through a systems approach to understand the challenges behind the SDG their groups focused on and to find a social innovation solution that could create the biggest impact on these challenges.

The workshops followed four phases of social innovation: understanding; framing; designing; and testing.



Workshop One: Understanding and Framing the Challenge

Day two workshops started with facilitators helping delegates to understand and hone in on the challenges faced within the SDG allocated to each group. Individuals mapped out the challenges, then shared their findings in robust group discussions with their group members before deciding which challenge to focus on.

The delegates then came together in their groups to dig deeper into their specific challenges – they mapped out the system that it played in, which included elements, relationships, and purpose. This allowed the groups to understand the following:

- What are the current facts and data that tell the story of this challenge?
- What stakeholders are present? What stakeholders might be missing? Who does the issue affect the most? How are the stakeholders connected?
- What are the current resources available?
- What is the current political and cultural environment around this topic?

Through the process of mapping, groups were able to understand and frame the challenge and problems within their systems. This allowed them to make more informed decisions about their solutions, which they came up with in the next few phases in workshops two to four.

Workshop Two: Planning and Prototyping

The exercise of understanding and mapping out the system was crucial in helping groups gather more information about their business model of the solution. Through the mapping exercise, the groups were able to fill out the Business Model Canvas and move into prototyping for the solutions phase.

Within this phase, the groups identified the different opportunities and framed the different intentions of what the future of the system could be. The groups worked on building the Business Model Canvas to prototype their solutions. There were numerous problems associated with the challenges chosen by the groups, and not all could necessarily be solved. Instead, the groups found the focal points from which they could create the biggest impact.

At the end of the second workshop, which closed off the second day of HYLI, the groups finalised the prototype and produced a digital version of it in preparation for testing it on day three, which would bring them to the next phase of their journey.

SUMMARY OF STUDENT WORKSHOPS









Workshop Three: Prototype Testing and Reiteration

On day three, groups entered the designing phase and went into a workshop that gave them the opportunity to share knowledge, collaborate, and experiment with solutions through the "World Café" – a classic workshop format that allows groups to circulate ideas and prototypes for instant feedback from other groups. The objective of the World Café was to allow for the alpha-testing phase of the solutions and to give other groups the opportunity to validate each other's prototypes. There were three rounds in total, with each group being in the spotlight for 15 minutes each round.

The groups then proceeded to go through the feedback they received and review their test results. They refined their business models and prototypes, and went on to prepare the first cut of their final pitch deck.

This moved the groups to their final phase of testing and making the case for their solutions.

Workshop Four: Making the Case

In the last workshop, the four groups had the opportunity to prepare and present the first draft pitch of their solutions. This phase allowed the groups to receive highly focused feedback, which supported them in improving their pitch and pitch decks for the final presentations. The observations provided by both main facilitators and individual group facilitators allowed the groups to see things from a broader perspective from the greater ecosystem, and not just from their own group members.

At this point, the groups were given the rest of the afternoon and evening to prepare for their final presentations and make any further adjustments before the final day of the programme.





Welcome Speech

Mr. Takatoshi Sasaki

Managing Director, Hitachi Asia Ltd.



The fourth and final day of HYLI 2022 kicked off with a passionate speech by Mr. Takatoshi Sasaki. He shared that besides his day job at Hitachi, he is also a baseball coach for junior high school kids in Singapore. As a coach, he has often emphasised three team policies. First, feel others' pain and happiness as if they were your own. Second, have a sense of ownership in the team. And finally, enjoy the process and encourage one another regardless of the outcome.

These three rules apply to the social issues we are facing as well, explained Mr. Sasaki. While the challenges we face today are not simple, he is positive that young people will help to build a better world. He called on the delegates to use the new knowledge and networks they had built at HYLI to strengthen their social innovation ideas.

Welcome Address by Lead Advisor

Ms. Meryl Koh Board Member Board of Directors, EB Impact



Ms. Meryl Koh, a director on the board of EB Impact, began by expressing her appreciation for the delegates, and that as an advisor, she had much to learn from them. She also emphasised that while there was a growing understanding among business leaders of the need for immediate action, more needed to be done in terms of integrating sustainability as a core part of their business strategy. Companies should concern themselves not only with short-term profits, because natural disasters, social unrest, and economic disparity can damage long-term prosperity.

Pointing to an existing ESG talent gap in the market, Ms. Koh said it was important for companies to offer young talents in the region more credible and impactful opportunities so that they can help to turn the tide. She concluded by encouraging the ESG community to do more for the future of our youth.

DAY 4 SPEECHES





Closing Remarks

Ms. Megumu Tsuda

Corporate Officer General Manager, Sustainability Promotion Division, Hitachi, Ltd.



During her closing remarks, Ms. Megumu Tsuda congratulated all the student delegates for successfully completing the programme and maintaining a positive attitude despite the rigorous schedule and challenging circumstances posed by the Covid-19 pandemic. She also thanked the advisory panel for the encouraging comments and insightful advice that they provided to the student presentation groups.

Although there had been plans to hold HYLI 2022 online or to postpone it further, Ms. Tsuda was glad that an in-person event could be organised. She recounted with fondness the students' happiness during the field trips and the diligence they displayed while working on their presentations. She also expressed her gratitude to HYLI's external partners, Eco-Business and Adrenalin, as well as the student mentors and audience for making such memories possible.

Ms. Tsuda closed her speech by communicating her hopes for the students' future. She reminded the students to make the most of HYLI's now-400-strong alumni network, as well as the valuable experiences and connections they made during the event. Finally, she stressed the power of diversity, which would enable the students to overcome any challenge and to bring forth the social innovations required to make the world a more sustainable place.

18[™] JULY TO 21[™] JULY 2022



ADVISORY PANEL

- Lead Advisor: Ms. Meryl Koh, Board Member, Board of Directors, EB Impact
- Mr. Thomas Thomas, Chief Executive Officer, ASEAN CSR Network
- Mr. Tan Szue Hann, Co-founder, IXSA, and Chairman of Sustainability, Singapore Institute of Architects
- Dr. Gerald Hane, Senior Executive for APAC, General Manager for Corporate Strategy, Hitachi Asia Ltd.





18[™] JULY TO 21[™] JULY 2022



Human Health

Student Delegates:

- Bach Minh Duc Vietnam
- Momo Hoshino
 Japan
- Neoh Ying Rui
 Malavsia
- Nur Hazeem Bin Abdul Nasser
 Singapore
- Poorit Lertpaitoonpan
 Thailand
- Raven Biason Frias
- The Philippines
 Vania Shafira Yuniar
- Indonesia



The Human Health group began their presentation by identifying the lack of accessible healthcare for the elderly as a major problem faced by Asia-Pacific countries, especially in countries with rapidly ageing populations, like Japan. Without people to attend to their needs, as many as four out of 10 elderly people die alone each year.

Students highlighted sources that showed how current telemedicine options failed to bridge this healthcare gap. For example, the Singapore Eye Research Institute found that 78% of their elderly respondents were uncomfortable with artificial intelligence (AI) interpreting their medical results and providing medical advice.

And although life-saving wearable devices are readily available today, uptake is still slow, especially in developing countries like Indonesia, where only 33% of the elderly use such technology. Furthermore, these devices may not necessarily guarantee the elderly person's independence, as 77% of them require assistance to operate digital devices like smartphones, according to research by the Pew Research Centre.

Hence, the student delegates proposed Stand-By-Me, a simple and affordable watch the elderly could wear to prevent serious injury or death during emergencies, especially if they lived alone. To withstand emergency situations and cater to the region's diverse language needs, the waterproof and shockproof watch would have customisable language settings and a battery that would last at least a week.

Each Stand-By-Me would cost US\$17.36 to make and come with a complimentary oneyear warranty. For a one-off subscription fee of US\$25, the watch would detect falls and contact registered medical professionals, nearby hospitals, and family members through an alert on the Stand-By-Me app. The device could also collect the user's physical data, which included their heart rate, oxygen level, blood pressure, sleep, and fitness. For an extra US\$7.50 a month, volunteers could warn users of potential health risks based on this given data, and also provide regular counselling or mental health check-ups. The group believed that providing these "high-tech" and "hightouch" services at a lower cost would enable Stand-By-Me to stand out from the other wearable medical devices currently on the market.

The group anticipated great demand for Stand-By-Me. With ASEAN's medical device industry expected to generate more than US\$8 billion in the next few years, the group highlighted the space for growth and expansion. Moreover, the World Health Organization (WHO) estimated that ASEAN's average healthcare accounted for 4% of the region's Gross Domestic Product (GDP). As a result, governments would be interested in reducing healthcare costs, which would make them open to supporting products like Stand-By-Me.

Using funding from venture capital companies or government agencies, the group planned to pilot the project in Indonesia, and aimed to reach 1% of the island nation's elderly population, or 1,875,582 people. Thereafter, the product could be sold to the rest of Indonesia and the ASEAN region, which had 187,558,517 and 456,053,071 potential users respectively.

First, the group planned to carry out market research about other available wearable medical devices on the market and assess the region's current needs. They then intended to partner with manufacturers to create a cheaper and easier-to-use watch for the elderly. After that, they would set up the social ecosystem required to support their device by notifying health professionals and organisations about Stand-By-Me, along with training volunteers and first responders. To further product recognition and ensure further sales, the group suggested partnering with government agencies to recommend usage, as well as advertising on social media.

The potential problems this project might face was the reluctance by the elderly to wear digital devices, as well as data security threats and device damage. In response, the group suggested greater collaboration with non-profit and government organisations (NGOs) to educate the elderly on Stand-By-Me's use, non-disclosure agreements, and customer service, in addition to the watch's damage-resistant properties.

HIGHLIGHTS OF STUDENT DELEGATES' PRESENTATIONS





Q&A and Feedback

Recalling Mr. Robin Pho's observation about Indonesia's low mobile phone ownership due to the lack of cellular connectivity, Ms. Koh questioned how Stand-By-Me could reach the elderly residing in rural areas and those without internet connections. The students admitted that though they would not be able to reach all vulnerable elderly people, the device would use SIM cards, which were still functional in rural settings. Moreover, they also hoped to work more closely with NGOs and companies to improve the telecommunication infrastructure of such communities.

Mr. Tan Szue Hann was convinced the group had the statistics to back up their anticipation for their device's demand and reiterated the importance of a mobile or SOS service connection. However, given the lower literacy rates among the elderly, he suggested the use of simple graphics instead of language and menus on the phone. He also suggested that the group work on the device's wearability and design features. These could help the elderly overcome their fear of digital devices and prolong the device's battery life by excluding unnecessary functions.

Expanding further on helping the elderly overcome their reluctance to wear monitoring devices, Dr. Gerald Hane asked if the students could make the watch fun to wear by linking it to pleasurable experiences like listening to music, which was enjoyable to even patients with severe memory loss. In response, the delegates said making the watch in glow-in-the-dark or neon colors would not only make it easier to find, but also more attractive to the elderly.

The product



(ASEAN Briefing, 2020)

percent of GDP

Investment Landscape

more than US\$8 billion in revenue in 2021

- ASEAN's medical devices industry is expected to see generate

- World Health Organization data estimates that average total healthcare expenditure per capita in ASEAN is **US\$ 544**, about 4

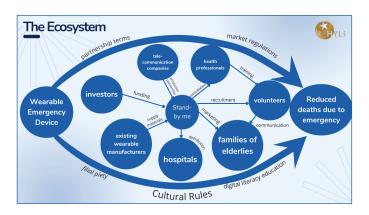
Notify Medical Care in Emergencies In the case of a detected abnormality, notify registered medical professionals, hospitals and family members an alert through the Stand by Me application.

Monitor user's Health

The wearable device would collect user's physical data: Heart rate/pace/distance, oxygen level, blood pressure, sleep, fitness, falling

Inform for prevention and prediction Weekly or monthly call from our staff to the users reporting on health result, warm potential health risks, mental health checkups, and counseling.

YLI



| Risk | Mitigation |
|---|--|
| Elderly may be reluctant to wear the device (digital hesitancy) | Partnerships between non-profit, volunteer and government organizations to cover elderly population education |
| Data security | Nondisclosure agreements |
| Damage of the device | Shock proof Water proof Customer Service |



Water Solutions

Student Delegates:

- Noppawan Rakthinkumnerd
- ThailandMatthew Ooi Xian Wei
- Malaysia
- Esther Yeoh
 Singapore
- Saori Tomishima
- Japan
- Sheva Rose Dawa Belarmino The Philippines
- Ricky Samuel Satria
 Indonesia
- Nguyen Hong An Vietnam

The group focusing on Water Solutions centred their pitch on a portal to tackle wastewater pollution in the fashion industry. The group opened their presentation with some startling statistics: 20% of wastewater worldwide comes from the textile industry. As fast fashion grew exponentially, so did its environmental impact. While a handful of brands such as Uniqlo and Adidas have embarked on initiatives to reduce their water impact, 80–90% of fashion brands still do not treat their wastewater, leaving fast fashion lagging behind contemporary industries in water-related issues.

One of the main obstacles fashion companies faced is the complexities of wastewater management. More than half of fashion companies failed to report water-related information, possibly due to a lack of technical expertise in this aspect. Yet, a plethora of technology and providers already existed in the market – for example, Swirltex, Aquacycl, CertusBio, and Hydraloop – many of which still lacked funding to scale up.

To bridge this gap, the group proposed Breaking the Cycle, a one-stop platform for fashion brands and enterprises to connect, share information, and engage in wastewater management projects. This portal would serve as a database for enterprises to exchange knowledge about projects they had worked on.

The group put together an impressive prototype of the portal that highlighted how it could be used to generate mutual benefits for stakeholders. Fashion companies could tap on the range of technical expertise in the market as well as receive customised solutions to fit their supply chain's requirements. Meanwhile, enterprises could use the platform to build industry recognition and obtain funding from fashion companies to scale their technology.

The rollout of the portal would occur in three phases: Catch; Connect; Retain. The "Catch" phase would see extensive collaboration between fashion companies and governments to capture investments for the building and development of the portal. Meanwhile, "Connect" could be done through a wastewater symposium to build a network of partners. The presenting group also proposed waiving fees for the initial listing of companies on the portal. Finally, the "Retain" phase would educate brands on disclosure and reporting, as well as offer advisory services to enterprises.

The group also shared examples of how conversations between stakeholders had been a proven solution in the fashion industry. They cited the non-profit NGO Better Cotton Initiative, which helped to connect policymakers, fashion brands, and companies with farmers to explore environmentally sustainable solutions. Cotton farmers were found to use 16% less water thereafter.

Lastly, the group acknowledged that it could be difficult to sustain the portal financially in the long run. To mitigate this, they suggested implementing monthly subscription fees and a transaction fee on successful projects.

All in all, Breaking the Cycle would help to connect resources, empower innovation, as well as reduce the impact of wastewater, they said.



HIGHLIGHTS OF STUDENT DELEGATES' PRESENTATIONS

18TH JULY TO 21ST JULY 2022







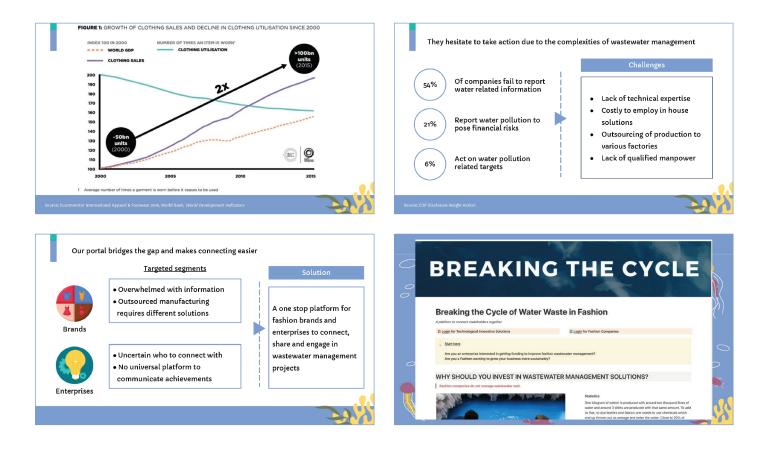
Q&A and Feedback

Mr. Thomas Thomas commended the group for their impressive presentation. However, he pointed out that the group had made an assumption during their presentation that there were perfectly matched issues and solutions between fashion brands and enterprises, which might not be true. He also highlighted that fashion brands often operated separately from manufacturers, from which many of the pollutive wastewater practices stemmed. Lastly, Mr. Thomas questioned who the main target investors for the portal would be, given that fashion companies might not be willing to contribute funding.

Meanwhile, Ms. Koh applauded the group's palpable passion and enthusiasm throughout their sharing. While she did not have specific questions about the portal, she asked the delegates about their research on existing wastewater management practices, specifically which countries in ASEAN seemed to have the most effective policies. She also suggested that the portal could also be used by enterprises for knowledge-sharing with regards to technology and policy.

Mr. Tan said that this was a very ambitious programme. However, he highlighted that the fashion supply chain is very long, and fashion companies were often just at the tail end – while manufacturers in between or along the fashion supply chain were often anonymous. He encouraged the delegates to consider how these unknown industry players could still be included on the platform. Mr. Tan also said that a more fundamental issue was whether fashion companies would "be willing to put themselves out there and let themselves be audited." This could affect the take-up rate on the portal.

Finally, Dr. Hane suggested a water label – similar to existing carbon labels – to complement the portal and improve transparency in the fashion industry.





Clean Energy

Student Delegates:

- **Florentiana Yuwono**
- Indonesia Moe Thiri Zun
- Myanmar Moeka Sumida
- Japan
- Nithyialakshmi Ravindran Malaysia
- Ong Jun Hock, Ryan
- Singapore Sirawit Saeung
- Thailand
- To Hai Dang Vietnam
- Vivienne Angelica Hernane Viernes The Philipines

The Clean Energy group prefaced their presentation by sharing a few key statistics with the audience. According to the UN, more than one in 10 people did not have access to electricity, and accounting firm PricewaterhouseCoopers (PwC) found that 80% of these people live in rural areas. Thus, the group wanted to find a way to make clean energy more accessible to off-grid communities.

The group then investigated the impact and feasibility of volunteer initiatives, government projects, and training communities to install power plants, which were solutions often used today to address the issue. They found that these solutions were not only inefficient, but also often overlooked or failed to cater to rural communities, which were usually difficult to contact, and those who lived there often had low levels of literacy.

Their proposed solution was Synergy, a digital platform that aimed to bring clean energy to off-grid communities by connecting them with the government, clean energy businesses, NGOs, and other funders. Furthermore, the platform would enable more efficient resource allocation and use, and help each partner achieve their objectives.

For example, a country's government could provide geographical data, funding, and other resources, while expertise and local knowledge could be obtained from clean energy providers and NGOs respectively. In return, the government could meet its sustainable development goals, funders had more clarity and range of investments to choose from, businesses could generate more profit, NGOs could achieve greater social good, and off-grid communities could have energy infrastructure tailored to their needs.

The group anticipated four main barriers to Synergy and their solutions. Firstly, though there were many people in ASEAN who are receptive to clean energy, many were unwilling to make the first move. This was further compounded by the lack of clean energy expertise in developing countries. High upfront costs and tariffs presented the third and fourth challenge respectively. To address these issues, the group intended to collaborate with NGOs to change mindsets about clean energy and train more rural people to install and maintain electrical infrastructure.

Finally, the group laid out their expansion plans. Their original intention was to focus on providing clean energy to off-grid communities. In the future, they also wanted to ensure continuous, reliable power supply to on-grid communities, and to provide policy recommendations that would more holistically integrate rural communities and developing countries in the upcoming energy transition.



HIGHLIGHTS OF STUDENT DELEGATES' PRESENTATIONS





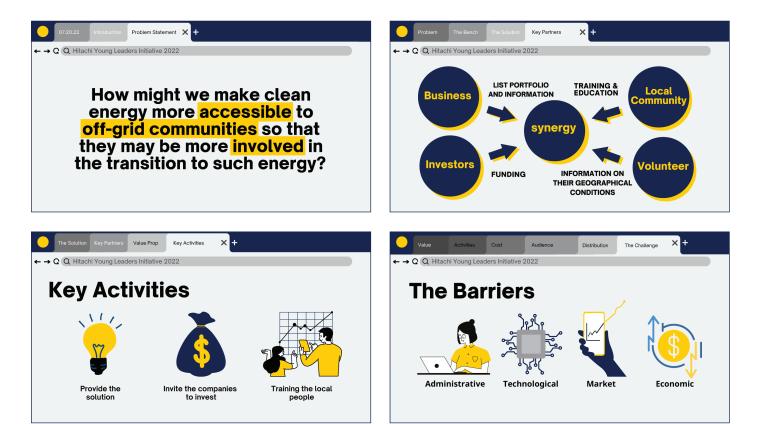
Q&A and Feedback

Mr. Tan praised the group's succinct and clear presentation as well as their noble aspirations, but also pointed out that clean energy could only be supplied at rates providers were willing to charge, which might not necessarily be affordable. He asked three questions. One, how would the group audit and select companies for their platform? Two, how would they convince governments to fund these projects instead of regulating the energy providers? Three, how would they gauge the companies' performance?

In response, the delegates likened Synergy to the online dating and networking application Tinder, where rural communities with solar, wind, or hydropower potential could be matched with companies that specialised in setting up such infrastructure and those willing to finance the project. They also pointed out that this process opened up the possibility of providing clean energy without government assistance and prevented the monopolisation of the clean energy market. Lastly, they stated that the number of rural households supplied with clean energy could be an indicator of Synergy's performance.

Continuing with the comparison to Tinder, Dr. Hane asked what an attractive match would look like, and if Synergy could use AI to find these matches more efficiently. The students responded by stating that profiles of companies, communities, and funders would be available on their website for interested parties to further evaluate.

Recalling her opening remarks in which she mentioned how the supply of ESG professionals was insufficient to meet current market demand, Ms. Koh asked how Synergy would recruit professional volunteers to their case, especially if they intended to pay below-market rates for their services. The students replied that while it would be ideal to integrate off-grid communities into the clean energy business, their platform would focus mainly on matching off-grid communities, funders, and providers. Moreover, their platform could also provide opportunities for newly-graduated ESG professionals requiring work experience to further their careers.





Future Cities

Student Delegates:

- Sivakami d/o Arunachalam Singapore
 Kumanan N Govaichelvan
- Malaysia
- Belinda Azzahra Irwan Putri
 Indonesia
- Win Win Khine
 Myanmar
- Christan Dave Chan Zablan
 The Philippines
- Pham Thanh Do
 Vietnam
- Pamela Panida Wichiramala
 Thailand
- Yumeka Nishi Japan

The final presentation was Group Four's digital initiative to support smallholder farmers in ASEAN and Japan. The group highlighted how Covid-19 had disrupted and changed many rural farmers' lives, particularly those of smallholder farmers. Up to one-third of the world's food supply is produced by smallholders, but only a third of those received sufficient agricultural financing.

"We are all surviving every day because of farmers, yet they are always still suffering. What if we can rewrite that narrative? What if we can change their lives for the better? What if we can empower them for resilience?" asked the group.

They believed that tapping on digitalisation could provide a sustainable alternative for smallholder farmers. Thus, FarmersFund – a digital peer-to-peer credit delivery system for smallholders – was born.

FarmersFund aimed to bridge loans from peers to smallholder farmers, therefore discouraging them from turning to illegal lenders who could impose high interest rates and even endanger their personal safety. Traditional banks, on the other hand, might not be suitable funders for smallholders due to administrative delays as well as insufficient collateral security.

While there might already be similar peer-to-peer services on the market, the group sought to value-add with an AI-empowered credit assessment metric. The peer-matching system would assess farmers' credit score based on factors such as agricultural productivity, crop production capacity, and credit history from FarmersFund, therefore allowing for a personalised amount of lending. The group also sought to tap on existing farming communities to expand the system.

During the sharing, the group presented a FarmersFund User Journey as the blueprint for implementation. This would begin with a farmer downloading the application and registering through the app. Once their registration was approved, the app would produce a personalised calculation for each farmer to achieve their financial target. It would then match them to a peer to receive the loans needed.

To increase the feasibility for FarmersFund, the group created an operational strategy for the upcoming year. This included three stages: (1) a planning stage, to define the app concept and seek feedback on the project; (2) an implementation stage to design the user experience and user interface of the app, and then build the prototype; (3) a post-implementation stage with the app launch, maintenance, and evaluation.



HIGHLIGHTS OF STUDENT DELEGATES' PRESENTATIONS



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The group proposed piloting the basic application in Indonesia in the next few years before slowly integrating more agri-technology features from 2026–2030. Besides creating the app, they also planned to educate farmers about financial inclusion and utilise farmers' communities – such as co-ops – as a marketing channel. They would also work with the government to obtain legal support and access data on farmers' finance.

The group showed a clear financial projection for the app, including a gross revenue of IDR1.53 million and 20,000 users in the first three years. To address the risks of small-scale farmers lacking digital and financial literacy to use the app, they proposed organising workshops and creating a dedicated information hotline for farmers.

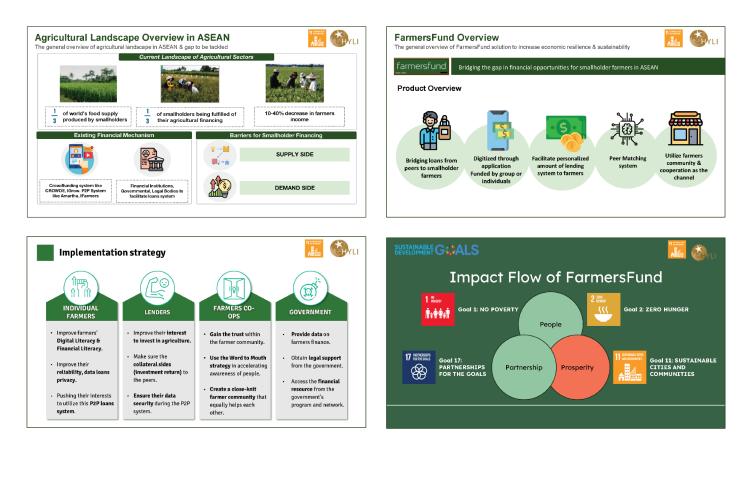
The group closed the presentation with an impactful quote by CropLife International: "Once in a lifetime you need a doctor, a lawyer, a policeman, a preacher but every day, three times a day, you need a farmer."

Q&A and Feedback

Mr. Thomas commended the group on a strong idea that cut across many different SDGs. He sought clarification from the delegates about whether there were any organisations already working on a similar idea but just lacked the funding to scale up, or if the group was instead intending to inject the market with a new technology.

Meanwhile, Mr. Tan suggested adding an environmentally sustainable metric to the FarmersFund framework for users to get a stronger credit rating. He also proposed the idea of a "farmer platinum card" where consumers could opt to donate credit back to farms. This would take the idea from a more institutional level of funding to integrating an element of individual crowdfunding as well.

Lastly, Dr. Hane shared that, in his experience, people who did peer-to-peer credit physically tended to only lend to people they knew in order to minimise risk. He asked the delegates to consider ways they in which they could build social networks across the platform, so that smallholder farmers across regions could get to know one another and build trust.



 $18^{\mbox{\tiny TH}}$ July to $21^{\mbox{\tiny ST}}$ July 2022













As part of HYLI tradition, the last day of the 2022 programme ended with an energetic and diverse display of national cultures from the eight countries represented by the 30 delegates. There was a passionate pageantry to the night during which the delegates brought the audience on an immersive journey of ASEAN and Japan that engaged the senses and evoked their youthful energy.

Delegates from all countries shared folk songs, dances, and cherished dishes, while telling stories of the different regions of their homelands and the cultures found within them. Malaysian, Filipino, Japanese, Vietnamese, and Singaporean delegates performed nationally loved tunes and folks songs to the audience.

On display were traditional cruisines from delegates' countries, such as the Burmese Tea Leaf Salad that was lovingly prepared by the Myanmar contingent, and which the audience got to sample, Singaporean and Thai delegates also proudly gave the audience a taste of various dishes that expressed the cultural and historical diversity of the countries, with a Thai delegate declaring a dish from the Northeastern region of Thailand as the "best thing to be invented by mankind."

The Indonesian, Myanmar, and Thai delegates showcased the cultural diversity of their countries through ethnic costumes, music, festivals, and architecture. Delegates from the Philippines, Indonesia, Vietnam, and Japan regaled delegates with stories of their homelands through dance performances. Japan's Sōran Bushi (\mathcal{V} $-\mathcal{P}\mathcal{V}$ 節) displayed a gregarious and vivacious spirit of striving, while a very different mood was evoked by the pining and gently flowing movements of the Vietnamese contingent who told a well-known folktale of a woman waiting for her husband to return from war.

The night ended with a final burst of group photos and farewells, with delegates and other audience members exchanging final words and gifts from their homeland. The end of the evening was punctuated with frequent bouts of laughter and scenes of connection across nations with cultures as testament to the bonds forged through the HYLI 2022 forum and workshop programme.











CULTURAL NIGHT

18[™] JULY TO 21[™] JULY 2022





Indonesia

Left to Right: Vania Shafira Yuniar, Florentiana Yuwono, Belinda Azzahra Irwan Putri

Not physically present: Ricky Samuel Satria



Malaysia

Left to Right: Neoh Ying Rui, Nithyialakshmi Ravindran, Kumanan N Govaichelvan, Matthew Ooi Xian Wei



Singapore

Left to Right:

Sivakami d/o Arunachalam, Ong Jun Hock, Ryan, Esther Yeoh, Nur Hazeem Bin Abdul Nasser



The Philippines

Left to Right: Raven Biason Frias, Sheva Rose Dawa Belarmino, Vivienne Angelica Hernane Viernes

Not physically present: Cristan Dave Chan Zablan



Japan

Left to Right: Momo Hoshino, Yumeka Nishi, Moeka Sumida, Saori Tomishima



Myanmar

Left to Right: **Moe Thiri Zun, Win Win Khine**



Thailand

Left to Right: Pamela Panida Wichiramala, Sirawit Saeung, Noppawan Rakthinkumnerd, Poorit Lertpaitoonpan



Vietnam

Left to Right: Pham Thanh Do, Bach Minh Duc, Nguyen Hong An, To Hai Dang

HYLI 2022 STUDENT DELEGATES





HITACHI YOUNG

LEADERS INITIATIVE 2022



Mr. Toshiaki Higashihara Director, Board of Directors Executive Chairman

Representative Executive Officer, Hitachi, Ltd.

"Economic growth in ASEAN countries has truly been remarkable and we must keep this trend even after COVID-19. But we should not forget that growth should be accompanied with sustainability."

"The future is not something that is given to you. Have a sense of ownership and

create a world that you'd like to live in, but never forget empathy."

Ms. Low Yen Ling Minister of State, Ministry of Trade and Industry & Ministry of Culture, Community and Youth

"You are really our hope for a better tomorrow because the ideas and actions of our youth today will define our future tomorrow. And by looking beyond our borders, we can capture the many opportunities that lie beyond, especially in our neighbouring countries."

Tan Sri Datuk Dr. Rebecca Sta Maria

Ms. Megumu Tsuda Corporate Officer

NOTABLE QUOTES FROM SPEAKERS

Executive Director, Asia-Pacific Economic Cooperation (APEC) Secretariat

"The sheer volume of issues confronting our region and our world can be daunting. But with all these challenges come opportunities to make the changes we want to see in the world – opportunities to upend the status quo, to put us on a pathway towards more environmentally sound and sustainable economic growth."



Mr. Kojin Nakakita Vice President and Executive Officer, Hitachi, Ltd. Chairman, Hitachi Asia Ltd. Chairman, Hitachi India Pvt. Ltd. "A dream may be very difficult to achieve... Use the tools that you are good at, like technology and digitalisation, to predict what's coming."



MARINA BAY

General Manager, Sustainability Promotion Division, Hitachi Ltd. "Push your boundaries and get out of your comfort zones. Engage with one another with interest. Enjoy the disagreement. But never forget the respect towards each other... Remember, when there is diversity, there is innovation."

- - -





MARINA BAY









Mr. Takatoshi Sasaki

Managing Director, Hitachi Asia Ltd.

"The youths are the ones who will overcome the challenges [we are facing today] and build a better world within Asia and Japan. You have started thinking about how social innovation is an important part of solving complex issues for your communities and countries, and realise sustainable societies in which every individual can enjoy wellbeing, while respecting planetary boundaries."

Ms. Meryl Koh

Board Member, Board of Directors, EB Impact

"The younger generation is putting more hope in the ability of companies to tackle social and environmental issues, and are hungry for training, exposure, and jobs related to ESC. We need initiatives [such as HYLI] to provide a platform to accelerate the understanding of today's sustainability challenges amongst youths."



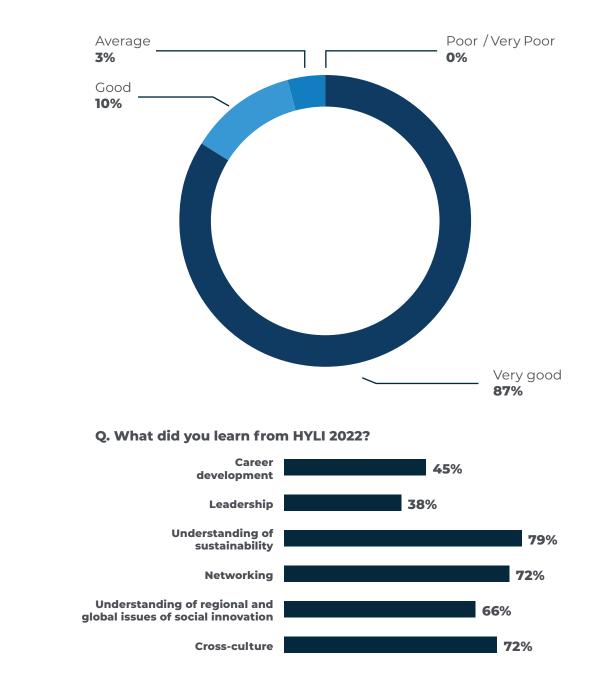
Outline of Student Survey

| Scope of Respondent | : HYLI 2022 Student Delegates (30) |
|---------------------|---|
| Purpose | : To evaluate programme outcome To identify further improvement area |
| Response Statistics | : 29 (Response Rate: 97%) |
| Survey Tool | : Google Form |

Total Evaluation

Learning Takeaway

Q. How would you rate HYLI 2022?



HYLI 2022 OUTCOME

18[™] JULY TO 21ST JULY 2022



Student Comments

Q. What did you learn from HYLI 2022?

I learnt a lot about the Sustainable Development Goals – what has been done to working towards them and what more can be done – via the plenary sessions and field trips. It was even more enlightening to be involved in hands-on engagement of some of these goals by creating a problem statement and working on pitching solutions as it allowed us to put what we have learnt to good use. It was also awesome meeting distinguished executives from Hitachi and forging lifelong bonds with friends from ASEAN and Japan.

In this programme, I not only learnt about sustainable development from the speakers and exchanged views with the other delegates, but I also had cultural exchanges and learnt working skills from many friends. Thank you, HYLI, for giving me a wonderful experience in the beautiful country of Singapore.

My interpersonal skills have definitely improved, thanks to the programme. Apart from acquiring technical knowledge, the biggest life lesson I've learnt is that since our lives revolve around competitions and rising through ranks, we sometimes forget that connections or friendships are more important than professional positions and showcasing our capabilities.

HYLI 2022 taught me the value of in-person conferences. No matter how wonderful a conference is online, it can never be replicated with the same kind of energy and passion as meeting face-to-face. Four days is not enough to find solutions and change the world, but we can make friends and connections that can help us move toward a better tomorrow.

Q. How will you utilise your experience of HYLI 2022 from now on?

The plenary section was too good to be true. Absorbing different perspectives from different, unique speakers has opened my eyes to a whole new world. I'll consider and be reminded of those words for practicality. Working with people from different backgrounds, it makes me realise trusting your group members is important to produce quality work. I believe HYLI 2022 shaped me to become a more sympathetic leader as well when it comes to group project.

The network and connections I made are really valuable. I am now in touch with students from all eight countries and I also got to meet amazing adults with outstanding professional backgrounds during the event. In the future, I believe that the experience I have gained will lead me to become a more exemplary leader, with more diverse knowledge and skills to better forge the path to a sustainable future together.

I will use the knowledge I have acquired from HYLI 2022 to spread awareness and enable civic engagement so that as individuals, each of us can actively change our lifestyles and habits for a more sustainable world.

I will share the experiences gained from HYLI 2022 with college friends so that people can develop ideas for future innovation and apply the ideas from the speakers to their upcoming research topics.





| Indonesia | |
|-----------|--|
| | Mr. Abraham Widiyanto Senior Manager, Human Capital Group & Corporate Communications Group, PT. Hitachi Asia Indonesia |
| | Mr. Emil Zulverdy Rachmat Hutabarat Human Capital Senior Executive, PT. Hitachi Asia Indonesia |
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| | Ms. Hiroko Ichikawa Assistant Professor, Centre for Pacific and American Studies, Graduate School of Arts and Sciences, The University of Tokyo |
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| | Ms. Sandy Phone Naing Assistant Manager, SC Resilience Department, Hitachi High-Tech (Singapore) Pte Ltd. |
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| | Mr. Min Lagon Aine Head of Business Development and Corporate Strategy, CS Department, Hitachi Asia Ltd Myanmar Branch |

ACKNOWLEDGEMENTS



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Mr. Kitichai Kongtong Deputy General Manager, Hitachi Asia (Thailand) Co., Ltd.

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| | |