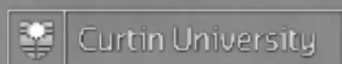




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Program Grant Sponsor



Program Title

Australian Government Funded Project

**Curtin Academy Interdisciplinary Industry  
Study Tour Program (CA-I3STP) and  
Sustainable Future Conference (CA-SFC)**

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**- New Colombo Plan**

13 April 2023



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# PREFACE

FROM THE PROGRAM LEAD



Awarded in 2019 the CA-I3SP was designed from the strong industry position with aims to provide students with the important triple "I" experience of an International Interdisciplinary Industry-focused In January 2022, with travel reinstated after COVID the three NCPs were able to be enacted, however, the lead creator of the NCP was no longer at Curtin. After meeting with the acting DVC-A and DVA-G for their support, I accepted the role of Lead and the perspective of the NCP shifted from an industry position to an educational pedagogy perspective.

The task was to create a unit with an intersectional focus that was valuable for the undergraduates of all faculties. Starting from a research perspective, focusing on a sustainable mindset the team and I started to develop the unit. We used the sustainable mindset (Rimanoczy, 2019) with its four areas of focus to develop the unit seeking to measure the impact of the program on the students' mindset as part of the underpinning research. The perspective focused on four areas including ecological worldview, system perspective, spiritual intelligence and emotional intelligence. The areas of the sustainable mindset focused on initially and most easily where 1) exploring the environment and the Anthropocene impact of the environment, and 2) identifying and accepting the flow of systems including the long term impact. We created these aspects of the unit/program through the initial sustainable focused conferences in Miri and the Summit in Perth. In these events experts presented on issues that impacted the contexts. Some example of this included, the mitigation of palm oil production in Sarawak and in Perth, the challenges around homelessness in the CBD.

After these events, we introduced the pedagogy of design thinking and created and supported intersectional student teams who then identified a contextual problem. They then carried out research with empathy with stakeholders either using secondary (online data) or interviews and discussions to then ideate, prototype and then to develop a solution in the form of a pitch. Our academic support teams travelling in country were only 3 or 4 team members and there were 20 teams of students, so we used a hybrid approach to link the teams with a Curtin Academy Fellow. The Fellows acted as mentors to enable teams to share and discuss their project and get feedback and support. Then the teams presented their pitches in Miri and Singapore to key industry and staff in country, and mentors online.

Every aspect of the unit/program was designed to encourage intersectionality and to help students feel empowered to create solutions to the issue

that they had identified and refined. Every industry partner was contacted and we met with them to discuss the focus on the project and how we saw them supporting the work. This enabled our industry partners and our offshore Curtin academic colleagues to confidently engage and support students to address their chosen 'hot topic'. Pitching in both Miri and Singapore was by the student teams and a range of industry partners and academics attended to hear the solutions that the teams had created. Students came up with innovative and interesting solutions in Miri to issues they identified in Miri. In Singapore the issues were Perth based identified at the Perth Summit and the students explored the solutions in Singapore to determine if these solutions would be applicable to Perth.

The second part of the sustainable mindset focuses on 3) spiritual and 4) emotional intelligence which includes innovation, self-reflection, mindfulness and purpose. These areas are challenging to explore and for this aspect of design we incorporated mindfulness into the program and sessions to help develop students 'mantras'. In subsequent discussion of the research and the student interviews, there have been situations where students have had those moments and recognised the importance of the context, culture and their role in their future.

# PROGRAM INTRODUCTION

CA-I3SP was the first Curtin mobility program to provide students with the important triple “I” experience of a International Interdisciplinary and Industry-focused research study. It included 240 Curtin students and 20 staff from each Faculty (Health Science, Business and Law, Science and Engineering, and Humanities). Students were given the task to co-partner in a consortium with educators and thought leaders from the Curtin Academy and industry experts. Students were task to co-create directly with relevant academic, industry and government agencies to explore “hot topics” that address the theme of academic global challenges with local action research to support the planet.

The focus of the program built on the

premise of :

- An interdisciplinary consortium of Curtin academic staff and students to be globally engaged.
- To lead industry interactions through project-based collaborations/ partnerships to address global challenges with local action.
- To promote students' sense of belonging to a global community and instil life-long stewardship of the planet.
- To support online engagement via Webinars for greater inclusion, and wider audience access and to increase participation & dissemination.

Based on the Design Thinking model, all students used the same pedagogical

approach with the learning experience to be framed within the United Nation's Sustainable Development Goals (SDGs). They have engaged with different industry and community groups in the country, and focus on 'contemporary issues' raised, and problems detected. This project typifies Curtin University's 2030 focus on People, Planet and Partnerships.

CA-I3SP had a significant bilateral, and regional importance, as the research program pivots on the expertise across faculties addressing interconnected and interdisciplinary challenges facing the global communities. Its remit would encompass economics, security, resources, governance, health, built and natural environment, technology and culture – to deepen the relationship



through research - knowledge - enterprise between Australia and the region. With having the core mission to promote building knowledge enterprise through the construction of a regional network for Australian students with a direct pathway opportunity to return with employment, reinforcing bilateral partnerships at the institutional, industry and government organisational levels.

Cross-institutional knowledge-practice exchange with local multidisciplinary companies, schools, NGOs, communities, and the government is a hallmark of Curtin's ongoing global mobility projects. This NCP project transcended the traditional-disciplinary borders by enabling knowledge-practice collaboration on a worldwide scale

beyond our shores.

CA-I3SP builds the capacity for a scalable multi-prong collaboration across the three locations of Malaysia and Singapore. Considering that each of the three locations had established new partnerships to build-on existing formal partnerships with local agencies (government, institutions and industry) and link the multitudes of disciplines from across the four faculties. CA-I3SP has generated a unified community of practice for each location, allowing the developing of transnational partnerships, as each location's collaborators and partners contribute to a much larger regional-knowledge-practice exchange-ecosystem.

CA-I3SP's network exchange opportunity to develop transnational projects across the three locations has increased significantly towards a regional collective. The sustainability of CA-MI3SP was through the establishment of a transnational ecosystem for the program. This meant that the program has the involvement and commitment of a broader stakeholder people-to-people group – adding to the scalability of research projects, skills and knowledge capabilities for more complex projects which led candidates for higher degrees by research. The established local research project value propositions were direct business cases for partnerships between student-industry and establishing employability through research capability-building partnerships.

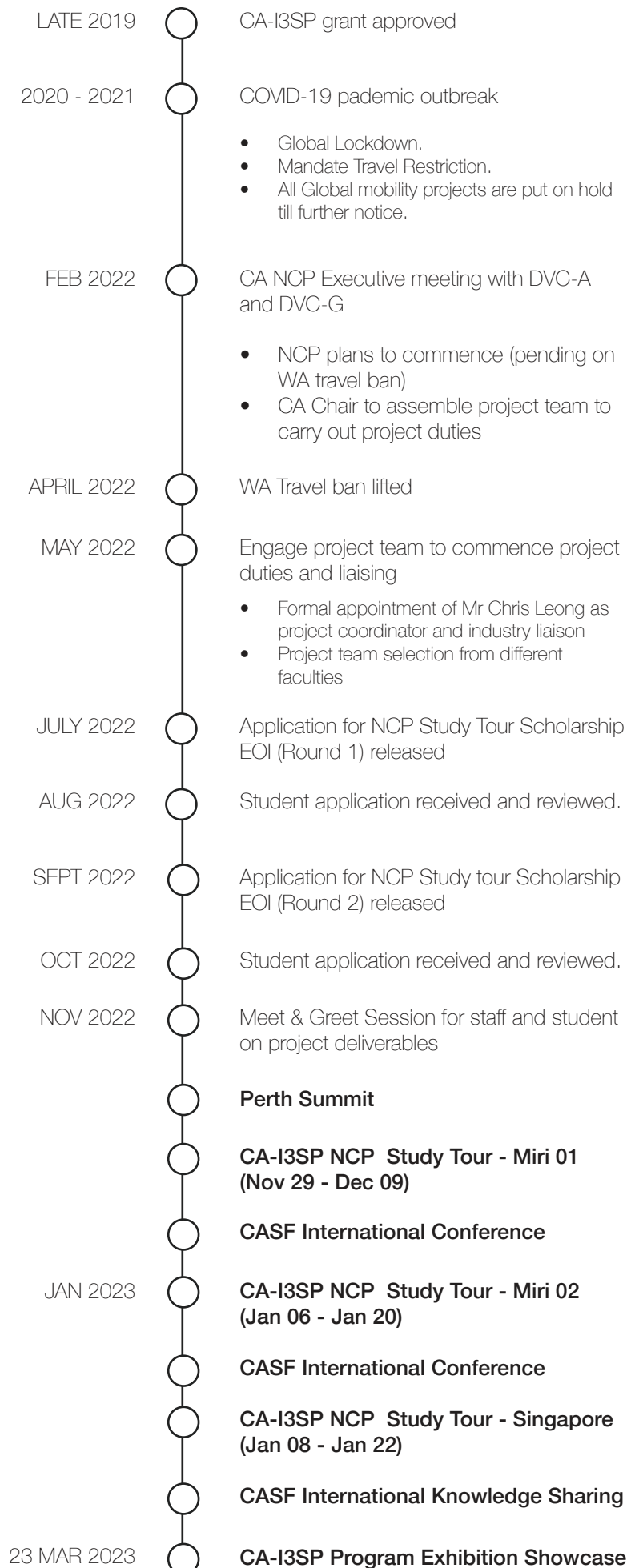


### Perth Summit, Perth City

The Perth Summit articulated some of the key issues identified in the City of Perth. Speakers such as Professor Peter Newman and Perth Lord Mayor, Mr Basil Zempilas articulated some key challenges faced. They charged the invited students to explore these issues in the Singapore context and bring back solution fit for Perth.



## PROJECT TIMELINE





# Pursuit to a Sustainable Future

Dialogue with the Project Lead & Chair of Curtin Academy  
Assoc Professor Rachel Sheffield

The 2030 Agenda, adopted by the United Nations, represents a global commitment to achieve Sustainable Development Goals (SDGs) by the year 2030 with aims to provide a holistic and integrated approach to address interconnected global challenges such as poverty, hunger, health, education, gender equality, clean water, sanitation, climate change, and peace and justice. The SDGs are interconnected and mutually reinforcing, recognizing that progress in one area often depends on progress in others. The 2030 Agenda encourages a transformative approach that integrates social, economic, and environmental dimensions of sustainability, fostering sustainable development in a balanced and inclusive manner. Moreover, the 2030 Agenda promotes partnerships and collaboration among governments, civil society, businesses, academia, and other stakeholders, recognizing the need for collective action to achieve the SDGs.

The implementation of the 2030 Agenda requires strong leadership, policy coherence, multi-stakeholder engagement, and effective monitoring and reporting mechanisms to ensure progress towards achieving the SDGs. Overall, the 2030 Agenda and the SDGs provide a comprehensive and ambitious framework for sustainable development, aiming to create a more equitable, resilient, and sustainable world for present and future generations.

Our biggest challenge in this new century is to take an idea that seems abstract - sustainable development - and turn it into a reality for all the world's people.

- Kofi Annan (former UN Secretary General - 1997-2006)

**SUSTAINABLE DEVELOPMENT GOALS**

<b>1 NO POVERTY</b> 	END POVERTY IN ALL ITS FORMS EVERYWHERE	<b>2 ZERO HUNGER</b> 	END HUNGER ACHIEVE FOOD SECURITY AND IMPROVED NUTRITION AND PROMOTE SUSTAINABLE AGRICULTURE
<b>3 GOOD HEALTH AND WELL-BEING</b> 	ENSURE HEALTHY LIVES AND PROMOTE WELL BEING FOR ALL	<b>4 QUALITY EDUCATION</b> 	ENSURE QUALITY EDUCATION AND PROMOTE LIFELONG LEARNING OPPORTUNITIES FOR ALL
<b>5 GENDER EQUALITY</b> 	ACHIEVE GENDER EQUALITY AND EMPOWER ALL WOMEN AND GIRLS	<b>6 CLEAN WATER AND SANITATION</b> 	ENSURE ACCESS TO WATER AND SANITATION FOR ALL
<b>7 AFFORDABLE AND CLEAN ENERGY</b> 	ENSURE ACCESS TO AFFORDABLE, RELIABLE SUSTAINABLE AND MODERN ENERGY FOR ALL	<b>8 DECENT WORK AND ECONOMIC GROWTH</b> 	PROMOTE INCLUSIVE AND SUSTAINABLE ECONOMIC GROWTH, EMPLOYMENT AND DECENT WORK FOR ALL
<b>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</b> 	BUILT RESILIENT INFRASTRUCTURE PROMOTE SUSTAINABLE INDUSTRIALISATION AND FOSTER INNOVATION	<b>10 REDUCED INEQUALITIES</b> 	REDUCE INEQUALITY WITHIN AND AMONG COUNTRIES
<b>11 SUSTAINABLE CITIES AND COMMUNITIES</b> 	MAKE CITIES INCLUSIVE, SAFE, RESILIENT AND SUSTAINABLE	<b>12 RESPONSIBLE CONSUMPTION AND PRODUCTION</b> 	ENSURE SUSTAINABLE CONSUMPTION AND PRODUCTION PATTERNS
<b>13 CLIMATE ACTION</b> 	TAKE URGENT ACTION TO COMBAT CLIMATE CHANGE AND ITS IMPACTS	<b>14 LIFE BELOW WATER</b> 	CONSERVE AND SUSTAINABLE USE THE OCEANS, SEAS AND MARINE RESOURCES
<b>15 LIFE ON LAND</b> 	SUSTAINABLY MANAGE FORESTS, COMBAT DESERTIFICATION, HALT AND RESERVE LAND DEGRADATION, HALT BIODIVERSITY LOSS	<b>16 PEACE, JUSTICE AND STRONG INSTITUTIONS</b> 	PROMOTE JUST, PEACEFUL AND INCLUSIVE SOCIETIES
<b>17 PARTNERSHIPS FOR THE GOALS</b> 	REVITALISE THE GLOBAL PARTNERSHIP FOR SUSTAINABLE DEVELOPMENT		

**UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDG17)**

The Sustainable Development Goals or Global Goals are a collection of seventeen interlinked objectives designed to serve as a “shared blueprint for peace and prosperity for people and the planet, now and into the future. The SDGs emphasize the interconnected environmental, social and economic aspects of sustainable development by putting sustainability at their center.



### Student Engagement

STEM School activities with local high school students in Miri, Sarawak, Malaysia

### What is your definition of Sustainable futures?

In 1987, the United Nations Brundtland Commission defined sustainability as “meeting the needs of the present without compromising the ability of future generations to meet their own needs.” Since 1987 there have been lots of definitions of sustainability and sustainable futures but this seems the simplest and most encompassing definition.

### What were your key considerations when it came to working on this project?

This project, CA-I3P, recognised that there is complexity in the way human activity has been fundamentally disturbing the planetary systems of our Earth. Successfully mitigating these issues requires collective change, urgent action from stakeholders, and the successful implementation of the SDGs. High quality education, which focusses on addressing these challenges, is a significant strategy for developing mind-sets to tackle these impending issues.

### How did the participants (students) achieve these targets?

To achieve the targets of the SDGs, the participants were challenged to adopt a mind-set that facilitates action with empathy: a sustainability mind-set. Educators possess the influence and skills to become change accelerators, and act as a driving force in cultivating these perspectives in society. This mindset seeks to support individuals to:

1. Identify, positively contribute to, and feel responsible for, the long-term outcomes of actions and plans, including environmental and social wellbeing.
2. Become active, agile, and reflective learners who co-create solutions and innovations.
3. Consider the greater good by focusing on global systems to develop deep understandings of synergies and co-existing partnerships.
4. Explore ethical decision making, focussing on not only what can be done but what should be done.

Through their comprehension of global issues, individuals, including students, must actively seek to adopt a sustainability mind-set. This will develop their capacity to iterate, co-create and implement innovative management strategies or products that address global issues through local action-research. Integrating Sustainable Development (SD) and Education for Sustainable Development (ESD) into tertiary education has the potential to build the competencies needed in all professional fields, particularly through an innovative mobility experience.



Curtin Academy is an active and honorary network of leaders passionate about the collaboration and dissemination of teaching excellence at Curtin University, nationally and internationally. The Academy provides advice, fosters innovation, development and enhancement of teaching, creating an independent, learned voice and make opportunities for teachers to interact regarding the scholarship and/or experience of learning and teaching.

# the global challenge

CA-13SP is the first Curtin mobility program to provide students with the important triple "I" experience of an international interdisciplinary industry-focused research study. It includes 240 Curtin students and 20 staff from each Faculty (Health Science, Business and Law, Science and Engineering, and Humanities). Students are co-partnering in a consortium with educators and thought leaders from the Curtin Academy and industry experts. Students will be co-creating directly with relevant academic, industry and government agencies to explore "hot-topics" that address the theme of academic global challenges with local action-research to support the planet.

### Program Study Tours

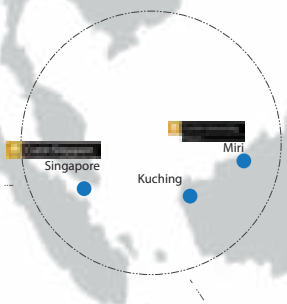
Miri, Sarawak (R01)  
Nov 25 - Dec 09, 2022  
  
Miri, Sarawak (R02)  
Jan 06 - Jan 20, 2023  
  
Singapore  
Jan 08 - Jan 22, 2023



### Quality Education

Students are required to implement strategies that ensure all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development.

SDG 4 Partnering Consultant



### Connecting Communities

Students were encouraged to develop strategies that enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries, in this case locally to the context. This includes Strengthen efforts to protect and safeguard the world's cultural and natural heritage.

SDG 11 Partnering Consultant

### Health & Wellbeing

Students are encouraged to investigate on strategies that promotes / Achieve universal health coverage, including financial risk protection, access to quality essential health-care services and access to safe, effective, quality and affordable essential medicines and vaccines for all.

SDG 3 Partnering Consultant

### Life On Land & Below Water

Students are given two tasks: Develop strategies that (1) Sustainably manage and protect marine and coastal ecosystems to avoid significant adverse impacts, including by strengthening their resilience, and taking action for their restoration to achieve healthy and productive oceans. (2) Ensuring the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems in line with obligations under international agreements.

SDG 14 & 15

### Consumption & Production

Students to implement the 10-Year Framework of Programmes on Sustainable Consumption and Production Patterns strategy in their proposition with aims to achieve the sustainable management and efficient use of natural resources.

SDG 12 & 13

### Economic Growth

Students were challenged to investigate on development orientated policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalisation and growth of micro-, small, and medium size enterprises, including through access to financial services. Apart from that, students are tasked to Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors.

SDG 8 Partnering Consultant

### Resilient Infrastructure

Students are challenged with the task to: (1) develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all; (2) Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes.

SDG 9 Partnering Consultant

### Energy Consumption

Students are tasked to develop strategies that ensure universal access to affordable, reliable and modern energy services whilst enhancing international cooperation to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology, and promote investment in energy infrastructure and clean energy technology.

SDG 7 Partnering Consultant

### PROJECT TEAM

Program Lead  
A/Prof Rachel Sheffield

Program Coordinators  
Mr Chris Leong  
Ms Stephanie Bruce

Supporting Staff  
A/Prof Rekha Koul  
Dr Ben Millburn  
Dr Joanne Castelli  
Dr Wahseem Soobratny  
Ms Nikki Fairhurst  
Ms Michelle De Kok  
Ms Madeline Ayoub  
Ms Christina Chong  
Ms Yvonne Lau

### CA13SP FOCUS

**PEOPLE**  
To foster a community of Curtin academic staff and students to be globally engaged.

**PLANET**  
To promote student sense of belonging to a global community and local life-long ownership to the planet.

**PARTNERSHIPS**  
To lead industry interactions through project based collaboration / partnerships to address global challenges with local action.

### ENGAGEMENT PROCESS

SDG Involved: SDG 4, SDG 9, SDG 11, SDG 17



As the world becomes increasingly interconnected and complex, the new generation of learners must seek to understand and address rapid changes in users' environments and behaviours.

The NCP Students were challenged to approach real-world challenges with industry experts through the application of the design thinking model. Design Thinking is a creative problem-solving approach that encourages the use of deep-dive interviewing and other ethnographic research tools to understand the problem through the eyes and experiences of the customer. By framing the problem, the team purposely places themselves in the shoes of their prospects and employs empathy to create better and more human-centred products, services, and processes.

It is anticipated that through this approach, the students would be able to gain hard-to-access insights (blind Spots) and apply a collection of hands-on methods to help find innovative alternatives in resolving the problems/challenges. The teaching and learning challenges in this instance are to help students to shift their perspective from textbook knowledge to resolving problems by incorporating user-driven criteria. The process is further developed with the guidance of industry experts (local & international) and Curtin Academy Fellows.

## CA-13SP PROJECT MAPPING

Together with Curtin Academy team responsible for the Global mobility, the BePartof team was tasked to develop a project curriculum that critically maps the program focus to provide students with the triple "I" experience of an international interdisciplinary industry-focused research study through three essential core-drivers - *People, Planet* and strategic *Partnerships*.



## **What was your creative starting point for this project? How was this implemented into the program?**

The mobility experience, CA-I3SP, includes the facilitation of the Design Thinking model to develop a multi-perspective sustainability mind-set on a global scale to instil stewardship to the planet. Tertiary students will focus on, and enhance, their sustainability knowledge, attitude, behaviour, and collaborative skills. To achieve this:

1. Knowledge will be improved by emphasising systems thinking, eco literacy, self-awareness (including one's own missing and purpose) and interviewing skills including empathy.
2. Attitude will be assessed on student ability to develop a sense of interconnectedness, thinking about the value of solutions, compassion, responsibility, and motivation.
3. Behaviour will be evaluated based on short-term and long-term outcomes, including student engagement with stakeholders; their capacity for solutions that incorporate the SDGs, contributions to local communities, demonstrations of proactive behaviours (personal and professional), and participation in contemplative practices, including reflection and mindfulness.
4. Student interdisciplinary collaborative skills (local and global) which contribute to a sustainability mind-set will be evaluated, and their capacity to listen and engage empathetically with stakeholders.

## **What are some of the learning initiatives that derived from the program?**

Absolutely. Apart from the study tour curriculum, the team has developed a leadership Program as part of the Curtin Academy NCP mentorship development initiatives.

'You are the pioneers of the program, and we are appreciative of you stepping up to engage in our leadership program.'

The participating student leaders demonstrated their agility and their warm and caring capacity in supporting their colleagues. They were tasked with the following instructions.

- Exciting opportunities including Chairing with support notes (made available with the notes of the speakers at conferences 1 and 2).
- Group appointments and pastoral care (approx 10 per group).
- Assist the staff to conduct certain on ground activities (which include but not limited to sport and mindfulness activities).
- Assist the staff in sharing the creation of media releases/twitter/Facebook or finding members of their group that can bring skills to this space .
- To be the conduit between the students and staff in addressing concerns and issues pertaining to the welfare of the student cohort .
- Meeting with leadership team every evening for 30 mins to review the day and highlight the issues for the next day.

All students who participated in the CA-NCP Mentoring Program received a Curtin Extra Tier 1 recognition to acknowledge the work that they completed as student leaders over the 2-week intensive. We very much appreciate the time they spent and the support they gave to staff, students and each other as part of the CA-NCP program. The program was developed by Dr Joanne Castelli and run in Miri 1 by Associate Professor Rachel Sheffield, Miri 2 by Dr Joanne Castelli and in Singapore by Associate Professor Lisa Tee.

## **What are the aspirations that you hope to achieve through this project?**

Focusing on a sustainable mindset there has been a hope that students would gain a greater understanding of the complexity of the world view and the many systems involved in all aspects of environmental education around the SDGs. There is hope that there would be changes too in student's spiritual and emotional mindset, but this type of short-term student experience may be too brief to have a long-term impact. We did notice at the post event, the Exhibition, that when the teams of students gathered to meet after their trip there was a noisy and excited buzz in the air.

## PULAU UBIN VISITATION WITH DR ADRIAN LOO (NATIONAL PARKS SINGAPORE)

Student briefing session by Dr Adrian Loo (National Parks Singapore) and Mr Colin Koh (Asian Detours) on Singapore's endeavour on Eco-Tourism and the need to preserve the natural habitat for the generations to come.



### **What were the challenges you had to overcome in the course of completing this project?**

Despite having a success in facilitation student global mobility and promoting cultural exchange, there are several challenges associated with the program.

#### **1. Funding and affordability:**

One of the main challenges of the project is the cost associated with overseas study. While the NCP provides funding support to eligible Australian students, including scholarships for tuition fees, travel, and living expenses, the overall cost of studying abroad can still be prohibitive for some students. This may limit the participation of students from lower socio-economic backgrounds, resulting in inequitable access to the program.

#### **2. Accessibility and inclusivity:**

The NCP program may not be equally accessible to all students. Students with disabilities, students from diverse cultural or linguistic backgrounds, or those facing other forms of disadvantage

may face additional barriers in participating in the program. This includes challenges related to accessibility of physical infrastructure, availability of suitable accommodation, support services, and cultural adaptation. Ensuring inclusivity and accessibility for all students, regardless of their background or abilities, can be a significant challenge for the NCP.

#### **3. Academic recognition and credit transfer:**

Another challenge of the NCP is the recognition of academic credits earned during the overseas study. Credit transfer processes and recognition of qualifications obtained abroad can vary across different institutions and countries, which may pose challenges in ensuring a smooth credit transfer and integration of overseas study into the students' academic programs. This may result in delays in graduation or additional academic requirements, which can be a concern for students planning to participate in the NCP.

#### **4. Risk Management and safety:**

The health and safety of students participating in the NCP program is a significant concern. Overseas travel, especially to unfamiliar countries, can present risks such as health emergencies, accidents, natural disasters, and cultural differences that may impact students' well-being and safety. Ensuring appropriate health and safety measures, including pre-departure training, insurance coverage, and emergency support, can be challenging to implement and manage effectively.

#### **5. Sustainability and impact:**

Ensuring the long-term sustainability and impact of the NCP program can also be a challenge. Building meaningful and sustainable partnerships with host institutions, organizations, and communities in the Indo-Pacific region requires ongoing efforts, coordination, and resources. Ensuring that the program delivers tangible benefits to both Australian students and the local communities can be complex, and measuring the long-term impact of the program may be challenging.

## Pulau Ubin Site Visit

Bird watching session with Dr Adrian Loo (National Parks Singapore) and Colin Koh (Asian Detours)



### 6. Experience & Engagements:

One of the impending challenge during the initial stage of curriculum development was develop a 'common ground where the participants can gather, engage and participate. Students find that some of the intended site visitation were not relevant to their study which in turn impacted their appreciation of the program. Students were generally interested in exploring their surroundings during their free time. Making students' names and photos available prior to the trip could enhance student-staff connection.

### 7. Project planning and management:

Students find it difficult to grasp and fully understand the level of planning involved in the program. The program occasionally faced unexpected changes that were difficult to mitigate. Insufficient scoping out of areas prior to student travel could lead to unknown issues. Although expectations between staff and students has been discussed, but there is still room for improvement.

### 8. Resource allocation:

The scholarship allotted by the DFAT was not enough to cover the cost of running the program due to inflation since its launch in 2014. Resourcing constraints of the funding and CoC applied to programs mostly run offshore. This also partly due to the constraint imposed by the various private and public sectors as result from the pandemic situation.

### 9. Clarity in communication and delivery of information:

Lack of information sharing across teams was a challenge. Lack of process (e.g. paper forms, relevant points of contact) hindered the program's management. This is also due to the diversity of faculties presented challenges to overcome, such as communication and engagement with students. Not knowing students personally in advance could be addressed through conducting interviews prior to the trip. The lack of pre-tour preparation by the students prior to the trip has impose danother level of challenge to the program.

### 10. Transparency & Disclosure of information:

Lack of transparency and disclosure around student wellness and need was a key threat to the program. Reputation and appropriate forums to lodge grievances need to be considered. Post-COVID, balancing equity with support for students who have not previously travelled overseas may be a challenge.

### 11. Student and Staff Wellbeing:

COVID/illness was managed well by the team. The lack of transparency around student wellness and need was a key threat to the program. Some students had undisclosed additional needs or mental health issues which flared up due to unfamiliar and challenging circumstances. This is especially difficult in organisation activities and program curriculum that is suited for the mass whilst addressing those with special individual requirements.



**STEM School Visit, Miri, Sarawak**

Engaging with local high school in a STEM activity driven by the design thinking framework

#### PRE-TOUR: MEET & GREET SESSION

Students and Staff were equipped with expectations and delivery of program.



Our biggest challenge in this new century is to take an idea that seems abstract - sustainable development - and turn it into a reality for all the world's people.

- *Kofi Annan (former UN Secretary General - 1997-2006)*

#### What's a day in the program like?

Based in the host location, CA-I3SP is an intensive and immersive three-PHASE (two-weeks) learning program:

- **PHASE 01: IDENTIFY & INVESTIGATE**

Students are given the opportunity to participate at our Curtin Academy Sustainable Futures International Conference where students' participation will achieve two things: 1) offer students with academic-industry interactions and knowledge exchange, to facilitate, 2) student research alignment of topics and the forming of research-clusters. It is envisaged that the research-clusters will be made up of students from across all faculties and research themes are interconnected.

- **PHASE 02: COLLABORATE & CO-CREATE**

Students' research clusters will be supported through the industry, government agencies and academic supervisors, forming a community of practice co-creating over the course of the week. To develop a series of local-action research projects focused on establishing partnership-based research (academic-government-academic) with a cleared defined value-proposition framework.

- **PHASE 03: DEMONSTRATE & DISCUSS**

Students' research proposals will be presented as part of an International Research Think-Tank Symposium. This offers a platform for students to receive peer review from industry, government and academics. It is anticipated that this event will highlight and showcase research talent from our Australian students to the local-host.



02



03



Language and culture are the frameworks through which human experience, communicate and understand reality -  
*Lev Vygotsky, 1968*

The students were challenged to engage stakeholder groups to identify, discern, discuss and develop culturally intuitive strategies that address pressing concerns around the topics of Sustainable development initiatives and mindset in our current society. This was done through curated excursions, site visitations and knowledge-sharing sessions within the localities of the region in which the students have been deployed as part of their NCP scholarship program.

CA-I3SP program's aim is to build the capacity for a scalable multi-prong collaboration across the three project locations of Malaysia, Singapore and Perth. Each of the three locations will establish new partnerships to build-on existing formal partnerships with local agencies (government, institutions and industry) and link the multitudes of disciplines from across the four faculties. CA-I3SP will generate a unified community of practice for each location, allowing the developing of transnational partnerships, as each location's collaborators and partners contribute to a much larger regional-knowledge-practice exchange-ecosystem.

CA-I3SP's network-exchange opportunity to develop transnational projects across the three locations would increase significantly towards a regional collective. The sustainability of CA-I3SP is through the establishment of a transnational ecosystem for the program. This means that the program has the involvement and commitment of a broader stakeholder people-to-people group – adding to the scale-ability of research projects, skills and knowledge capabilities for more complex projects which can lead to candidacies for higher degrees by research. The established local research project value propositions are direct business cases for partnerships between student-industry and establishing employability through research capability-building partnerships.

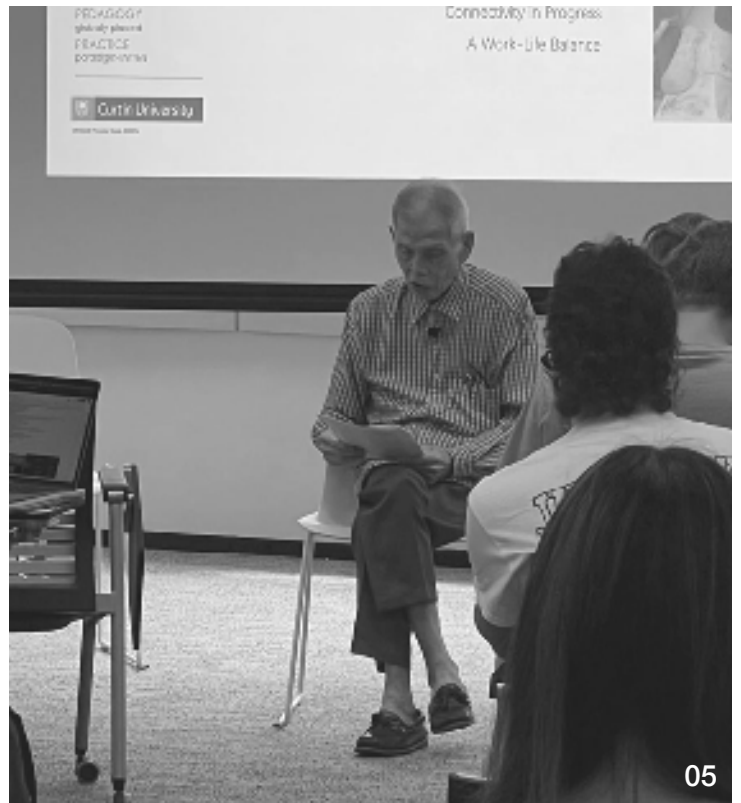
**EXCURSIONS, SITE VISITS AND ON-SITE KNOWLEDGE SHARING EXCHANGE (01-04)**

**01.** Cultural exchange with the Ibans at the long house near Niah Caves. **02.** Site Visit to the Net Zero Carbon Building in National University of Singapore (NUS). **03** Algae Cultivation Facility Visit at Sarawak Biodiversity Centre, Kuching. **04.** Knowledge Sharing session at the Enabling Village.



# LEARNING ENDEAVOURS

CA-I3SP provides first-hand local knowledge and practical soft skills of the host location through a two-week academy-industry facilitated research interactions: 1) To directly engage local experts including academics/industry/professionals/government civil servants; and 2) To experience wide-range learning in local settings to increase students reach, access and network via—conference, industry discussions, cultural-places-communities, businesses and academic. The program has successfully facilitated three separate study groups of students simultaneously hosted across three locations, undertaking one unified program via web-link platforms. Offering students' observational knowledge experience of both locations and achieving transnational education scalable learning by overlapping activities.



**01.** Conference Round Table Discussion with NGO experts, Ms Celine Lim (SAVERivers) and Mr Iqbal Abdollah (Future Ocean Borneo). **02.** Onsite Engagement with Dr Adrian Loo (National Parks Singapore) and Mr Colin Koh (Asian Detours) on Pulau Ubin Ecotourism and its challenges. **03 & 04.** Ideation workshop with Curtin Academy Fellows (Hybrid mode). **05.** Colombo Scholar Sharing with Mr Daniel Koh (Senior Strategy Consultant). **06.** Carbon Zero Presentation by NUS Representatives. **07.** NCP Singapore Program Induction. **08.** Knowledge Round Table Sharing by Mr Joe Phelan (WBCSD), Curtin Singapore. **09.** National Design Centre Tour and discussion with students





06



07



08



09

## INDUSTRY ENGAGEMENTS

CA-I3SP's network-exchange opportunity to develop transnational projects across the three locations would increase significantly towards a regional collective. The sustainability of the program is through the establishment of a transnational ecosystem for the program. This means that the program has the involvement and commitment of a broader stakeholder people-to-people group – adding to the scale-ability of research projects, skills and knowledge capabilities for more complex projects which can lead to candidacies for higher degrees by research. The established local research project value propositions are direct business cases for partnerships between student-industry and establishing employability through research capability-building partnerships.



WELCOME RECEPTION EVENT HOSTED BY SINGAPORE INTERNATIONAL CHAMBER OF COMMERCE (SICC)



**SIICC**  
Singapore Institute of  
International Commerce

**SIICC** Singapore  
Institute of  
International  
Commerce  
Helping Institutions and Singapore since 1977

Welcome Back Reception

The future belongs to the **CURIOUS**. The ones who are not afraid to **TRY** it. **EXPLORE** it, **POKE** at it, **QUESTION** It and **TURN** it inside out. - *Anonymous*

Education underpins all the experience of the NCP, and it made perfect sense to engage the tertiary students with secondary students where possible. There was a connection with schools in Miri and therefore there was an opportunity to support the student experience. The challenge was around creativity where the secondary student groups were supported by a tertiary student mentor to build a pipeline from paper. This is an example of stem skills and knowledge where the students need to build the pipeline drawing on their collaborative and communication skills and employing their creative and problem-solving skills to create the longest pipeline.



01



03

#### STEM ACTIVITIES AT LOCAL SCHOOLS (01-07)

Students were challenged to develop strategies to engage local high school learners on the aspect of ideation and prototyping. Images illustrates a series of ideation activities that was conducted at a few local high school in Miri, Sarawak.



02



04



05



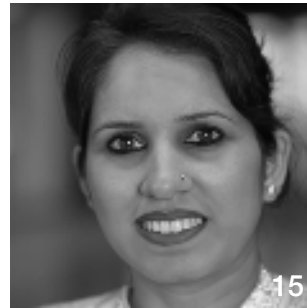
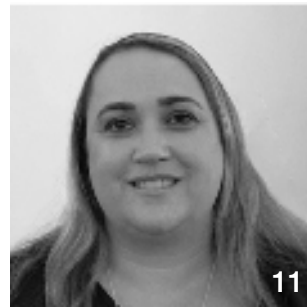
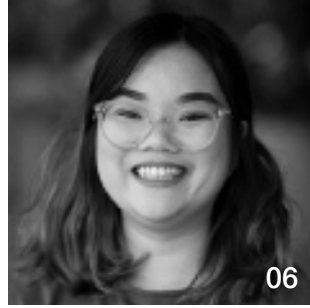
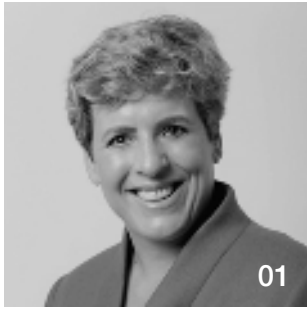
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07



CURTIN ACADEMY SUSTAINABLE FUTURES INTERNATIONAL  
CONFERENCE HELD IN CURTIN MALAYSIA, JANUARY 2023



## PROJECT TEAM

**01 A/Prof. Rachel Sheffield**  
Faculty of Humanities

**02 Dr Ben Milbourn**  
Faculty of Health Sciences

**03 A/Prof. Lisa Tee**  
Faculty of Health Sciences

**04 Dr Joanne Castelli**  
Faculty of Science & Engineering

**05 A/Prof Rekha Koul**  
Faculty of Humanities

**06 Ms Christina Chong**  
Faculty of Science & Engineering

**07 Ms Stephanie Bruce**  
Faculty of Business & Law

**08 Dr Washeem Soobratty**  
Faculty of Business & Law

**09 Mr Chris Leong**  
Office of DVC Academic

**10 Ms Madeline Ayoub**  
Faculty of Humanities

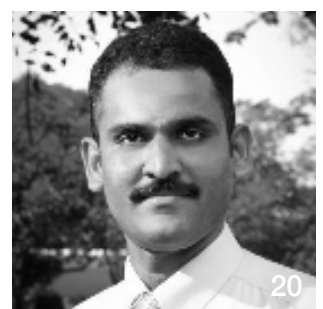
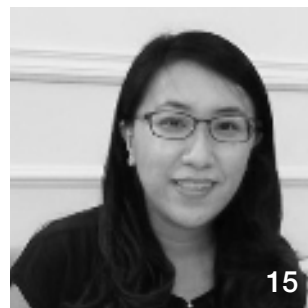
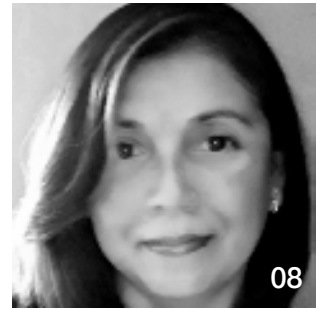
**11 Mrs Michelle De Kok**  
Faculty of Humanities

**12 Ms Nikki Fairhurst**  
Faculty of Humanities

**13 Ms Yvonne Lau**  
Faculty of Business & Law

**14 Dr Leo Ng**  
Faculty of Health Sciences

**15 A/Prof Sherry Bawa**  
Faculty of Business & Law







Design thinking workshop by Ms Nikki Fairhurst, conducted in Curtin Malaysia with our fellow NCP scholarship recipient.

## CURTIN GLOBAL CAMPUS & PROJECT COLLABORATORS

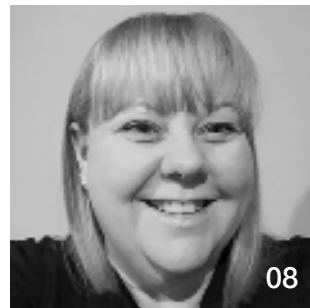
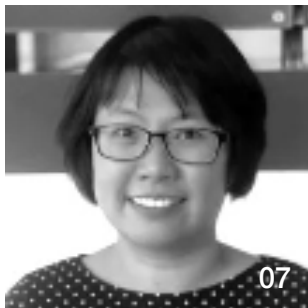
A future-  
focused  
university  
committed  
to strong  
global  
engagement  
& dialogue

- |           |  |           |  |
|-----------|--|-----------|--|
| <b>01</b> | <b>Prof. Seth Kunin</b><br>Curtin University     | <b>13</b> | <b>Dr. Samuel O. Adeyinka</b><br>Curtin Malaysia   |
| <b>02</b> | <b>Prof. Paul Brunton</b><br>Curtin University   | <b>14</b> | <b>Dr Leong Yong Kong</b><br>Curtin Malaysia       |
| <b>03</b> | <b>Prof. Linley Lord</b><br>Curtin Singapore     | <b>15</b> | <b>A/Prof. Bridgid Chin</b><br>Curtin Malaysia     |
| <b>04</b> | <b>Prof. Simon Leunig</b><br>Curtin Malaysia     | <b>16</b> | <b>A/Prof. John Lau</b><br>Curtin Malaysia         |
| <b>05</b> | <b>Prof. Vincent Lee</b><br>Curtin Malaysia      | <b>17</b> | <b>Dr Meheron Selowara Joo</b><br>Curtin Malaysia  |
| <b>06</b> | <b>Prof. Fon Sim Ong</b><br>Curtin Malaysia      | <b>18</b> | <b>Dr Yeong Huei Lee</b><br>Curtin Malaysia        |
| <b>07</b> | <b>Prof. Fu Ee Tang</b><br>Curtin Malaysia       | <b>19</b> | <b>A/Prof. Dominuque D. Wan</b><br>Curtin Malaysia |
| <b>08</b> | <b>Dr. Carolyn Koh</b><br>Curtin Singapore       | <b>20</b> | <b>Prof. Ramasamy Nagarajan</b><br>Curtin Malaysia |
| <b>09</b> | <b>Ms Lee Nah Wong</b><br>Curtin Singapore       | <b>21</b> | <b>Ms Carrie Lee Ing Ho</b><br>Curtin Malaysia     |
| <b>10</b> | <b>Ms Cherina Chiew</b><br>Curtin Malaysia       | <b>22</b> | <b>Mr. Terry Justin Dit</b><br>Curtin Malaysia     |
| <b>11</b> | <b>A/Prof. Yew Tek Lew</b><br>Curtin Malaysia    | <b>23</b> | <b>Ms. Valerie Velina</b><br>Curtin Malaysia       |
| <b>12</b> | <b>A/Prof. Stephanie Chan</b><br>Curtin Malaysia | <b>24</b> | <b>Dr. Ai Chen Tay</b><br>Curtin Malaysia          |



**CURTIN  
ACADEMY  
MENTORSHIP  
PROGRAM**

Support &  
advance teaching  
and learning  
initiatives and  
innovations across  
our OneCurtin  
campus  
community





Ideate Session (research development) with Curtin Academy Fellows via hybrid mode (F2F & Online)

## CURTIN ACADEMY MENTORSHIP PROGRAM

Curtin Academy has always shown a deep interest in the research work of the students and their project solutions. Despite having prior commitments, the team have received much support from the Fellows for taking time to engage and involve in the student proposal development stages in each study tour. As the CA were from all different faculties they came with different knowledge and perspectives much like the students. In the days before the pitch to industry and their colleagues, all student groups were provided with a CA mentor and they met online. This hybrid approach was a challenge especially in Singapore where the students were often on line in different rooms but it did give the Fellows an opportunity to ask questions and help students to articulate their problem and possible solutions. We would like to express our deepest gratitude to all the Curtin Academy mentors for their support.

- 01 **John Distinguished Prof. Dale Pinto**  
CA Advisory Board
- 02 **A/Prof. Rachel Sheffield**  
Curtin Academy Chair
- 03 **A/Prof. Janie Brown**  
Fellow
- 04 **Dr Leo Ng**  
Executive Fellow
- 05 **Dr Ben Milbourn**  
Fellow
- 06 **A/Prof. Cesar O. Sanchez**  
Fellow
- 07 **Dr. Jun Chih**  
Fellow
- 08 **Prof. Natalie Gassons**  
Fellow
- 09 **A/Prof. Lisa Tee**  
Fellow
- 10 **A/Prof. Subra Ananthram**  
Fellow
- 11 **A/Prof. Katharina Wolf**  
Fellow
- 12 **Prof. Sonia Dickinson**  
Fellow
- 13 **Dr. Shafiq Gopee**  
Fellow
- 14 **Dr. Dave Parsons**  
Associate Fellow
- 15 **A/Prof. Jonathan Paxman**  
Fellow
- 16 **Dr. Abhijeet Singh**  
Associate Fellow
- 17 **A/Prof. Toni Dobinson**  
Fellow
- 18 **A/Prof. Margo Brewer**  
Fellow

# RESEARCH TOPICS

Following the Curtin Academy Sustainable Futures Conference, students were challenged to develop a series of local-action research proposals. The proposals focused on establishing partnership-based research (academic-industry-government) with a clearly defined value proposition framework.





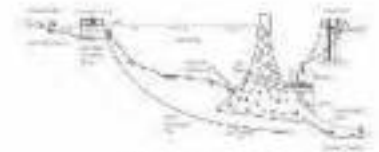
**202** Student Researchers

**50+** Challenges & Hot Topics addressing areas of the United Nations' SDGs

**55%** Humanities (inc Aboriginal studies)    **20%** Business & Law    **15%** Science & Engineering    **10%** Health Sciences



02



**A Sustainable Proposal for Sediment Bypass in Existing Hydroelectric Plants**

By: [Name] & [Name]

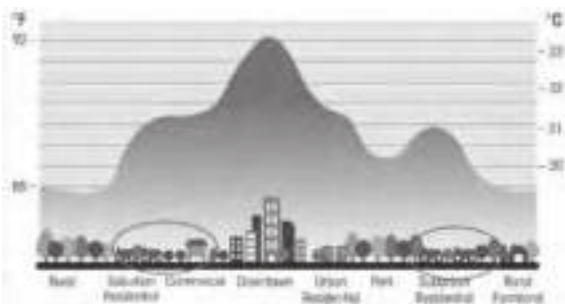
03



**Sustainable Transit Infrastructure Project**

By: [Name] & [Name]

05



06



**Industry, Innovation and Infrastructure Greenification**

By: [Name] & [Name]

07

**Student Research proposal samples**

**01.** Design thinking pedagogical framework used to drive the student proposals **02 - 03.** Sustainable proposal for Sarawak Energy Berhad on the sediment bypass in Existing Hydroelectric Plants. **04 - 05.** Transit Infrastructure Proposal addressing the connectivity within the city of Miri, Sarawak. **06 - 07.** Learning from Singapore: An Urban Greenification proposal for the City of Perth.



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Borneo Laboratory

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Sarawak Biodiversity Centre

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SARAWAK METRO

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## INDUSTRY, GOVERNMENT & ORGANISATIONS

The CA-I3SP program was designed to provide significant bilateral, and regional importance, as the research program pivots on the expertise across faculties addressing interconnected and interdisciplinary challenges facing the global communities. Its remit will encompass economics, security, resources, governance, health, built and natural environment, technology and culture – to deepen the relationship through research-knowledge-enterprise between Australia and the region. The core mission is to promote building knowledge enterprise through the construction of a regional network for Australian students with a direct pathway opportunity to return with employment, reinforcing bilateral partnerships at the institutional, industry and government organisational levels. Cross-institutional knowledge-practice exchange with local multidisciplinary companies, schools, NGOs, communities, and the government is a hallmark of Curtin's ongoing global mobility projects. This NCP project transcends traditional-disciplinary borders by enabling knowledge-practice collaboration on a worldwide scale beyond our shores.



25



26



27

01. Design Singapore Council (Singapore) 02. National Design Centre (Singapore) 03. Urban Redevelopment Authority (Singapore) 04. GHY Culture & Media (Singapore) 05. Future Ocean Borneo (Miri, Sarawak, Malaysia) 06. Enabling Village (Singapore) 07. SaveRIVERS (Miri, Sarawak, Malaysia) 08. Asian Detours (Singapore) 09. Borneo Laboratory (Miri, Sarawak, Malaysia) 10. National University of Singapore (Singapore) 11. Nanyang Technological University (Singapore) 12. National Parks (Singapore) 13. Sarawak Biodiversity Centre (Kuching, Sarawak, Malaysia) 14. Sarawak Metro (Sarawak, Malaysia) 15. Sarawak Energy (Sarawak, Malaysia) 16. Singapore International Chamber of Commerce (Singapore) 17. Sarwak Oil Palms Berhad (Sarawak, Malaysia) 18. Tuyang (Sarawak, Malaysia) 19. United Nations Development Program (Kuching, Sarawak, Malaysia) 20. Sustainable Development Solutions Network (Kuala Lumpur, Selangor, Malaysia). 21. ESG Malaysia 22. Liteleaf (Singapore) 23. The Fullerton Hotel (Singapore) 24. Imperial Hotel (Miri, Sarawak, Malaysia) 25. SICC Welcome back reception with industry partners and government agencies. 26. Ecolabs presentation by Nanyang Technological Universities representatives. 27. Site Visit to Sarawak Biodiversity Centre in Kuching, Sarawak, Malaysia.



02



03







01

We do not learn  
from experience...  
we learning from  
reflecting on  
experience

- *John Dewey*

Curtin Academy has recently hosted a post-study tour exhibition showcase last March 2023. The event celebrated the completion of the Curtin Academy New Colombo Plan International Interdisciplinary Industry Study program and its commitment to empowering tertiary students to use design thinking while travelling to Malaysia and Singapore to address Sustainable Development topics by collaborating with industries.

The event served as an opportunity to engage with other students, hear from key figures involved in the NCP, and gain insight into how the design thinking learning framework was applied in tackling complex sustainability challenges.

The New Colombo Plan is a government initiative that aims to strengthen ties between Australia and our neighbours in the Indo-Pacific region. It offers Australian students the chance to study and undertake internships in the region, with a focus on building people-to-people and institutional links.

At the event, we had the opportunity to hear first-hand from the students who participated in the program and listened to their experiences and the impact it has had on their lives. We also had the opportunity to network and hear from expert speakers who shared their insights and knowledge about the impacts of the NCP on the students and their contributions to Sustainable Development.



04



05

#### CELEBRATING MOMENTS AND REFLECTING EXPERIENCES DURING THE SHOWCASE EVENT (01-05)

01. Fellow students honouring student leaders whom have invested in making the program a success. 02. Ice breaker event during the NCP Miri Study Tour. 03 Students celebrating the night with Curtin Malaysia Pro Chancellor - Tan Sri Datuk Patinggi George Chan and Dato Lorna. 04. Program Student Leadership Program

# Acknowledgement

Curtin Academy would like to thank all the partners, organisation, government agencies and companies who have contributed to production of this document. This project would not have been accomplished without their significant contribution to its compilation. Curtin Academy would like to express our warmest gratitude to all the producers for their invaluable opinions, and assistance throughout this entire project. Its successful completion owes a great deal to many professionals in the creative industry who have given the project time previous insights and comments. And to the many others whose names are not credited but have made specific input in this project, we thank you for your continuous support the whole time.

# Future Collaboration

For future project collaboration, please kindly reach out to [Curtinacademy@curtin.edu.au](mailto:Curtinacademy@curtin.edu.au)



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Email: [curtinacademy@curtin.edu.au](mailto:curtinacademy@curtin.edu.au)