

CLIMATE SOLUTIONS LAB

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IMPACT
HUB Asia Pacific

Final Impact Report



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What is the Climate Solutions Lab?

Unique to any other program offering we offer in Impact Hub, the Climate Solutions Lab is a program that will allow cities to identify their climate action agendas and connect them with innovators that can help to address them.

Innovators we look for:

Location of Residence: Based in any of the three (3) participating cities of the program: Jakarta, Kuala Lumpur, and Taipei.

Venture Phase: Mid to growth stage entrepreneurs

Focus: SDG focused entrepreneur working on urban climate solutions



Climate Solutions Lab Timeline (UPDATED)

March 2023
Program
Kickoff,
Analyse CRVA
data

**03 July - 11
Aug 2023**
Workshop:
Validate &
Design
Challenge
Statements

**02 Oct - 06 Oct
2023**
Application
screening and
selection

**16 Oct 2023 - 13
Nov 2023**
Solutions support
pre-local
showcase

**20 Nov 2023 - 26
Feb 2024**
Ongoing
Technical Support
for Each Winner

26 Feb 2024
CSL Regional
Showcase Day



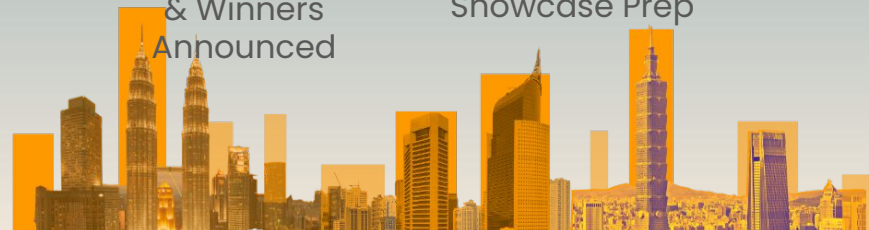
**April - May
2023**
Establish
City
Partnerships
& Steering
Committee

**14 Aug - 29
Sep 2023**
Outreach /
Open Call
for Solutions

**21 Aug - 10 Nov
2023**
Local
Showcase
Prep

16 - 24 Nov 2023
Local Showcase
& Winners
Announced

**01 Dec - 26 Feb
2023**
Regional
Showcase Prep



Program Outcomes

Program Target Highlight from the 3 Cities



25,437

Quality reach through online campaigns (excluding Taipei)



52

quality applicants/entreprises received from across the 3 cities



23

shortlisted enterprises received business and pitch preparation support for the Local Showcase



19

City Partnerships established



4 enterprises & 1 consortium

awarded a \$3,000 cash prize each and on-going tailor-fit technical support

Program Delivery



3

Validation and Design Challenge Workshop Sessions conducted



3

Local Showcase Sessions conducted



1

Regional Showcase Sessions conducted



112

Event attendees for the local showcase and regional showcase

Total number of events/activities held:

- **April 6th, 2023**, training on how CRVA Data and how to analyze them, by CDP.
- **May 16th, 2023**, training on impact measurement, by Impact Hub Global.
- **Since March 2023**, we have hosted **11** on-going monthly meetings between project managers from each local Impact Hub to keep each other updated on the progress, challenges and lesson learns.
- **3 Validation and Design Challenge Workshops** hosted by three Impact Hubs:
 - 3rd August 2023 for Taipei
 - 10th August 2023 for Kuala Lumpur
 - 21st July 2023 for Jakarta
- **3 Local Showcases** hosted by the three Impact Hubs:
 - 16th November 2023 for Taipei
 - 24th November 2023 for Kuala Lumpur
 - 16th November 2023 for Jakarta
- **From 1st December 2023 to 26th February 2024**, on-going technical support for the ventures.
- **Regional Showcase** hosted by the three Impact Hubs and Impact Hub Asia Pacific:
 - 26th February 2024

Cities's Impact Overview



Taipei



Impact in Number: Taipei



10 Applications

1 Representative team
At Regional Showcase

4 Climate Change
Experts

5 Competing Teams
At City Showcase

1 Meeting with Taipei City Government

2 Workshops

5 Mentor sessions

17,497 Social Media
Reach

2 Key Topics Revealed



How might we **Mitigate** the threats of climate change through affordable **green building materials** to change the cultural narratives of “green is expensive.” Or providing behavior changing **low-carbon transportation** and **zero-waste products**.

How might we disrupt innovative **Adaptation** measures to tackle climate change? For example, an **accessible disaster warning system** to make sure no one is left behind; or an **affordable and quality emergency kit or education materials** to raise public awareness of emergency preparedness.

5 Teams form City Showcase



Homemakers United Foundations

Mitigate



Ridey

Mitigate



Green Hope

Green Hope

Mitigate



RiIVERSE

Mitigate



CO2uptake

Mitigate



Meeting

@Department of Economic Development, Taipei City Government



What we have achieved



Integrate environmental concepts from Green Hope into Taipei City Government's Friendly-Shop Platform

Improve presentation skills of participants

Create networking opportunities with climate change experts

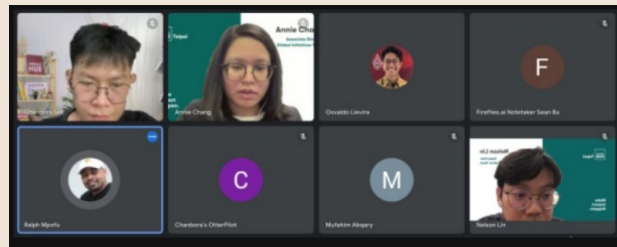


Use reusable tableware during workshops and city showcase

What we have learned

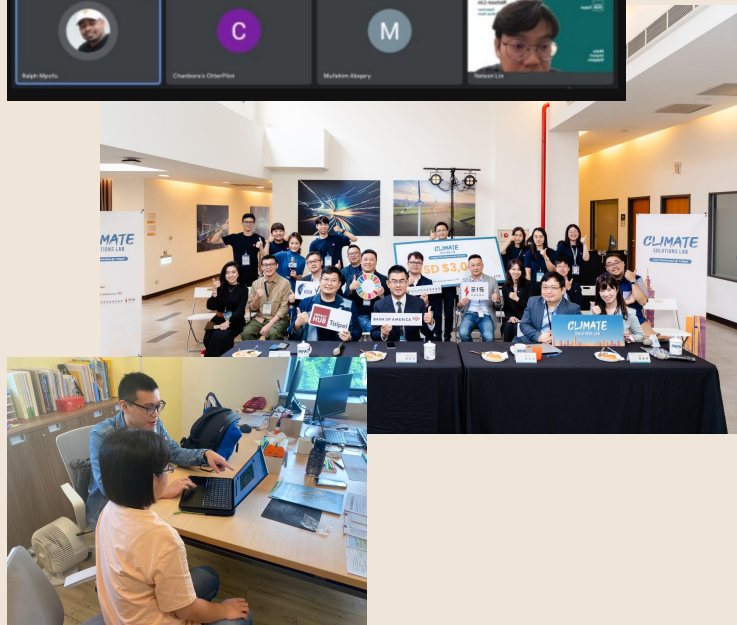


Monthly meetings is a good platform for peer learning.



Use CDP report as a tool to leverage more public resources

This program create opportunities for us and the team to have tighter connection with Taipei city government



Jakarta



Impacts Report Jakarta



34 Applications

3 Representative team
At Regional Showcase

3 Climate Change
Experts

17 Competing Teams
At City Showcase

7 Meeting with Jakarta City Government

2 Workshops

5 Mentor sessions

8,003 Social Media
Reach

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Meeting Jakarta Government

Meeting Jakarta Rusunawa Pesakih Local Government



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Meeting Jakarta Government

Meeting Jakarta Government Cooperation Bureau and Climate Advisors



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2 Key Topics Revealed



How can **Circularity** further **mitigate the climate crisis** through **reducing carbon emission** cooperating with **Urban Development**, Transitioning current Jakarta Initiatives smoothly for Government, Private Sectors, and Citizens through: **Waste Management, Cycle Assesment, Agriculture, Renewable Energies and more**

Realizing the **importance of Water resiliency** from its Supply to access, raising the **urgency of Sinking cities and accessible, affordable, and drinkable water** for everyone through innovation and reducing water consumption based emission

17 Teams form City Showcase



MallSampah



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Rusunawa Pesakih Site Visit



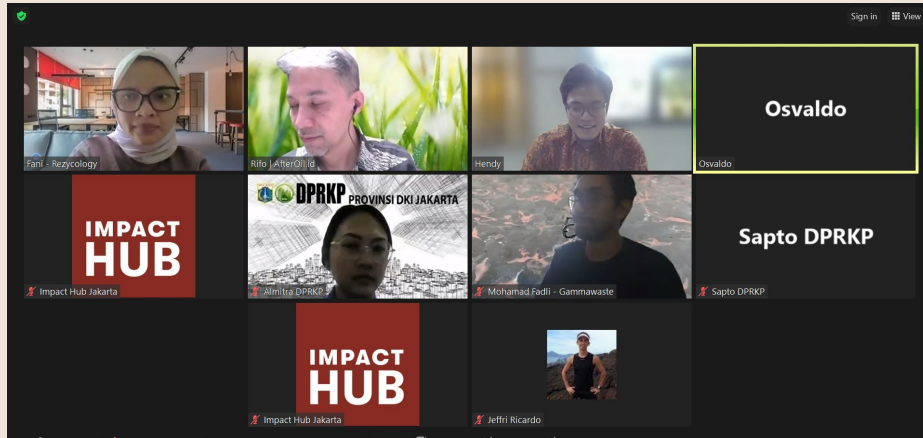
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Meeting

With Jakarta Government (Cooperation, Development, and Regional Asset Bureau



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What we have achieved



Coordinate and strengthened Government initiatives in Climate Initiatives and private sector through the workshop and Startup Solutions

Improve Business strategy and pitch skills of participants

CSL through its partners BoA and CDP allow further cooperation with Governments (National and International)

Use reusable tableware during workshops and city showcase from our ecosystem



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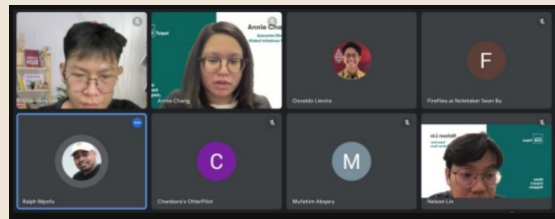
What we have learned

CLIMATE
SOLUTIONS LAB

Monthly meetings allows sharing of best practices to learn and develop together

Leveraging CDP local staffs and manager to maximize relations and cooperation

This program create opportunities for us and the team to have tighter connection with Jakarta government



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Kuala Lumpur



Impact In Number: Kuala Lumpur

12 Number of applicants

23 Organisations connected during the programme

52 Attendees attended the local showcase

2 Needs assessment sessions

4 Teams competed at the local showcase

3 Pre-event workshops were hosted

32,451 Social media reach through 5 major online platforms

6 Outreach partners

Strategic Partnerships

Third Sector Organisations

- NGOs
- Advocacy groups



WWF



SDGCENTRE
Kuala Lumpur

MAVCAP

Funding Innovation



**UNIVERSITI
MALAYA**

Private Sector/Academia

- Companies
- GLCs/GLICs
- Investors
- Universities

Multiple partners were mapped and identified as potential stakeholders and community partners to support the implementation of the Climate Solutions Lab in Malaysia.

Partners were invited based on their knowledge, experience and priority focus to climate action initiatives in Malaysia.



MBSJ
GEMILANG BERSAMA



Government Sector

- Local councils

Kuala Lumpur Climate Challenges

During the ideation workshop with key stakeholders, 3 main challenges were identified based on the data submitted via the CDP Climate Risk Vulnerability Assessment by the City of Kuala Lumpur. The 3 climate-related challenges would form the basis of the call for solutions in Kuala Lumpur, Malaysia.



Urban
Flooding



Drought



Extreme
Temperature

Finalists

4 early stage ventures were selected to present their ideas on stage during the local showcase event.



Umore

A graphene replacement to traditional batteries, which is cost and energy efficient



Re:Kayu

Recyclable furnitures made from industrial waste



Bina BioX

A mycelium packaging replacement to single use plastic



Mimba

Smart urban farming for livestocks in urban areas.

Partnerships

Catalytic impact from connections to industry and policy



In Jakarta, partnerships with organizations like BofA, CDP, C40, and Bappeda have **enabled teams to engage with key stakeholders, addressing urban challenges and fostering potential collaborations.** This has led to sustainable solutions tailored for Jakarta's unique needs.



In Taipei, the collaboration with the Department of Economic Development **has empowered businesses to refine their solutions and find valuable niches.** This partnership not only boosts business success but also aims to contribute to the city's economic and social development.

Validation and Design Challenge Workshops



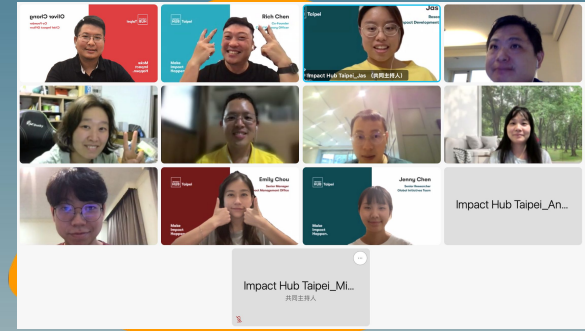
Jakarta
21st July 2023

The workshop improves understanding of Jakarta Government's priorities and fosters cooperation for greater program impact. It involves diverse stakeholders, aiding in identifying urgent areas such as water resilience and reducing emissions where the private sector can assist.



Taipei
3rd August 2023

The workshop focused on identifying key interests like renewable energy and shared transportation, stressed the importance of adaptation strategies like high-temperature warning systems, and highlighted the need to increase public awareness about power plants and personal carbon footprints.



Kuala Lumpur
10th August 2023

The workshop highlighted three main issues: the fragmentation of climate efforts across sectors, the limited sustainability of existing initiatives, and the slow policy response to urgent urban climate risks, prompting a need for more effective strategies.

Local Showcases

The goal of the local showcase aim to get all the shortlisted solutions and innovators from the 3 cities to pitch their solutions in front of the panel of judges.

One winner is chosen from each city (except in Jakarta where they are experimenting with selecting multiple solutions and consortium as winner) to get a cash prize of 3,000 USD and on-going technical support by their local Impact Hub on the topics that they need support on.



Local Showcases



**Winner from Taipei:
GreenhopeBCTW**

GreenhopeBCTW, a Blockchain technology firm, offers a platform called "Beautiful City" for trading Carbon Digital data. Users receive a "Green Pass," a carbon passbook, which functions as a public VIP card. Showing the Green Pass at participating stores provides discounts and helps accumulate carbon assets.



**Winner from Malaysia:
Bina BioX**

Bina BioX, a Malaysian biomaterials firm, develops mycelium-based bio-composites to replace plastics and foams. Currently in R&D (TRL 3), their initial products are packaging, acoustic panels, and wall tiles, targeting direct sales to businesses.

Local Showcases



**Winner from Jakarta:
AfterOil**

AfterOil supports communities in collecting local biomass to produce Biochar pellets using ASP technology. These pellets are used in EcoGas SmartTubes to generate Carbon-Neutral Synthetic Gas and Renewable Electricity. The business model, inspired by blockchain, creates an EcoGas On-Demand ecosystem.



**Winner from Jakarta:
Karma Bumi**

Karmar Bumi's subscription model connects customers with farmers for monthly vegetable boxes, promoting local agriculture and sustainability. This approach reduces distribution chains by offering weekly deliveries and local pickups, strengthening community ties.



**Winner from Jakarta:
Rezycology.id &
Gamma Waste**

Rezycology is a B2B plastic recycling company using a mobile app for traceability and efficient sorting, working with 3,500 waste contributors across 7 stations in Java and Bali to process and supply pressed plastic for recycling.

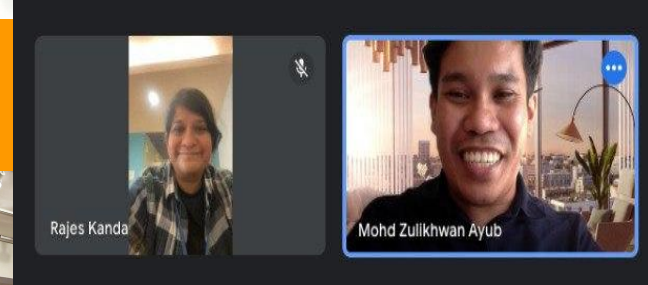
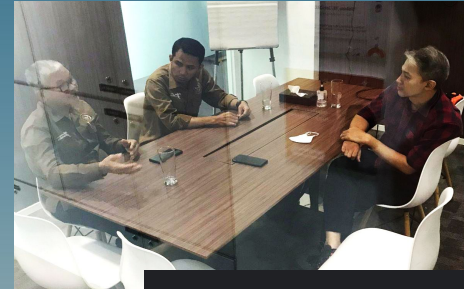
Gammawaste is a platform dedicated to upcycling plastic waste into innovative, sustainable products for daily use.

Mentoring and Ongoing Support



The one-on-one mentor meetings and workshops provided targeted professional guidance on core issues, while the Presentation Skill workshop enhanced the structure and effectiveness of the teams' presentations.

Jakarta



Kuala Lumpur



Taipei

Regional Showcases

The Regional Showcase of the Climate Solutions Lab program is a premier online event designed to highlight the groundbreaking work in environmental innovation and sustainability.

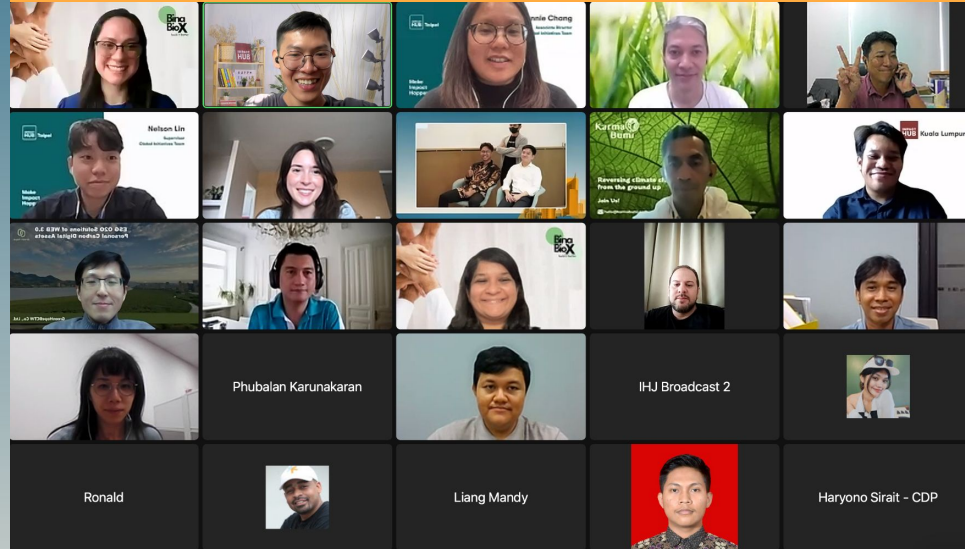
After 4 months of on-going technical from the three local Impact Hub, this half-day showcase, brought together a diverse group of businesses with innovative solutions that aim to solve some of the climate challenges in the three cities, namely Jakarta, Kuala Lumpur and Taipei.

35

Event attendees

4 enterprises &
1 consortium

Showcased their innovative
climate solutions



Regional Showcases

PROBLEM STATEMENT

limited low-carbon solutions available

value chain is ineffective, < 10% is recycled



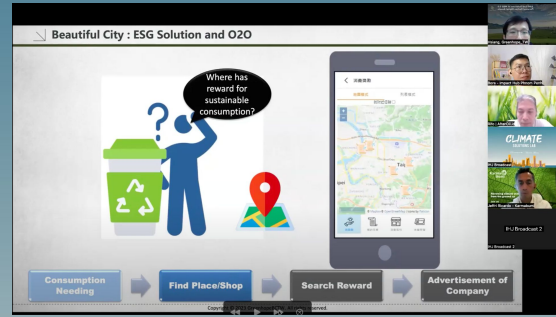
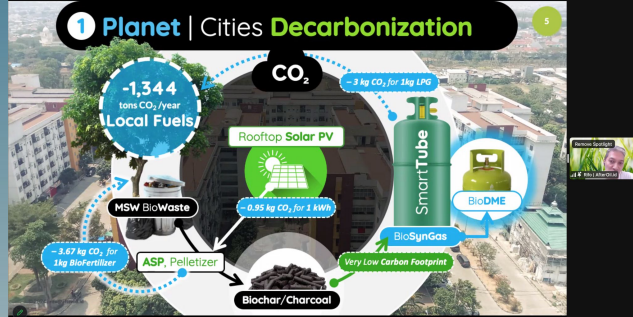
traditional PACKAGING POLLUTES



plastics demand is growing @ CAGR 12.6%



adverse effects have been observed



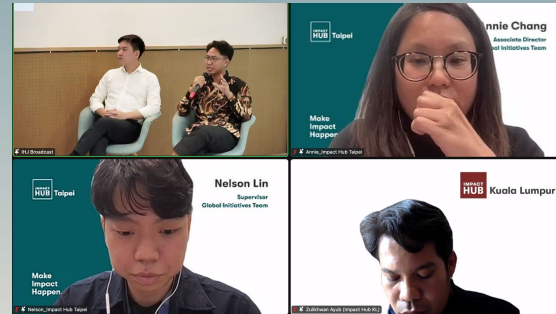
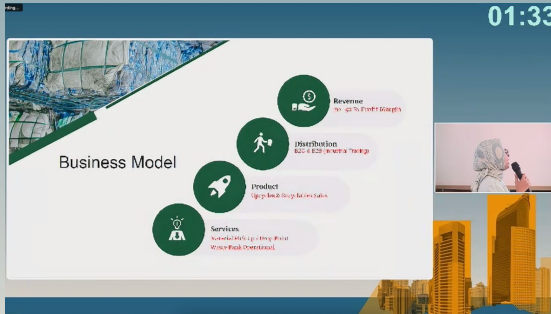
Cultivating Sustainability: Regenerative Agriculture as change hub

A project by:



KARABUMI PITCHING PROPOSAL

Climate Solution Lab 2024 - COPYRIGHT KARABUMI



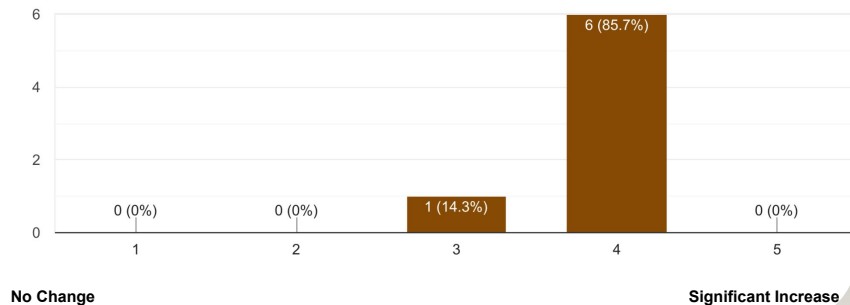
Participant's Learning Outcomes

A post-program survey has been conducted to assess the winning team member's learning outcomes from the Climate Solutions Lab. A total of 6 participants from 2 cities have participated in this survey.

Knowledge and Skills:

How has your knowledge/skills changed as a result of participating in the program?

7 responses



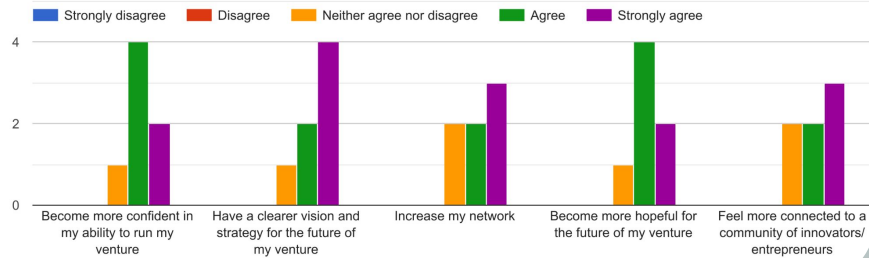
The knowledge/skills that have changed the most:

- 1. Navigating government bureaucracy requires patience, strategic thinking, and adherence to procedures.**
- 2. Understanding local startups' innovations for climate change, carbon reduction, and nature protection.**
- 3. Addressing challenges and improvement strategies for pitching in Kuala Lumpur.**
- 4. Developing better pitching skills.**
- 5. Insights on structuring pitches, measuring impact clearly, and managing stakeholders, including government bodies.**
- 6. Exploring collaboration opportunities with other startups for consortium solutions.**

Participant's Learning Outcomes

Help and Support:

To what extent do you agree or disagree with the following statements: Climate Solutions Lab program helps me:



The program help you and/or your team grow:

1. **Maintaining focus, innovation, and persistence.**
2. **Understanding significant public-private investment opportunities for a sustainable future.**
3. **Improved identification and resolution of key challenges.**
4. **Enhanced pitching techniques and structure.**
5. **Broadened business networks and skillset in pitching, communication, and business strategy.**
6. **Opportunities for refining and piloting innovative business models, inspired by successful startups.**
7. **Strengthened government networking and communication.**

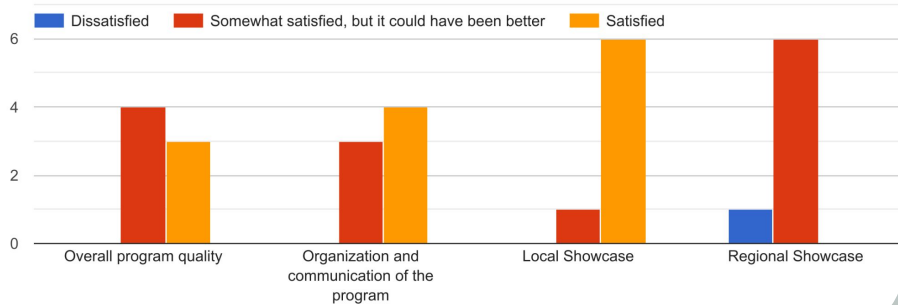
The funding and the technical support helped:

1. **Benefitted from exceptional technical support.**
2. **Small-scale funding kickstarted our MVP development.**
3. **In-depth technical support provided insights into government workflows in our country.**

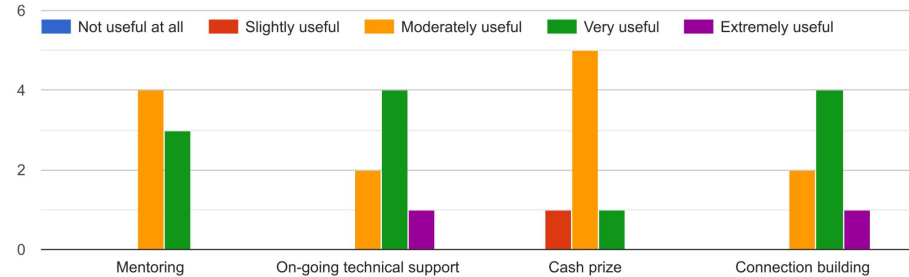
Participant's Learning Outcomes

Usefulness and Satisfaction:

How satisfied are you with the following:



How useful were these program components to you?

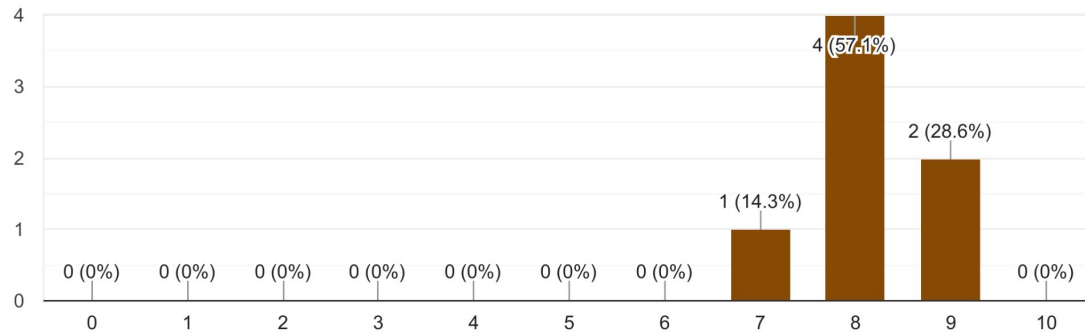


Participant's Learning Outcomes

The NPS score is **28.57**

How likely would you recommend this program to other entrepreneurs/startups/innovators/ventures?

7 responses



Participant's Learning Outcomes

Quote from participants:

Thais Lewnegie (Bina BioX)

"CSL has been a life changing for a startup company like us"



Jeffri Ricardo (Karmabumi)

"No matter how big or small the project and the impact, this program has provided us with opportunity to act and start."



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