



# Second Annual Symposium on Accelerating Science, Technology, and Circular Innovation in Southeast Asia: *Smart Cities Innovation, Biotechnology, and Circularity*

**July 17-19, 2024**

*Crowne Plaza Hotel, Vientiane*

As a strong, reliable, and durable partner of ASEAN, the United States supports initiatives that promote cooperation in science and technology and foster sustainable economic growth. The U.S.-ASEAN Smart Cities Partnership (USASCP), Arizona State University (ASU), and the Rochester Institute of Technology (RIT), are collaborating to host the Second Annual Symposium on Accelerating Science, Technology, and Circular Innovation in Southeast Asia.

The Symposium is structured in three mutually reinforcing tracks: smart sustainable cities, cooperation in science, technology, and innovation, and circular economy and entrepreneurship. It will bring together public and private sector actors involved in programming across multiple disciplines and urban sectors.

	Joint Activity		STIC Program
	USASCP Program		RIT Program

## **Tuesday, July 16, 2024**

Welcome to the Second Annual Symposium on Accelerating Science, Technology, and Circular Innovation in Southeast Asia! The formal programming will commence on Wednesday, July 17th. You are cordially invited to join an optional no-host happy hour and complete early check-in the night before, upon your arrival in Vientiane, Lao PDR.

**16:00-18:00**  
Elephant Lounge

**Early Check-In and No-Host Happy Hour**



## Wednesday, July 17, 2024

The first day of the Symposium is organized around education and training in circular economies, resiliency in the built environment, and digital applications for ASEAN. The day will commence with remarks from high level officials and partner organizations. In the afternoon, ASU will kick off the ASEAN-U.S. Science, Technology, and Innovation Cooperation (STIC) Entrepreneurial Pitch Competition for its participants. All other attendees are invited to join workshops and brainstorming sessions on parallel tracks, occurring simultaneously.

### **Second Annual Symposium on Accelerating Science, Technology, and Circular Innovation in Southeast Asia:** *Smart Cities Innovation, Biotechnology, and Circularity*

#### **Day 1: Education and Training**

<p><b>8:00-8:30</b> Pre-Function Area</p>	<p><b>Check-In</b></p>
<p><b>8:30-9:30</b> Lane Xang Ballroom</p>	<p><b>Plenary Session</b>  <b>Moderator: Ms. Helen Santiago Fink</b>, USASCP Program Manager, U.S. Department of State  <b>Prof. Dr. Phouphet Kyophilavong</b>, Vice President, National University of Laos  <b>Ambassador Heather Roach Variava</b>, Ambassador, U.S. Embassy to Lao People’s Democratic Republic (PDR)  <b>H.E. Dr. Souroudong Sundara</b>, Vice Minister of Education, Ministry of Education and Sports, Lao PDR</p> <p>The first day of the Second Annual Symposium on Accelerating Science, Technology, and Circular Innovation in Southeast Asia will begin with opening remarks from United States and Lao People’s Democratic Republic (PDR) representatives as well as an introduction from the Vice President of the National University of Lao PDR.</p>
<p><b>9:30-10:30</b> Lane Xang Ballroom</p>	<p><b>Public-Private Partnerships for Education and Training</b>  <b>Ms. Helen Santiago Fink</b>, USASCP Program Manager, U.S. Department of State  <b>Ms. Meghan Gibson</b>, Director of Global Programs, Ira A. Fulton Schools of Engineering, Arizona State University  <b>Dr. Angkham Ounavong</b>, Deputy-Director, University of Health Sciences  <b>Prof. Dr. Phouphet Kyophilavong</b>, Vice President, National University of Laos  <b>Dr. Clyde Eirikur Hull</b>, Director of Competitive Sustainability Center, the Rochester Institute of Technology</p> <p>Symposium partners alongside representatives from the National University of Laos will discuss the significance of public-private partnerships for education and training.</p>



**10:30-11:00**  
Pre-Function Area

**Coffee and Tea Break | Speed Networking Activity (15 mins.)**

**11:00-12:30**  
Lane Xang Ballroom

**Education for Sustainability and Resiliency in the Built Environment**

**Dr. Weimin Wang**, Energy Production and Infrastructure Center, Associate Professor of Mechanical Engineering Technology, University of North Carolina at Charlotte (UNCC)

**Kyoung-Hee Kim**, Director, Integrated Design Research Lab, University of North Carolina at Charlotte (UNCC)

**Dr. Le Thi Hong Na**, Senior Lecturer, Ho Chi Minh City University of Technology

**Mr. Wisnu Agung Hardiansyah**, Lecturer, Researcher, Gadjah Mada University

UNCC speakers will discuss cities and local challenges in the ASEAN building sector. They will also share an overview of UNC curriculum development on topics such as decarbonization and climate resiliency. Partnerships with ASEAN universities to mainstream green building concepts will underscore the dialogue.

**12:30-14:00**  
Mosaic Restaurant

**Lunch Break**

**14:00-18:30**

**Parallel Sessions**

ASU STIC participants in the Entrepreneurship and Innovation track will engage in a pitch competition.

All other attendees should stay in **Lane Xang 3** for the rest of the education and training programming, hosted by USASCP, for the remainder of the day.

**14:00-15:00**  
Lane Xang 3

**Green Buildings Research & Innovation for Net-Zero**

**Dr. Weimin Wang**, Energy Production and Infrastructure Center, Associate Professor of Mechanical Engineering Technology, University of North Carolina at Charlotte (UNCC)

**Dr. Sarin Pinich**, Faculty, Chulalongkorn University, Thailand

**Dr. Atch Sreshthaputra**, Faculty, Chulalongkorn University, Thailand

**Dr. Alexander Suryandono**, Lecturer, Gadjah Mada University, Indonesia

This session will provide an overview of the latest research and innovation in material use to advance net-zero building.



**15:00-15:30**

Lane Xang 3

### **PatiHoub: Recycled Plastics for Construction Boards**

**Ms. Viengvilay Phimmasone**, Co-Founder and Director, [PatiHoub](#), USASCP

Business Innovation Fund Awardee

**Dr. Thuy Phuong Nguyen**, Co-Founder and Technical Advisor, [PatiHoub](#), USASCP

Business Innovation Fund Awardee

Lao PDR's first circular, value-chain focused plastics recycling business and 2022 USASCP Business Innovation Fund Awardee, Patihoub, will provide an overview of their work and products.

**14:00-15:30**

Lane Xang 1 and 2

### **STIC Entrepreneurship and Innovation Pitch Competition Round 1**

**Note: This is a closed session, by invitation only.**

In this dynamic session, thirty-five participants from the STIC Virtual Incubator Program/Entrepreneurship & Innovation Track will be divided into two groups and assigned to designated pitch rooms for an exhilarating pitch competition. Each participant will present a compelling five-minute pitch to a panel of three judges, followed by a rigorous five-minute Q&A session. The top four ventures from each room will advance to the Final Round.

Participants will be seamlessly directed from the waiting lobby to their respective pitch rooms, ensuring a smooth and organized flow of the competition.

**15:30-16:00**

Pre-Function Area

### **Coffee and Tea Break | Networking**

**16:00-17:00**

Lane Xang 3

### **Circular Buildings and Digitalization**

**Mr. Christian van Maaren**, Founder and CEO, Excess Materials Exchange

**Mr. Liang Zheng Gooi**, Project Manager, [White Room](#), USASCP Business Innovation Fund Awardee

**Mr. Jian Chia**, Project Lead, [White Room](#)

In this presentation, speakers will provide an introduction to building materials deconstruction platforms to promote material reuse, resource recovery; presentation of the Irish Green Building Council (IGBC), and digital exchange opportunities for supply chain collaborations and circular entrepreneurial opportunities.

**17:00-18:30**

Lane Xang 3

### **Brainstorming Digital Applications for ASEAN**

**Mr. Christian van Maaren**, Founder and CEO, Excess Materials Exchange

**Mr. Liang Zheng Gooi**, Project Manager Project Manager, [White Room](#); USASCP Business Innovation Fund Awardee

**Mr. Jian Chia**, Project Lead, [White Room](#)

Audience members will have the opportunity to brainstorm the feasibility of establishing digital construction materials exchange platforms with technical experts/speakers in ASEAN cities.



**16:00-18:30**  
Lane Xang 1 and 2

**STIC Entrepreneurship and Innovation Pitch Competition  
Round 1 (continued)**

*Note: This is a closed session, by invitation only.*

**Thursday, July 18, 2024**

The second day of the Symposium will focus on circular economy and innovation featuring parallel sessions hosted by USASCP and RIT. The plenary session will introduce the Business Innovation Fund 2.0 and set the agenda for the day. The ASU STIC Competition will continue for the Science & Technology track. All other attendees are cordially invited to join programming led by technical experts, government officials, and private sector representatives.

**Second Annual Symposium on Accelerating Science, Technology, and  
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**Day 2: Circular Economy and Innovation**

<p><b>8:00-8:30</b> Pre-Function Area</p>	<p><b>Check-In</b></p>
<p><b>8:30-9:30</b> Lane Xang Ballroom</p>	<p><b>Plenary Session</b>  <b>Ms. Helen Santiago Fink</b>, USASCP Program Manager, U.S. Department of State   <i>Announcement of BIF 2.0</i>  <b>Dr. Clyde Eiríkur Hull</b>, Director of Competitive Sustainability Center, Rochester Institute of Technology   <i>Digitalization, Connectivity; &amp; Circular Entrepreneurship</i>  <b>Ms. Israa Thiab</b>, Assistant Visiting Professor, Rochester Institute of Technology   <i>Preview of Circular Textiles</i>  <b>Ms. Meghan Gibson</b>, Director of Global Programs, Ira A. Fulton Schools of Engineering, Arizona State University   USASCP will announce the Business Innovation Fund 2.0 and introduce the day's focus on circular economy and innovation in cities and building.</p>
<p><b>9:00-10:30</b></p>	<p><b>Parallel Sessions</b>   ASU STIC participants will participate in a research and publishing poster showcase. All other attendees should stay in the <b>Lane Xang Ballroom</b> for the rest of the circular economy and innovation programming, hosted by USASCP and RIT, for the remainder of the day.</p>



**9:00-9:30**

Lane Xang Ballroom

### **Circularity in Cities and Buildings**

**Mr. Ivan Thung**, Lead, Circular Buildings Coalition, [Metabolic](#), Amsterdam (pre-recorded video)

Mr. Thung will provide a white paper research presentation on decarbonizing the built environment, net zero buildings, reducing construction’s carbon footprint, and supporting climate proof buildings in Europe.

**9:30-10:30**

Lane Xang Ballroom

### **Material Flow Analysis and E-Waste Circularity**

**Dr. Eric Williams**, Golisano Institute for Sustainability, Rochester Institute of Technology

**Mr. Satoshi Yoshida**, Director of Resource Circulation, Japan Ministry of Environment

**Mr. Venkatachalam Anbumozhi**, Senior Research Fellow, Economic Research Institute for ASEAN & East Asia

Dr. Williams will delve into the disposal of e-waste in ASEAN countries by utilizing Material Flow Analysis to map the movement and processing of electronic waste, highlighting critical areas and findings.

**10:30-11:00**

Pre-Function Area

### **Coffee and Tea Break | Networking**

**11:00-11:45**

Lane Xang Ballroom

### **Circular Entrepreneurship and Digitization**

**Dr. Clyde Eiríkur Hull**, Director of Competitive Sustainability Center, Rochester Institute of Technology

**Dr. Riccardo Corrado**, Associate Professor, CamEd Business School

Speakers will address how universities can prepare students for the digital economy and how digital tools and connectivity can empower circular business models that reduce waste and promote sustainability.

**11:45-12:30**

Lane Xang Ballroom

### **Circular Economy Business Challenges and Solutions**

**Ms. Viengvilay Phimmason**, Co-Founder and Director, [Patihoub](#), USASCP Business Innovation Fund Awardee

**Ms. Thuy Phuong Nguyen**, Co-Founder and Technical Advisor, [Patihoub](#), USASCP Business Innovation Fund Awardee

Patihoub speakers will engage in a conversation on barriers to innovation in the circular economy and potential solutions for Laos and the ASEAN community.

**12:30-14:00**

Mosaic Restaurant

### **Lunch Break**



<p><b>14:00-18:30</b></p>	<p><b>Parallel Sessions</b></p> <p>ASU STIC participants will participate in a final competition.</p> <p>All other attendees should stay in <b>Lane Xang 1</b> or <b>Lane Xang 2</b> for the rest of the circular economy and innovation programming, hosted by USASCP and RIT, for the remainder of the day.</p>
<p><b>14:00-14:30</b> Lane Xang 1</p>	<p><b>Case Study: Circular Candles by Kampong Dolanan Community</b></p> <p><b>Ms. Farah Larissa</b>, Vice Director of Partnership and Innovation Strategy, Kampong Dolanan Community</p> <p>This presentation explores the innovative approach of the Kampong Dolanan Community in Indonesia and their implementation of circular economy principles by transforming used cooking oil into eco-friendly candles. This session will showcase the community's resourcefulness tackling waste management and highlight the potential of this approach for sustainable development.</p>
<p><b>14:30-15:00</b> Lane Xang 1</p>	<p><b>National University of Laos (NUOL): Circular Economy and Strengthening Management Capacity and Systems</b></p> <p><b>Dr. Pakaiphone Syphoxay</b>, Associate Professor, National University of Laos</p> <p>This talk delves into the National University of Laos' Faculty of Economics and Business' project on strengthening management skills and systems. It will also explore how the project incorporates principles of the circular economy to foster entrepreneurial opportunities.</p>
<p><b>15:00-15:30</b> Lane Xang 1</p>	<p><b>Strategy First University: Circular Entrepreneurship Training &amp; Outreach</b></p> <p><b>Aung Chit Khin</b>, President, Strategy First University <b>Dr. Clyde Erikur Hull</b>, Director of Competitive Sustainability Center, Rochester Institute of Technology</p> <p>Strategy First University will present their recent initiatives in fostering circular entrepreneurship. The talk will delve into the key findings and insights gleaned from their training programs, offering valuable perspectives on this innovative approach to business development.</p>
<p><b>15:30-16:00</b> Pre-Function Area</p>	<p><b>Coffee &amp; Tea Break   Networking</b></p>



**14:00-14:30**

Lane Xang 2

### **Global and Regional Trends in E-Waste**

**Dr. Ruediger Kuehr**, Senior Manager, Sustainable Cycles, The United Nations Institute for Training and Research (virtual)

Sustainable Cycles (SCYCLE) is a program under UNITAR’s Division for Planet. Dr. Kueher will speak to research and global trends in global e-waste efforts.

**14:30-15:30**

Lane Xang 2

### **Multi-sectoral Insights into E-Waste Circularity in ASEAN**

**Mrs. Mahanani Kristianingsih**, Deputy Director for Specific Waste Management, Government of Indonesia (virtual)

**Mr. Balan Shanmuganathan**, Senior Engineering Director, Sustainability, Seagate Technologies

**Mr. Sadamitsu Sakoguchi**, Government of Japan (virtual)

**Dr. Eric Williams**, Golisano Institute for Sustainability, Rochester Institute of Technology

Experts across public, private, and academia will provide insights into the opportunities and challenges of e-waste circularity.

**15:30-16:00**

Pre-Function Area

### **Coffee & Tea Break | Networking**

**16:00-17:00**

Lane Xang 2

### **Strengthening the Enabling Environment for Sustainable E-Waste**

**Mr. Satoshi Yoshida**, Director of Resource Circulation, Japan Ministry of Environment

**Dr. Venkatachalam Anbumozhi**, Senior Research Fellow, Economic Research Institute for ASEAN and East Asia (ERIA)

Representatives from the public sector will present on circular economy framework implementation from regional, sectoral, and a city perspective - with a focus on public-private-public partnership for economic integration.

**17:00-18:30**

Lane Xang 2

### **Private Sector Commitments & Financial/Entrepreneurial Opportunities in E-Waste**

**Mr. Takashi Watanabe & Mr. Hitoshi Sugawara**, Resource Circulation Division of Metals Company, Mitsubishi Material

**Dr. Lely Fitriyani**, Research and Development Manager, PPLI - Integrated Waste Management Services, Indonesia (virtual)

**Mr. Balan Shanmuganathan**, Senior Director, Sustainability, Seagate Technology

**Ms. Mehrunisa Zafar**, Mitsui Sumitomo Bank (virtual)





	<p>The role of the private sector, financial organizations, manufacturers, and the ICT (information, communication technology) industry is instrumental to catalyzing sustainable e-waste supply chains and forming part of the national and local ecosystems for finance, infrastructure, innovation, labor empowerment, and entrepreneurship development. This conversation explores the complementarity of the public and private sector roles in advancing e-waste at the regional, national, and local scales and what are key priority issues for stakeholders in this process.</p>
<p><b>09:30-12:30</b> Patuxay and Thatluang</p>	<p><b>STIC Research and Publishing Poster Showcase Round 1</b> <i>Note: This is a closed session, by invitation only.</i></p> <p>Thirty-five participants from seven Southeast Asian countries have been competitively selected to present their science and technology research proposals, aligning with the strategic objectives of STIC's technical academies. Expert evaluators will review their posters, selecting the top eight projects to advance to the final round. Four winners will each be awarded \$12,500 USD to support their research and publication efforts.</p> <p>This session will highlight these researchers as they present their innovative concepts, promoting advancements in science and technology to drive significant impact.</p>
<p><b>12:30-14:00</b> Mosaic Restaurant</p>	<p><b>Lunch Break</b></p>
<p><b>14:00-15:30</b> Lane Xang 3</p>	<p><b>STIC Final Competition</b> <i>Note: This is a closed session, by invitation only.</i></p> <p>The top eight ventures from the Pitch competition and the top 08 projects from the Research Poster Showcase will advance to the Final Round. This round will determine four winning ventures and four winning project proposals, each receiving \$12,500 USD to support their projects or business development efforts.</p>
<p><b>15:30-16:00</b> Pre-Function Area</p>	<p><b>Coffee &amp; Tea Break   Networking</b></p>
<p><b>16:00-18:30</b> Lane Xang 3</p>	<p><b>STIC Final Competition (continued)</b> <i>Note: This is a closed session, by invitation only.</i></p>
<p><b>18:30-19:00</b></p>	<p><b>Short Break (free time for all attendees)</b></p>
<p><b>19:00-21:00</b> Zen Garden   Rain Location: Lane Xang Ballroom</p>	<p><b>Joint Reception (for all attendees)</b></p>

**End of Day 2**



## **Friday, July 19, 2024**

The third and final day of the Symposium will focus on climate resilience, with plenary sessions in the morning from partners and a presentation on green environments. Parallel sessions will follow the morning coffee break.

### **Second Annual Symposium on Accelerating Science, Technology, and Circular Innovation in Southeast Asia:**

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#### **Day 3: Climate Resilience**

<b>8:00-8:30</b> Pre-Function Area	<b>Check-In</b>
<b>08:30-09:30</b> Lane Xang Ballroom	<b>Plenary Session: Nature Based Solutions for Climate Resilience</b>  <b>Ms. Helen Santiago Fink</b> , USASCP Program Manager, U.S. Department of State <i>To Be Confirmed</i> , STIC Participant Research  The ASEAN region is among the most vulnerable to climate change leading to impacts across sectors and geographies. Increasing the capacities of cities to strengthen the resilience of its water utilities as well as addressing growing public health concerns such as extreme heat, air pollution and flooding is essential. The session will frame the day’s presentations on climate resiliency with a focus on nature-based solutions as an important strategy to mitigate climatic challenges.
<b>09:30-10:30</b> Lane Xang Ballroom	<b>Agroecology Garden for the Future (AG4F): Challenges and Opportunities</b>  <b>Mr. Veata Mey</b> , Sustainable Food Systems Program Manager, Louvain Cooperation & <a href="#">Eclosio</a>  The AG4F project helps provide a greener environment and raise awareness of public health among high school students in urban areas in Cambodia. Presenters will share a case study and facilitate an interactive discussion about the challenges and opportunities of promoting greener environments amidst a backdrop of rapidly accelerating climate change.
<b>10:30-11:00</b> Pre-Function Area	<b>Coffee &amp; Tea Break   Networking</b>
<b>11:00-12:30</b> Lane Xang Ballroom	<b>Climate Resiliency through Capacity Building Water Smart Engagements</b>  <b>Mr. Chris Rich</b> , U.S. Water Partnership, Water Smart Engagements (WiSE) <b>Mr. Tran Kim Thach</b> , Water Quality Director, Saigon Water Corporation (SAWACO)



**Mr. Bounpakob Phonharath**, Deputy Director, Vientiane City Office for Management and Services  
**Mr. Sonephet Vongpadit**, Head of Drainage System and West Water Division, Vientiane City Office for Management and Services  
**Mr. Eakawat Sugprajun**, Head of Production Section, Provincial Waterworks Authority of Phuket  
**Mr. Chainarong Kongdum**, Engineer of Production Section, Provincial Waterworks Authority of Phuket

The [U.S.-ASEAN Smart Cities Partnership's \(USASCP\) Water Smart Engagement Program](#) has worked to improve water management with a focus on potable water and wastewater treatment in select cities in ASEAN. Partners from Phuket, Ho Chi Minh City, and Vientiane will share practices/technologies adopted to address water quality and scarcity toward greater resiliency.

**11:00-12:30**

Patuxay and Thatluang

**Circular Entrepreneurship Partner Debriefing Session**

**Note: This is a closed session, by invitation only.**

The Rochester Institute of Technology's Circular Entrepreneurship project partners will convene for private debriefing discussions to share learnings, strategize next steps, and foster collaboration.

**12:30-14:00**

Mosaic Restaurant

**Lunch Break**

**14:00-1:30**

**Parallel Sessions**

ASU STIC participants will participate in closing and awards ceremonies.

All other attendees should stay in **Lane Xang 1** or migrate to **Patuxay & Thatluang** for the panel discussions on climate resilience for the final day of programming.

**14:00-15:30**

Patuxay & Thatluang

**Circularity Opportunities in the Textile Sector**

**Professor Israa Thiab**, Rochester Institute of Technology

This presentation reviews waste problems in the textile industry and a success story in circularity followed by a Q&A session.

**14:00-15:30**

Lane Xang 1

**Makassar City Smart Garden Alleys**

**Dr. Wangda Zuo**, Professor, Pennsylvania State University

**Dr. Rachmawan Budiarto**, Senior Lecturer, Universitas Gadjah Mada Indonesia

**Dr. Mochamad Donny Koerniawan**, Lecturer and Researcher, Institut Teknologi Bandung Indonesia

The Smart Garden Alleys Projects, led by Penn State University and Gadjah Mada University in Indonesia, will present work that fosters carbon neutral communities in Makassar City through collection of micro-climatic data with sensors in the city's alleyways to support urban planning and investment as well as the installation of solar panels in targeted communities.



**15:30-16:00**

Pre-Function Area

**Coffee & Tea Break | Networking**

**16:00-17:00**

Lane Xang Ballroom

**STIC Awards Ceremony and Closing Remarks**

Attendees will be invited back to the main room where the winners of the 2024 STIC pitch and research poster competitions will be announced. The 30-minute Awards Ceremony will be followed by a joint closing by all three Symposium partners.

***End of the Symposium***



## About the U.S.-ASEAN Smart Cities Partnership

The U.S.-ASEAN Smart Cities Partnership (USASCP) is a Department of State initiative that aims to promote sustainable, resilient, and inclusive solutions to advance urban quality of life in Southeast Asian cities. The USASCP works across urban sectors to address local challenges through knowledge-sharing and capacity building, systems modeling and data collection, research and innovation, catalytic financing, and private sector engagement. Since 2018, USASCP has committed over \$10 million to over 20+ projects in ASEAN member states to strengthen cities' capacities to improve critical urban services. A focus on climate action, circular economy, and net-zero innovation reinforces ASEAN cities to better address socio-economic and environmental challenges and global trends.

USASCP engagement strategies include U.S.-ASEAN city partnerships/pairings, U.S.-ASEAN academic pairings, ASEAN targeted pilot cities, ASEAN demand-driven alliances, innovation funding, and regional knowledge sharing. USASCP's whole-of-government approach works with U.S. government agencies, national labs, NGOs, subnational authorities and cities, university institutions, and private sector partners.



## About the STIC Program

Sponsored by the U.S. Department of State's Bureau of East Asian and Pacific Affairs Office of Multilateral Affairs (EAP/MLA) and implemented by Arizona State University (ASU), STIC aims to strengthen science, technology, and innovation cooperation between the U.S. and the ASEAN member states. This 3-year program (2022 - 2025) focuses on three major activities:

### **Science, Technology, and Innovation Policy Study Tour in Washington D.C.**

The STIC Study Tour convenes policymakers and technical experts from ASEAN-member states in Washington D.C. to participate in an intensive 1-week program to promote collective action around policy, best practices, and the adoption of shared standards and capacity-building strategies to foster cooperation in science, technology, and innovation in the ASEAN region.

### **STIC Education Portal**

In partnership with Coursera, the STIC Portal provides access to hundreds of upskilling and reskilling courseware developed by top universities in the United States that specifically align with the priority areas identified in the ASEAN Plan of Action on Science, Technology, and Innovation (APASTI 2016-2025). The courses available in the STIC Portal have been carefully curated and grouped into three learning tracks:

- **Science and Technology (S&T) Track**

The S&T Track includes 9 technical academies aligned with the priority areas identified by APASTI 2016-2025. Each year, participants will be invited to submit research concepts and 35 will be competitively selected to present at the annual conference where \$50k will be awarded in research grants.

- **Entrepreneurship and Innovation (E&I) Track**

The E&I Track has curated content to develop skills around ideation, prototyping, financial literacy, and business growth. Each year, 35 participants will be selected to join an online business venture incubator leading to the pitch competition during the annual conference where \$50k will be awarded in seed funding.

- **Industry Professional Credentials (IPC) Track**

The IPC Track includes content from companies like IBM, Google, Meta, and Microsoft. This track provides certification courses on skills that are in high demand such as cloud computing, AI, machine learning, cybersecurity, etc.

### **STIC Regional Conference**

Each year, the program will host a 2-day regional conference with keynote speakers and panel discussions with international subject matter experts, networking opportunities, roundtable discussions, collective projects, and advanced skill-building workshops. The conference will host a research seed grant competition and a business venture creation pitch competition. Annually, \$100,000 will be awarded to 4 research projects and 4 business ventures through a competitive process.



## About the RIT Circular Entrepreneurship Program

The project is funded by the United States Department of State in partnership with the U.S.-ASEAN Science, Technology and Innovation Cooperation (STIC) Program and the U.S.-ASEAN Smart Cities Partnership (USASCP). This program involves working with partners across the ten member states of ASEAN (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, the Philippines, Thailand, Singapore, Vietnam) to spread awareness and build capacity for circular economy (CE), and develop networks to disseminate circular entrepreneurship training as widely as possible across the region to promote the establishment of more circular businesses, accelerate sustainable economic development, and achieve environmental stability.

This 2-year project includes the following activities:

- 1) Engaging with partners such as business incubators, universities, and NGOs in ASEAN to gain a deep understanding of local challenges and opportunities.
- 2) Analyzing the status of electronic waste in terms of economic opportunity, environmental impact, and the governing regulatory framework, focusing on opportunities for new technology to supplant older, more wasteful technology.
- 3) Based on the input from the two previous activities and prior work on training circular entrepreneurs, develop a locally relevant circular economy entrepreneurship curriculum and an intensive in-person training program for entrepreneurs, making this training available to and through local partners.
- 4) Developing CE business models and sharing them with local partners, leading to the incubation of new CE businesses in local incubators, and helping existing businesses transition to CE technology and solutions.