

U.S.-ASEAN Smart Cities Partnership

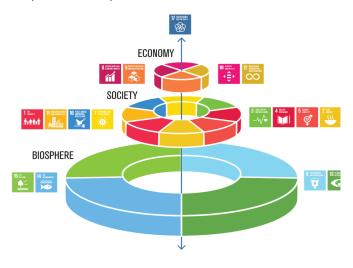
Sharing Expertise Between Cities to Benefit the People of ASEAN



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 enables ASEAN cities to better address socio-economic and environmental challenges and alobal 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.



Water Smart Engagements

- U.S.-ASEAN city pairing model promotes the delivery of essential water services and addresses issues of potable and wastewater management, non-revenue water, water reuse, storm water management, and climate resiliency.
- City partnerships include: • Johor Bahru - Washington, D.C.
 - Phuket Milwaukee, WI
 - Vientiene Hilsboro, OR
 - Cebu Miami Dade, FL
 - Ho Chi Minh City San Francisco, CA

Integrated Urban Services

- The U.S. National Renewable Energy Laboratory (NREL) promotes systems integration in the food, energy, and water sectors to increase resource efficiency and enhance climate resiliency and food security.
- Two pilot projects focused on agri-tech in Cagayan de Oro, Philippines, and Iskandar, Malaysia, will provide prototypes and lessons to be shared across the ASEAN region to advance resource-efficient, regenerative approaches to urban agriculture.

Smart Cities Business Innovation Fund

- The fund finances net-zero and low carbon solutions to urban challenges
- The program includes \$1 million total capitalization
- We received 72 proposals received totaling \$14 million in demand for financing
- The 6 winning proposals included:
 - Sustainable seaweed packaging
 - Product/furniture from re-purposed marine plastics
 - Solar panel recycling facility
 - 3D printed early warning stations
 - Carbon foot printing of corporate fleets
 - Agroecology education and creation of gardens in public schools

Circular Entrepreneurship

 Rochester Institute of Technology (RIT) is conducting an e-waste material flow analysis to identify circular entrepreneurship (CE) opportunities. RIT will develop CE curriculum and partner with incubators and universities to deliver this curriculum throughout the ASEAN region.

Energy Modeling

 USASCP funded the Department of Energy's Pacific Northwest National Laboratory to utilize the Global Change Assessment Model to gauge future demand energy, capacity of the grid to incorporate renewables, and the potential of GHG reductions in Kuala Lumpur and the Bangkok metro area.

Smart Sustainable Transport

- This program employs a U.S.-ASEAN city pairing model to strengthen policy, planning, and technology for smart mobility solutions, such as complete streets, multi-modal options, bus rapid transit, and streamlined payment systems.
- City partnerships include:
 - Jakarta Los Angeles, CA
 - Johor Bahru Portland, OR
 - Phnom Penh Boston, MA
 - Phuket Las Vegas, NV

Green Buildings Innovation

- The USASCP Partnership with University of North Carolina-Charlotte is developing building innovation education for future architects, city planners, designers, and engineers through capacity building and site visits with participants throughout the ASEAN region.
- Virtual classes will be offerred in
 - Life cycle assessment (LCA)
 - Building resiliency
 - Bio-climatic design

USASCP USASCP U.SASEAN Smart Cities Partnership	Pillars of	USASCP P https://www.usascp.org	rogramm	ing
Business Innovation	္စ္လွ Business	Circular Waste	Green Buildings	Circular
milovation	⁹⁸ Promotion &	$\mathcal{L} \ensuremath{arsigma}$ Management		°∽ Entrepre-
Fund (BIF)	Cybersecurity		Innovation	neurship
Climate finance for net- zero urban innovation	 Business engagements, reverse trade missions, and networking 	Professional Exchange Program	Capacity building and site visits; Building innovation education for future arch-	E-waste material flow analysis, circular entrepreurship, curriculum development and
	्र Department of Commerce:	Constructional Department of State/ Bureau of Educational	itects, planners, & engineers	training, hackathons
Department of Commerce: International Trade Association	International Trade Association Cherokee Nation Solutions	and Cultural Affairs Center for Liveable Cities (Singapore)	Government of Singapore University of North Carolina - Charlotte	Rochester Institute of Technology
Phnom Penh, Cambodia Tangerang, Indonesia Luang Prabang, Laos Bataan, Philippines Da Nang, Vietnam	ASEAN Region	ASEAN Region	ASEAN Region University Partners - Yogyakarta, Indonesia - Bangkok, Thailand - Ho Chi Minh City, Vietnam	ASEAN Region
∖ ∽ Integrated	Energy	🖉 📠 Research &	👝 Smart	😤 Water Smart
🔨 Urban	Modeling	E Innovation	🗖 🗮 Sustainable	Engagements
Services (IUS)			Transport	(WiSE)
Systems integration for resource efficiency and reuse in the food, energy, and water sectors	 Forecasting pathways to- wards carbon neutrality in cities and energy systems Department of State/ 	○ Urban Innovation ○ Vational Science Foundation U.SASEAN University	 Policy, planning, and technology solutions Department of Transportation 	Drinking water and wastewater treatment Department of State/OES Global Environment &
炎 Department of State/OES	Bureau of Energy Resources	Partners	U.SASEAN City Partners	Technology Foundation
National Renewable Energy Laboratory	Pacific Northwest National Laboratory	Jakarta, Indonesia Makassar, Indonesia Kuala Lumpur, Malaysia	Jakarta - Los Angeles, CA Johor Bahru - Portland, OR	Water Environment Federation
ASEAN Region (Peer Learning) Pilot Cities - Iskandar, Malaysia - Cagayan de Oro City, Philippines	Heim Kuala Lumpur, Malaysia Bangkok, Thailand	Manila, Philippines Singapore Thailand	Phnom Penh - Boston, MA Phuket - Las Vegas, NE	Cebu - Miami Dade, FL Ho Chi Minh Ciy - San Francisco, CA Johor Bahru - Washington D.C. Phuket - Milwaukee, WI Vientiene - Hillsboro, OR