ASEAN Smart Cities Network Monitoring & Evaluation Report 2025

Contents

List of Acronyms

ACTS	Automated Citywide Traffic Control System
ADB	Asian Development Bank
AI	Artificial Intelligence
Aus4ASEAN	Australia for ASEAN Futures Initiative
ASCAP	ASEAN Smart City Action Plan
ASPP	ASEAN Smart City Professional Program
ASUF	ASEAN Sustainable Urbanisation Forum
CCTV	Closed-Circuit Television
CHASE	Clean, Healthy, Advance, Safe, and Eco-friendly
DEPA	Digital Economy Promotion Agency of Thailand
GIS	Geographic Information System
IMAC	Iskandar Malaysia Analytics Centre
INFLOS	Integrated Flood and Monitoring Pump House System
IRDA	Iskandar Regional Development Authority
JICA	Japan International Cooperation Agency
KLUO	Kuala Lumpur Urban Observatory
LGU	Local Government Unit
MCDC	Mandalay City Development Committee
MRID	Manila Residents Identification
NPTDC	Nay Pyi Taw Development Committee
PDD	Punggol Digital District
PPCH	Phnom Penh Capital Hall
SCADA	Supervisory Control and Data Acquisition
SDP	Social Development Program
SME	Small and Medium-sized Enterprises
SNU	Seoul National University
SPLiT	*Sistem Pengurusan Lalulintas Pintar*
SRPA	Siem Reap Provincial Administration
SSDaP	Siem Reap Smart City Data Platform
UN-Habitat	United Nations Human Settlements Programme
USTDA	United States Trade and Development Agency
YCDC	Yangon City Development Committee

1| Introduction

Over the past year (October 2024 – September 2025), the ASEAN Smart Cities Network (ASCN) has continued to make significant progress in advancing the ASCN Smart City Action Plans, promoting the sharing of best practices, enhancing the capacity of national and local governments, developing knowledge products, and strengthening partnerships.

This report summarises the progress and key outcomes of the ASCN's work during the period, providing an overview of project implementation, regional activities, and strategic developments.

The number of ASCN smart city projects continues to expand, driven by both existing and new member cities. As of September 2025, the ASCN has a total of 134 smart city projects.

An overview of distribution of these projects across the ASCN's key focus areas is shown in **Exhibit 1**.

Exhibit 2 provides a snapshot of smart city implementation progress, as follows:

- **On-going:** 108 projects (81%) are currently in implementation. These are typically projects beyond the feasibility stage and include efforts to scale up or enhance existing initiatives.
- **Completed:** 18 projects (13%) have been successfully concluded.
- **Planning:** 8 projects (6%) are in the proposal development, pre-feasibility and feasibility stage.

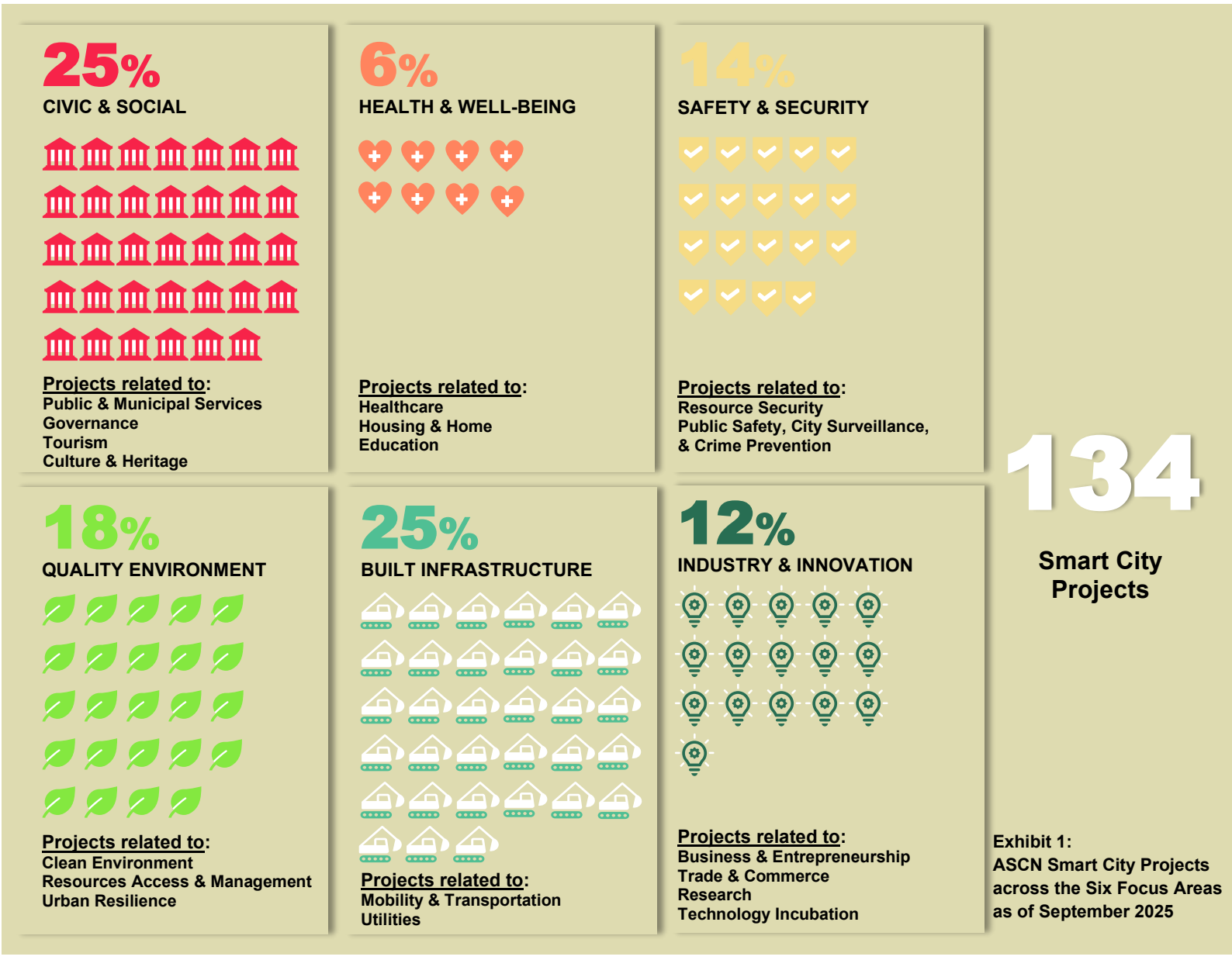
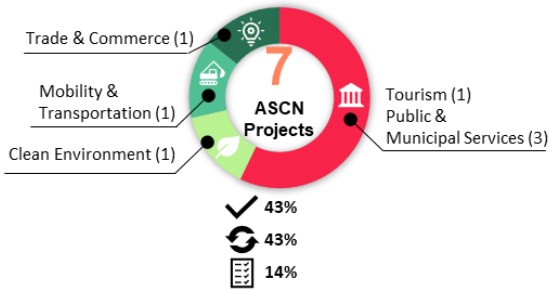


Exhibit 1:
ASCN Smart City Projects across the Six Focus Areas as of September 2025

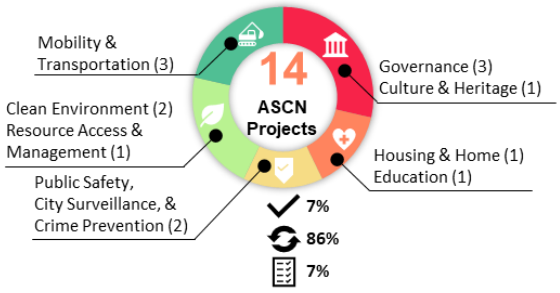
Exhibit 2: Overall Implementation Progress of ASCN Smart City Projects as of September 2025

Exhibit 3: Country Chart as of September 2025

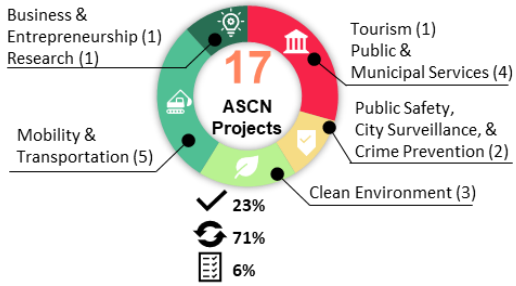
BRUNEI DARUSSALAM
Bandar Seri Begawan



MYANMAR
Mandalay | Nay Pyi Taw | Yangon

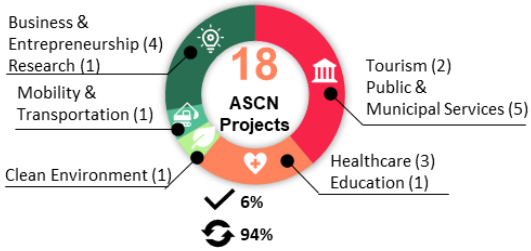


CAMBODIA
Battambang | Phnom Penh | Siem Reap | Sihanoukville City

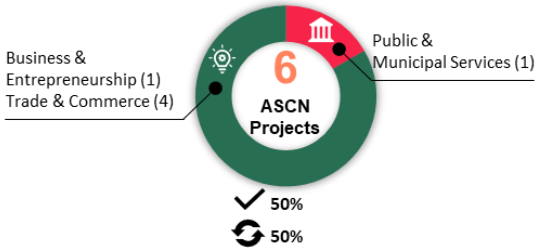


THE PHILIPPINES
Cebu City | Davao City | Manila City | Cauayan City

INDONESIA
Banyuwangi | Jakarta | Makassar | Sumedang



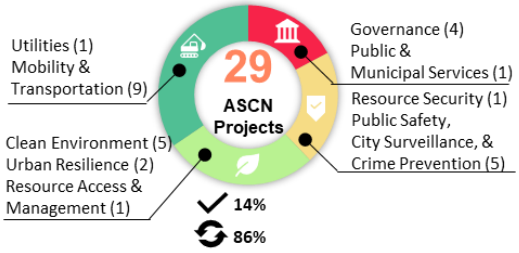
SINGAPORE
Singapore



LAO PDR
Luang Prabang | Vientiane

THAILAND
Bangkok | Chiang Mai | Chonburi | Khon Kaen | Phuket | Rayong

MALAYSIA
Ipoh | Johor Bahru | Kota Kinabalu | Kuala Lumpur
Kuching | Putrajaya | Seberang Perai



VIET NAM
Da Nang | Ha Noi | Ho Chi Minh City

Civic & Social
Health & Well-Being
Safety & Security
Quality Environment
Built Infrastructure
Industry & Innovation
Completed
On-going
Planning

A detailed breakdown of smart city projects by ASEAN Member States, including the distribution by focus areas and specific project types, is provided in the **Country Chart (Exhibit 3)**.

At the regional level, the ASCN has launched the ASEAN Smart City Financing Toolkit; spearheaded the convening of the ASEAN Sustainable Urbanisation Forum (ASUF) 2025, as well as a series of the Urban Planning for City Leaders Training Programme and Multi-Stakeholder Capacity Building Programme; convened a Smart City Expert Talk and Smart City Connect Exhibition back-to-back with the 8th ASCN Annual Meeting; driven the implementation of the short-term training and Master's Degree scholarships under the ASEAN Smart City Professional Program (ASPP); expanded membership from 26 pilot cities upon establishment to 35 cities as of September 2025; as well as actively participated in workshops/events that convened by/in collaboration with ASEAN's external partners.

The ASCN M&E Report 2025 comprises three main sections. Following the Introduction section, this Report presents the status of ASCN smart city projects by focus area with each ASCN city having one of their smart city projects highlighted. The full list of ASCN smart city projects can be seen in the Appendix. The last section is a summary of observations and recommendations.

2| Status of ASCN Smart City Projects

Civic & Social

The focus area of Civic and Social aims to achieve social cohesion, promote social equity, preserve and deepen appreciation for cities' cultural authenticity and heritage, promote the tourism sector, and improve the citizen experience. These involve enhancing good governance in the delivery of public and municipal services, decision making, transparency, accountability, and information accessibility. Civic and Social accounts for 25% of the overall ASCN projects. Siem Reap, Johor Bahru, Kuala Lumpur, Yangon, and Manila City are examples of ASCN Cities that have projects in this focus area.

Siem Reap, Cambodia

With the aim to optimise urban services in a unified operation system and encourage free data utilisation, the Siem Reap Provincial Administration (SRPA) launched the Siem Reap Smart City Data Platform (SSDaP) in September 2024.

Smart Tourism

Objective: To deliver a more convenient and on-demand tourism service, as well as develop diverse tourism resources towards more convenient and satisfactory tourism.

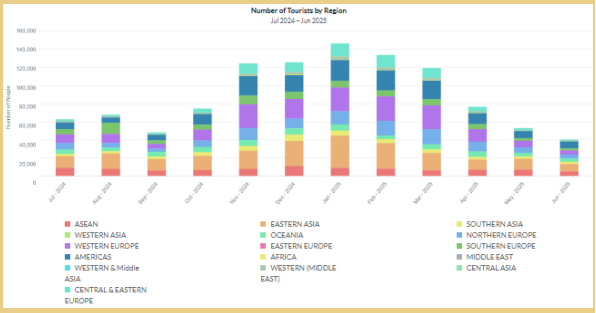


Exhibit 4: Tourism dashboard from SSDaP. © SRPA

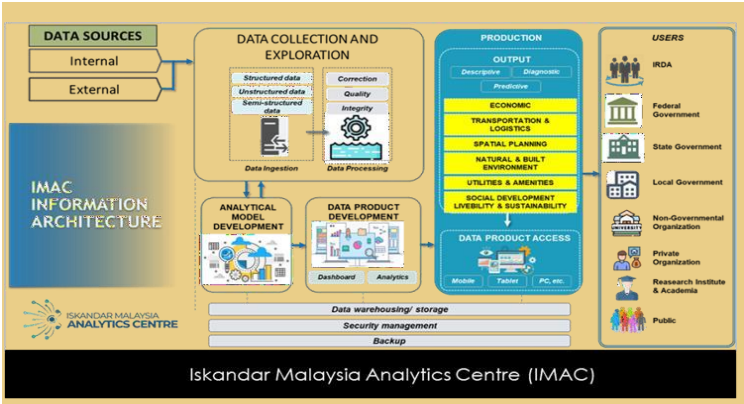
SSDaP seeks to collect data across sectors and share with government officials, businesses, and researchers to conduct policy planning, as well as improving and creating urban services.

The Japan International Cooperation Agency (JICA) has supported the development of SSDaP as well as provided capacity building for the officers of Siem Reap's Department of Tourism to collect and manage data digitally.

One of the data types provided by SSDaP is on tourism. It provides statistics on number of tourists by region, by country, and by month, as well as tourists arriving at the Siem Reap International Airport. SRPA continues to work on expanding SSDaP and promote its usage to the public.

Johor Bahru, Malaysia

The work to develop the system for Iskandar Malaysia Analytics Centre (IMAC) has commenced in December 2024. Driven by the Iskandar Regional Development Authority (IRDA) the project aims to establish a data centre to collate, update, analyse, manage and disseminate data and analysis to stakeholders – government and private alike – for making more informed and timely decisions.



Iskandar Malaysia Analytics Centre (IMAC)

Exhibit 5: *IMAC*

Objective: To ease decision-making in planning approval process and to improve government transparencies in tracking development, policies and targets.

Prior to the system development, IRDA completed the framework documents for IMAC which consists of business plan, data landscape review, as well as data management and policy with funding from the United Nations Development Programme. The development of system architecture framework and platform requirements for the IMAC core system was completed with funding from the United States Trade and Development Agency (USTDA). The project to develop IMAC system is expected to be completed in 2026.

Kuala Lumpur, Malaysia

The Kuala Lumpur Urban Observatory (KLUO) is envisaged to be a centralised database platform and city-level information sharing network, providing access to the citizens and exchange of data across ministries and agencies.

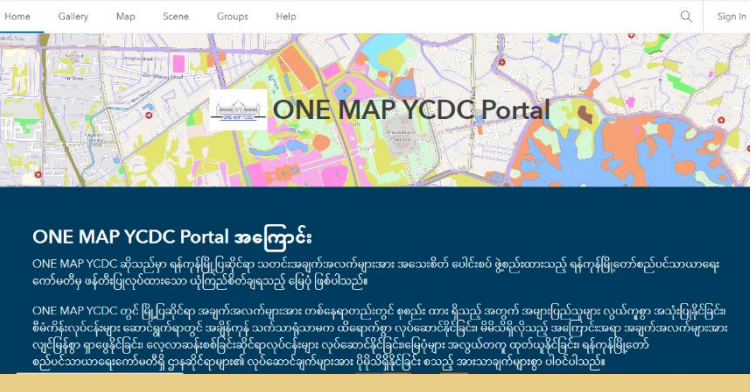
KLUO seeks to establish data analytics platform where it can integrate and comprehend multiple big data platforms to perform data analytics functions. Tender documentation is currently being prepared and is anticipated to be published in Q4 2025.

Yangon, Myanmar

Through the One Map Yangon initiative, Yangon City Development Committee (YCDC) has continued to integrate spatial and non-spatial data from all YCDC Departments towards improved transparency, coordination, data management and maintenance, and better services to the public. This has been done through establishing and maintaining the E-government platform, i.e. maps.ycdc.gov.mm .

Exhibit 6*: One Map Yangon*

Objective: To develop an integrated geospatial database platform with spatial and non-spatial data from all YCDC departments.



Now the Urban Planning Department of YCDC is analysing the urban blue and green areas in GIS by using One Map Yangon data. The urban green analysis will be utilised for evacuation shelter, and the urban blue area analysis will be utilised for supply of water to community in case of natural disasters. This research and analysis can support the government efforts in disaster management for preparedness and awareness.

Currently, One Map Myanmar and One Map Yangon are collaborating towards a national-level integration of geospatial data infrastructure.

Manila City, the Philippines

Exhibit 7: Official web and mobile application of GO! Manila made available.
© City of Manila

E-Government Services

Objective: To provide fast, secure, effective and convenient manner of various services to the public to access a full range of payments and financial services that will reach not only the constituents of the city but globally.

As part of its initiative to provide e-Government services, Manila City launched the Go! Manila as the official web and mobile application of the City Government of Manila that aims to provide fast, effective, and convenient services to the public. It serves as a platform for a more secure and cost-effective means to access a full range of payments and financial services of the City Government.

The mobile application has several features such as the City of Manila's Real Property and Business Tax Payments; wide range of facilities for payment of bills for government and private

entities; jobs portal; electronic social amelioration system; and e-wallet for loading, payment, sending, and receiving of funds.

Additional features of the application are currently being integrated in the system to include the Manila Residents Identification (MRID) in which data capturing of residents and issuance of physical MRID Card are ongoing.

The City Government is also implementing the Manila Inclusive Digital Transformation Project for an inclusive digitalisation and digitisation of transactions in all offices in the City using digital platforms and digital documents for internal transactions (payroll system, budget, procurement, accounting, digital signature). The City Government also aims to establish a Manila intranet to ensure interconnectivity of department/offices of the City of Manila using fibre optics and wireless connection. This initiative aims for efficient, faster, and more convenient public service delivery.

Health & Well-Being

Improving the quality and access to healthcare, housing, and education in a way that is innovative and resource-efficient are the core of Health and Well-Being focus area. Health and Well-Being accounts for 6% of the overall ASCN projects. Examples of ASCN projects fall under this focus area can be found in Makassar, Sumedang, Nay Pyi Taw, and Rayong.

Makassar, Indonesia

Makassar's homecare programme called *Dottoro'ta* or "our doctor" in Makassar language, had attended 6,973 patients in 2024 and has attended more than 2,800 patients this year as of July 2025. *Dottoro'ta* aims to improve the level of health independence of citizens and reduce impacts of diseases, reduce the number of patient referrals because patients are directly served at their homes, and increase awareness/knowledge of residents on healthy living behaviours.

Exhibit 8: Health services are provided to individuals/families at their homes to improve health of people independence and to reduce impacts of diseases. © City of Makassar

Dottoro'ta is operating 24 hours in collaboration with the community health centres (*Puskesmas*) and Makassar University Hospital. The programme is supported with 48 homecare electric ambulances that are equipped with tele-ultrasonography, tele-electrocardiography, and tele-spirometry. The mobile-app version of *Dottoro'ta* has been developed.

To advance and sustain *Dottoro'ta*, it would be necessary to have more specialists providing consultation for certain/specific diseases, increase technical knowledge and welfare of homecare workers, increase the use of information and communication technology in *Dottoro'ta*, as well as continue to disseminate the information on *Dottoro'ta* programme especially to the remote areas of Makassar, including the islands.

Sumedang, Indonesia

There are four elements to the project on "Jatinangor City of Knowledge", that are ongoing, namely: (1) Integrated Campus District; (2) Smart Infrastructure Development; (3) Multifunctional Plazas and Open Spaces; and (4) Digital Public Services.

Jatinangor City of Knowledge

Objective: To develop a vibrant, inclusive, and sustainable campus district that seamlessly integrates public spaces, promotes open access, and fosters community engagement.

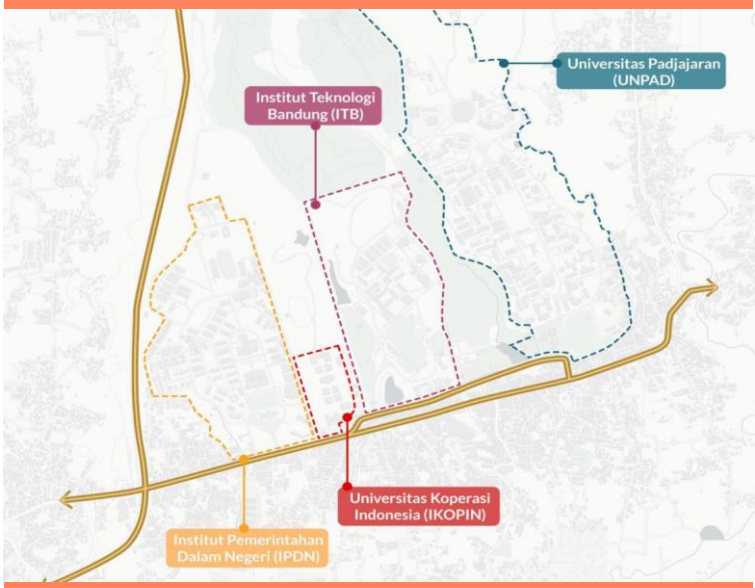


Exhibit 9: Jatinangor is known for hosting several major universities. The area accommodates around 60,000 students from these institutions, with an annual increase of approximately 12,000 new students. © Sumedang Regency.

Facilitated by the local authorities, deliberation is ongoing among the education institutions within Jatinangor towards realising an integrated campus district. To support public safety and accessibility efforts, CCTV cameras and free WiFi connection have been installed in the village offices and strategic locations surrounding the residential areas within Jatinangor. Furthermore, both improvement in the physical and digital public services has been ongoing through the establishment of a public service mall as well as the digital tools, i.e. E-Office Desa, Tahu Sumedang, and WhatsApp Bot.

Nay Pyi Taw, Myanmar

Nay Pyi Taw Development Committee (NPTDC), Nay Pyi Taw Council, and the Ministry of Construction have jointly completed the construction of 3,000 units of low-cost housing (Phase I), named as Thu Kha Taw Win Housing, including basic infrastructures. All the units have been allocated to public and government employees, including the retired government employees.

Building on the success of Phase I, Phase II was launched in 2024, aiming to construct 1,060 additional low-cost housing units. The Phase II construction has commenced in early 2025 with the initiation of foundation work. However, the major earthquake that struck Mandalay in March 2025 has caused significant disruption to the construction activities. The earthquake led to safety concerns regarding the structural integrity of the ongoing work, prompting a halt in construction activities.

Exhibit 10: ***Affordable and Low-Cost Housing***
Objective: To construct affordable and low-cost housing for the public and government employees, including the retired government employees.

Rayong, Thailand

Rayong has been developing a Public Health Monitoring and Care System that provides screening, monitoring, and control of individuals at risk for hypertension and diabetes. The system includes health data collection via a mobile application, targeting no fewer than 5,000 residents in the designated area over an extended period. Training programme has also been conducted for the village health volunteers in Rayong Province to train them on how to use digital health screening tools for real-time data collection, eliminating the need for manual data entry by the volunteers. The system is joint effort involving a wide range of stakeholders, including a Thai's start-up, the Digital Economy Promotion Agency (depa), and National Health Security Office. Collaboration with more public and private sector entities would be key to ensure sustainability of the initiative.

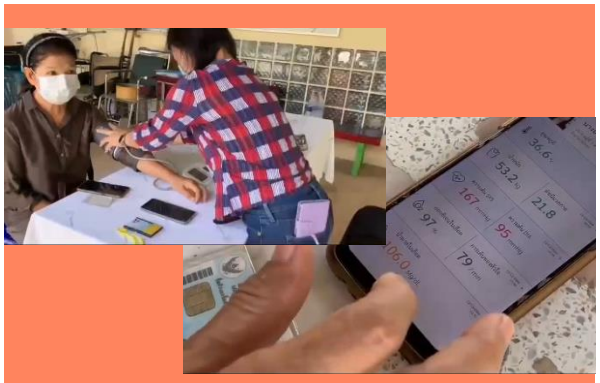


Exhibit 11: ***Public Health Monitoring and Care System with a Health Database***
Objective: To provide screening, monitoring, and control of individuals at risk for hypertension and diabetes, alongside health data collection via a mobile application.
Photo © depa

Safety & Security

The focus area of Safety and Security refers to the adoption of effective technologies to address urban security problems, such as, strengthening public safety, city surveillance and crime prevention, among others.

Safety and Security accounts for 14% of the overall ASCN projects. Sihanoukville City, Ipoh, Putrajaya, Cebu City, Chiang Mai, Da Nang, Ha Noi, and Ho Chi Minh City are examples of ASCN Cities that have projects in this focus area.

Sihanoukville City, Cambodia

As part of Preah Sihanouk Province's ongoing efforts to leverage modern technology towards create a safer, more secure urban environment for all residents and visitors, the government has installed 433 GPS cameras on upgrading 34 arterial and other critical roads in and around the city. All installed CCTV cameras are connected to the internet, enabling real-time data transmission to the central CCTV monitoring centre. The CCTV control room is equipped with 18 LED screen displays to receive and monitor live feeds from the cameras.

However, as the implementation progresses, several cameras have been reported as damaged or stolen and require repair or replacement to maintain a comprehensive surveillance coverage. At present, the contracted service provider continues to assist the police officers with the daily operation of the CCTV system.

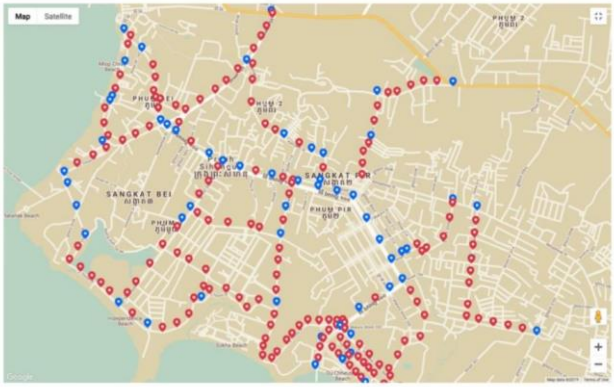


Exhibit 12: GPS cameras linked to a control centre monitor the public safety and security. © Sihanoukville City

Smart Security

Objective: To enhance the effectiveness and timeliness of policing including crime prevention, investigations and evidence gathering.

The Ministry of Post and Telecommunication of Cambodia is supporting the procurement of 100 Artificial Intelligence (AI)-powered street cameras. These advanced cameras will be installed throughout the city to strengthen monitoring capabilities, improve public safety, and help prevent incidents of violence.

Looking ahead, investment in human resources and capacity building is urgently needed to strengthen the skills and capabilities of operational staff, ensuring sustainable and effective CCTV management in the long run.

Ipoh, Malaysia

Improving the mobility of residents Ipoh has been the priority of Ipoh City Council towards realising the vision of a smart liveable, resilient, and sustainable city by 2030. Ipoh City Council has installed of AI-powered cameras and IOT sensors connected to the controller allows real-time analysis of all traffic data and optimal green time setting to be generated automatically.

Adaptive traffic flow systems have been used to make traffic planning more dynamic and responsive to real-time conditions, leading to smoother traffic movement and reduced travel time, as well as help lower carbon emissions. Ipoh City Council has also been gathering traffic data and analysing patterns to support better decision-making for both road management and town planning, ensuring that infrastructure meets the growing demands of the community.

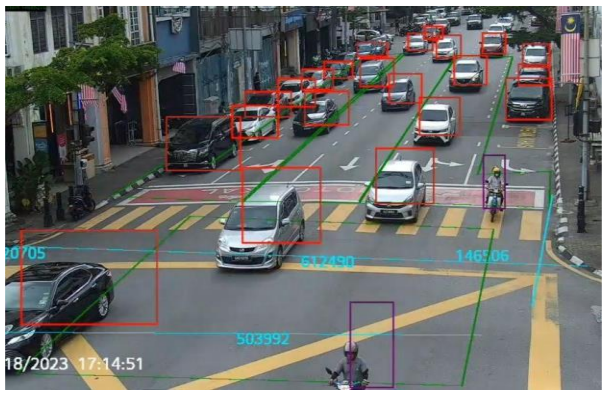


Exhibit 13: SPLiT at Jalan Sultan Idris Shah. © Ipoh City Council

SPLiT

Objective: To improve traffic management to address congestion, reduce carbon emissions, and enhance operational efficiency.

Putrajaya, Malaysia

Putrajaya Smart City Blueprint has been guiding the city in formulating policies, strategies, and initiatives towards the implementation of Putrajaya Smart City. One of the key initiatives that the city has been advancing is public safety enhancement through providing assistance to complainants according to their needs and send an enforcement team to assist them. Under the CHASE (Clean, Healthy, Advance, Safe, and Eco-friendly) Programme, Putrajaya Corporation has set a target to install 1,000 units of CCTV and 120 units of panic buttons by the year 2030. So far, 545 units of CCTV and 96 units of Panic Button have been installed.

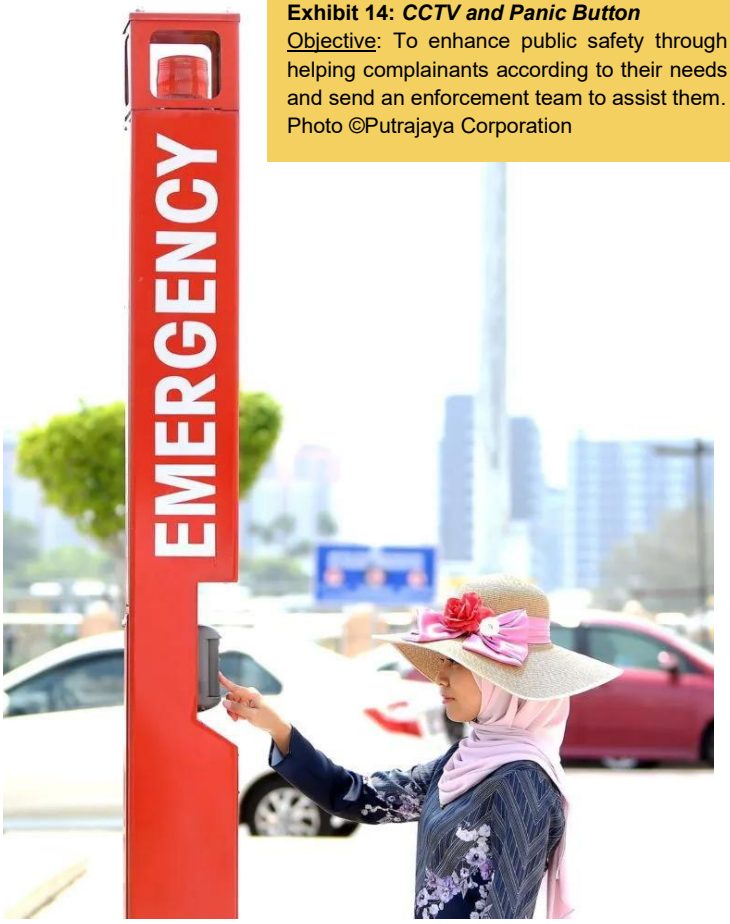


Exhibit 14: *CCTV and Panic Button*
Objective: To enhance public safety through helping complainants according to their needs and send an enforcement team to assist them.
Photo ©Putrajaya Corporation

Cebu City, the Philippines

Phase 1 of the Automated Citywide Traffic Control System (ACTS) has been completed and operational. This includes the completion of installation cameras for the 18 intersections in the uptown and midtown areas in Cebu City. The fully installed Phase 1 of ACTS adapts the timings of traffic lights based on real-time traffic conditions to optimise the flow of traffic. The construction of a Command Centre for the ACTS has also been completed.

Cebu City Government is reviewing the installed Phase 1 ACTS and the constructed command centre to ensure optimum operation by the Traffic Management Coordination Committee and Cebu City Traffic Office. Meanwhile, permit requirements are being fulfilled to complete the Phase 2 installation.

Chiang Mai, Thailand

The Wildfire Prevention & Solution Command Centre (PM2.5 DSS & FireD), developed by Chiang Mai Provincial Administrative Organisation, seeks to serve as a command hub, a database system, and a public gateway for information on the PM2.5 situation to support decision-making in biomass fuel management and reduce risks and impacts for the people of Chiang Mai.

Exhibit 15: *Wildfire Prevention & Solution Command Centre*
Objective: To establish a command and control for situational response, data-driven planning through forecasting and analysis, and public communication and empowerment through data accessibility.
Photo © Chiang Mai Provincial Administrative Organisation

The work of the command centre involves addressing complex data integration that requires aggregating real-time data from diverse sources (ground sensors, satellite imagery, weather models, management data from the FireD app) into a single, reliable decision support system.

The next phase of the project requires technology and infrastructure to install and integrate the dust sensor network across all 25 districts to enable complete real-time, localised data linkage. This will be implemented in

collaboration with Chiang Mai University as the provider of Dust Boy sensors and technical expertise. Equally important, training for local administrative organisation officials is needed to effectively utilise the FireD and CMDSS PM2.5 platforms for autonomous fuel management and public communication, ensuring the success of decentralisation.

Da Nang, Viet Nam

Da Nang has been advancing its intelligent operation centre to integrate different services and cater to various needs, as well as support analysis and decision-making. The intelligent operation centre has been providing complaint service, traffic monitoring service, order security monitoring service, social network monitoring service, information security monitoring service, and public service monitoring. Work continues to capture a wider range of services which include environmental warning monitoring, open data services, monitoring socio-economic indicators, natural disaster prevention, and monitoring garbage truck journeys.

Ha Noi, Viet Nam

Forming an intelligent operation centre in Ha Noi is expected to contribute the goal of becoming an interactive, transparent, efficient administration, providing services based on the needs of people and businesses. In this regard, an intelligent operation centre is sought to provide services for and contribute to, among others, monitoring security and safety, press and media, traffic management and crime prevention in public areas, data analytics, as well as, receiving and processing information on emergency, fire prevention, search and rescue, medical rescue.

Ho Chi Minh City, Viet Nam

Ho Chi Minh City has been investing in the development of an emergency response centre and enhancement of the efficiency of emergency call service which includes facilitating emergency cases reported through methods other than voice call, i.e. mobile app, Coordination with central-level ministries and agencies has been taking place to ensure compatibility and compliance with, among others, legal regulations and telecommunications policies.

Quality Environment

The focus area of Quality Environment aims to leverage technologies to, for example, maintain a clean and pleasant environment; promote the sustainable use of ecosystems, natural resources and biodiversity; and strengthen resilience against disaster risks and potential climate change impact. Quality Environment accounts for 18% of the overall ASCN projects. Battambang, Luang Prabang, Vientiane, Kuching, Seberang Perai, Mandalay, and Cauayan City are examples of ASCN Cities that have projects in this focus area.

Battambang, Cambodia

The work continues in upgrading the drainage and sewage system as a key aspect of Battambang's priority in mitigating flood. The main canal in the city is being rehabilitated to help store excess rainwater during the rainy season. Construction has been progressing for the wastewater treatment plant in both east and west sides of the Sanger River. Efforts are also underway to connect the drainage and sewage system to household in the city centre. The solid and liquid waste management projects in Battambang are implemented by the Ministry of Public Works and Transport of Cambodia and supported by the Asian Development Bank (ADB).

Exhibit 16: Main canal rehabilitation; drainage and sewage system construction; wastewater treatment plant construction; connecting sewage system to household. (Clockwise from top-left) © Battambang Provincial Hall

Solid and Liquid Waste Management
Objective: To establish sewage and wastewater management systems, including developing additional drain and sewage infrastructure.

Luang Prabang, Lao PDR

As part of its clean and safe environment effort, Luang Prabang is implementing the Urban Environment Improvement Investment Project that seeks to: (i) improve the quality and coverage of urban infrastructure and services; (ii) strengthen institutions and capacity to foster climate and disaster resilient development pathways; (iii) promote inclusive and gender-responsive urban planning; and (iv) enhance women's leadership and economic empowerment.

A Project Coordination Unit and Project Implementation Units have been established. Procurement of vehicles and essential tools to launch the first phase has been completed. Work plan for the first phase, as well as project boundaries have been defined for the implementation areas.

Clean and Safe Environment
Objective: To improve solid waste and wastewater management and promote smart climate and disaster risk solutions appropriate for the local context.

Exhibit 17: The project seeks to contribute to the City's goal to enhance well-being for around 104,500 residents and 1.3 million annual visitors by 2031.
© Luang Prabang City Administrative Office

Vientiane, Lao PDR

Vientiane's urban expansion poses challenges, such as increased traffic congestion, environmental degradation through increased pollution, and administrative complexity. With regards to the environmental protection, Vientiane Capital has been putting efforts to leverage technology to centralise and modernise its wastewater treatment.

The construction of wastewater treatment plant with an expected capacity of 52,000 m^3/day has been ongoing. The plant utilises biological purification technology, as well as sensors to form real-time community-level monitoring dashboards. So far, the project has restored 15% of domestic wastewater in the urban area, benefitting over 8,000 households.

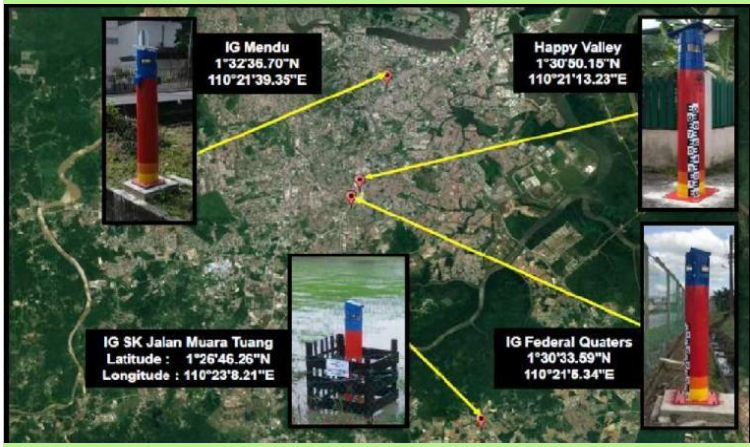
Exhibit 18: The wastewater treatment plant is expected to cover improve the local water quality indexes. © Department of Public Works and Transport of Vientiane Capital

Kuching, Malaysia

Kuching has upgraded and been operating 78 telemetry stations to obtain real-time data/information through various means of communication. The ability to provide real time rainfall and water level on-line enable close monitoring of the development of floods at critical flood prone areas and drought situation in the river basin. This will then allow for the proper, timely and smooth co-ordination of essential disaster relief operations and management to the affected areas.

Data and alerts are provided to the citizens via IHYDRO, an online Hydrological Telemetry System. With IHYDRO, users can be kept informed on the rainfall condition and river condition in their areas.

Integrated Flood Management and Response System
Objective: To create a comprehensive and real-time flood-related database through the upgrading critical rainfall/ water level telemetry-enabled stations for more accurate flood modelling and prediction to prevent and mitigate floods.



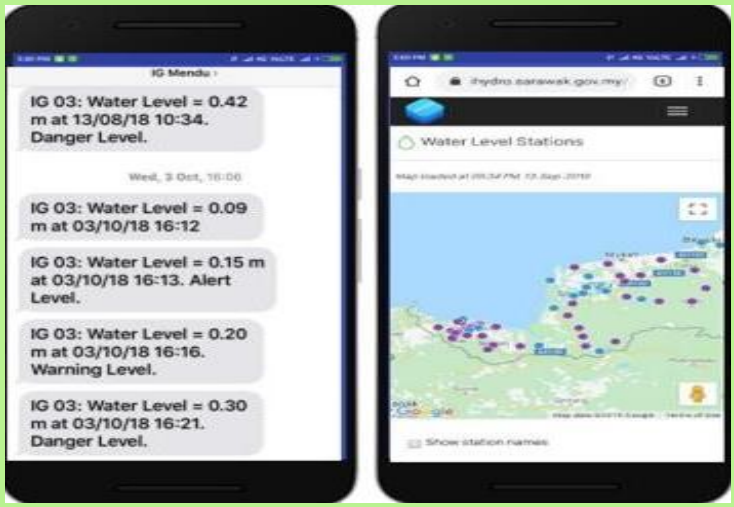


Exhibit 19: IHYDRO is an online platform for real-time flood and drought monitoring. © DID Sarawak

Seberang Perai, Malaysia

Seberang Perai has put in place measures to ensure continuous readiness for managing flood risks through the Integrated Flood and Monitoring Pump House System (INFLOS). The system involves monitoring 12 key flood hotspots and controlling 20 pump houses via the Supervisory Control and Data Acquisition (SCADA) system. The SCADA system features real-time monitoring and remote automatic

control of pump house operations, along with residential sensor monitoring for efficient and rapid flood management. Further investment in infrastructure is necessary to enhance the performance of INFLOS.

Mandalay, Myanmar

Since 2018, the Mandalay City Development Committee (MCDC) has been expanding and upgrading the drainage system with precast concrete to mitigate flash floods, to have an effective flood management system and to beautify the neighbouring environment with the provision of better drainage within the city area.

The main irrigation canal, Yay Ni Canal (4km in length) has been upgraded with precast concrete in 2019 and 2022. Since 2019, the old drains along the driveway within the city area have also been upgraded to improve the water quality and to have healthy environment by creating smooth water flow.

Exhibit 20: Drainage System Improvement in Mandalay © MCDC

Solid Waste and Wastewater Treatment

Objective: To ensure quality water supply through good solid waste and wastewater management.

Within the city area, all new construction and repairs of drainage systems, bridges, and box culverts have been done using precast concrete. Presence of underground cables and water supply pipelines has posed some challenges to the drainage improvement effort. Nevertheless, MCDC has been committed to continuously improving the drainage system. Approximately 104 km of drain length have been constructed using precast concrete between 2021 - 2025.

Cauayan City, the Philippines

As part of the effort in building a green and resilient city through resource-efficient and promote circular economy, the Local Government Unit (LGU) of Cauayan City has been focusing on developing Material Recovery Facility and introducing a smart waste collection system with route optimisation and sensor-enabled bins. This initiative seeks to synergise with the implementing a city-wide composting, recycling, and waste segregation initiatives, as well as, promoting education campaigns and incentive systems for sustainable practices.

Built Infrastructure

The focus area of Built Infrastructure advocates investment in infrastructure to deliver multiple benefits across various stakeholders, whether private or public. These can include investing in utilities such as energy, mobility and transportation, as well as buildings and construction.

Built Infrastructure accounts for 25% of the overall ASCN projects. Kota Kinabalu, Davao City, Bangkok, Chonburi, Khon Kaen, and Phuket are examples of ASCN Cities that have projects in this focus area.

Kota Kinabalu, Malaysia

To improve public transport accessibility, punctuality, and coverage, Kota Kinabalu has been developing the Stage Bus Transformation System which adopts a more efficient 'hub and spoke' network concept for people to arrive at their destinations and its operations are monitored through electronic and modern systems. Operator has been appointed and in the contract preparation stage. Bus service was scheduled to launch in September 2025.

Davao City, the Philippines

Efforts continue to modernise Davao City's public transport services under the Davao Public Transport Modernisation Project. This entails transforming the existing jeepney-driven public transportation system into a higher capacity bus system, consisting of a core bus network of over 100km and a feeder network of over 500km. The project has been supported by the ADB, Government of the Philippines, LGU of Davao.

To promote a sustainable and commuter-friendly transport system, Davao City is developing an intelligent transport system, garage and Operations Command Centre, as well as bus fleet management system.

Exhibit 21: Intelligent Transport System, Garage and Operations Command Center, Bus Fleet Management System (Clockwise from left). © Davao City

Intelligent Transportation and Traffic Systems with Security

Objective: To enhance transportation and traffic management capabilities by leveraging on the latest technological innovations available and ensuring inclusivity and security.

The initiative to modernise Davao City's public transport systems has been planned and implemented in a manner that takes into account the socio-economic impacts and risks of implementing the project. The Davao Bus Information System has been also developed to serve as a web-based application for the Social Development Program (Davao Bus-SDP) provided to the affected operators, drivers, and their beneficiaries, Davao Bus-Grievance System for concerns, complaints, incidents, damages or conflicts resulting from the Davao Bus project, as well as Davao Bus-SMS for administrator's information dissemination tool. Furthermore, training has been ongoing for affected beneficiaries of SDP.

Bangkok, Thailand

Krung Thep Aphiwat Central Terminal Station or Bang Sue Grand Station has been expanding its service by surrounding area as part of the efforts towards achieving the vision of Liveable Innovation City, connecting Thailand and the world. These efforts are in line with Bang Sue Smart City Action Plan that will guide the implementation of integrated development in Bang Sue Area. Bang Sue

Smart City Action Plan is currently being developed with expected completion in 2025.

Bang Sue Grand Station is a central station connecting various rail transport systems, including commuter trains, long-distance trains, and future high-speed trains. The construction of the high-speed railway to the northeastern part of Thailand (first section) has been progressing and is expected to be completed in 2027. This high-speed railway will link with high-speed train from the southern of China to Lao PDR and to Thailand. Meanwhile, the contract on the high-speed railway linking Don Mueang- Suvarnabhumi - U-Tapao airports is being reviewed for approval. The construction process would begin immediately after the contract signing, with the goal of opening for service in 2030-2031.

Exhibit 22: Bang Sue Grand Station.
© Office of Transport and Traffic Policy and Planning

Chonburi, Thailand

Government of Thailand has partnered with AMATA Corporation PCL, the industrial city developer for Chonburi AMATA Smart City, in promoting renewable energy, as well as, developing smart energy infrastructure and systems. An initiative that has been under planning and feasibility assessment is on the development of hydrogen energy as fuel for forklifts in the factories in Chonburi AMATA Smart City area.

The business model and implementation plan for the hydrogen energy project are under development. The "research before demonstration" has been ongoing since 2024 to identify the ideal method to supply and distribute hydrogen to customer. The feasibility assessment is expected to complete this year and to be followed by agreement signing. The demonstration period would then commence and is expected to last until 2028. Once hydrogen fuel gains wider adoption among users, the consortium will continue exploring business opportunities to commercialise the product based on customer demand.

Challenges to the implementation relate to the high price of hydrogen fuel, high price of vehicle using hydrogen fuel, sensitive nature of the hydrogen for transportation, and achieving economy of scale for the project.

Khon Kaen, Thailand

Khon Kaen Municipality has been working to develop a tram system in the city towards reducing social inequality and improving the quality of life.

The detailed design of Khon Kaen Tram has been completed. The project will be managed by local administrative organisations and is seeking private investment. Discussions are ongoing regarding the use of land, and an Environmental Impact Assessment report is being prepared.

Khon Kaen Tram
Objective: To improve efficiency, reduce unnecessary costs, and enhance service quality, thereby supporting the long-term viability of operators and providing reliable transportation options for the public.

Exhibit 23: Khon Kaen Tram network is planned to have 26 kilometres of track. © Khon Kaen Municipality

The experience managing Khon Kaen City Bus highlighted the potential of technology to address the challenges faced by the public transportation operators. In this regard, Khon Kaen Tram seeks to leverage GPS and fare collection data to analyse passenger behaviour, enabling route adjustments that match demand and reduce idle runs. Khon Kaen Tram also aims to integrate an AI-powered announcement system provides stop information in both English and the local language, benefiting visually impaired passengers. Additionally, a live map and timetable will be made available to enhance travel planning.

Phuket, Thailand

To facilitate comfortable and convenient movement for tourists and residents alike, Phuket has continuously developed its transport sector.

Phuket Smart Mobility
Objective: To enhance public transportation network and achieve seamless mobility.

Exhibit 24: Phuket One Map integrates all public transport routes covering both air-conditioned and non-air-conditioned bus. © depa

The EV Bus system, by the Phuket City Development Company and Phuket Administrative Office, provides smart bus services. The Phuket One Map integrates all public transport routes for Phuket local people and tourists. Meanwhile, a cashless fare payment system and joint tickets have been developed to increase convenient ride for Phuket smart bus system and seamless ride.

Industry & Innovation

The focus area of Industry and Innovation pertains to encouraging industries and businesses to capitalise on new technologies, using innovation as a catalyst to build competitive advantages and transform processes. Industry and Innovation accounts for 12% of the overall ASCN projects. Bandar Seri Begawan, Phnom Penh, Banyuwangi, Jakarta, and Singapore are examples of ASCN Cities that have projects in this focus area.

Bandar Seri Begawan, Brunei Darussalam

The Digital Payment Hub (DPH), now rebranded as *tarus*, was initiated in 2021 and officially launched Phase 1 on 12 March 2025. *tarus* is an instant fund transfer service which enables secure, instant, and cost-effective account-to-account fund transfers and payments available around the clock across local participating banks and e-wallets, alongside the roll-out of a national QR code for payments.

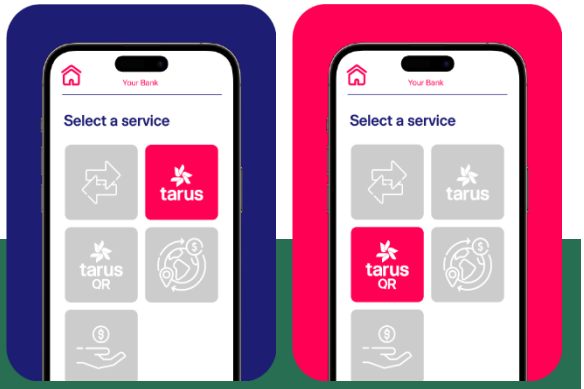
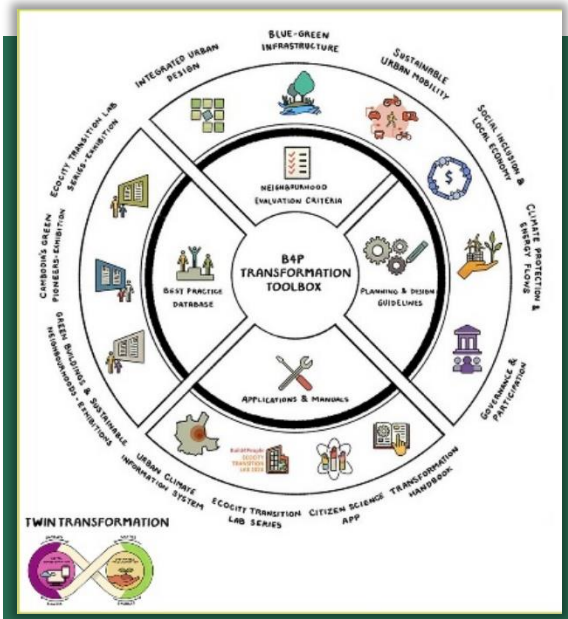


Exhibit 25: *Digital Payment Hub*
Objective: To implement a Fast Payment System (Instant Payment System) to enable secure, instant, and cost-effective account-to-account fund transfers and payments available around the clock across local participating banks and e-wallets, alongside the roll-out of a national QR code for payments. © tarus

Currently, the participants providing end-user solutions for *tarus* (i.e. transfers via Alias lookup) include Beep Digital Solutions, Bank Islam Brunei Darussalam (BIBD) At-Tamwil, Datastream Digital, Perbadanan Tabung Amanah Islam Brunei (TAIB), and Progresif. With incoming participants including Baiduri Bank, BIBD, and Pocket (ThreeG Media). The National QR standard (tarusQR) has been approved and issued by the Brunei Darussalam Central Bank to support QR payment interoperability between participating banks and e-wallet providers.

Phnom Penh, Cambodia

Further to the series of Ecocity Transition Labs conducted by Phnom Penh Capital Hall (PPCH) during the period of 2020-2024, the Build4People (B4P) project has produced a PPCH-B4P Transformation Toolbox prototype. The Ecocity Transition Labs, which were held with the support from the German Federal Ministry of Education and Research, sought to provide a multi-stakeholder dialogue platform to deliberate on current urban development issues in Phnom Penh. Meanwhile, the PPCH-B4P Transformation Toolbox seeks to serve as a comprehensive digital planning instrument and eventually as an online interactive and participatory learning platform that enables evidence-based data-driven decisions. The B4P project has entered an implementation phase where the Phnom Penh Capital Administration will utilise the Transformation Toolbox to help advance its sustainable goals through connecting its green and smart city strategies.



Build4People
Objective: To achieve a transformative shift in the current development path of Phnom Penh and improve the urban quality of life of Phnom Penh citizens through research.

Exhibit 26: Transformation Toolbox is an output of the Ecocity Transition Labs. © Build4People

Banyuwangi, Indonesia

Banyuwangi Regency Government with its flagship programme called *Jagoan Banyuwangi*, or Banyuwangi Champs, has been consistent in providing a holistic approach to support small and medium-sized enterprises (SMEs) in the areas of entrepreneurship (*Jagoan Bisnis)*, digital (*Jagoan Digital)*, and agriculture (*Jagoan Tani*).

Spearing Industrial Growth through Education
Objective: To collaborate with private entities to provide the youth with knowledge in e-commerce and online trading through the inclusion of customised IT modules in the skills curriculum.

Exhibit 27: Since 2021, around 75 young talents participated in Jagoan Digital every year. © Banyuwangi

Through *Jagoan Digital*, young entrepreneurs receive trainings on, among others, foundational programming, algorithms, UI/UX development, HTML & CSS, and no-code development for those without advanced coding expertise. The programme also includes a hackathon that allows participants to compete in developing technology solutions within a short timeframe. As part of the programme, a mentorship is provided for participants to receive guidance directly from technology professionals to further hone their technical skills and strengthen their digital business strategies. Participants are further selected to be given access to seed funding, internship programme, an investor network to develop technology start-up ideas into sustainable businesses, as well as an official certificate from *Badan Siber dan Sandi Negara* / the National Cyber and Crypto Agency.

Jakarta, Indonesia

Since the launch of JakPreneur in February 2020 until June 2025, 405,052 MSMEs from various business sectors have registered with JakPreneur, allowing them to tap on a wide range of support and facilitation. Aiming to empower the MSMEs in Jakarta, Jakarta Provincial Government has established JakPreneur as a platform for innovation, facilitation, and collaboration for MSME development through creating entrepreneurial ecosystem, involving start-ups, educational institutions, and financing institutions.

JakPreneur offers various support to MSMEs covering trainings, licensing, marketing, financial reporting, as well as capital facilities. Comprehensive assistance has been given to MSMEs to navigate the licensing and permitting process. This includes the curated information available on JakPreneur website and facilitation in obtaining the MSME permit or Business Identification Number, Home Industry Food Production certificate, Halal certificate, and Intellectual Property Rights certificate.

JakPreneur
Objective: To encourage economic growth through supporting the MSMEs in Jakarta for long-term cooperation by providing training and mentoring to gain capital which could be accessed through digital platforms.

Exhibit 28: A wide range of support offered by JakPreneur to the MSMEs. © JakPreneur

More than 200 JakPreneur Bazaars promoting MSMEs from various industries have already been held from the beginning of 2024 to June 2025.

Through JakPreneur, Jakarta Provincial Government continues to explore partnership and collaboration to enable credit programmes without collateral, incentivise the financial services sector to offer funding for the MSMEs, as well as to bring in experts and mentors to sustain the training programmes.

Singapore

Singapore's Smart Nation 2.0 aims to use technology more effectively to improve citizens' lives and is guided by three key goals, namely Trust, Growth, Community.

Through developing the Punggol Digital District (PDD), Singapore aims to build a smart and sustainable business district that offers new operating and service delivery concepts. A Smart City Operating System is being developed to enable district level facility management to achieve maintenance and manpower cost savings, as well as achieve resource optimisation.

PDD has begun opening progressively from Q3 2024. The Open Digital Platform has been developed to serve as the district's digital backbone, bringing together various systems to optimise building management and resource utilisation. Co-developed by GovTech and Jurong Town Corporation (JTC), this platform not only streamlines operations but also transforms PDD into a living laboratory for experimentation and innovation. With this rollout, data collection will commence to demonstrate the value of system integration, operational optimisation, and innovation enablement.

Punggol Digital District

Objective: To build a smart and sustainable business district that offers new operating and service delivery concepts.

Exhibit 29: PDD comprises JTC Business Park and SIT Campus. © MDDI Singapore

3| Observations and Recommendations

Besides advancing the implementation of smart city projects of the respective ASCN Cities, the ASCN has established itself as a platform for exchange, strengthened knowledge exchange, and deepened cooperation with ASEAN Dialogue Partners and other external partners.

Successful Platform for Exchange

The ASCN continues to serve as a vital platform for peer-to-peer learning, public-private dialogue, and the sharing of best practices, fostering a collaborative ecosystem for smart and sustainable urban development in ASEAN. Under the Chairmanship of Malaysia, the ASCN held the 8th ASCN Annual Meeting on 9 September 2025 back-to-back with the Smart City Expert Talk held on 10 September 2025. The Smart City Expert Talk discussed ways to strengthen collaboration between the ASEAN and private sectors, the development of strategies for effective governance and investment, and actionable recommendations aimed at scaling smart city projects. The ASCN has also supported the convening of the ASUF 2025 through the concept development, resource mobilisation (as part of the project on *Accelerating the Implementation of the ASEAN Sustainable Urbanisation Strategy - Phase II* ("ASUS Project-Phase II")), as well as participation and speaking roles.

Expansion of Partnerships

The ASCN has successfully strengthened its engagement with ASEAN Dialogue Partners and external stakeholders, which has translated into concrete support and knowledge sharing, enhancing the network's overall capacity and reach. For example, at the invitation of the New Zealand Ministry of Foreign Affairs and Trade, representatives of the ASCN participated in the event on *ASEAN Smart Cities Network Showcase of New Zealand Initiatives* in November 2024. The Showcase provided the opportunity for the delegates to share on their experience in advancing their respective smart city initiatives as well as learn from and engage with representatives from New Zealand Councils, international speakers, and other participants with relevant expertise.

Development of Capacity and Knowledge

Through targeted training programmes and the development of practical toolkits, the ASCN is building a sustainable suite of initiatives to enhance knowledge and capacity in implementing smart and sustainable urban projects. The ASCN launched the ASEAN Smart City Financing Toolkit in November 2024. Supported by the Australia for ASEAN (Aus4ASEAN) Futures Initiative with the technical assistance from Access Partnership, The Toolkit has now been made available for policymakers and key stakeholders in ASEAN to access knowledge and deepen understanding of the financing options available for various types of smart city initiatives in ASEAN Member States as well as to identify strategies that suit the needs of smart city projects, through the sharing of global best practices via case studies.

Under the ASUS Project-Phase II, the organisation and conduct of the series of Urban Planning for City Leaders Training Programme and Multi-Stakeholder Capacity Building Programme for the participating countries have benefited from the strong leadership of the National Representatives and collaboration with the Chief Smart City Officers of ASCN. The ASUS Project – Phase II is supported through the Aus4ASEAN Futures Initiative, with the technical assistance from the United Nations Human Settlements Programme (UN-Habitat).

In its third-year implementation, the ASPP has conducted the 3rd batch of ASPP short-term training, as well as commenced the ASPP Master's Degree Course Spring Fall 2025 on topics related to data-driven smart city planning at Seoul National University (SNU) supported through the ASEAN-Korea Cooperation Fund. As of 2025, a total of 144 local government representatives and urban practitioners have benefitted from the ASPP short-term training. Meanwhile, a total of 40 local government representatives and urban practitioners have been undergoing a Master's Degree Course at SNU with some of them already graduating early next year.

With the above efforts, it is important to enhance partnership momentum by continuously and proactively engage with existing and new partners to secure sustained technical and financial support for capacity building and project implementation. Moreover, continued coordination will be essential to ensure the timely and successful completion of all deliverables under various ASCN projects towards developing new phases of these projects.

There may be merits to systematically document, share, and scale the successful stories and lessons learnt from the smart city projects across all ASCN members.

Led by Malaysia as the Chair of ASCN this year, ASCN has developed and adopted an ASEAN Smart City Action Plan (ASCAP) for 2026-2035. The implementation of the ASCAP 2026-2035 shall leverage on the efforts and partnerships made thus far, towards supporting the realisation of the ASEAN Community Vision 2045.

Appendix

A. List of ASCN Smart City Projects that are Ongoing and under Planning across the Six Focus Areas

No.	Country	City	Project	Focus Area
1.	Brunei Darussalam	Bandar Seri Begawan	Revitalisation of Kampong Ayer (Water Village)	Civic & Social
2.		Bandar Seri Begawan	Digital Identity	Civic & Social
3.		Bandar Seri Begawan	Gov.bn	Civic & Social
4.		Bandar Seri Begawan	Bus Passenger Information System	Built Infrastructure
5.	Cambodia	Battambang	Urban Street and Public Space Management	Built Infrastructure
6.		Battambang	Solid and Liquid Waste Management	Quality Environment
7.		Phnom Penh	Phnom Penh Walk Way	Built Infrastructure
8.		Phnom Penh	Phnom Penh Public Bus Service	Built Infrastructure
9.		Phnom Penh	Phnom Penh Smart City Hub	Industry & Innovation
10.		Phnom Penh	Build4People	Industry & Innovation
11.		Siem Reap	Smart Tourism	Civic & Social
12.		Siem Reap	Smart Security	Safety & Security
13.		Siem Reap	Data Platform	Civic & Social
14.		Siem Reap	Government Internal Document Tracking	Civic & Social
15.		Siem Reap	Air Quality Sensors Installation	Quality Environment
16.		Sihanoukville City	Smart Security	Safety & Security
17.		Sihanoukville City	Smart Parking	Built Infrastructure
18.	Indonesia	Banyuwangi	Spearing Industrial Growth through Education	Industry & Innovation
19.		Banyuwangi	Digital Public Service Mall	Civic & Social
20.		Banyuwangi	Caring for Stunting	Health & Well-Being
21.		Banyuwangi	Sustainable Waste Management	Quality Environment
22.		Jakarta	JakPreneur	Industry & Innovation
23.		Jakarta	JakLingko	Built Infrastructure
24.		Jakarta	JAKI	Civic & Social
25.		Jakarta	Jakarta Smart City Goes to School	Civic & Social

No.	Country	City	Project	Focus Area
26.		Jakarta	Living Lab	Industry & Innovation
27.		Makassar	Smart Health Care	Health & Well-Being
28.		Makassar	Smart E-Tax	Civic & Social
29.		Makassar	Tourism Alleys	Civic & Social
30.		Makassar	Makassar Virtual Economic Centre	Industry & Innovation
31.		Makassar	Makassar Incubator Centre	Industry & Innovation
32.		Sumedang	Jatinangor City of Knowledge	Health & Well-Being
33.		Sumedang	E-Office Desa	Civic & Social
34.		Sumedang	Integrated Stunting Intervention	Health & Well-Being
35.	Lao PDR	Luang Prabang	Restoration of Wetlands for Green Spaces	Quality Environment
36.		Luang Prabang	Construction of Concrete Roads for Communities	Built Infrastructure
37.		Luang Prabang	Clean and Safe Environment	Quality Environment
38.		Vientiane	Integrated Vehicle Management and Transportation	Quality Environment
39.		Vientiane	Vientiane Sustainable Urban Transport Project (VSUTP)	Built Infrastructure
40.		Vientiane	Wastewater Treatment System	Quality Environment
41.		Vientiane	Vientiane Integrated Urban Information GIS-based Opendata (VirGo) Platform	Civic & Social
42.	Malaysia	Ipoh	*Sistem Pengurusan Lalulintas Pintar* (SPLiT)	Built Infrastructure
43.		Ipoh	Smart Surveillance System-Smart CCTV	Safety & Security
44.		Ipoh	Air Quality Monitoring System	Quality Environment
45.		Ipoh	Ipoh Integrated Operation Center	Safety & Security
46.		Johor Bahru	Iskandar Malaysia Analytics Centre	Civic & Social
47.		Johor Bahru	Integrated Smart Mobility Programs	Built Infrastructure
48.		Kota Kinabalu	Integrated Public Transport System	Built Infrastructure
49.		Kota Kinabalu	Integrated Solid Waste Management	Quality Environment
50.		Kota Kinabalu	Smart New Township and Smart Water Management	Quality Environment
51.		Kota Kinabalu	Kota Kinabalu Command Centre	Safety & Security
52.		Kuala Lumpur	Kuala Lumpur Urban Observatory	Civic & Social
53.		Kuala Lumpur	GoKL Journey Planner	Built Infrastructure

No.	Country	City	Project	Focus Area
54.		Kuala Lumpur	Smart Bin	Quality Environment
55.		Kuala Lumpur	Bicycle Friendly City	Quality Environment
56.		Kuching	Integrated Smart Traffic Light System	Built Infrastructure
57.		Kuching	Integrated Flood Management and Response System	Quality Environment
58.		Kuching	Sarawak Integrated Operation Centre	Built Infrastructure
59.		Kuching	Smart Parking	Built Infrastructure
60.		Putrajaya	Smart Traffic Light	Built Infrastructure
61.		Putrajaya	Putrajaya Urban Observatory	Civic & Social
62.		Putrajaya	Solar System	Built Infrastructure
63.		Putrajaya	Electric Vehicle Charging Stations	Built Infrastructure
64.		Putrajaya	CCTV and Panic Button	Safety & Security
65.		Seberang Perai	Integrated Flood and Monitoring Pump House System	Quality Environment
66.		Seberang Perai	Seberang Perai Command Centre	Safety & Security
67.	Myanmar	Mandalay	Traffic Congestion Management	Built Infrastructure
68.		Mandalay	Solid Waste and Wastewater Treatment	Quality Environment
69.		Mandalay	On-Grid Solar System at the Water Pumping Stations	Quality Environment
70.		Mandalay	Public Parks	Quality Environment
71.		Nay Pyi Taw	Affordable and Low-Cost Housing	Health & Well-Being
72.		Nay Pyi Taw	Knowledge Hub	Health & Well-Being
73.		Nay Pyi Taw	Smart Street Lighting	Safety & Security
74.		Nay Pyi Taw	Safe City	Safety & Security
75.		Nay Pyi Taw	Electric Vehicle System Development	Built Infrastructure
76.		Nay Pyi Taw	One Map Myanmar	Civic & Social
77.		Yangon	Conservation of Downtown Yangon	Civic & Social
78.		Yangon	Transit Oriented Development in Hlaing Thar Yar Township	Built Infrastructure
79.		Yangon	One Map Yangon	Civic & Social
80.	Philippines	Cauayan City	Waste-Wise Cities for Sustainability	Quality Environment
81.		Cebu City	Cebu City Bus Rapid Transit	Built Infrastructure
82.		Cebu City	Automated Citywide Traffic Control System	Safety & Security

No.	Country	City	Project	Focus Area
83.		Davao City	Converged Command and Control Center	Safety & Security
84.		Davao City	Intelligent Transportation and Traffic Systems with Security	Built Infrastructure
85.		Davao City	Stormwater Management System	Quality Environment
86.		Manila City	Command Center Upgrade	Safety & Security
87.		Manila City	E-Government Services	Civic & Social
88.	Singapore	Singapore	Punggol Digital District - Smart Facility Management	Industry & Innovation
89.		Singapore	Woodlands North Coast - Autonomous Delivery Robot	Industry & Innovation
90.		Singapore	Marine Digital Twin	Industry & Innovation
91.	Thailand	Bangkok	Bang Sue Smart City	Quality Environment
92.		Bangkok	Bang Sue Grand Station	Built Infrastructure
93.		Chiang Mai	Wildfire Prevention and Solution Command Centre	Safety & Security
94.		Chiang Mai	Mae Kha Canal Development	Quality Environment
95.		Chiang Mai	Smart Tourism and Living: Nimman Road & Chiang Mai University Campus	Industry & Innovation
96.		Chiang Mai	Mea-Hia Smart City	Civic & Social
97.		Chonburi	Smart Data Utilisation for Smart Microgrid Development	Built Infrastructure
98.		Chonburi	Solar Energy (Solar Rooftop and Floating Solar)	Built Infrastructure
99.		Chonburi	Hydrogen Energy (Hydrogen Forklift)	Built Infrastructure
100.		Khon Kaen	Kaen Nakhon Tram	Built Infrastructure
101.		Khon Kaen	Khon Kaen Smart Bus	Built Infrastructure
102.		Khon Kaen	Knowledge Governance Token	Industry & Innovation
103.		Phuket	Smart Mobility	Built Infrastructure
104.		Phuket	Smart Pier	Safety & Security
105.		Phuket	City Data Platform	Civic & Social
106.		Phuket	Healthcare Platform	Health & Well-Being
107.		Rayong	Wangchan Valley Smart City	Industry & Innovation
108.		Rayong	Emergency Incident Command Centre	Safety & Security
109.		Rayong	Public Health Monitoring and Care System with a Health Database	Health & Well-Being
110.		Rayong	Smart Government Service	Civic & Social
111.	Viet Nam	Da Nang	Intelligent Operation Centre	Safety & Security

No.	Country	City	Project	Focus Area
112.		Da Nang	Smart Water Management System	Quality Environment
113.		Ha Noi	Intelligent Operation Centre	Safety & Security
114.		Ha Noi	Transport Operation and Surveillance Centre	Built Infrastructure
115.		Ho Chi Minh City	Integrated Operation Centre	Civic & Social
116.		Ho Chi Minh City	Integrated and Unified Emergency Response Centre	Safety & Security

B. List of Completed ASCN Smart City Projects across the Six Focus Areas

No.	Country	City	Project	Focus Area
1.	Brunei Darussalam	Bandar Seri Begawan	National Information Hub	Civic & Social
2.		Bandar Seri Begawan	Clean River Management	Quality Environment
3.		Bandar Seri Begawan	Digital Payment Hub	Industry & Innovation
4.	Cambodia	Phnom Penh	Smart City Strategic Planning	Civic & Social
5.		Siem Reap	Formulation of Smart City Roadmap	Civic & Social
6.		Siem Reap	38-Road Construction	Built Infrastructure
7.		Siem Reap	Smart Waste Management	Quality Environment
8.	Indonesia	Banyuwangi	Creating Inclusive Economic Growth through Tourism-Based Development	Civic & Social
9.	Lao PDR	Luang Prabang	Smart City Planning and Development	Civic & Social
10.		Luang Prabang	Smart and Integrated Urban Strategy	Civic & Social
11.	Malaysia	Johor Bahru	Iskandar Malaysia Integrated Urban Services Program	Safety & Security
12.		Johor Bahru	Management of Water Resources and Distribution	Quality Environment
13.		Kuala Lumpur	OSC 3.0 Plus Online	Civic & Social
14.		Kuching	Introduction of Blockchain Technology	Civic & Social
15.	Myanmar	Mandalay	Cadastral Map and GIS Database	Civic & Social
16.	Singapore	Singapore	E-Payments	Industry & Innovation
17.		Singapore	National Digital Identity	Civic & Social
18.		Singapore	Smart Nation 1.0 Initiatives	Industry & Innovation