

ASEAN SMART CITY ACTION PLAN (ASCAP) 2026-2035

Introduction

1. The ASEAN Smart City Action Plan (ASCAP) 2026-2035 aims to realise a resilient, sustainable, and inclusive ASEAN Community by leveraging modern technologies and innovative infrastructures to address urban and rural challenges while enhancing connectivity. This plan builds upon the ASEAN Smart Cities Framework, adopted by ASEAN Leaders at the 33rd ASEAN Summit in 2018, which provides guidance for smart city development across the ASEAN Smart Cities Network (ASCN) with a focus on strategic outcomes, urban systems, and enabling mechanisms.
2. Aligned with the ASEAN Connectivity Strategic Plan (ACSP) under ASEAN Community Vision 2045, [adopted in May 2025], the ASCAP emphasises the critical role of **smart and sustainable urban development** in enhancing ASEAN Connectivity. It directly supports **Strategic Goal B of ACSP**, which aims to achieve an integrated, sustainable, and resilient region through initiatives that promote digital transformation, green infrastructure, and inclusivity. By fostering both regional collaboration and local innovation, the ASCAP seeks to address pressing urban and rural challenges while advancing **connectivity, resilience, sustainability and inclusivity**.

Vision and Objectives

3. The ASCAP 2026-2035 envisions empowering ASEAN cities and villages to enhance the quality of life, stimulate economic growth, and prioritise environmental sustainability. As a guiding document, ASCAP 2026-2035 serves to align regional aspirations with national and local development priorities, fostering integrated urban-rural progress across ASEAN.
4. The ASCAP 2026 – 2035 is aligned with the Strategic Goal B of ACSP under ASEAN Community Vision 2045, whereby ASEAN envisions: “*a Community capable of managing urban and rural challenges by leveraging modern technology, and innovative infrastructure, as well as enhancing ASEAN smart and sustainable cities and villages*”. The ASCAP 2026-2035 envisions:
 - a. Enhanced urban and rural quality of life;
 - b. Advanced sustainability and resilience;
 - c. Strengthened regional collaboration and inclusivity; and
 - d. Promoted economic growth and innovation.

5. By integrating best practices and fostering collaboration between governments, private sectors, and communities, ASCAP reaffirms ASEAN's leadership in sustainable urban development. It sets a global benchmark for balanced modernity, resilience, and cultural richness, ensuring that cities and villages alike benefit from smart and sustainable solutions.

Core Elements and Key Actions

Core Elements	Key Actions	Detailed Activities	Expected Outcome(s)
<p>Digital Transformation and Smart Infrastructure</p> <p>(ACSP Strategic Measure B.12: Strengthen urban-rural linkages and spatial planning collaboration for sustainable urbanisation and sustainable community development)</p>	<p>Build robust digital and physical infrastructures, through:</p> <ul style="list-style-type: none"> ▪ expanding 5G and broadband connectivity to underserved areas; ▪ developing smart utilities using IoT for resource efficiency; ▪ facilitating Public-Private Partnerships (PPPs) for infrastructure expansion. <p><i>Examples:</i> <i>ASEAN pilot projects like IoT-based smart grids in Laos and Myanmar to enhance rural connectivity;</i></p> <p><i>Subsidy programs encouraging private-sector-led broadband infrastructure in Indonesia and Viet Nam.</i></p>	<p>Develop an ASEAN-wide policy framework for digital infrastructure;</p> <p>Organise annual forums for best practices in smart utilities management.</p>	<p>Improved connectivity, optimised resource management, and reduced urban-rural digital divides.</p>
<p>Sustainable and Green Urban Development</p> <p>(ACSP Strategic Measure B.4: Promote environment sustainability and resilience through innovative nature-based solutions and ecosystem-based approach to reduce vulnerability to climate change, address environmental issues, including transboundary haze pollution, promote water resources, sanitation and waste</p>	<p>Promote environmental resilience and sustainability, through:</p> <ul style="list-style-type: none"> ▪ constructing energy-efficient buildings and expand urban green spaces; ▪ developing circular economy initiatives focusing on waste reduction and resource efficiency; ▪ promoting renewable energy adoption through public and private partnerships. 	<p>Establish regional green building certification systems;</p> <p>Develop ASEAN-wide benchmarks for waste reduction. Create incentives for renewable energy projects.</p>	<p>Lower emissions, improved air quality, and resilient urban ecosystems.</p>

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<p>management, sustainable use and consumption, circular economy, and increase resource efficiency and urban and rural resilience; and ASCP Strategic Measure B.2: Improve quality and affordability of housing and access to essential health services)</p>	<p><i>Examples:</i> <i>Singapore’s Green Mark Scheme as a benchmark for ASEAN building standards;</i></p> <p><i>Urban composting programs piloted in Malaysia and Thailand.</i></p> <p>Ensure smart cities deliver affordable, resilient housing and accessible healthcare through digital innovation and inclusive urban development, prioritising underserved communities, through:</p> <ul style="list-style-type: none"> ▪ developing smart and affordable housing policies; ▪ enhancing access to digital and AI-driven healthcare; ▪ leveraging data for policy and planning. <p><i>Examples:</i> <i>Smart housing projects integrating IoT and energy efficiency;</i></p> <p><i>AI-driven telemedicine services, mobile health clinics;</i></p> <p><i>Big data-driven housing and health policy recommendations.</i></p>	<p>Establish ASEAN Smart Housing Standards;</p> <p>Develop public-private partnerships for smart housing projects;</p> <p>Expand digital healthcare infrastructure in urban and rural areas;</p> <p>Integrate smart health monitoring devices;</p> <p>Utilise predictive analytics for affordable housing allocation;</p> <p>Deploy AI to optimise healthcare resource distribution.</p>	<p>Increased availability of affordable, technology-enabled housing;</p> <p>Improved healthcare accessibility, faster diagnosis, and reduced urban health disparities;</p> <p>Data-driven decision-making, equitable resource allocation.</p>
<p>Smart Mobility and Transportation (ACSP Strategic Measure B.6: Strengthen existing urban and rural infrastructure, human resources, and knowledge sharing platforms to facilitate mobility, improve the efficiency and sustainability of building and construction, integrate effective land use planning, and build climate and disaster resilience, and disability-inclusive infrastructure</p>	<p>Enhance sustainable transport systems, through:</p> <ul style="list-style-type: none"> ▪ expanding integrated public transit systems connecting urban and rural areas; ▪ developing electric vehicle (EV) infrastructure; ▪ implementing IoT-based traffic management systems. 	<p>Pilot multimodal transport hubs in key ASEAN cities;</p> <p>Conduct workshops on sustainable transit practices and EV adoption.</p>	<p>Reduced traffic congestion, enhanced commuter experience, and increased adoption of green mobility solutions.</p>

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for sustainable development)	<p><i>Examples:</i> <i>Thailand's EV pilot program as a model for scaling across ASEAN Member States;</i></p> <p><i>Public transport tracking apps deployed in Jakarta and Manila.</i></p>		
<p>Resilience and Disaster Preparedness</p> <p>(ACSP Strategic Measure B.5: Strengthen cooperation in climate change mitigation and adaptation, resilience, disaster risk reduction, biodiversity protection, and conservation; and ACSP Strategic Measure B.3: Strengthen public safety and security in cities)</p>	<p>Strengthen urban and rural resilience, through:</p> <ul style="list-style-type: none"> ▪ deploying predictive early-warning systems for disaster management; ▪ designing climate-resilient infrastructure; ▪ fostering cross-sector collaboration on disaster risk reduction. <p><i>Examples:</i> <i>ASEAN-wide disaster simulation exercises based on Indonesia's tsunami response model;</i></p> <p><i>Flood-resilient housing standards developed in the Philippines.</i></p> <p>Enhance urban safety and resilience through smart surveillance, AI-driven emergency response, and cybersecurity, ensuring secure and inclusive smart cities, through:</p> <ul style="list-style-type: none"> ▪ expanding smart surveillance for safer cities; ▪ improving emergency response and disaster preparedness; ▪ strengthening cybersecurity for public services; ▪ enhancing traffic and public safety with digital tools; ▪ encouraging regional cooperation on security. 	<p>Create a regional data-sharing platform for climate risk assessment;</p> <p>Establish cross-border task forces for disaster preparedness.</p> <p>Install affordable AI-powered surveillance in high-risk areas;</p> <p>Set up community-based emergency alert systems;</p> <p>Develop low-cost early warning systems (SMS alerts, radio broadcasts);</p> <p>Train first responders in AI-assisted disaster coordination;</p> <p>Implement simple and cost-effective cybersecurity measures;</p> <p>Provide training on cyber threats for government agencies;</p> <p>Install affordable smart traffic management</p>	<p>Enhanced disaster resilience, reduced economic losses from climate events, and improved community safety.</p> <p>Reduced crime rates, improved public safety;</p> <p>Faster response times, fewer casualties, better disaster preparedness;</p> <p>Reduced cyber risks, more secure public digital services;</p> <p>Safer roads, fewer traffic accidents, better urban mobility.</p>

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	<p><i>Examples:</i> CCTV with AI analytics, emergency alert systems;</p> <p><i>Early warning SMS, AI-driven disaster response;</i></p> <p><i>Basic digital identity verification, cyber protection for city systems;</i></p> <p><i>Smart traffic lights, digital road safety campaigns.</i></p>	<p>systems;</p> <p>Use mobile apps and digital boards for public safety awareness.</p>	
<p>Digital Governance and Citizen Engagement</p> <p>(ACSP Strategic Measure B.1: Promote integrated, data-driven, and adaptive approaches to urban and rural planning; and ACSP Strategic Measure B.8: Strengthen urban and rural governance and promote partnerships across multi-level governments and multi-stakeholders, including public-private partnerships and community, on sustainable urban and rural development)</p>	<p>Advance inclusive governance frameworks, through:</p> <ul style="list-style-type: none"> ▪ implementing e-governance platforms for public service access; ▪ establishing real-time citizen feedback systems; ▪ safeguarding data privacy through regional cybersecurity standards. <p><i>Examples:</i> <i>Jakarta's citizen reporting app replicated across ASEAN Member States;</i></p> <p><i>Open forums for digital governance improvements in ASEAN smart cities.</i></p>	<p>Develop a shared roadmap for inclusive digital governance;</p> <p>Facilitate cross-border workshops on citizen engagement strategies.</p>	<p>Strengthened public trust, increased citizen participation, and adaptive governance frameworks.</p>
<p>Innovation and Economic Growth</p> <p>(ACSP Strategic Measure B.7: Encourage industries and businesses to capitalise on technologies and use innovation to build competitive advantages and transform process)</p>	<p>Drive technological adoption and economic transformation, through:</p> <ul style="list-style-type: none"> ▪ establishing innovation hubs and digital skills training programs; ▪ developing platforms for green technology R&D; ▪ promoting smart tourism and digital economy initiatives. 	<p>Provide grants for local green technology start-ups;</p> <p>Organise regional innovation fairs.</p>	<p>Boosted economic activity, job creation, and technological leadership in ASEAN.</p>

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	<p><i>Examples:</i> <i>Malaysia's Cyberjaya Innovation Hub serving as a model for ASEAN;</i></p> <p><i>Annual ASEAN Smart City Hackathons focused on green technology.</i></p>		
<p>Rural Development and Transformation</p> <p>(ACSP Strategic Measure B.12: Strengthen urban-rural linkages and spatial planning collaboration for sustainable urbanisation and sustainable community development)</p>	<p>Strengthen urban-rural linkages and empower rural communities, through:</p> <ul style="list-style-type: none"> ▪ expanding rural digital connectivity; ▪ establishing agro-innovation hubs for enhanced productivity; ▪ supporting community-based tourism. <p><i>Examples:</i> <i>Agro-tech training programs in the Philippines and Cambodia;</i></p> <p><i>E-commerce platforms like Malaysia's Agroz app connecting rural producers to urban markets.</i></p>	<p>Pilot rural-to-urban supply chain optimisation projects;</p> <p>Host regional forums on rural economic integration.</p>	<p>Improved rural resilience, increased agricultural productivity, and integration into smart city frameworks.</p>
<p>Cybersecurity and Data Governance</p>	<p>Strengthen digital ecosystems for secure and sustainable urban development, through:</p> <ul style="list-style-type: none"> ▪ building regional frameworks for data protection and cross-border data flows; ▪ enhancing coordination among ASEAN Member States for cybersecurity response; ▪ promoting awareness campaigns on cybersecurity for urban and rural populations. <p><i>Examples:</i> Thailand's Cybersecurity Act <i>servicing as a model for</i></p>	<p>Implement the ASEAN Framework on Digital Data Governance to establish legal and regulatory measures;</p> <p>Organise regional training programs for cybersecurity professionals, using Singapore's CSA expertise as a guide;</p> <p>Develop cybersecurity awareness campaigns targeting vulnerable groups in rural and urban areas;</p> <p>Create a shared platform for reporting and mitigating cross-border cyber threats.</p>	<p>Secure digital ecosystems across ASEAN;</p> <p>Enhanced trust in cross-border data flows and digital services;</p> <p>Improved regional resilience against cyber threats.</p>

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	<p><i>harmonised regional cybersecurity legislation;</i></p> <p><i>The Philippines’ National Cybersecurity Plan 2022 providing a framework for incident response and public-private collaboration;</i></p> <p><i>Singapore’s Cyber Security Agency (CSA) supporting ASEAN countries in developing CSIRTs and cross-border collaboration mechanisms;</i></p> <p><i>Indonesia’s “Digital Literacy National Movement” promoting public awareness of data privacy and online safety.</i></p>		
<p>Collaboration and Cooperation among Villages</p> <p>(ACSP Strategic Measure B.10: Support collaboration and cooperation among villages to enable villages to fast-track rural transformation)</p>	<p>Enable villages to fast-track rural transformation through collaboration and cooperation, through:</p> <ul style="list-style-type: none"> ▪ facilitating cooperative models for rural villages to share resources and strategies; ▪ encouraging knowledge exchange on sustainable practices like eco-tourism, agro-tech innovation, and rural entrepreneurship; ▪ promoting regional or sub-national initiatives that integrate village-level strategies into broader smart city frameworks. <p><i>Examples:</i> <i>Community-driven rural digitalisation projects piloted within ASEAN Member State to enhance connectivity;</i></p> <p><i>Workshops for village leaders on governance,</i></p>	<p>Develop village-to-village collaboration platforms for knowledge sharing;</p> <p>Introduce cooperative grants for rural development projects.</p>	<p>Strengthened rural collaboration, accelerated rural transformation, and enhanced village-level capacity for sustainable development.</p>

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	<i>sustainability, and economic transformation.</i>		
Funding and Financing (ACSP Strategic Measure B.9: Promote financial sustainability, and bridge funding and financing gaps for smart cities as well as urban and rural projects)	Ensure financial sustainability for smart cities, through: <ul style="list-style-type: none"> ▪ establishing ASEAN Smart Cities Fund; ▪ developing innovative financing mechanisms, including green bonds and microloans; ▪ building capacity for local government officials on financial management. <p><i>Examples:</i> <i>Green bonds in Indonesia and Vietnam as financing models;</i></p> <p><i>ASEAN-led forums on funding mechanisms for smart cities.</i></p>	Develop a guide on sustainable urban finance; Conduct annual training for municipal leaders on financial planning.	Increased funding availability, strengthened financial resilience, and long-term sustainability.

Monitoring and Evaluation Framework for ASEAN Smart Cities

6. The monitoring and evaluation (M&E) of ASCAP 2026–2035 will build on ASCN Monitoring and Evaluation Framework, as well as leverage on the results framework to be developed under ACSP, ensuring consistency with its reporting mechanisms and templates. This approach ensures that M&E activities are aligned with established practices and support seamless integration into regional processes.

- **Key Performance Indicators (KPIs):** Measure outcomes across core elements, focusing on sustainability, quality of life, and economic impact.
- **Progress Reports:** Publish annual updates to document achievements, challenges, and best practices. Ensure that the M&E process allows each ASEAN Chair to highlight specific accomplishments and challenges during their tenure, fostering ownership and alignment with regional priorities.
- **Stakeholder Involvement:** Include citizens, NGOs, and private sectors to maintain inclusivity and responsiveness.

Challenges and Risk Management

- **Potential Issues:** Address funding constraints, policy alignment, and technology gaps.
- **Mitigation Strategies:** Propose alternative funding, flexible policy adaptation, and partnerships with specialists.
