



# **PROGRAM INTRODUCTION FOR SCIENCE, TECHNOLOGY AND INNOVATION (STI)**

**Presented in  
CELEBRATION AND COLLABORATION  
-- ASEAN IVO 10<sup>th</sup> ANNIVERSARY --**

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# CONTENTS:

**1. APASTI 2026 - 2035**

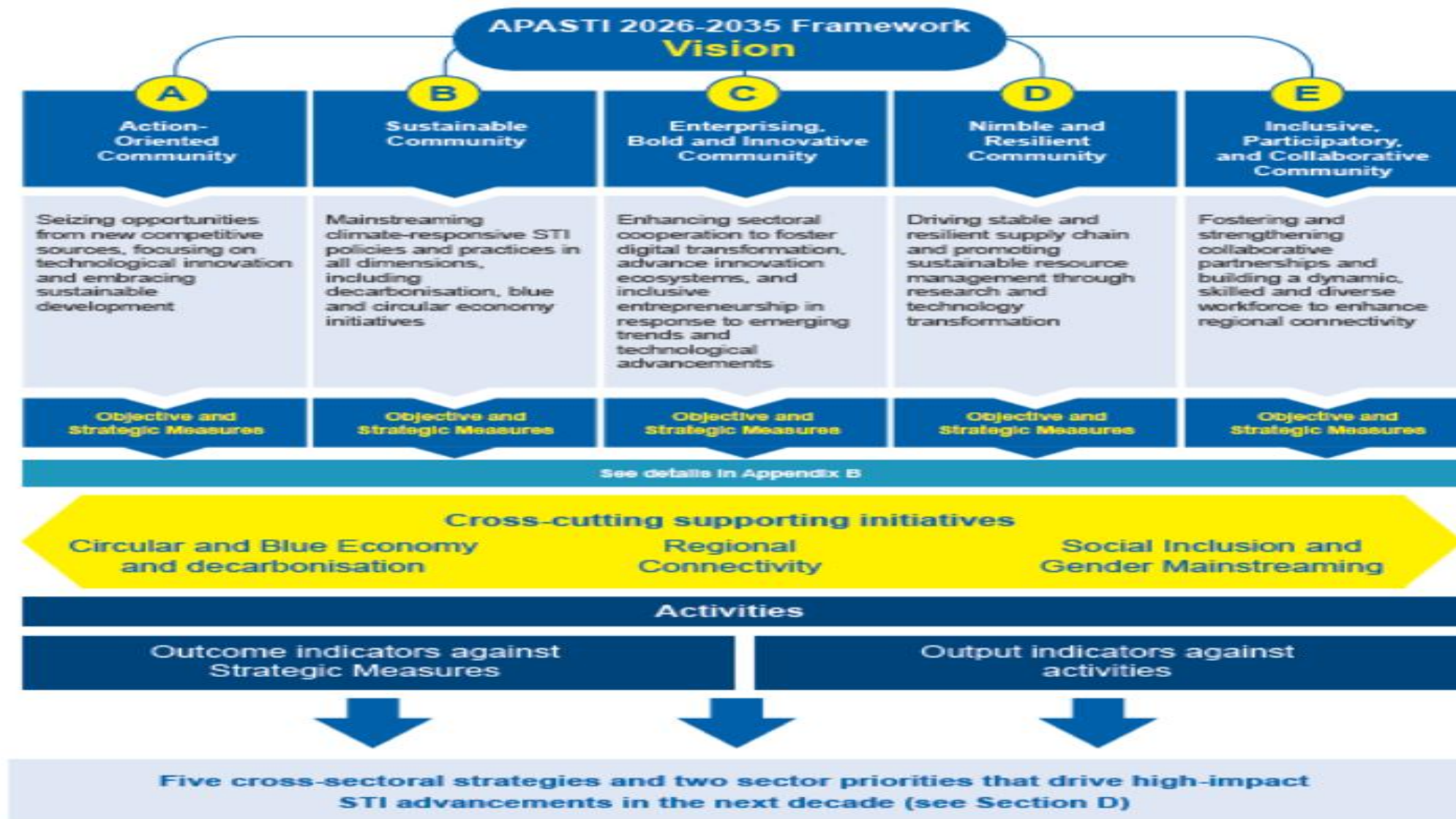
**2. ASEAN's Strategic STI Aspirations**

**3. 1 Priority Economic Deliverable (PED) &  
5 Annual Priorities (APs)**

**4. International Cooperation Program (ICP)**

# 1. ASEAN Plan of Action on Science, Technology, and Innovation (APASTI) 2026 - 2035

**Vision:**  
An integrated ASEAN powered by science, technology, & innovation (STI), fostering seamless collaboration, global competitiveness through enhanced innovative performance, sustainability and economic growth for a prosperous future.



## 2. ASEAN's Strategic STI Aspirations

### Cross-sectoral strategies

- 1 Strengthening regional capability and responsiveness on emerging and enabling technologies
- 2 Enhancing research capability and capacity in space technology
- 3 Future-proofing the STI ecosystem and fostering partnerships to drive innovation and entrepreneurship
- 4 Supporting the accelerated deployment of STI in key industries
- 5 Investing in talent development and mobility

Accelerate regional STI advancement and technology-driven innovations across a range of core domains, including healthcare, environmental and disaster resilience, sustainability.

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A significant player in the realm of emerging and enabling big data such as:

- **HPC (High-Performance Computing)**,
- Artificial Intelligent (AI)
- Quantum computing
- Biotechnology

By enhancing connections between the private sector and knowledge communities to catalyze innovation and nurture entrepreneurship such as:

- Creation of **Start-ups**

Stands at the forefront of transformative change through innovative solutions in key industries such as:

- **Healthcare**
- **The digital value chain**

To unlock new opportunities for collaboration and innovation such as:

- **ATM (ASEAN Talent Mobility)**

### Sector priorities

Differentiated investment to advance high-impact areas across priority sector value chains, specifically:

- 1 Cross-sectoral collaboration to accelerate innovation and commercialisation of new energy technologies and STI deployment in blue and circular economy.
- 2 Adoption of innovative technologies to promote sustainable water use and advance agriculture, food and forestry industries.

### 3. 1 Priority Economic Deliverable (PED) & 5 Annual Priorities (APs)

2024

#### 1 PED:

Establish an ASEAN Online Education Platform for Industry 4.0 → Co-lead: LA, KH, and TH.

Main output: ASEAN COSTI main website  
<https://astnet.asean.org/>



- 1 Establish an ASEAN Technology Management Hub (Phase III), co-led by Cambodia and Indonesia;



- 2 Develop an ASEAN Regional Research Infrastructure Strategy, led by Thailand;



- 3 Establish the ASEAN Startup Initiative, led by Malaysia;



- 4 Establish an ASEAN Talent Mobility Community, led by Thailand; and



- 5 Implement the ASEAN Energy Resilience Assessment Guideline: Capacity Building on Energy Resilience Assessment, led by Thailand

2025

#### 1 PED:

Establish ASEAN Startup Technology Ignite → Lead: MY.  
Main output: Official launching of its portal, Hackathons/Pitch Competition/Startup Accelerator Programme, Startup Village, Entrepreneurship & Tech Commercialization Curriculum, etc.



- 1 Integrating Artificial Intelligence into ASEAN Journal on Science and Technology for Development (AJSTD) for Advanced Scholarly Analysis, led by Brunei Darussalam;



- 2 Building ASEAN High Performance Computing Infrastructure for Enabling Research in Advanced Computing, led by Indonesia;



- 3 Enhancing Battery Safety in Enabling Energy Transition in ASEAN through ASEAN Battery Safety Network, led by Singapore;



- 4 Strengthening ASEAN Research Cooperation on Nuclear Safety and Risk Assessment and Management, led by Thailand;



- 5 The Engagement of ASEAN Talent Mobility (ATM) Community, led by Thailand.

# 4. International Cooperation Program (ICP)

## Accelerate Digital and Technology Transformation

- Catalyse start-up innovations through deepened regional cooperation.
- Adopt and promote the principle of technology neutrality.
- Enhance talent development on frontier technologies and innovation through upskilling and reskilling, including digital value chain and digital literacy.
- Adopt and advance evidence-based approach and a coordinated approach to governing AI to facilitate adoption of big data and AI.

### Outcome Indicators:

- Percentage of individuals using the internet, a computer or at least 3G coverage (ITU).
- Digital Integration Index Score.
- Digital literacy level (including disaggregated data by gender and socio-economic status).
- Number of big data or AI IP, including patents, copyright, knowhow, and industrial designs.

## Advance Innovation Ecosystem

- Boost ICT innovations and entrepreneurship and technological developments, including among others, on smart city and big data analytics.
- Stimulate adoption and diffusion of innovation and technologies such as Internet of Things (IoT), big data and cloud-based technology, AI, quantum technology, high-performance computing, virtual and augmented reality, additive manufacturing, and biotechnology.
- Deploy STI solutions to accelerate growth in key industries with transformative potentials, such as in healthcare, circularity, and digital value chains.
- Strengthen collaboration among academia, research institutions, networks of centres of excellence, and private sector to establish an effective ecosystem for capability development, technology transfer, and strategic commercialization.
- Enhance mobility of scientists and researchers from science and technology institutions in the public and private sector.
- Establish innovative support system to promote and manage regional STI enterprises arising from spin-offs and joint ventures.
- Accelerate advancement in space technology through research and capacity development in geoinformatics, satellites, and other applications.

### Outcome Indicators:

- Global Innovation Index Knowledge and Technology Outputs.
- R&D expenditure as a percentage of GDP disaggregating performance by business enterprises and financed by government.
- Number of scientific publication from the different ASEAN Member States (including disaggregated data on publication referring to different topics such as geoinformatics and satellites).
- Number of registered patents in ASEAN Member States.
- Number of researchers (headcount) per million population.
- Improvement in % of regional circularity.

# THANK YOU