



กระทรวงดิจิทัล
เพื่อเศรษฐกิจและสังคม



SMART CITY
Thailand



Thailand Smart Cities In Practice

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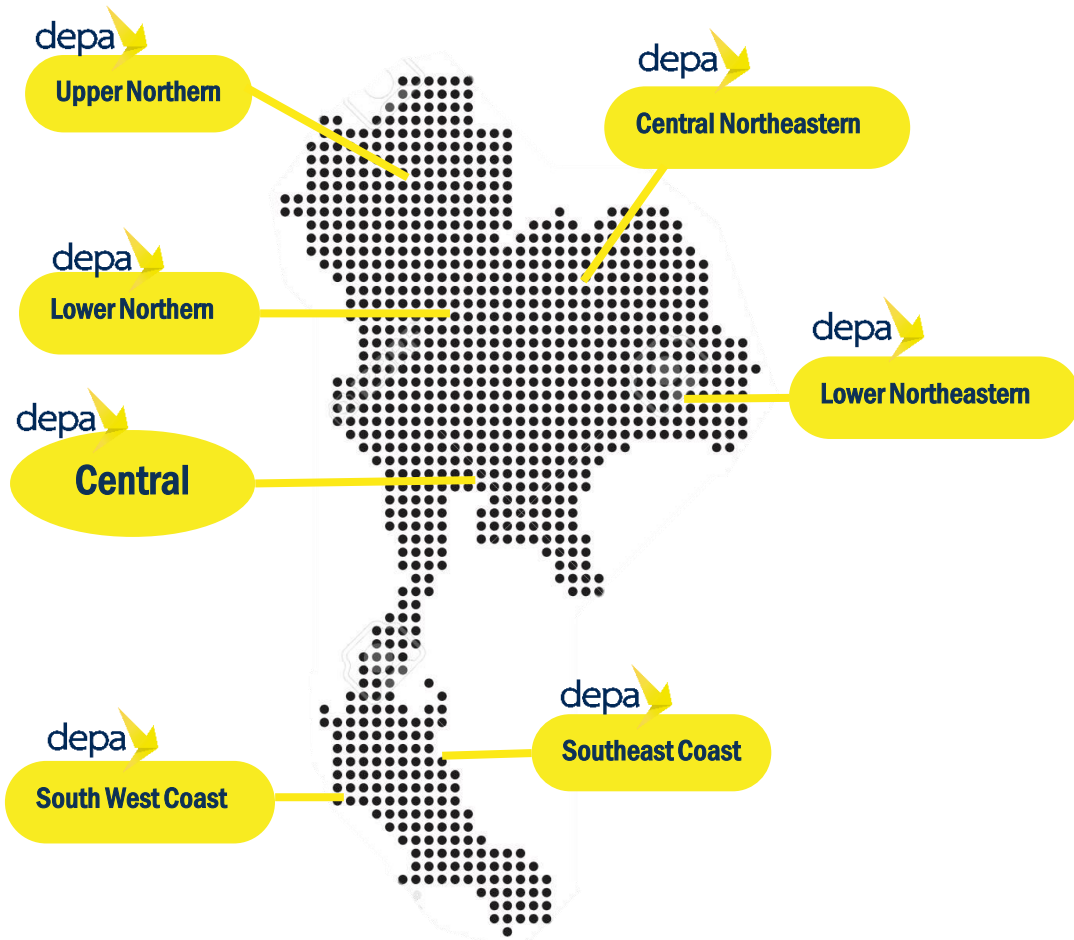
Sources: Photo by [Marc-Olivier Jodoin](#) on [Unsplash](#)

About Us



Digital Economy Promotion Agency

The Premier Digital Economy Promotion Agency to Accelerate Transformation in Thailand



MISSION

- ▶ To develop the digital economy promotion **strategies** in accordance with the national policy and plan on the development of digital economy and society.
- ▶ To promote and support the **investment or business** operations in relation to the digital industry and innovation.
- ▶ To promote, support and **work with other public and private** organizations to achieve the development of digital industry and innovation.
- ▶ To promote, support and implement the **human resource** development with regard to digital industry and innovation.
- ▶ To propose, expedite and follow up on the amendment of intellectual property protection laws, **regulations or measures** related to digital industry and innovation, in collaboration with the relevant agencies .

Reinforcement

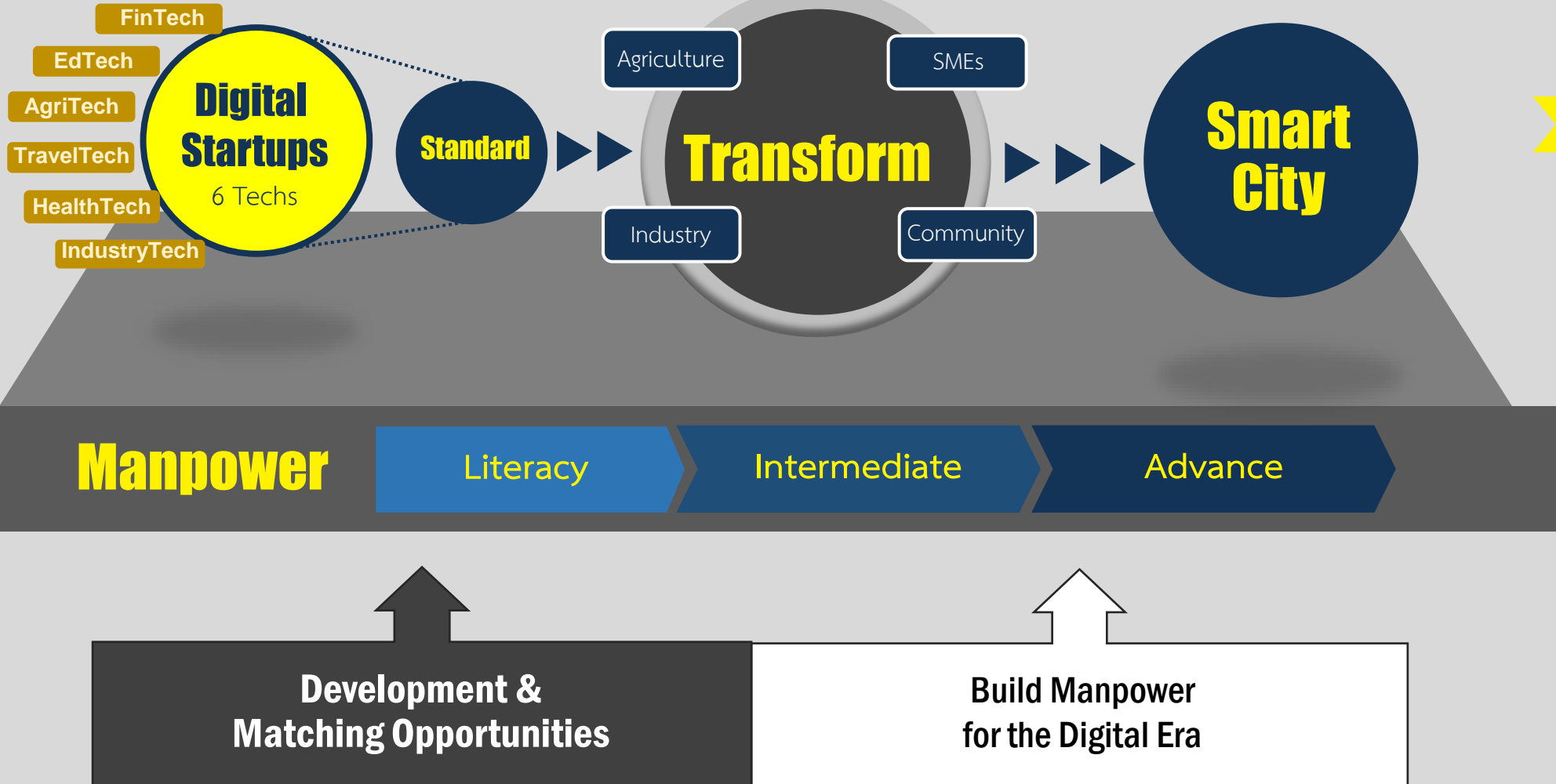
Promote Digital Industry
& Innovation

Transform

Transform Businesses and
Create New Growth Engines

Build Ecosystem

Build an Enabling
Digital Ecosystem



Digital Thailand

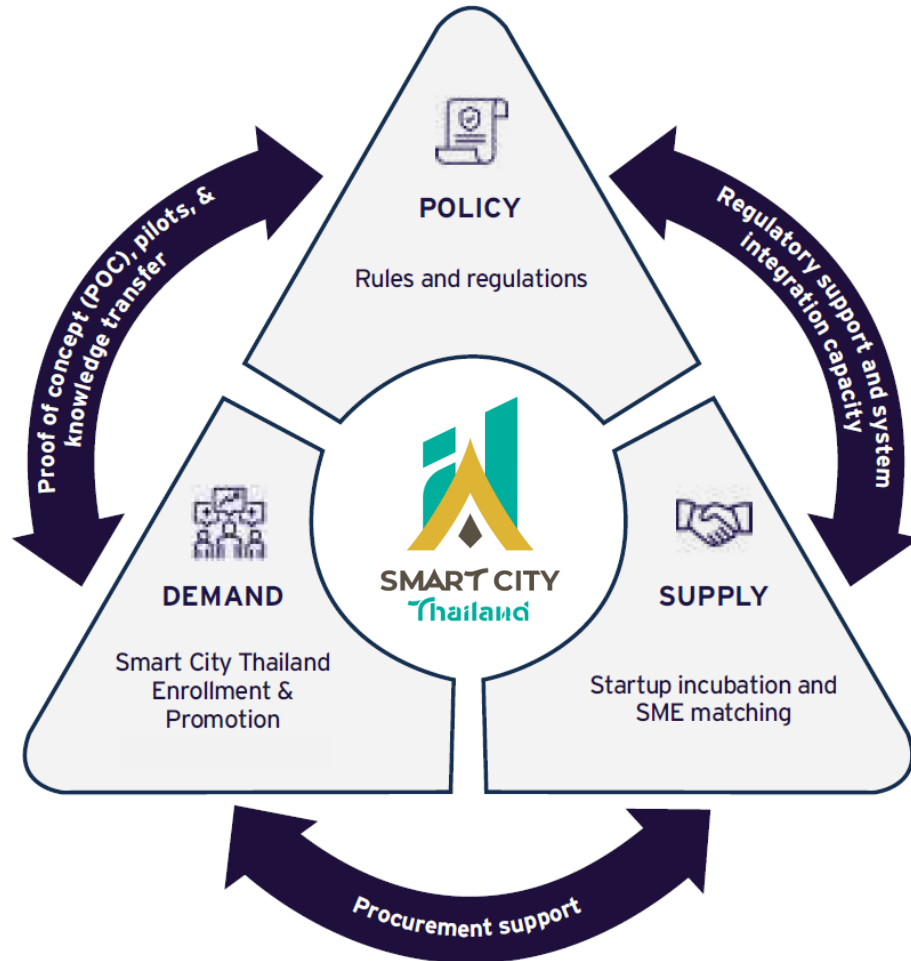
- ▲ Employment Rate
- ▲ Purchasing Power
- ▲ Quality of Life
- ▲ Strong Community
- ▲ Civil Society
- ▲ Sustainable Economic Growth



BUILD & SUPPORT SMART CITY MARKETPLACE



CONNECT STAKEHOLDERS



- Match Opportunities: Demand - Supply
- Policies Enabler



- Build an active ecosystem
- Facilitate the growth of Thailand market

Smart City National Committee



กระทรวงดิจิทัล
เพื่อเศรษฐกิจและสังคม

depa



7 Smarts Working Committee



Smart City Thailand
Steering Committee

Prawit Wongsuwan
Deputy Prime Minister



National Smart City
Steering Sub-committee

Chaiwut Thanakamanusorn
Minister of Digital
Economy and Society



Nuttapon Nimmanphatcharin
President/CEO,
depa

Chairman : Deputy Prime Minister



Minister of Transport



Minister of Digital
Economy and Society



Minister of Energy



Permanent
Secretary
Ministry of
Finance



Permanent
Secretary
Ministry of
Transport



Permanent
Secretary
Ministry of Digital
Economy and
Society



Permanent
Secretary
Ministry of
Energy



Permanent
Secretary
Ministry of
Science and
Technology



Permanent Secretary
Ministry of Interior



Permanent Secretary
Ministry of Tourism
and Sports



Permanent Secretary
Ministry of Public Health



Permanent Secretary
Ministry of Education



Permanent Secretary
Ministry of Natural
Resources and Environment



Director
Bureau of Budget



Secretary General
Office of the National
Economic and Social
Development Board



Secretary General
Office of the National
Broadcasting and
Telecommunications
Commission



Secretary General
Office of the Council
of State



Secretary General
Office of the Council
of State



Permanent
Secretary
Ministry of
Foreign Affairs



Director General
Department of Public
Works and Town and
Country Planning



Director
Energy Policy and
Planning Office



Director
The Office of
Transport and
Traffic Policy and
Planning



Secretary General
Thailand Board of
Investment

secretariat

depa
President/CEO
Digital Economy
Promotion Agency

Experts

Economic Affairs Experts

Social Affairs Experts

Telecommunication Experts

Chairman : Minister of Digital Economy and Society



Permanent
Secretary
Ministry of
Transport



Permanent
Secretary
Ministry of Digital
Economy and
Society



Permanent
Secretary
Ministry of
Energy



Permanent
Secretary
Ministry of
Interior



Permanent
Secretary
Ministry of
Natural
Resources and
Environment



Secretary General
National Economic &
Social Development
Board



Permanent
Secretary
Ministry of Public
Health



Secretary
General
Eastern
Economic
Corridor
Office (EECC)



Secretary General
Office of the Board
of Investment



Governor of Mass
Rapid Transit
Authority of
Thailand



Director
Office of Transport
and Traffic
Policy and Planning



Director
Energy Policy and
Planning Office



Executive
Director Creative
Economy Agency



President of
Digital Council Of
Thailand



President of the
Thailand Tech Startup
Association

Secretariat and
sub-committee

depa
President/CEO
Digital Economy
Promotion Agency

Experts

Socio-economics
Experts

Urban Design and
Development Experts

Data Experts

Chairman : President/CEO of Digital
Economy Promotion Agency



Suthep Panpeng
Smart Mobility Expert



Kecha Teerakomen
Smart Energy Expert



Pansak Siriruchatapong
Smart People Expert



Wiwat Wongwarawipat
Smart Living Expert



Sarun Sumriddetchkajorn
Smart Governance Expert



Weranit Thansuporn
Smart Environment Expert



Pattaraporn Bodhisuwan
Smart Economy Expert



Sutee Anantsuksomsri
Urban Design and
Development Expert



SHUSAK JANPATHOMPONG
Urban Design and Development Expert

co-secretariat



Passakon Prathombutr
Vice President, depa



Kasitorn Pooparadai
Vice President, depa



Smart City Thailand Office

Smart City Evaluation Procedures



กระทรวงดิจิทัล
เพื่อเศรษฐกิจและสังคม



Proposal

Smart City Promotion Zone

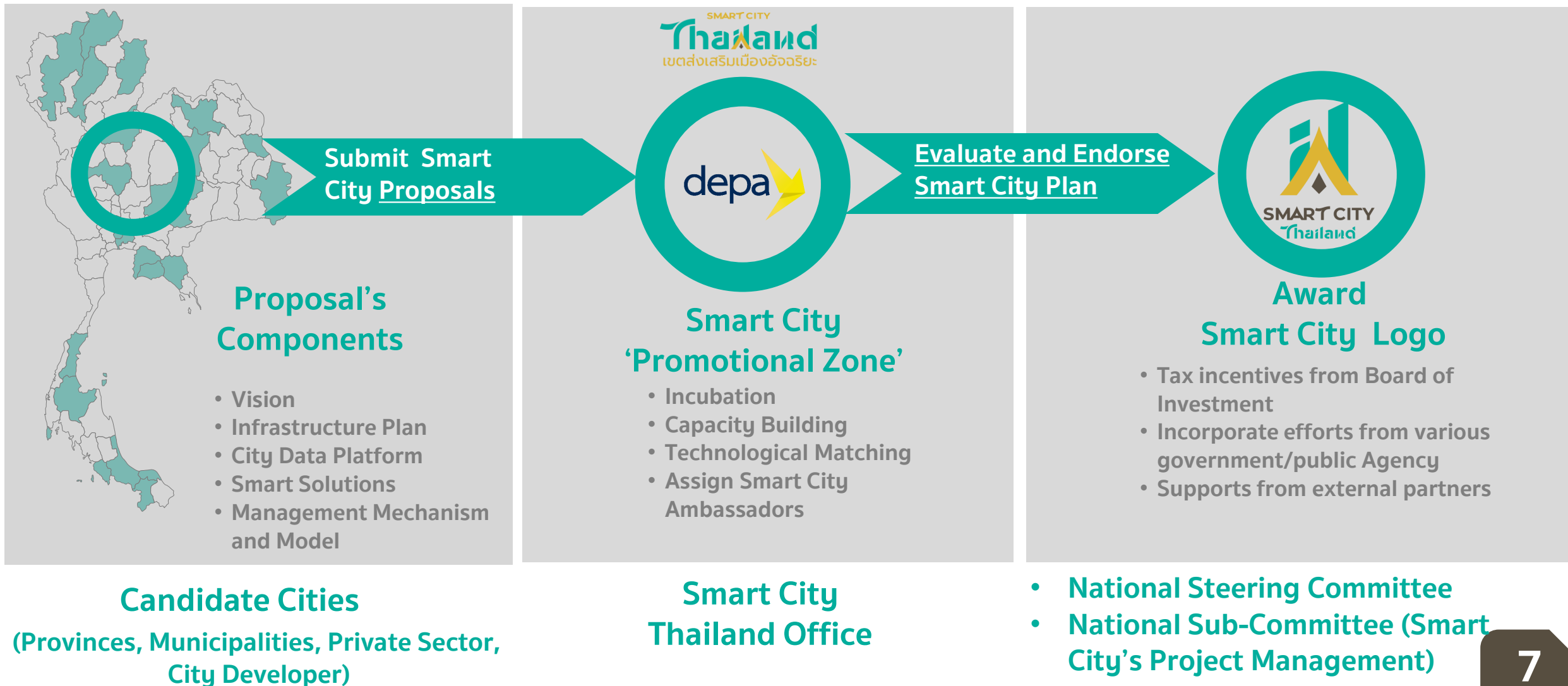
Smart City



Award Smart City Logo

- 2-year Follow-up
- BOI Incentives
- Unlock restrictions

Thailand's Smart City Development Mechanism



Criteria

Smart City Evaluation Criteria



กระทรวงดิจิทัล
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Geographic boundary and smart city vision

Must identify geographical boundary and formulate smart city goals



Infrastructure development and investment

Must have an infrastructure development and investment plan including digital infrastructure



City data platform with cyber security

Must have a development plan for city data platform



Smart city solutions and services

Must provide smart city solutions (Economy, Mobility, Energy, Environment, Living, People, Governance)



Sustainable management model

Must have a sustainable management model

Five components in Smart City Plan



กระทรวงดิจิทัล
เพื่อเศรษฐกิจและสังคม



01

Vision

- Defining or setting Smart city zone, goals, objectives, types and characteristics of smart cities.



02

Infrastructure Plan

- Having Smart city infrastructure action plan for both digital technologies and infrastructures such as transport, energy, utilities, or others that related to the goals.



03

City Data

- Develop City Data Plan and Platform
- Data Catalogue
- Data Exchange
- Data Governance.

SMART
7

04

Smart Solution

- Providing smart city services/solutions
- Smart Environment is mandatory



05

Management for Sustainability

- Having project management plan and process that creates participation to achieve operational sustainability.

7 Dimensions of Smart City



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Smart Environment



Minimizing the **negative impact** of urban living on the environment and climate change through the systematic use of technology, such as, in water resource management, climate monitoring, waste management and disaster watch, including the public participation in the conservation of the natural resources.

Smart Energy



Spearheading **effective energy management** and building a fine balance between the producing and usage of energy to enhance energy security and decrease reliance on the traditional channels of energy distribution

Smart Mobility



Emphasizing the development of **traffic and transportation systems** in driving the country forward. By enhancing the connectedness of a variety of traffic and transportation systems, urban residents benefit from the enhanced convenience, safety, and by becoming friendlier to the environment.

Smart Economy



Using digital technology to **effectively increase value-addedness in the economic system** as well as resource management, such as smart agro-city and smart tourism city.



Smart Living

Maximizing health, safety, and the **quality of life** of urban residents through universal design.

Smart People



Improving knowledge base, skill sets, and environment conducive to the life-long learning of urban residents in order to decrease social and economic inequality and provide new opportunities for creativity, innovation and public participation.

Smart Governance



Developing the **system of public services** to benefit the **residents** whose access to data and trust in the accountability of such system are key to their livelihood and wellbeing. The system shall be consistently improved through applied service innovation.



Key Performances for 7 Dimensions of Smart City



กระทรวงดิจิทัล
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Smart ENERGY

Increase the **efficiency of energy usage** and the use of **clean energy** $\geq 1\%$ **annually** *



Smart ECONOMY

Raise the citizens' annual **income** per capita $\geq 250,000$ **bath** *



Smart LIVING

The livability index (Health, Safety) $\geq 80\%$ **annually** *



Smart ENVIRONMENT

- ◆ Air, Water Quality, and Waste Management meet the environmental standard
- ◆ **CO₂ Emission Reduction** $\geq 1\%$ **annually** *



Smart PEOPLE

Percentage of citizens gaining **Digital Literacy Skills** $\geq 70\%$ **annually** *



Smart PEOPLE

- ◆ Percentage of citizens access to information or **online services** $\geq 60\%$ *
- ◆ Percentage of **citizens engagement** in public service development $\geq 60\%$ *



Smart MOBILITY

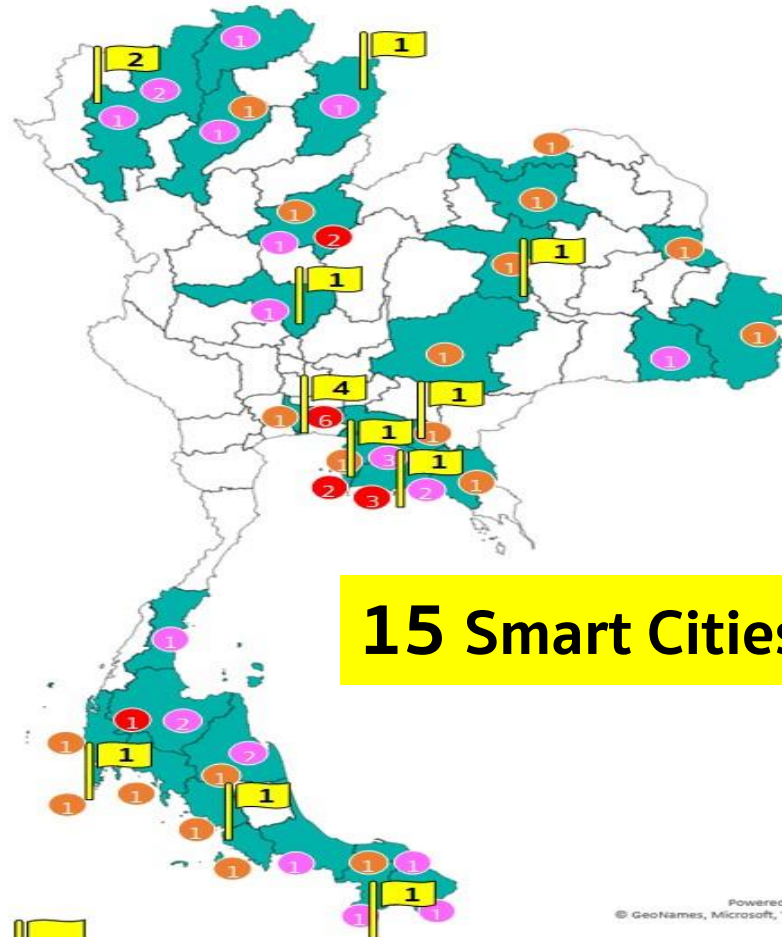
- ◆ Satisfaction $\geq 60\%$ *
- ◆ The number of casualties ≤ 12 **people/100,000** citizens *

* Or depends on the goal/context of the city to express how the city can be developed to be the Smart City

Status of Smart City and Smart City Promotional Zone



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15 Smart Cities

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Smart City

56 proposals in **31** provinces

51 Livable Cities

5 New Cities

20

Proposals
Provincial
level

22

Proposals
Municipality/
District level

14

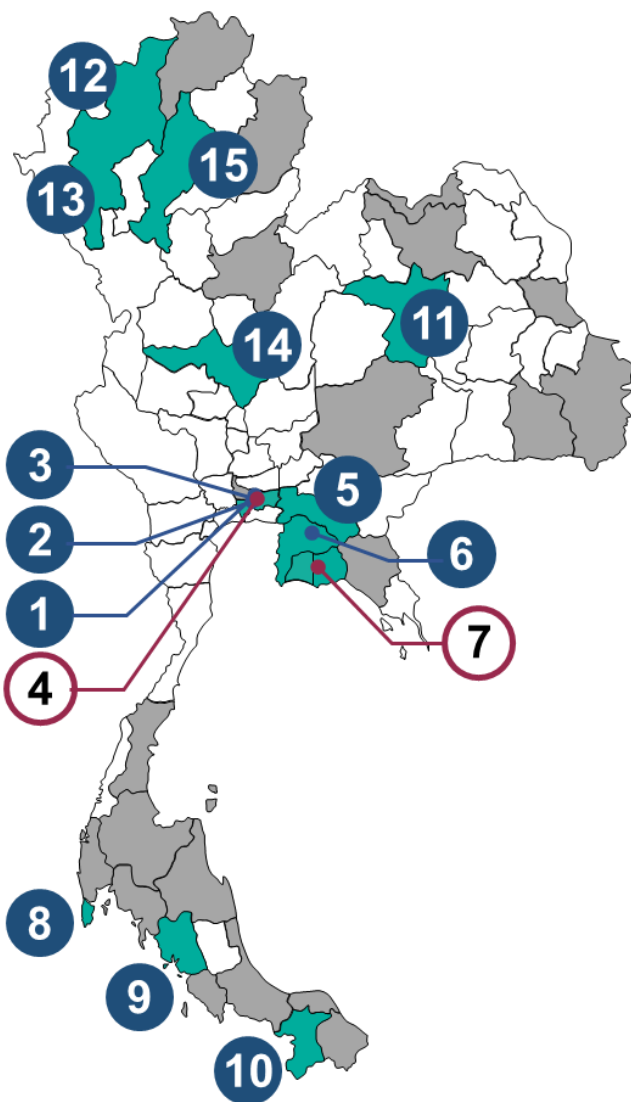
Proposals
Area level

- Maehia Municipality to Smart City
- Nakhon Si Thammarat Municipality to Smart City

The proposals received in Mar. 2022



15 Smart Cities in Thailand



1 Smart City Development for Klong Phadung Krung Kasem (Bangkok)

2 Phra Ram 4 Smart City (Bangkok)

3 Samyan Smart City (Bangkok)

4 Makkasan Smart City (Bangkok)

5 Chachoengsao Livable City

6 Saensuk Smart City (Chon Buri)

7 Wangchan Valley Smart City (Rayong)

8 Phuket Smart City

9 Sri Trang City (Trang)

10 Yala Smart City

11 Khon Kaen Smart City

12 Chiang Mai Smart City Through Smart Old Town

13 CMU Smart City (Chiang Mai)

14 Nakhonsawan Smart City

15 Mae Moh Livable City (Lampang)

● Livable City

○ New City

378 projects

Smart City



- Smart Environment 77 projects
- Smart Energy 56 projects
- Smart Economy 38 projects
- Smart Mobility 64 projects
- Smart Living 71 projects
- Smart Governance 40 projects
- Smart People 32 projects

Percentage of Investment

Investment

40,000 mb

- Smart Energy 28%
- Smart Environment 24%
- Smart Mobility 17%
- Smart Living 11%
- Smart Economy 7%
- Smart Governance 6%
- Smart People 6%

Improve quality of Life of

16,000,000 people

Smart Environment

Electric Vehicle
 Infrastructure
 Participation
 Urban Design
 Water Management
 Waste Management
 Monitoring

Smart Energy

Power Plant
 HVAC
 Smart Grid
 Renewable Energy
 Electric Vehicle
 Smart Meter

Smart Economy

Transaction
 Infrastructure
 Marketing
 Ecosystem

Smart Mobility

Delivery
 Urban Design
 Electric Vehicle
 Public Transportation
 Traffic Management
 Infrastructure
 Parking
 Multimodal

Smart Living

Infrastructure
 Marketing
 Wellness
 Ecosystem
 Security
 Safety
 Monitoring
 Urban Design

Smart Governance

Administration
 Participation
 Operations Management

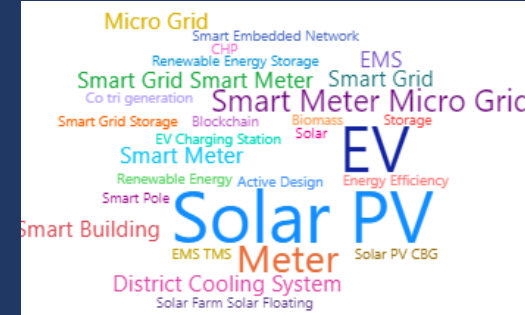
Smart People

Training
 Participation
 Ecosystem
 Infrastructure
 Online Learning
 Lifelong Learning

Smart Environment



Smart Energy



Smart Economy



Smart Mobility



Smart Living



Smart Governance



Smart People



Smart Environment

Participation
Water Management
Monitoring
Urban Design
Infrastructure
Waste Management
Electric Vehicle
Ecosystem

Smart Energy

Smart Meter
Power Plant
Smart Grid
Renewable Energy
Electric Vehicle
HVAC
Infrastructure

Smart Economy

Ecosystem
Transaction
Infrastructure
Management Information System MIS
Marketing

Smart Mobility

Multimodal Urban Design
Infrastructure
Public Transportation
Delivery
Traffic Management
Electric Vehicle
Parking

Smart Living

Urban Design
Ecosystem
Wellness
Marketing
Security Safety
Monitoring
Infrastructure

Smart Governance

Administration
Operations Management
Participation

Smart People

Participation
Training
Lifelong Learning
Ecosystem
Infrastructure
Online Learning

Smart Environment



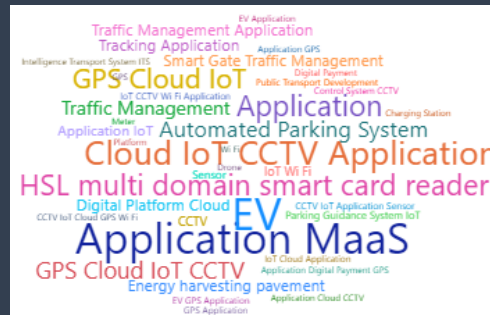
Smart Energy



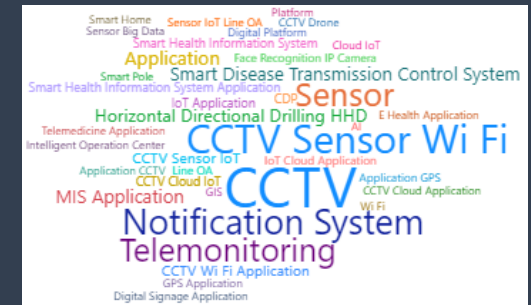
Smart Economy



Smart Mobility



Smart Living



Smart Governance



Smart People

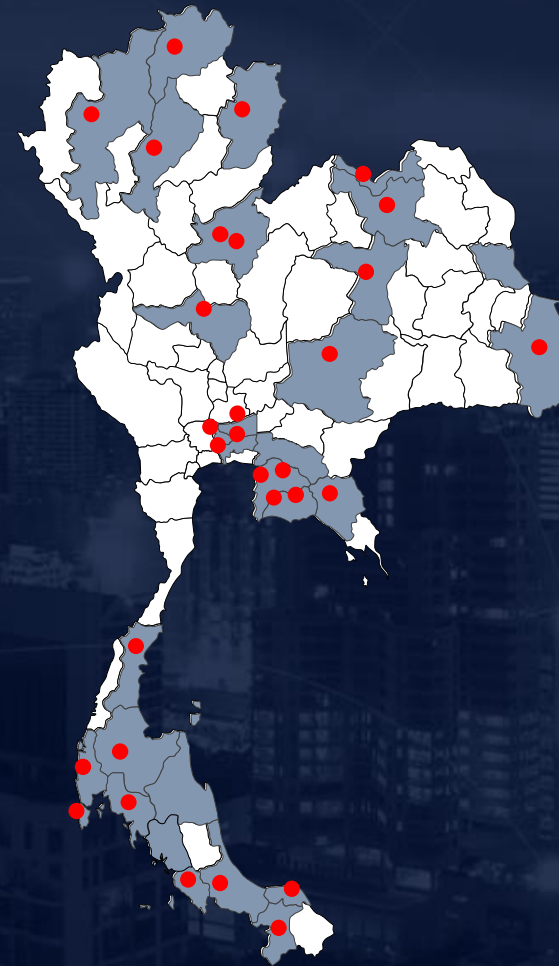


The Smart City Ambassadors #1

SCA The Smart City Ambassadors

30 SMART CITY AMBASSADORS

Logo partners at the bottom: CISCO, ptt, PINEAPPLE VISION SYSTEMS, SKYLLER, HUAWEI, accenture, Jumbo Electronics, SCB ACADEMY, and a Thai government seal.



- Smart City Promotion Zone
- City with Ambassadors

- Young Generation Smart City Developer
- Linkage between Central to Local
- Smart City Ambassador Bootcamp



30 Ambassadors/
Cities
25 Provinces

The Smart City Ambassadors 2 (SCA#2)

New Opportunity

**More Cities
to Come**

**150 Smart City
Ambassadors**

150 Cities



Thailand Smart City Week 2020

(16 – 22 OCTOBER 2020)

- Learns, Hacks, Plays, Meets Activities
- Celebrating 13 Smart City Promotion Zones
- Smart City Awareness of 300,000 people



Ceremony for 13 Smart City Promotion Zones



Online Seminar



Online Hackathon



QR for Booklet



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Thailand Digital Valley @EECd

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Location and accessibility

Thung Suk La,
Siracha District,
Chonburi 20230



TDV@EECd



Motorways and Highways

Investment of 580 Million USD

Double Track Rails Linking 3 Seaports

Laem Chabang Deep Seaport – Map Ta Phut Deep Seaport – Sattahip Seaport

Investment of 1,822 Million USD

High Speed Rail Linking 3 International Airports

Don Mueang Airport – Suvarnabhumi Airport – U-Tapao Airport

Investment of 4,471 Million USD



139 k.m.

Don Muang
International
Airport



98.9 k.m.

Suvarnabhumi
International
Airport



69.2 k.m.

U-Tapao
International
Airport



4.3 k.m.

Double Track
Railway Station
(Laem Chabang)



6 k.m.

High-Speed
Railway Station
(Siracha)



6.7 k.m.

Laem Chabang
Deep Sea Port



75 k.m.

Map Ta Phut
Deep Sea Port



23.4 k.m.

Bang Saen



28 k.m.

Pattaya City



30.4 k.m.

Pattaya-Huahin
Ferry Port

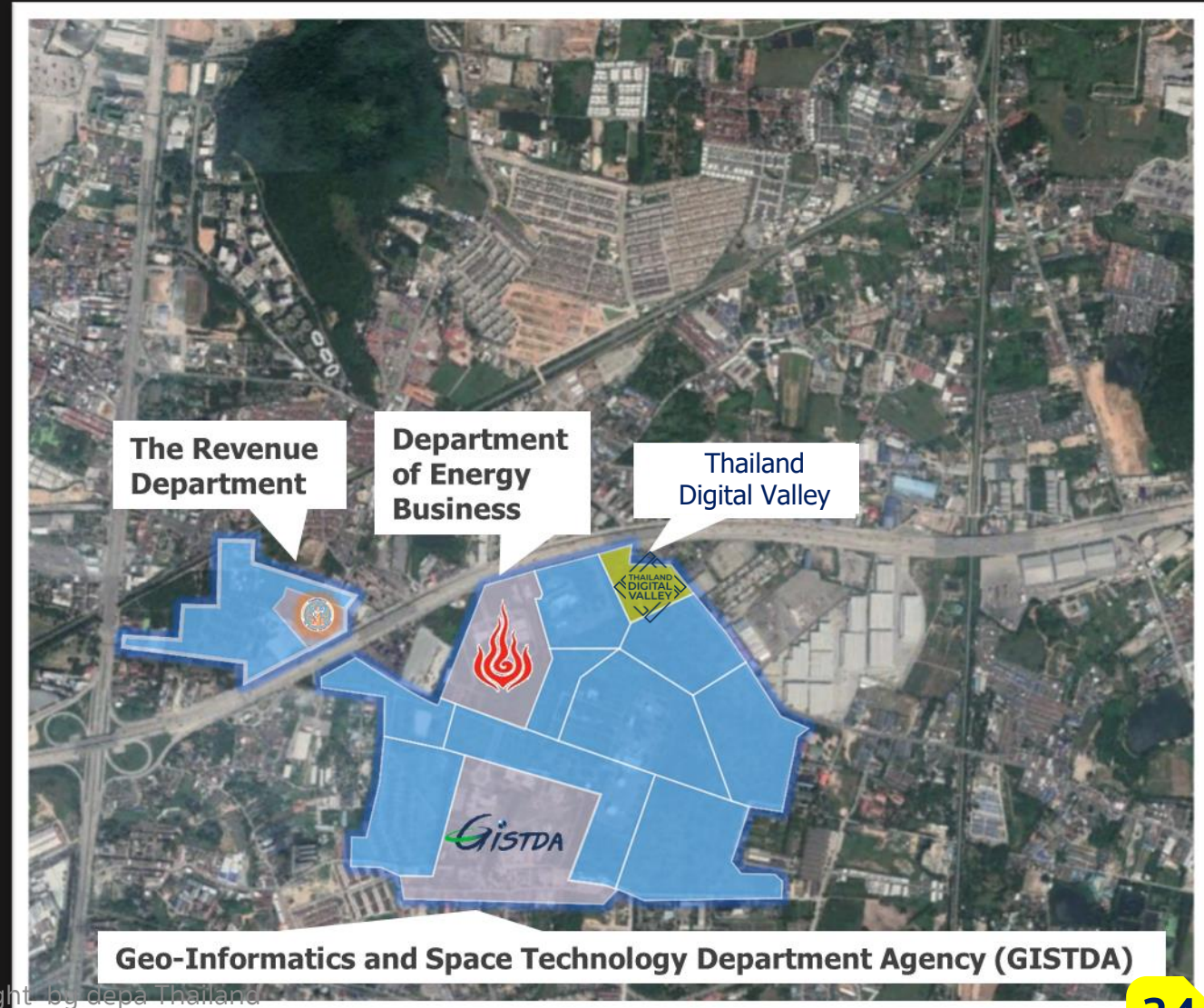
Project Overview

Location

Thung Suk La, Siracha District, Chonburi

Function by Site

| Type | Rai | Acres |
|-----------------------------|---------------|---------------|
| Available for Invest | 570.00 | 225.30 |
| Thailand Digital Valley | 30.00 | 11.86 |
| CAT Telecom (Teleport) | 14.00 | 5.53 |
| Satellite Station | 8.75 | 3.46 |
| Energy Business | 71.75 | 28.36 |
| Revenue Department | 14.50 | 5.73 |
| Total | 709.00 | 280.24 |
| GISTDA | 120.00 | 47.43 |
| Grand Total | 829.00 | 327.67 |



Digital Valley Landscape

TDV 5
Digital
Go Global
Centre
(20,000 sq.m.)

TDV 3
Digital
Innovation
Centre
(40,000 sq.m.)

TDV 1
depa Digital
One Stop
Service
(1,500 sq.m.)

TDV 4
Digital
Edutainment
Complex
(20,000 sq.m.)

TDV 2
Digital Startup
Knowledge
Exchange
Centre
(4,500 sq.m.)



Thailand

Digital Valley Purpose

1



Strengthen

Partnerships and Collaboration
Among Private Sectors, Academic
Institutions and Government

2



Build

An Ecosystem
and Open Platform
for Global Startups

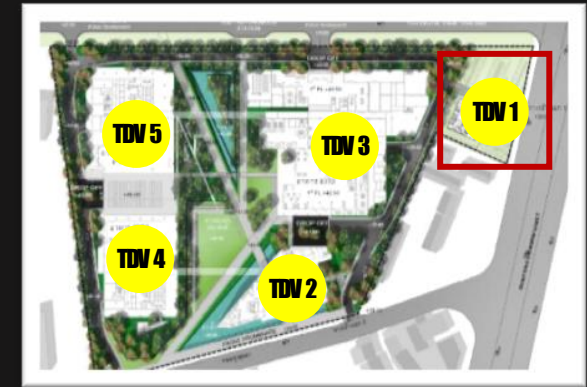
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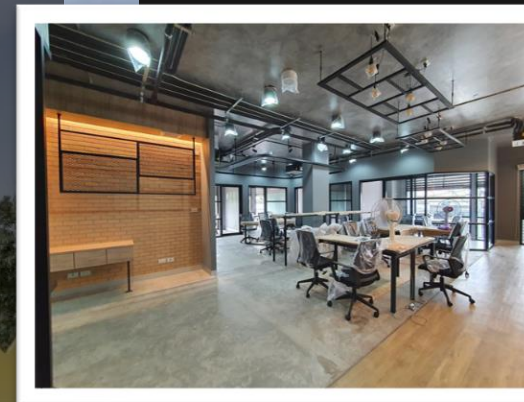
Support

Digital Products and Services Design
by Large Tech Enterprises
and Startups

TDV 1 depa Digital One Stop Services



100% Completed
Coordination Center for Thai Digital Businesses
Smart Data Centers in Chonburi and Eastern of Thailand
Workspaces for Thai startups and Digital Tech companies



Services

- depa's promotion i.e. funds
- Exclusive community Activities & Event Access
- Smart Visa
- BOI's privileges
- Rental spaces for digital provider & startup
- Co-working space

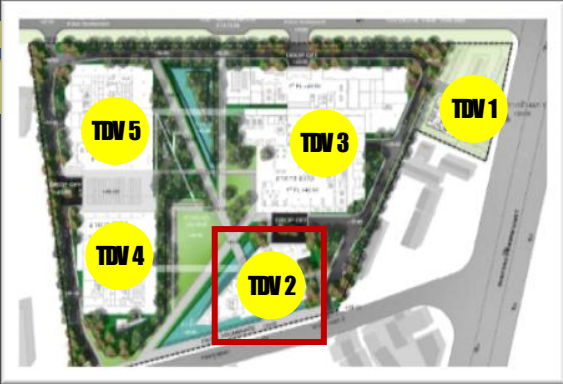
depa

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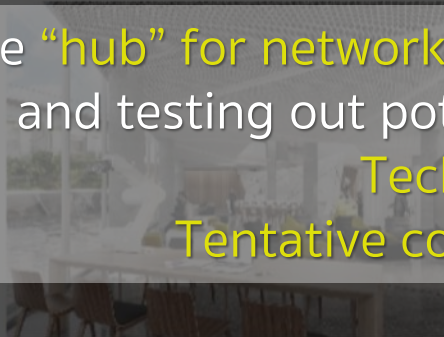
27



TDV 2 Digital Startup Knowledge Exchange Center



The “hub” for networking, exchanging ideas and testing out potential business plans.
Tech community Building
Tentative completion in Apr 2022



work

learn

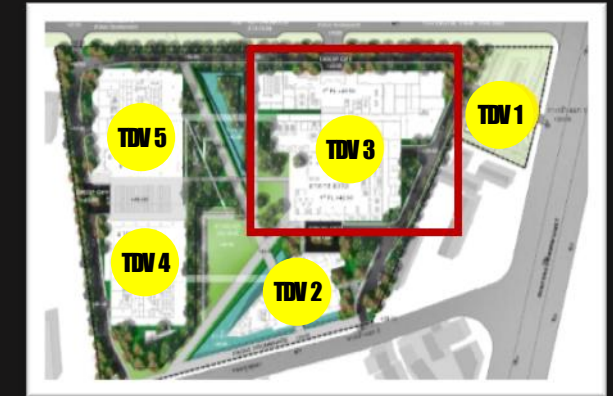
live



| | | |
|----------------------|-----------------|--|
| • Knowledge Exchange | 4 th | |
| • Knowledge Exchange | 3 rd | • Meeting & Conference • Gym |
| • Knowledge Exchange | 2 nd | • Lifestyle Community |
| • Co-Working Space | 1 st | • Lifestyle Community • Food & Beverages |

TDV 3 Digital Innovation Center

Largest in ASEAN
40,000 sq.m.



Zone A

3rd

Conference 1,500 persons

2nd

Startups Offices

1st

Super Maker Space
3D Printing Center



Zone B

5G Application Lab

Cloud Innovation Centre

IoT Innovation Centre

Startups Co-creation Space

AI Lab

BIG DATA Center

Startups Co-Creation Space

Hardware & Smart Devices Lab

Exhibition Hall

Zone C

7th

Startups Co-Cocreation Space

6th

Startups Co-Cocreation Space

5th

Software Convergence Centre

4th

Startups Co-Cocreation Space

3rd

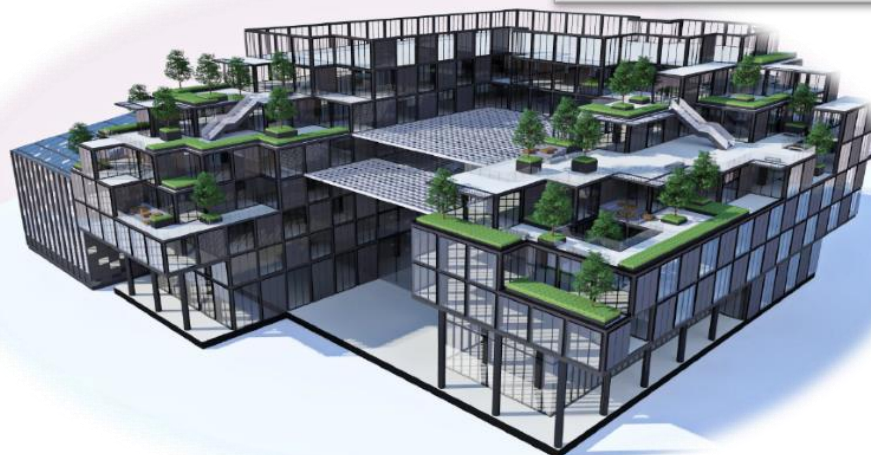
AR/VR/MR Lab

2nd

Startups Co-Cocreation Space

1st

Canteen
Business Service and Support

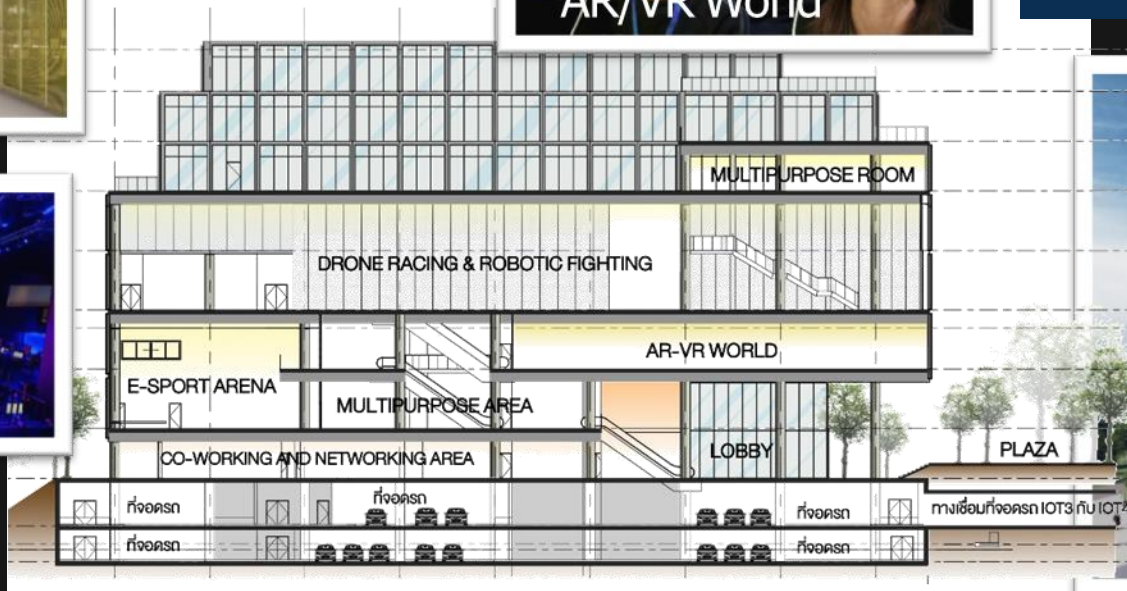
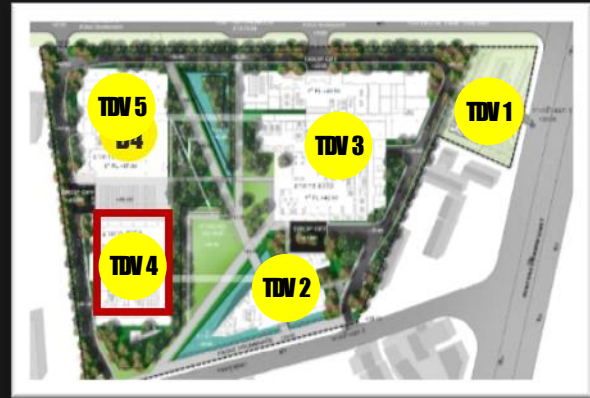


TDV 3 Construction Progress

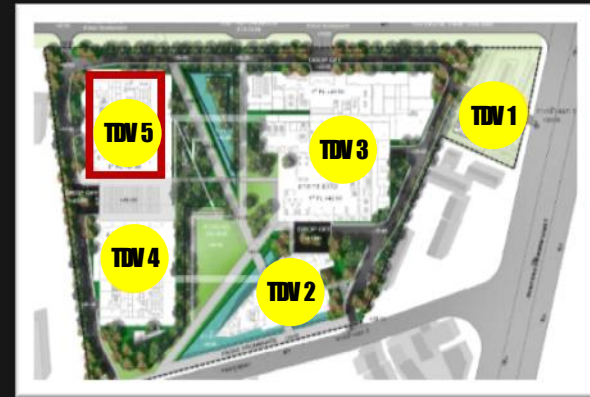


TDV 4 Digital Edutainment Complex

- 7-8th** Product & Service Design & Prototyping
- 6th** Robotic School
- 5th** Drone School
- 4th** Drone Racing Robotic Fighting
- 3rd** AR/VR/MR World
- 2nd** E-Sport Arena
- 1st** Co-Working Space



TDV 5 Digital Go Global Center



Global is here


Are you ready ?

- 7-8th** Conference and Meeting Rooms
- 6th** Go Global Office
- 5th** Go Global Office
- 4th** Go Global Office
- 3rd** Go Global Office
- 2nd** Go Global Office
- 1st** Exhibition Space

- 7-8th** GYM and Sky Lounge
- 6th** Design Thinking Centre
- 5th** Acceleration Centre
- 4th** Mentoring Centre
- 3rd** Consultation Centre
- 2nd** Business Support Centre
- 1st** Co-Working Space

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The background image is a conceptual rendering of a modern digital workspace. It features multiple levels connected by stairs and walkways. People are seen walking and working. There are drones flying in the air and small, rounded robotic pods on the ground. The color palette is dark with yellow accents.

Economic Impact
50,000 million baht

Digital Job Opportunities
20,000 new hires

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Project Timeline



TDV 1
August 2020



TDV 2:
87% progress
Mid-year 2022



TDV 3



TDV 4



TDV 5

2019

Design

Jan - Aug 2019
Architecture Design Finished

2020

TDV 1 and TDV 2

2021

2022

Construction : TDV 3, TDV 4 and TDV 5

2023

2024



กระทรวงดิจิทัล
เพื่อเศรษฐกิจและสังคม



หลักสูตร

Fundamental of Smart City

พื้นฐานองค์ความรู้การพัฒนาเมืองอัจฉริยะ สำหรับคนทั่วไปที่ต้องการเข้าใจความรู้
พื้นฐานด้านการพัฒนาเมืองอัจฉริยะ หนึ่งในองค์ประกอบหลักสูตรผู้นำเมืองอัจฉริยะ
นำอยู่ Chief Smart City Officers (CSCO)



CHIEF
SMART CITY
OFFICERS (CSCO)

โดย สำนักงานส่งเสริมเศรษฐกิจดิจิทัล และ สำนักงานเมืองอัจฉริยะประเทศไทย



เริ่มเปิดรับสมัคร
ในเดือนสิงหาคม 2563
เพื่อรับสิทธิ์การเรียนรู้

ผู้ที่เข้ารับการอบรมครบทุกองค์ประกอบ
จะได้รับประกาศนียบัตร CSCO

ติดต่อสอบถามได้ที่ :
ฝ่ายส่งเสริมเมืองอัจฉริยะ สำนักงานส่งเสริมเศรษฐกิจดิจิทัล
e-mail :
scp@depa.or.th โทร: 02 0262333 ต่อ 5109



กระทรวงดิจิทัล
เพื่อเศรษฐกิจและสังคม



GBDi
Government Big Data Institute



SMART CITY
Thailand

www.thailandsmartcity.or.th
Email: scp@depa.or.th