

Progress Report of Low-Carbon Model Town (LCMT) Project

October 25, 2017

**Agency for Natural Resources and Energy
METI, Japan**

APEC Low-Carbon Model Town (LCMT) Project

LCMT Project was initiated in 2011 in response to Declaration at the 9th APEC Energy Ministers Meeting held in Fukui, Japan in 2010.

Background of the LCMT Project:

- **Rapid urbanization and increase in energy consumption in the APEC Region**
- **Necessity of low-carbon measures in city planning to boost energy efficiency and fossil energy use**

Key Activities of LCMT Project (Phase 1-6)

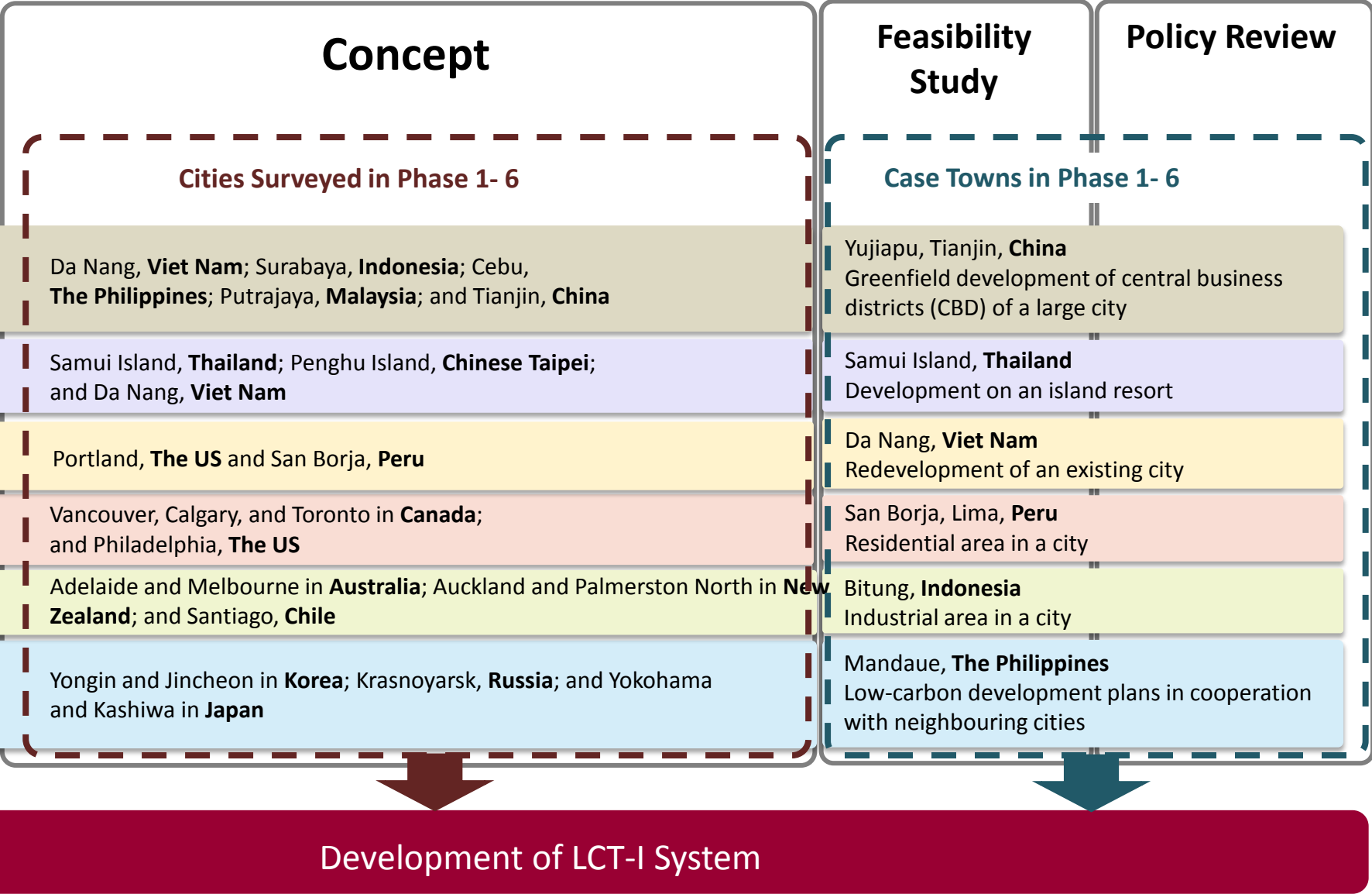
1. Development and refinement of the “Concept of the Low-Carbon Town in the APEC Region (Concept)”

- **The Concept shows a basic idea/principle of a low-carbon town and provide guidance.**
- **The APEC Low-Carbon Town Indicator (LCT-I) System has been developed based on the Concept.**

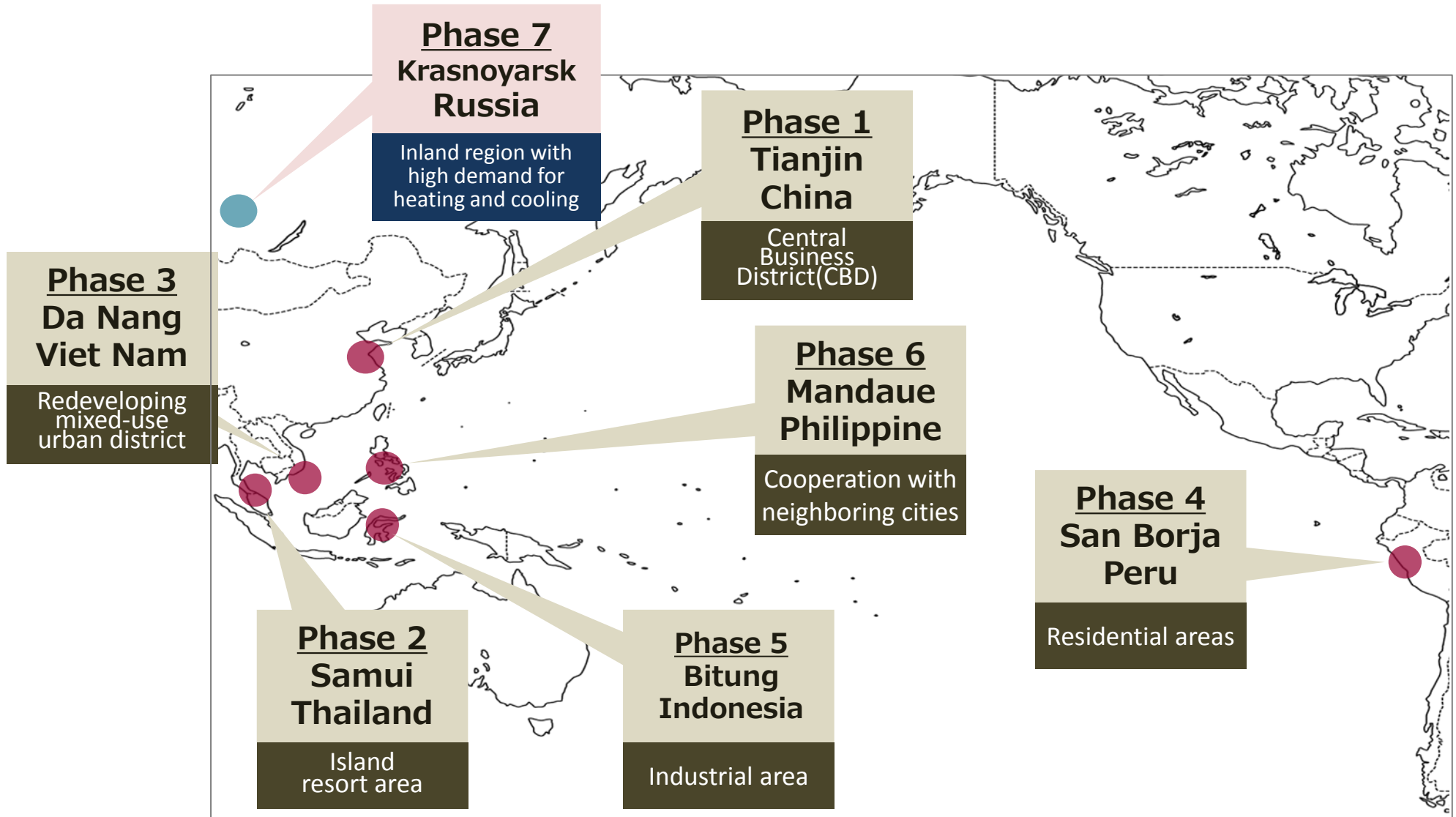
2. Feasibility Study for a Case Town

3. Policy Review for a Case Town

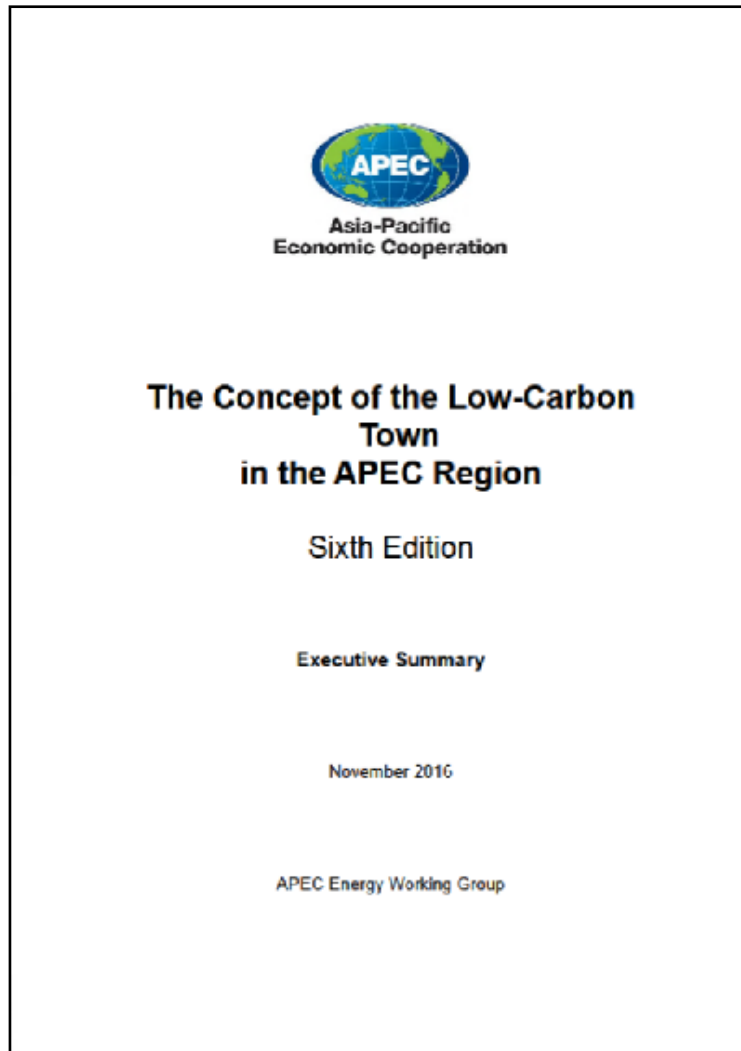
Preliminary Research



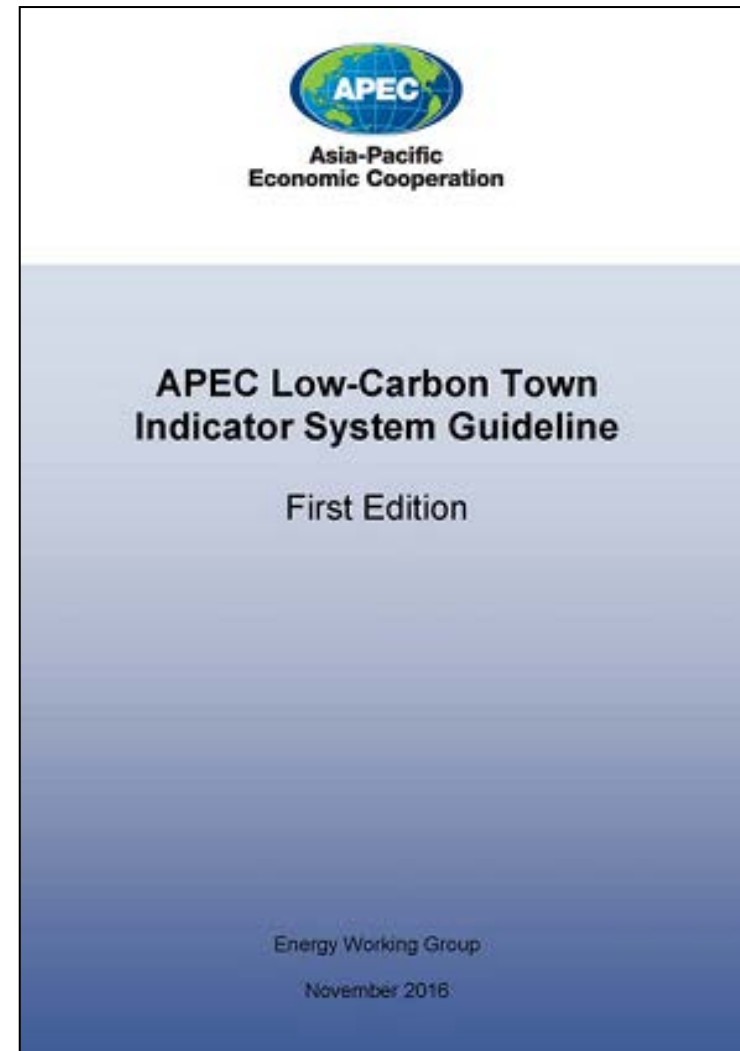
Case Towns of Feasibility Study and Policy Review



The Concept and the LCT-Indicator System



The Concept of the Low-Carbon Town in the APEC Region (Sixth Edition)
http://publications.apec.org/publication-detail.php?pub_id=1796



APEC Low-Carbon Town Indicator System Guideline (First Edition)
http://publications.apec.org/publication-detail.php?pub_id=1797

Assessment Framework of LCT-I System

	Tier 1	Tier 2 (No. of Tier 3 indicators)
Directly Related	Demand	1. Town Structure (3) 2. Buildings (4) 3. Transportation (6)
	Supply	4. Area Energy System (1) 5. Untapped Energy (1) 6. Renewable Energy (1) 7. Multi Energy System (1)
	Demand & Supply	8. Energy Management System (3)
Indirectly Related	Environment & Resources	9. Greenery (2) 10. Water Management (3) 11. Waste Management (2) 12. Pollution (3)
	Governance	13. Policy Framework (4) 14. Education & Management (2)

APEC Low Carbon Town-Indicator system

Image of assessment result

Overall Assessment Result

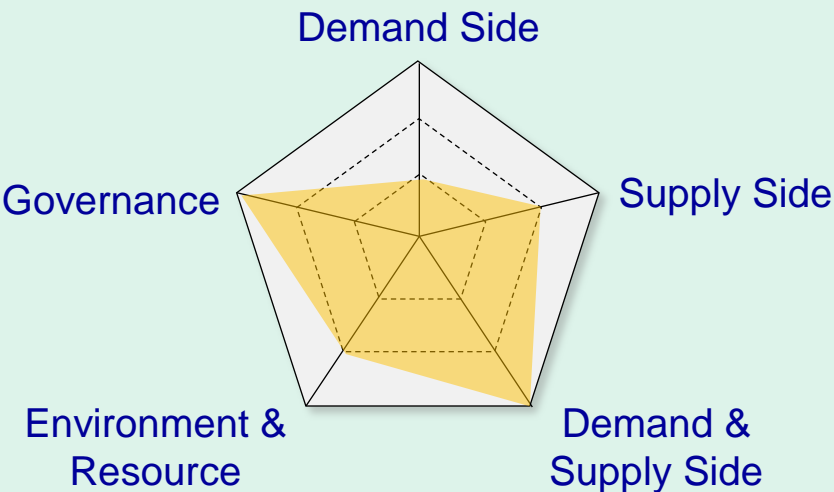
Overall Rank



Total Point
average of (1)to(15) **2.5**

CO2 Reduction
470 t-CO2/year

Radar Chart



Individual Assessment (more than 30 items)

	★	★★	★★★	★★★★	★★★★★
Required ...	████████████████████				
Optional ...	████████████████████████████				
Total (average)	████████████████████				

Transition of LCMT Project

Phase 1 – Phase 6 (2011-2016)

Refinement of the
“Concept” (including
the LCT-I System)

Feasibility Study (full scale)
of the Case Town

Policy Review
of the Case Town

Phase 7 (July 2016 - December 2017)

Feasibility Study (full scale)
of Krasnoyarsk city

Policy Review
of Krasnoyarsk City

Volunteer Towns
Nomination/Selection

**LCMT Symposium
(Sep. 2017)**

Dissemination Phase 1 (Aug. 2017 – Dec. 2018)

Feasibility Study (specific area) of 3 Volunteer Towns

Volunteer Towns
Nomination/Selection

2nd LCMT Symposium

Dissemination Phase 2 (The Concept Note to be submitted for APEC fund)

Feasibility Study (specific area) of Volunteer Towns

Volunteer Towns
Nomination/Selection

3rd LCMT Symposium

Transition of LCMT Project

Krasnoyarsk city

FS Consultant: Nikken Sekkei Research Institute

Phase 7 (July 2016 - December 2017)

Feasibility Study (full scale)
of Krasnoyarsk city

Policy Review
of Krasnoyarsk City

Volunteer Towns
Nomination/Selection

**LCMT Symposium
(Sep. 2017)**

Banda Aceh City, Indonesia

Hang Tuah Jaya, Malaysia

Shah Alam City, Malaysia

FS Consultant will be selected
through open tendering process

Dissemination Phase 1 (Aug. 2017 – Dec. 2018)

Feasibility Study (specific area) of 3 Volunteer Towns

Volunteer Towns
Nomination/Selection

2nd LCMT Symposium

Call for nomination - Next Volunteer Towns

Key Objectives of Dissemination Phase

- To disseminate the basic ideas and effective approaches of the Concept through utilizing the LCT-I System, which helps evaluate the progress and status of low-carbon development of various area in the APEC region;**
- To provide Feasibility Studies of a specified area of low-carbon development projects selected as the LCT-I volunteer towns in the LCMT Project and identify how to improve the low-carbon development plans through the Feasibility Studies; and**
- To share best practices and real-world experiences of low-carbon town design with planners and policy makers throughout the APEC region.**



**1st APEC Low-Carbon Model Town Symposium
14-15 September 2017, Jakarta, Indonesia**

Thank you for your kind attention!
(A-ri-ga-to-u-go-za-i-ma-si-ta!)