

Can Tho towards a Low Carbon City

NGUYEN Thai Hoa^{*(1)}, Yuki Ochi⁽²⁾, Kazuya Fujiwara⁽³⁾, Junichi Fujino⁽⁴⁾, Koji Shimada⁽⁵⁾

^{*(1)} Senior Researcher - Ritsumeikan University
⁽²⁾ Researcher – E-konzal
⁽³⁾ Researcher - Mizuho
⁽⁴⁾ Programmer Director – IGES; Senior Researcher – NIES
⁽⁵⁾ Professor – Ristumeikan University

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Introduction

- 2016: Can Tho city officially became a member of 100 resilient cities network (100RC) pioneered by Rockefeller Foundation.
- 2017: 100RC program was officially implemented in Can Tho city
- Goal: to support develop a City Resilience Strategy against internal challenges as well as the global challenges of the 21st century.
- Can Tho climate change action plan: focus more on adaptation measures
- With the targets of green growth, sustainable development, Low carbon scenario is an economic development model that Can Tho city is going to implement.
- July 2017: Training workshop in Yokohama: Sharing experience wit other cities, primary discussion for development of a LCS for Can Tho
- September 2017: Collaborate with ISPONRE, IGES, Mizuho Information and Research Institute (MHIR), Integrated Model of Asia and the Pacific team (AIM) to organize a workshop to develop a low carbon scenario for Can Tho city.
- November 2017: attended the 6th annual LoCARNet meeting, Bangkok

Background of Can Tho city

- Can Tho is a central city, a motivation for the economic, cultural and social development of the Mekong Delta, which is considered as a granary to ensure food security in Vietnam and in the world.
- Area: 1.405 km², 90% of the area is agricultural land, the river system is dense with a relatively high density of 1.8-2 km/ km².
- Population: 1,23 million



Training workshop in Yokohama



Workshop to develop a low carbon scenario for Can Tho city

The 6th annual LoCARNet

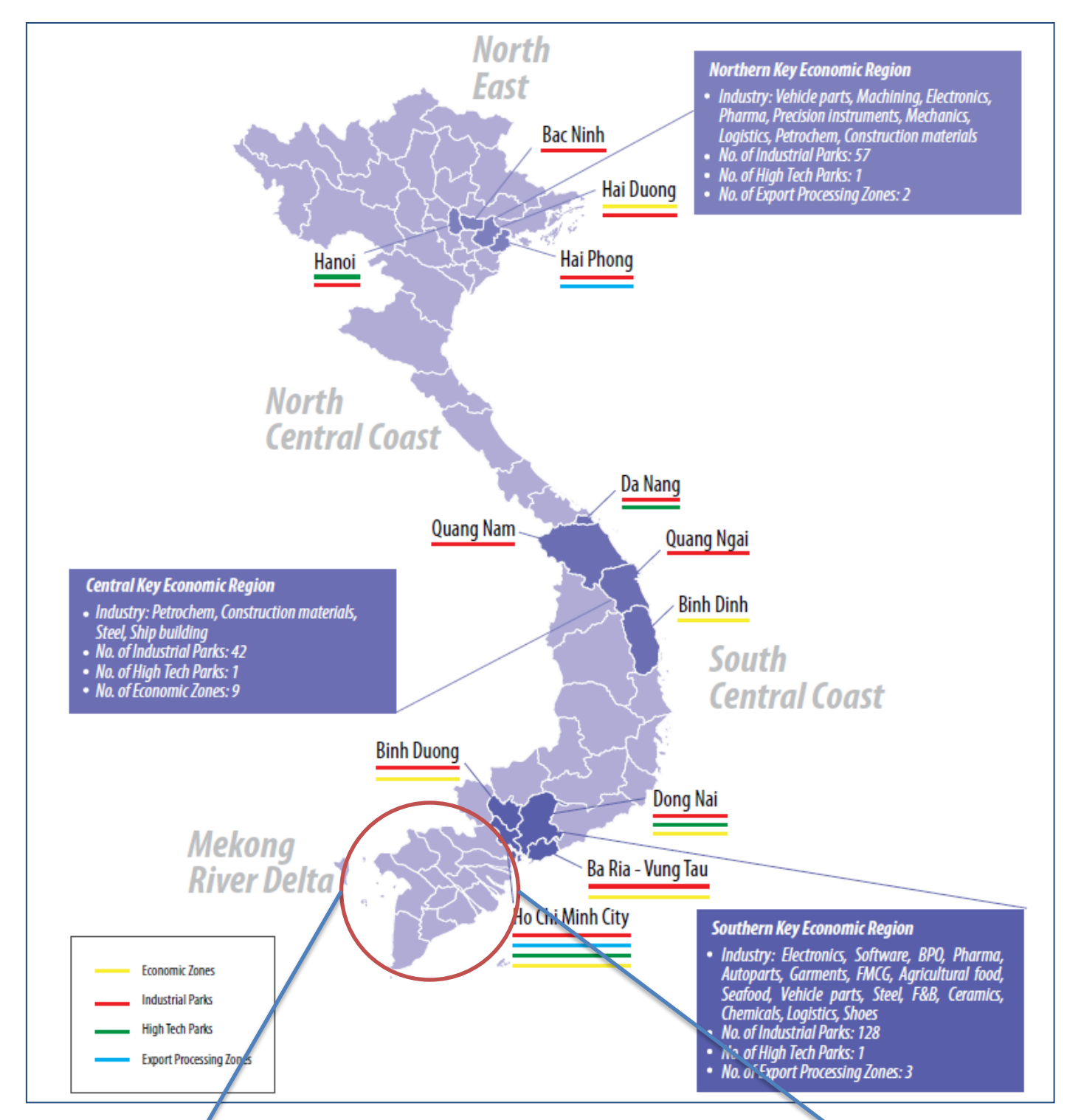
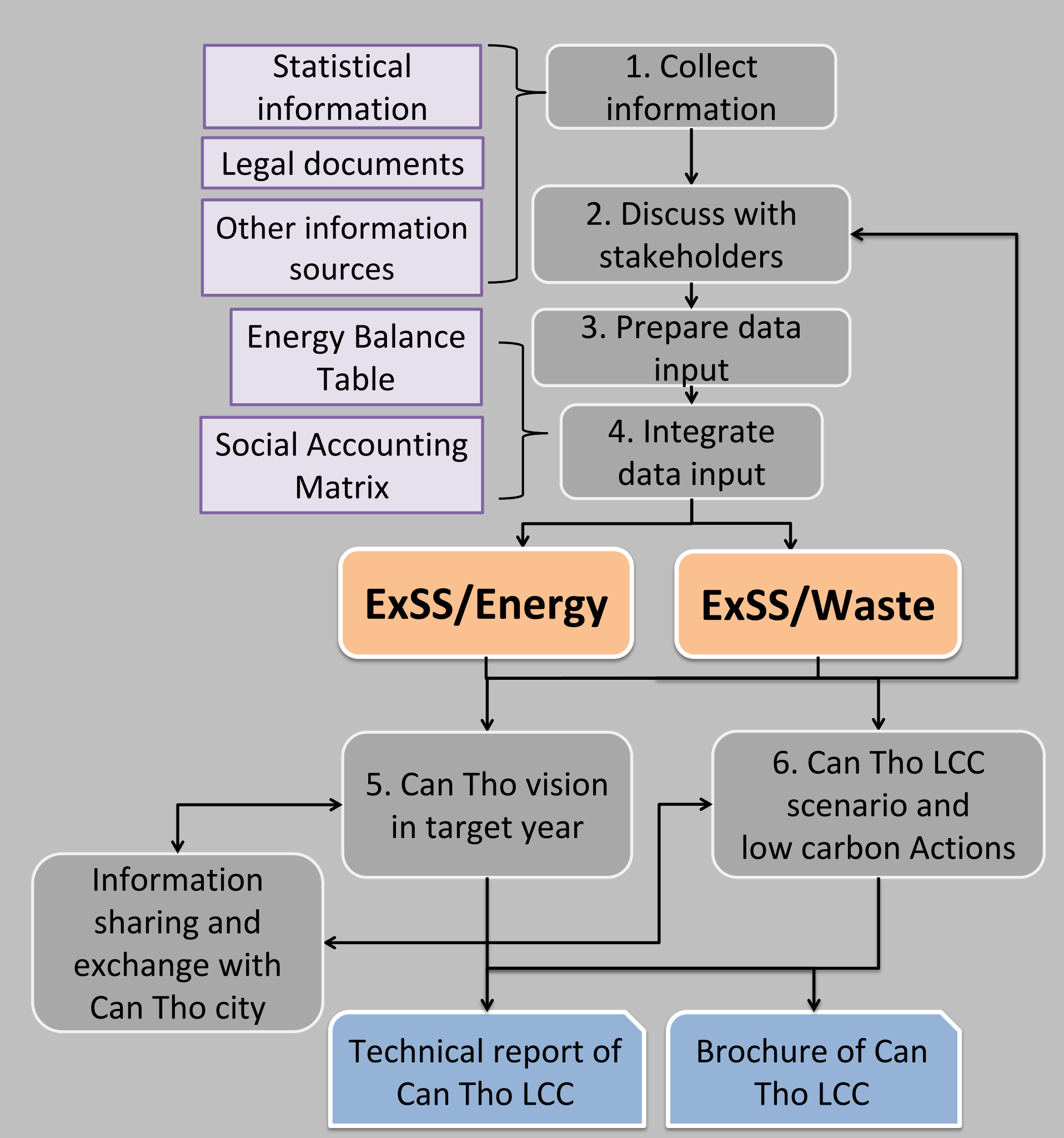


Image sourced from the May 2014 edition of the Vietnam Briefing Magazine "Developing a Sourcing Strategy for Vietnam".

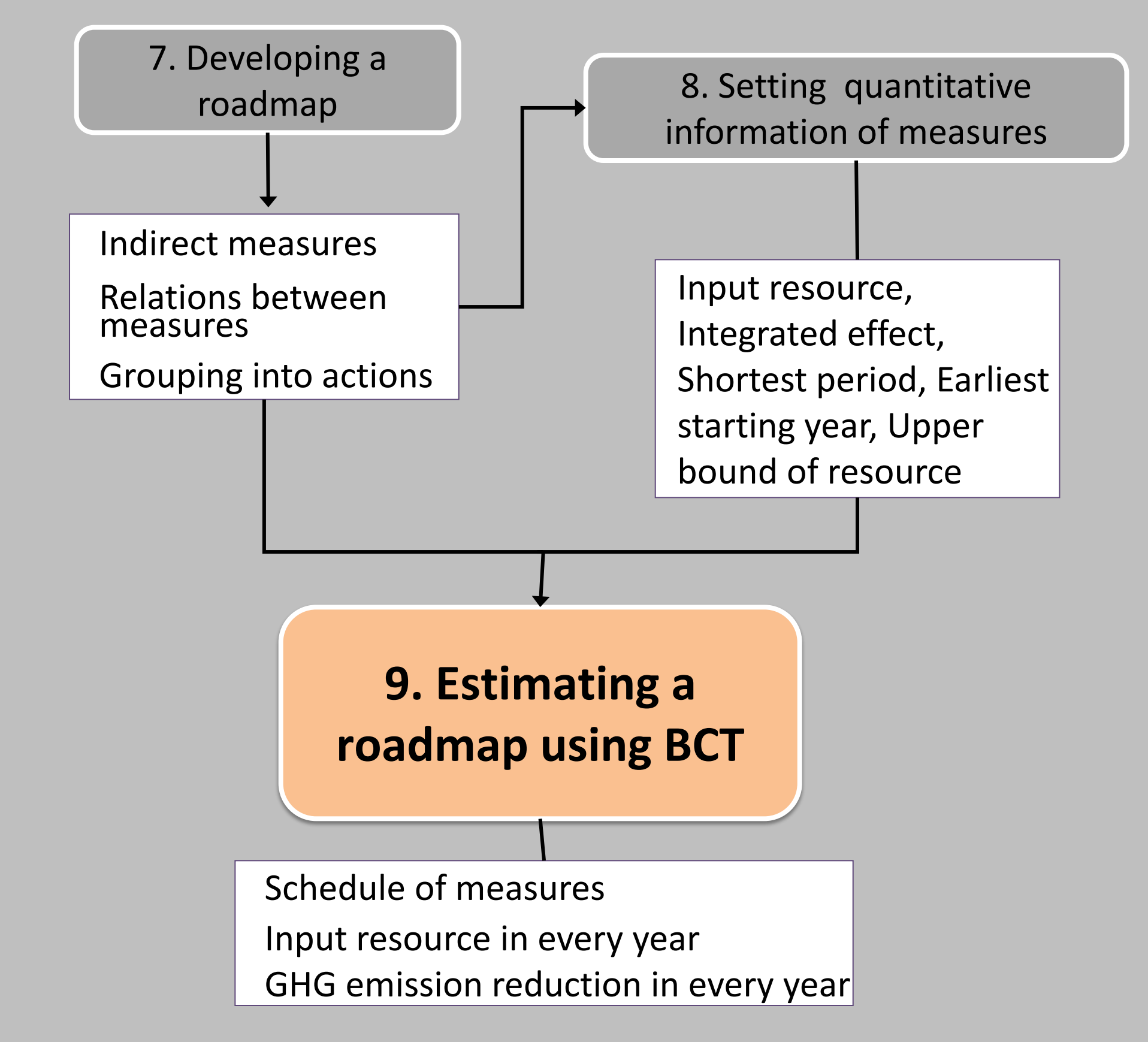


Work procedure

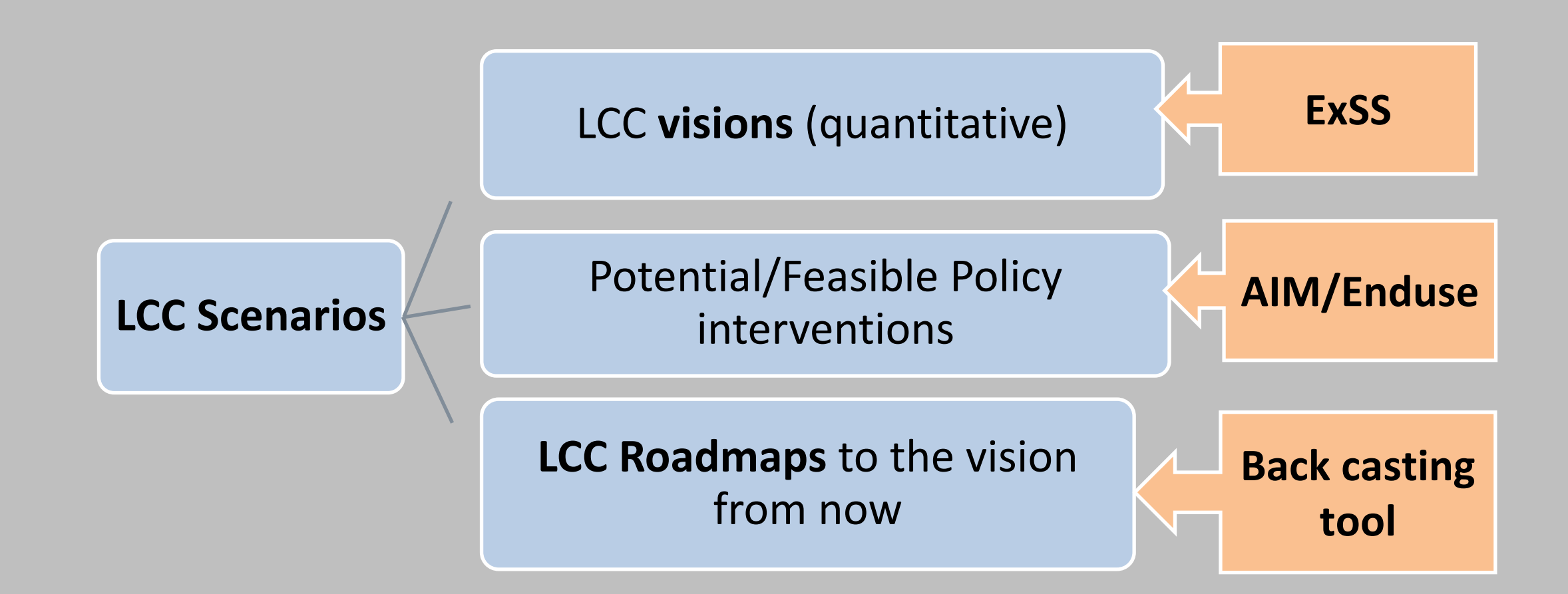
Phase 1. To create a “snapshot” including future socio-economic activity, GHG emissions, and required low-carbon measures to achieve the target.



Phase 2. To develop a “roadmap” which shows whose, when, and what kind of actions are needed to achieve the snapshot in the target year, and how much it costs.



Design a Low Carbon City (LCC)



Definition of terms:

- 1. LCC Scenario:** a plausible often quantitative description of how the future LCC may develop based on a coherent and internally consistent set of assumptions on social, economic, and technology development and their relationships
- 2. LCC Vision:** the future image and also quantitative design of a city (group of cities) under not only GHG reduction targets but also social, economic and environmental targets
- 3. LCC Roadmap:** the pathway of when and how each policy should be implemented in order to achieve the vision

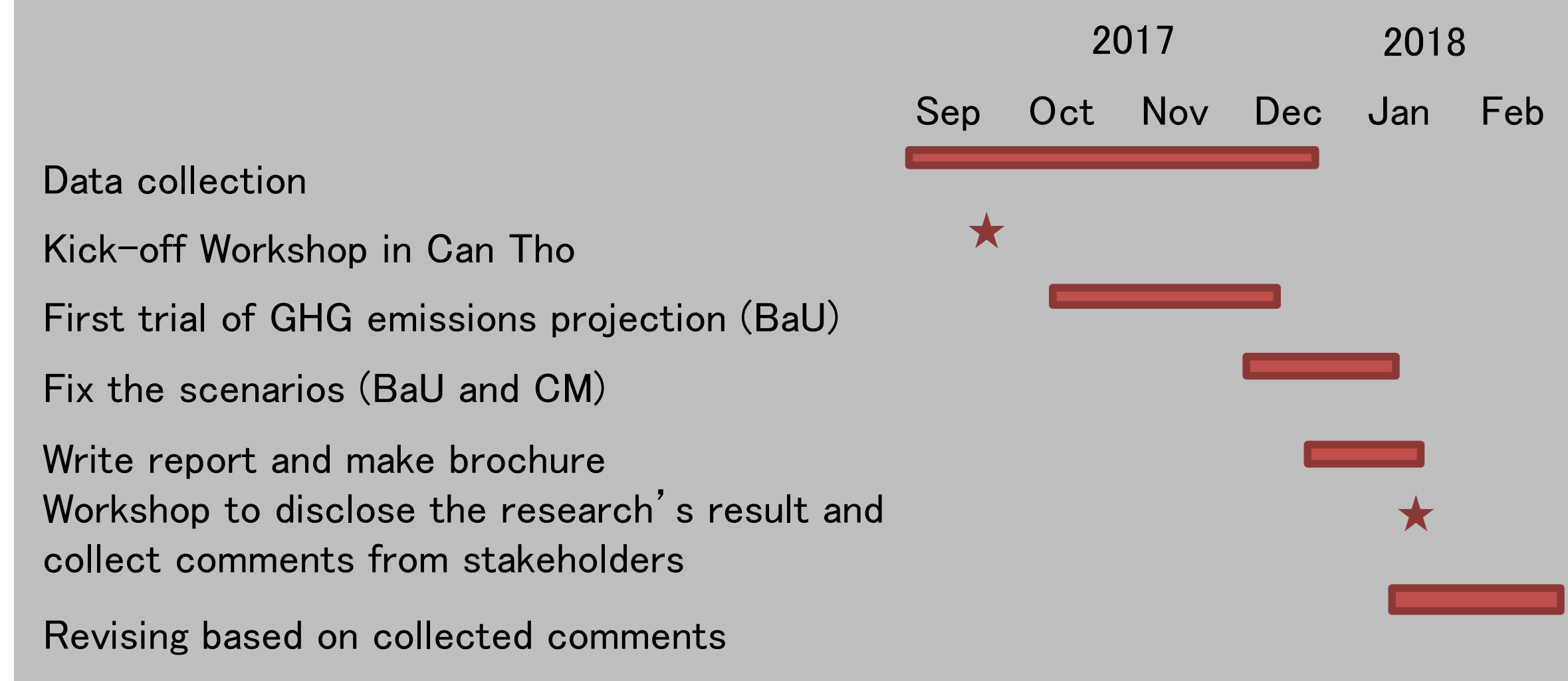
Framework of study

- **Base year:** 2015
- **Target years:** 2030 (follow targets of some development plans)
- **Sectors:** Energy, Transport, Industry, Waste, (Agriculture, LULUCF)
- **Area:** Can Tho city
- **Target GHG:** CO₂, CH₄, N₂O, (HFCs, PFCs, SF₆)
- **Social:** 1 population group, 1 household type
- **Transportation:** consider both domestic and cross-border
- **Passenger transport mode:** Road (bicycle, motorcycle, car, taxi, bus, train), waterway, aviation
- **Freight transport mode:** Road, waterway, maritime, aviation
- **Scenarios:** BaU (Business as usual) and CM (Countermeasure)

Research progress

Indicators	Status
Base year information	
Socio-economic	
Population	Obtained
Household size	Obtained
Social Accounting Matrix	Estimating
Transport	
Building	
Floor area of commercial sector per output	Not obtained
Floor area of commercial buildings	Not obtained
Energy	
Power supply table in the base year	Estimating
Dispersed power generation	No information
Energy demand	Estimating
Energy balance table	Estimating
Emissions	
GHG emissions factor	Obtained
Reference for future scenario: BaU and CM	
Population projection	Obtained
Economic projection / planning	Obtained
Transport planning	Obtained
Energy strategy	Collecting
Potential of renewable energy	Collecting
etc.	Collecting

Tentative schedule



Acknowledgement

This research is a collaboration work among Ritsumeikan University, Asian-Pacific Integrated Model (AIM) team, National Institute for Environmental Studies (NIES), Institute for Global Environmental Strategies (IGES), Mizuho Information and Research Institute (MHIR) and E-konzal in Japan, and Institute of Strategy and Policy on Natural Resources and Environment (ISPONRE), Can Tho city in Vietnam. We would like to express the great gratitude to those institutes and organizations for contribution their work on this research.