Thailand

Partner country

Status of the project: ongoing technical assistance



Population: 65.93 million (2016) | Growth rate: 0.25%

Percentage of urban population: 51.4% GDP per capita: USD 8,134 (NESDC, 2020) Percentage of the population living below

the national poverty lines: 7.2% Annual average infrastructure expenditures

as percent of GDP: 20.5%, 655,805.7 million baht out of 3.2 trillion (2020)

Nationally Determined Contribution (NDC):

Thailand NDC is to reduce GHG emissions by 20% (115.6 $MtCO_2$) from projected BAU level by 2030.

Transport will aim to reduce 41 MtCO₂ or 35.5% of the total NDC target (MoT)

National GHG emissions per capita: 3.99 (tCO₂eq) (Including Land Use, Land Use Change and Forestry)

Proportion of transport related GHG emissions: 27.21% (including LULUCF 2016) Exposure to climate change: HIGH

Context

Thailand is located in the heart of Southeast Asia and it borders with Lao PDR, Myanmar, Cambodia, and Malaysia. Its capital is Bangkok or Krung Thep in Thai. Thailand has the second largest economy in Southeast Asia, after Indonesia. The services sector represents 45.75% of jobs in Thailand and contributes 58.59% to the total GDP. It is followed by the agriculture sector which employs 31.62% of the active workforce and contributes 8% to the GDP. Lastly is the industry sector which employs 22.63% of the active workforce and contributes 33.4% to the GDP (Statista, 2019). Thailand relies heavily on tourism with nearly 40 million visitors in 2019. This puts Thailand in one of the top 10 most visited countries in 2019. However, many sectors have suffered from the decline in tourism due to the COVID-19 pandemic, which had a major impact on Thailand's economy. Thailand experienced a negative GDP growth in 2020 for the first time since 1998.

Private vehicle is the most popular mode of transportation in Thailand. Bangkok has the most diversified transport offer in the country. The BTS (skytrain), MRT (subway), metered taxis, motorcycle taxis, Tuk Tuks, to name a few, are ways people can commute around the capital. However, Bangkok is still notorious for traffic congestion as people prefer to use private vehicles for convenience and flexibility. To travel around the country or to the suburbs, there is an abundance of minivans and buses that serve most cities and popular destinations. Thailand also has 38 airports and seven of them are international airports. It typically takes around an hour to reach anywhere in Thailand by plane. Thailand also has a rail system spanning 4,925 km (BOI) which serve every part of the country albeit it is not a high-speed train.

The national government has decided to develop a NUMP called the Thai Clean Mobility Program to reduce GHG emissions from the transport sector, reduce air pollution and promote modal shift away from motorized private vehicles to public transport.

The development of the NUMP is a participatory process and requires several preparatory steps and discussions. These steps include:

- Building on existing sector studies to assess current funding, financing and transport planning mechanisms and implementation of cities and national government
- Identifying support needs for cities that are to be included in the NUMP (capacity, financial instruments, funding, planning procedures, institutional framework)
- · Assessing the current main barriers for low-carbon transport in Thailand
- Providing recommendations for "Vision & Goal setting" to:
 - » draft a national vision for urban mobility (in line with the NDC action plan);
 - » define the objectives of the National Urban Mobility Programme and;
 - » provide strategic direction on using the various levers of action available (governance, financing, funding, capacity building, technological choices, etc.) in Thailand

Support from the Partnership

Technical Assistance: National Urban Mobility Program (NUMP)

Type of NUMP: Programme NUMP

Funded by: BMU

Funding amount: EUR 1,661,634

Implemented by: GIZ through the TRANSfer III Project

Local counterpart: Office of Transport and Traffic Policy and Planning (OTP), Ministry of Transport

Main purpose of the NUMP:

- Provide necessary groundwork that allows policy makers in the Thai government to make an informed decision on the implementation of the NDC action plan
- Develop a funding mechanism that supports the implementation of urban transport measures
- Provide a planning framework for urban transport planning (quality standards, clear guidance on roles and responsibilities, capacity development)

Objectives:

The 'Thai Clean Mobility Program' consists of three pillars:

- Congestion charging
- Set-up of a Clean Transport Fund
- Bus modernization and reform

Supported activities:

Inter-ministerial agencies to create detailed design of the Thai Clean Mobility Program

Status of implementation

Project start: 2017 Q1

Expected project completion: 2022 Q2

Completed outputs:

• Study Tour to Berlin and London (February 2020)

Next expected outputs

- Pre-feasibility study on congestion charging design for Bangkok
- 2 congestion charge videos for communication and educational purposes for broad public as well as for the expert and policy maker community
- ENCON fund proposal
- Study for development of Clean Transport fund
- City symposium for green public transport

Core impact indicators baselines

Indicator	Baseline - 2016
Total annual transport related GHG emissions (Mt $CO_2 eq$)	68.26 Mt $\rm CO_2 eq$ (2016) from energy sector
Annual transport related GHG emissions per capita (kg CO_2eq)	1.03 kg $\rm CO_2 eq$ / capita (2016)
Road safety Annual traffic fatalities in the urban area, per 100,000 inhabitants	11 fatalities / 100,000 habitants (2020)

Highlights in the past year

A study tour to London and Berlin was a great opportunity for the project partner (The Office of Transport and Traffic Policy Planning, Thailand) to learn more about how congestion charging has been implemented in other cities and consolidated the working relationship and engagement with OTP on the specific topic.

Impact of the COVID-19 pandemic

Events, working group meetings on congestion charge and a steering group meeting had to be delayed due to COVID-19.