

# International Urban Cooperation Asia

## Tawau Climate Action Plan

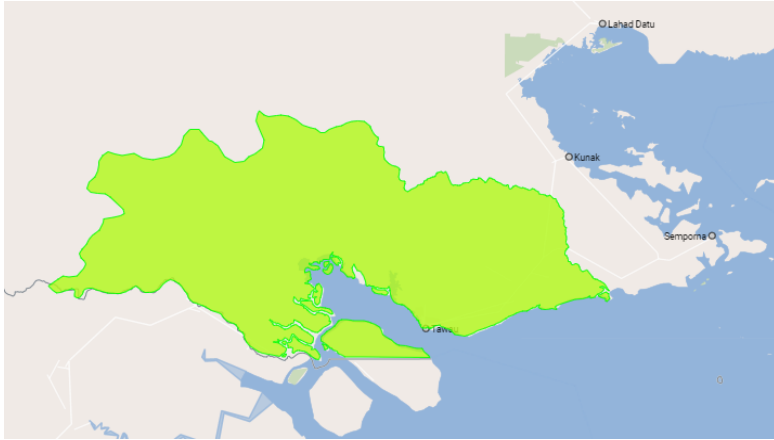
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# About Tawau



**Population:** 499,200 (2017)

**Land Area:** 6,125 km<sup>2</sup>

**Economy:** Agriculture & Fishing

## Basic Profile / Key Features






Tawau is a district in Sabah, Malaysia, located at border of Kalimantan, Indonesia and the **coastal area of Southeast Sabah** (facing the Sea of Sulu and Cerebes)

The **main economic activity in Tawau is agricultural** with more than 123,725 hectares of potential land for this purpose being developed for oil palm, cocoa, rubber and coconut farming. **Fisheries and timber are also significant** economic contributors in Tawau with fish and shrimp being exported to Peninsular Malaysia and overseas markets, and the presence of 30 timber processing factories

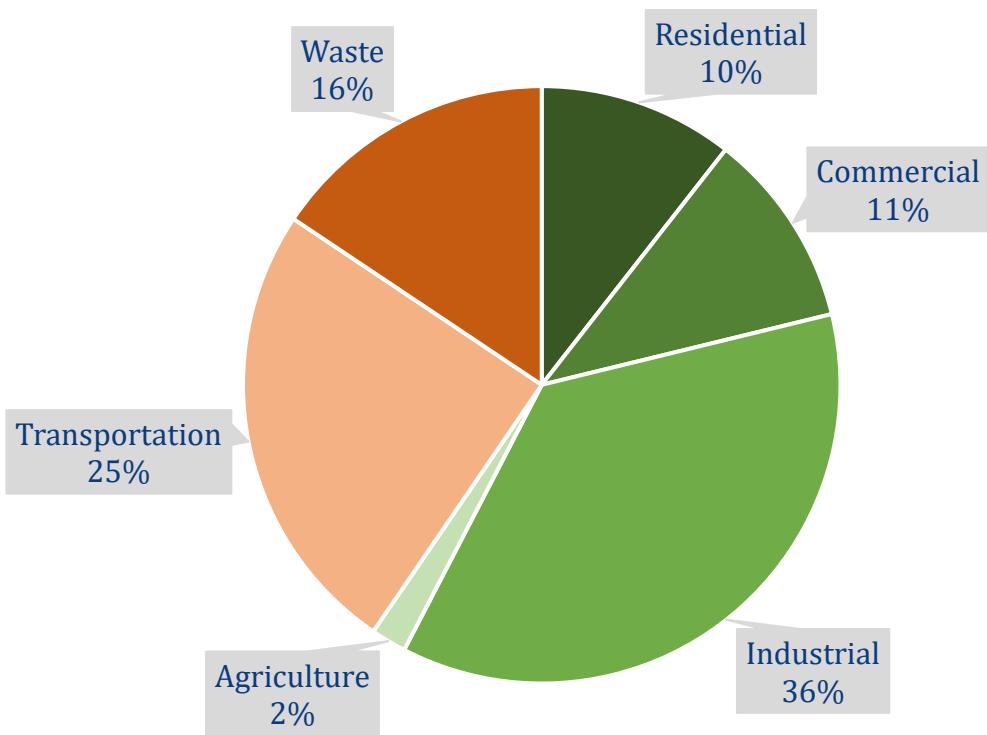
# Climate Change and Tawau

	Current Observation	Projection for 2030	Projection for 2050	Reference - Assumption Remarks
<b>Average Annual Temperature</b>	26.1 °C	26.9 °C (+3.1%)	27.4 °C (+5.0%)	East Coast Sabah (NC3 & BUR2, 2018, pg. 87)
<b>Average Annual Rainfall</b>	2,320 mm	2,434 mm (+4.9%)	2,375 mm (+2.3%)	East Coast Sabah (NC3 & BUR2, 2018, pg. 87)
<b>Range of Maximum Sea Level Values (Coastline)</b>	1.36 - 2.10 m	1.49 - 2.25 m	1.61 - 2.36 m	Sabah Southeast (NC3 & BUR2, 2018, pg. 95)
<b>Maximum Sea Level Values (Port)</b>	1.65 m	1.78 m	1.88 m	Tawau (NC3 & BUR2, 2018, pg. 95)

# Main Effects of Climate Change on Tawau

Climate Hazards	Risk Level	Future Trend	Affected Sectors	Vulnerable Population	Social Impact
<b>Tropical Storm</b>	Medium		Transportation; Food and agriculture; Tourism; Emergency services.	Marginalised group; Low-income households; Persons living in sub-standard housing.	Increased demand for public services; Increased risk to already vulnerable populations.
<b>Storm Surge</b>	Medium		Food and agriculture; Environment, biodiversity, forestry; Commercial.	Low-income households.	Increased demand for public services; Increased risk to already vulnerable populations.
<b>Flood (Flash, River)</b>	Medium High		Transportation; Emergency services.	Low-income households.	Increased demand for public services; Loss and damage.
	Medium		Water supply and sanitation; Food and agriculture; Waste management; Residential; Emergency services; Land use planning	Low-income households; Persons living in sub-standard housing.	Increased demand for public services; Increased demand for healthcare services; Increased resource demand; Loss and damage.
<b>Vector-borne Disease</b>	Medium		Residential; Public Health.	Children & youth; Elderly; Persons with chronic diseases; Low-income households; Person living in sub-standard housing.	Increased demand for public services; Increased demand for healthcare services; Increased risk to already vulnerable populations.

# Tawau's Contribution to Climate Change



Total GHG Emissions (2017) (ktCO<sub>2</sub>eq)

**1,561**

GHG Emissions per Capita (tCO<sub>2</sub>eq)

**3.1**

GHG Emissions per unit land area (km<sup>2</sup>)

**255**

■ Residential ■ Commercial ■ Industrial ■ Agriculture ■ Transportation ■ Waste

# Mitigation Target

**45%** emission intensity reduction by 2030 compared to base year 2010

## Adaptation Goals

Flood (Flash, River)

**Goal 1 Reduce property damage due to rainstorm and flooding by 50% by 2030 compared to 2017**

Tropical Storm & Storm Surge

**Goal 2 Reduce downtime of utilities caused by tropical storms by 30% by 2030 compared to 2017**

Vector-borne Disease

**Goal 3 Reduce the number of dengue cases by 50% by 2030 compared to 2017 level**

# Theme Based Actions

- 1. Low Carbon Economy** (farming, industry)
- 2. Walkable City** (active transport, public transit)
- 3. Green and Resilient Infrastructure** (flood, landslide, open space)
- 4. Prepared and Connected Community** (recycling, composting, mini hydro)

# Walkable City Tawau- Pedestrian first


The concept of walkable city is a popular alternative green urban mobility that fits well into sustainable development and sustainable transportation. **Walkable city Tawau focus on pedestrian and cyclists first.**

Implementation of walkable city Tawau in hot tropical condition is challenging due to hot sun and heavy rain. Hence the supporting facilities and amenities such as pedestrian zone, safe walkway, covered or tree shading and crossing are important.

Walkable city concept will also help the promotion of public transport which help to **improve the modal split of Tawau** where the usage of private vehicles is currently very high. **Improving quality of bus service such as expanding bus network** and online bus real time information on arrival can be useful to reduce carbon emission on transport sector when modal split improves.



# Walkable City

Action	Benefits	Responsible department	Key partners	Timeline	
				2020-2025	2025-2030
T1: Create dedicated bike lanes in downtown areas to promote cycling as healthy and environmental mode of transport	Mitigation	Development & engineering	Ministry of Transport, NGOs		



# OUR CHALLENGES

## 1 KNOWLEDGE/TECHNICAL BARRIER

Difficult for all of our staff to understanding the idea of GHG emissions

## 2 COORDINATION

Need to promote with the idea to other departments (within municipality) as the implementation is cross sectoral

## 3 DISTRACTION FROM COVID-19 PANDEMIC

In the period of COVID-19 pandemic, local community give less priotise and interest on climate change (Difficulty of having capacity building);  
Sacrifices time for helping community to address COVID-1

# LESSONS LEARNED

## 1 FIRST EXPERIENCE ON CRVA AND CIRIS MODELLING

Direct Learning from CDP and IUC Asia

Ability to appreciate how data collection are then be used in estimating GHG emission for MPT

## 2 STRONG SUPPORT FROM TOP MANAGEMENT

Tawau has been working on pedestrian and environmental friendly. Management is currently emphasis on walkability. Public health like dengue is also championing by MPT.

## 3 GLOBAL RELEVANCE OF LOCAL ACTIONS

GCoM provide global perspective to MPT on how city level experience can contribute in addressing climate change

## 4 COLLABORATION WITH UNIVERSITY

Interesting experience to work with Universities, they can support us new knowledge (e.g. technical input)

# NEXT STEPS

**1** IDENTIFY QUICK WIN PROJECTS  
from the CAP document that is in line with State Government aspiration (e.g. eco-tourism, waste-to-energy, community farming)

**2** DISSEMINATE CAP WITH THE STAKEHOLDERS  
Get buy-in from the business community (e.g. chamber of commerce), school and NGOs

**3** SECURING FUNDING  
Seek and obtain funding for implementing climate action (e.g. pedestrian facility)