

Experiencing Thailand's Energy - Literally and Figuratively

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Before Departure

Me and my friends were intrigued when we found out about the possibility to do our bachelor thesis abroad. After contact with students who went the year before us me and my friend Axel Lund decided to apply for a project in Thailand, a country we had both visited and really enjoyed. Our project aimed to identify the most optimal future energy system for a village currently relying on solar power. When our project was approved, we had to get vaccinated, apply for a visa and get familiar with the simulation program used in our project.

Upon Arrival

Our project was mainly planned and thought out by me and Axel. Therefore, we could start working as soon as we came to Bangkok. We were in Bangkok for about 10 weeks and during the start of our project we spent 4 days in the study area, in the south of Thailand. Upon arrival we met our local supervisor, Thavatchai and 2 other students also doing MFS in Thailand, Caroline Wahlberg and Leontina Walldén. The goal of the project was changed many times prior to our departure. Our first idea was to do an overall analysis of solar power in Thailand. After meeting with our supervisor, Dilip Khatiwada, a more distinct scope was determined.

Financials

Thailand is well known for its food and cheap prices. We could easily save money by eating street food, which is everywhere in Bangkok. Getting around in tuctucs, taxis and by local transportation was also very cheap. Sometimes the metro and trains could be even more expensive than booking a grab, which is the equivalent of Uber in Stockholm. The street food is often served on plastic chairs on the sidewalk and not only does it have the best prices, but also great food and lovely staff.

Accommodation

In Bangkok we had an apartment through AirBnB. At the top of the 32 storied building was a pool, a gym and a conference room. During our field trip we stayed in a hostel we found online. Because Bangkok is a big city and relatively cheap we did not need any help from our local contact person. Before booking, we did some research on the best areas and knew we wanted to stay close to Chulalongkorn University, where we would often study and meet the local supervisor.

Project

The goal of our project was to evaluate and identify the best future energy system for a rural village in the south of Thailand. The inhabitants in the village recently gained electricity access through rooftop-mounted solar panels. Based on different future scenarios and the local conditions, we evaluated what energy source configuration could best complement the current system. We plan on working together with our supervisor Dilip Khatiwada in hopes of potentially getting it published in a journal.

There was not a lot to do in the city Pranburi, where we stayed during the field study. Therefore, we could not wait to take the taxi out to the village in the morning. During the first days we would walk through the village, hand out questions written in Thai and try to interact with the locals. On our last day we had a translator and conducted an interview with technicians involved in the solar panel project years prior. When we got back from our days in the village we would eat Korean BBQ right next to our hostel.

Despite Thailand being a tourist-friendly country, Thai people are not always great English speakers. In order for us to get in touch with the right people and explain our project, we had to rely on our local supervisor Tay, who was very helpful. Tay was present on Zoom the day we presented our project and also received our drafts as our work progressed.

Country

The most notable culture shock was the language barrier. Their English was only slightly better than our Thai, which was severely flawed. Luckily, the Thai population is generous, used to foreigners and helpful. The combination of their patience and apps like google translate really simplified our time in Thailand. In April we celebrated a holiday called Songkran, which is the Thai new year. The holiday is celebrated with a four-day water fight on the biggest streets of Bangkok. April being the warmest month of the year explains the need for such an activity. There had not been a celebration since the covid pandemic, which made people extra excited this year. In the streets and in bars, water could be poured over or shot at you through water guns and all you could do was to fire back.

Leisure and social activities

During our spare time we would visit markets, bars and restaurants or simply enjoy the pool and gym in our apartment building. Because Bangkok is a well-known city, suggestions of what to visit and what to do is everywhere on the internet. The reception of international students at Chulalongkorn is during the fall, therefore getting to know international students in school was quite difficult. We developed a good relationship with some of the bartenders in a nearby pub called tropic city.

Sustainability

Flying across the world to Bangkok is probably not very sustainable in it of itself. However, there were things we made sure to keep in mind during our stay in order to be as sustainable as possible. We always turned off our AC when we left our apartment and ate lots of locally produced fruits and vegetables. The most important thing regarding sustainability was probably the project itself. Ensuring electricity for rural the rural population is related to *SDG 7, Affordable and clean energy*. It is also related to *SDG 11, Sustainable cities and communities*. Most projects regarding energy access and electricity can also be connected to many sub-goals regarding climate action and infrastructure. We hope our work can be useful for the village and hopefully have an impact on further work in similar areas around the world.