

Southeast Asia Climate & Clean Air Initiative (SEACAI)

Integrated approaches to climate protection and air quality improvement in Southeast Asia / Mekong riparian states



Regional Challenge:

The transboundary haze across ASEAN reveals an important fact: that seasonal haze primarily caused by agricultural and forest fires, waste burning, and other combustion activities rarely remains within the borders of the country where it originated. Short-lived climate pollutants (SLCPs), mainly black carbon, ozone and methane, from agricultural burning, forest fires as well as waste combustion and decomposition create recurring air quality problems throughout the Mekong region and the broader ASEAN bloc. These invisible forces contribute approximately 45% to anthropogenic global warming while quietly undermining human health through respiratory and cardiovascular diseases, and even

cancer in the process. The impact extends to the land itself, with agricultural productivity suffering and crop failures of up to 15% being attributed to SLCPs emissions. This creates economic ripples that cost affected areas 7-9% of their national GDP.

While ASEAN has established important frameworks, e.g. the ASEAN Agreement on Transboundary Haze Pollution (AATHP) and the Second ASEAN Haze-Free Roadmap (2023-2030), the complexity of emissions of SLCPs calls for fresh, comprehensive solutions, approaches that can work across diverse country contexts and sectors. The SEACAI project believes that solutions that begin in the Mekong basin can blossom and bear fruit throughout the entire ASEAN region.

Objective:

SEACAI works to enhance solution approaches to reduce climate-relevant air pollutants across ASEAN, with particular focus on the Greater Mekong Subregion (specifically, Cambodia, Laos, Thailand, and - to a lesser extent - Vietnam).

Approaches:

Local Solutions to the Regional Scale

SEACAI weaves together regional cooperation, practical demonstration, and knowledge sharing to create solutions that work both locally and regionally.

Regional Policy Cooperation That Opens Doors

SEACAI works to breathe life into the Haze-Free Roadmap by bringing together lessons from the Mekong Subregion with ASEAN's broader strategic vision. This will create opportunities to finance resources through both the ASEAN Investment Framework (AIF) and climate financing mechanisms. And it will ensure that good ideas have the resources to flourish.

The wisdom connects with other ongoing initiatives such as RAPAP (UNESCAP) and the Global Methane Pledge (CCAC). This cooperation will create a Southeast Asian network commitment to SLCPs mitigation that thinks and acts beyond traditional boundaries.

Mekong Subregion: Where Visions Take Shape

In the Greater Mekong Subregion, a Knowledge Hub is built as a living archive fed by science inputs, pilot demonstrations, and hands-on training. It supports Clear Sky Strategy implementation with practical tools like forest-fire roadmaps that communities can use.

SEACAI facilitates Zero-Burn Strategy discussions and creates roundtables where different voices contribute to shared solutions, building sustainable networks.

Local Demonstration:



implemented by:



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

**Swiss Agency for Development
and Cooperation SDC**

Our country-specific pilot projects show communities what's possible while generating insights that transform approaches across the region.

In **Thailand**, the project is working with agricultural communities to combat open burning through innovative public-private partnerships, creating viable alternatives that make economic sense.

In **Laos**, it is supporting burn-free forest and associated agriculture management where traditional knowledge merges with modern techniques.

In **Cambodia**, it is developing sustainable waste and agricultural residue management that turns problems into resource opportunities.

Financed by

Federal Ministry of Economic Cooperation and Development of Germany (BMZ) 4million Euros

The Swiss Agency for Development and Cooperation (SDC) 2million Euros

Country

Thailand, Laos, Cambodia, and Vietnam within the Mekong region.

Project partner

Implementation support from the Pollution Control Department (PCD) in the selected countries.

Project duration

2025 – 2028

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