



Executive Summary: the First Terrestrial Carbon Accounting Certificate Program in Indonesia

What is The Carbon Institute?

The Carbon Institute's mission is to build a new global workforce to better measure and manage carbon, Earth's most vital element. We power international academic and government partnerships that create solution-oriented professional carbon accounting training programs.

The **Carbon Institute** is a partnership led and managed by the **Greenhouse Gas Management Institute (GHGMI)**. The Greenhouse Gas Management Institute is dedicated to training tomorrow's experts on the principles, concepts and techniques to manage and credibly account for greenhouse gases. GHGMI's mission is to address climate change by building a global community of experts with the highest standards of professional practice in measuring, accounting, auditing and managing greenhouse gas emissions.

The Carbon Institute partner in Indonesia, the **Centre for Climate Risk and Opportunity Management for Southeast Asia and Pacific (CCROM-SEAP)**, has been

an academic asset for the Government of Indonesia on climate change. CCROM-SEAP provides support for national GHG inventories, REDD+ reference levels, and training programs.

CCROM-SEAP is building the first comprehensive Terrestrial Carbon Accounting (TCA) Certificate program in Indonesia. The goal of this TCA Certificate is to train Indonesian professionals so they will be better at implementing programs that have a measurable impact on emissions.

Course Areas for Comprehensive Terrestrial Carbon Accounting

1. Science and Policy Context
2. GIS/Remote Sensing (generating activity data)
3. 2006 IPCC Guidelines and Land Classification
4. Field Methods (developing emission factors)
5. Statistics for Terrestrial Carbon Accounting
6. Analysis and Communication of Results

Supported by:



Federal Ministry for the
Environment, Nature Conservation,
Building and Nuclear Safety

based on a decision of the German Bundestag

Scoping Studies Help Calibrate TCA Programs:

CCROM conducted two initial scoping studies: (1) one to determine the existing academic baselines for teaching terrestrial carbon accounting in Indonesia and (2) another to conduct stakeholder consultations on Indonesia's national and subnational government needs and priorities for terrestrial carbon accounting instruction.

Baselines: Forest Carbon Training Offerings in Indonesia

CCROM-SEAP conducted a comprehensive curriculum examination of nine academic institutions and training programs. All institutions and programs surveyed had some gaps in comprehensive TCA instruction. In general courses tend to be heavy on policy context and light on technical skills. The research concluded that there is no current comprehensive program for Terrestrial Carbon Accounting in Indonesia taught through careful course development and dialogue with government partners.

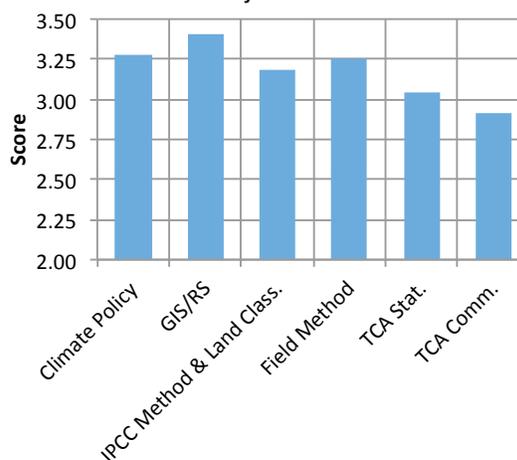
Gaps: Stakeholder Consultations on Forest Carbon Priorities in Indonesia

CCROM-SEAP interviewed 154 stakeholders including government employees,

academics, forest carbon practitioners, as well as students from the PhD, masters, and bachelors levels. These stakeholders provided recommendations about course content, the ideal course candidates, and program logistics.

Key insights that influenced the final business proposal include: information on which skills are the most needed and currently lacking, the timing and duration of the program, the preferred role of government in the program, and a confirmation that most learners want to bring real data for use in the TCA course, creating directly-usable outputs for their employers.

Exemplary figure. Self-evaluation of respondents on their knowledge in the six TCA subject areas



Full reports on TCA program baselines, TCA stakeholder consultations, and the TCA program details can be accessed online:

<http://carboninstitute.org/resources-and-media/country-context/>

Opportunities: TCA Certificate Program Business Plan

The Carbon Institute partners believe the Indonesian TCA Certificate program should be structured in the following way:

INSTITUTIONAL HOME: The TCA Certificate program will be hosted in the Graduate School of Bogor Agricultural University (IPB).

USE EXISTING TOOLS: The TCA Certificate program will leverage template curriculum for advanced Terrestrial Carbon Accounting, which is adapted to national circumstances and priorities. The program will also benefit from a TCA Help Desk, online courses, and professional development programs offered by The Carbon Institute and GHGMI.

TARGET AUDIENCE: The key target audience local and provincial government staff enrolled at IPB. The course will be open to all students in the PhD, masters, and undergraduate levels that meet the prerequisites.

COURSE LENGTH AND TIMING: The program will be run for 12 days over two weeks and conclude with examinations and a certificate ceremony for qualified students. The program will typically run once a year in July or August.

COURSE TRACKS: The TCA Certificate program will have two tracks: one for technical staff and another for policy staff. Technical staff will enroll in the full 12 days of the program to develop comprehensive technical skills. Policymaking staff will be able to learn the essentials of Terrestrial Carbon Accounting in the first two days, which will focus on policy context, communication of results to decision

makers, and a survey of each of the four technical areas.

COURSE STRUCTURE: The first nine days of the course will be classroom-based lectures and exercises. The final three days of the program will be fieldwork exercises that integrate all the technical skill areas. This approach allows participants to engage in a smaller-scale version of the same work they will conduct as TCA professionals.

EXPENSE AND ENROLLMENT: The program cost about 10 to 15 million rupiah per student with an expected training enrollment of about 20 to 30 students per year. This price will enable the long-term sustainability of the program. Government ministries and agencies will most likely pay program tuition expenses. The price of the program may be bundled together with Master's degrees as an option to develop additional competency.

CERTIFICATION AND ACCREDITATION: The TCA Certificate program will go through IPB's formal accreditation process, review by the GHG Management Institute, and possibly through an independent accreditation panel convened by The Carbon Institute.

RECRUITMENT AND MARKETING: The course will be directly marketed to potential students at IPB and through IPB's course portfolio. The program will also engage sponsoring government ministries and agencies (e.g., Ministry of Environment and Forestry, Ministry of Education).

We welcome your feedback on the scoping studies and proposed program details: <http://conta.cc/2woWFAu>

This project is part of the International Climate Initiative (IKI). The Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB) supports this initiative on the basis of a decision adopted by the German Bundestag.