



TRAINING THE WORKFORCE TO SOLVE CLIMATE CHANGE

THE CAPACITY GAP

A central element of the Paris Agreement is for countries to regularly and accurately take stock of their greenhouse gas sources and sinks. Yet three years after entry into force, there is still a significant disconnect between ambition and implementation. Even with unprecedented political will to combat climate change, the current institutions and workforces in many countries cannot fully implement the Paris Agreement as intended.

CLOSING THE GAP

Developing additional capacity for GHG inventories helps countries efficiently meet NDC targets, further increase ambition, and receive results-based finance from REDD+. International capacity-building efforts to date often defaulted to discrete initiatives revolving around short workshops with significant foreign expert roles. Closing this ambition gap requires a structural shift toward novel and innovative strategies of more permanent country-owned technical training in GHG measurement.

**Mentor
faculty**

**Tailor
advanced
curricula**

**Accredit
programs
globally &
nationally**

**Conserve
& restore
ecosystems**

**Measure
climate
progress
transparently**

OUR WORK

To meet this challenge, The Carbon Institute has made a long term commitment to building institutionalized GHG measurement capacity through supporting faculty in establishing terrestrial carbon accounting certificate programs. Self-sustaining, solution-oriented professional training courses use teaching best practices, shared curricula, faculty mentoring, and active learning modules. Carbon Institute programs graduate professional workforces with technical skills to measure land use emissions and contribute to the UNFCCC expert review process.

SUSTAINABLE CAPACITY

Investing in carbon accounting faculty in teaching centers builds long-term capacity and a new generation of carbon professionals. The Carbon Institute trains world class experts in measuring natural carbon stocks without being reliant on continuous foreign consultants or support. Our model invests in the long-term success of a country's workforce, educational systems, and national climate ambition by empowering academic institutions that sustain and grow human capacity.



INDONESIA

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

based on a decision of the German Bundestag



“The Carbon Institute has made significant contributions to capacity development on terrestrial carbon accounting in developing countries. With its unique approach and working modalities between partners, it has a huge opportunity to expand its existing partnerships in terms of both its regional coverage and its scope of training, especially after the adoption of the Paris Agreement Rulebook, which recognizes the central role of capacity building for the transparency framework.”

— **Nur Masripatin**, Carbon Institute Council Chairwoman, Former Director General of Climate Change of the Indonesian Ministry of Environment and Forestry

The Carbon Institute’s advanced terrestrial carbon accounting (TCA) certificate in **Indonesia** is a model of how international partnerships can help skilled forestry professors further expand their impact in teaching land use based climate solutions. The result: a locally taught program in comprehensive TCA with graduates who are now supporting local policies, projects, and market mechanisms to reduce GHG emissions from land use. IPB University now offers the TCA course as regular competency-based training program under the School of Graduate Studies.

- 30 PROFESSIONALS/YEAR TRAINED
- 81 COURSE HOURS/PERSON
- TCA IMPROVEMENT COMMITTEE FOR NATIONAL STRATEGY INTEGRATION



“Many countries with large tropical forest stocks have made strong commitments to reduce emissions from deforestation and forest degradation. The main obstacle, though, to understanding the impact

of steps taken is in the accounting. The Carbon Institute provides significant support in addressing this challenge, particularly in designing terrestrial carbon accounting curriculum and facilitating the exchange of knowledge between partner countries.”

—**Rizaldi Boer**, Director, Center for Climate Risk and Opportunity Management in Southeast Asia and Pacific of IPB University

28 **2,268** **84%**

Indonesian professionals trained in TCA

Course person-hours of TCA training

Communications proficiency in TCA

CURRICULAR CONTENT

- TCA Policy Context
- IPCC Guidelines and Land Use Classification
- GIS, Remote Sensing, and Activity Data
- Field Measurements and Emission Factors
- Carbon Accounting Math and Statistics
- Communicating TCA Results

