



## Executive Summary: a New Terrestrial Carbon Accounting Certificate Program in China

### 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 China, the Forest Carbon Accounting and Monitoring Center (FCAMC), has been an asset for the People's Republic of China on forests and

climate change. FCAMC develops the personnel and products to implement forest GHG inventories and hosts a variety of technical trainings related to forest carbon technical work.

FCAMC is building the advanced comprehensive Terrestrial Carbon Accounting (TCA) Certificate program in China. The goal of this TCA Certificate is to train Chinese and possibly other professionals so they can better implement 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

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## Scoping Studies Help Calibrate TCA Programs:

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

### Baselines: Forest Carbon Training Offerings in China

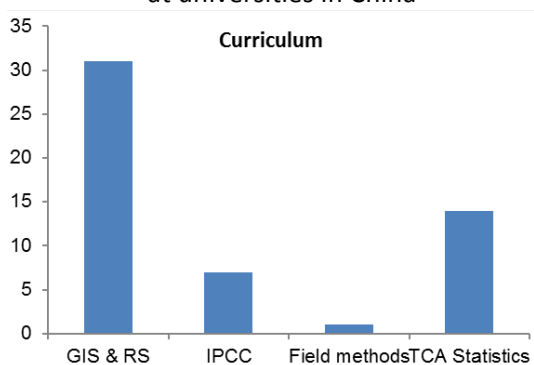
FCAMC conducted a comprehensive curriculum examination of twelve academic institutions and training programs. All institutions and programs surveyed had some gaps in comprehensive TCA instruction. In general courses tend to be heavy on policy context and light on technical skills. The research concluded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

### Gaps: Stakeholder Consultations on Forest Carbon Priorities in China

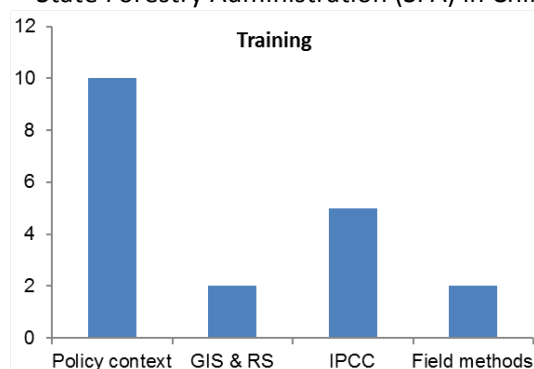
FCAMC interviewed 16 stakeholders including province-level forest carbon technicians, instructors, and students. These stakeholders provided recommendations about course content, the ideal course candidates, and program logistics.

Key insights that influenced the final program proposal include: information on which skills are the most needed and currently lacking, the timing and duration of 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 1. TCA-related curriculums at universities in China



Exemplary figure 2. TCA-related trainings at the State Forestry Administration (SFA) in China



**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 Chinese TCA Certificate program should be structured in the following way:

**INSTITUTIONAL HOME:** The TCA Certificate program will be organized and managed by FCAMC.

**LOCATION:** The program will be hosted and run at STAFA (the State Academy of Forestry Administration) in Beijing.

**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 target audience members are forestry professionals from provincial forestry departments across China. The program will train over 20 people per year.

**COURSE LENGTH AND TIMING:** The program will occur 1 to 2 times per year, beginning in 2018. Each session will be 2

weeks of length between Spring Festival and May.

**EXPENSE AND ENROLLMENT:** The program will be financed by the provincial government forest agencies and forest management companies that send staff to the course. The program will cost about 6,000 Yuan per student. This price will enable the long-term sustainability of the program.

**CERTIFICATION AND ACCREDITATION:** The We anticipate certificates will be jointly accredited by the Chinese Forestry Engineering Association (CFEA), the GHG Management Institute, and possibly through an independent accreditation panel convened by The Carbon Institute.

**RECRUITMENT AND MARKETING:** The program will be directly marketed through the network of CFEA, which serves about 50,000 people.. The program will also engage sponsoring government ministries and agencies (e.g., other bodies within the State Forestry Administration).

*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.*