

# Building the People and Institutions to make the World “Paris Ready”

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# **THE CLIMATE LANDSCAPE**

From the Convention to the Paris Agreement

# The World in which we Operate

## Enhancing MRV Needs

### UN Framework Convention on Climate Change (1994)

Developed countries submit annual GHG inventory  
All countries submit national communications

Biennial reports/ Biennial Update Reports

### Kyoto Protocol (1997)

Quantified reduction targets for Annex I countries.  
Annual review

### Paris Agreement (2015)

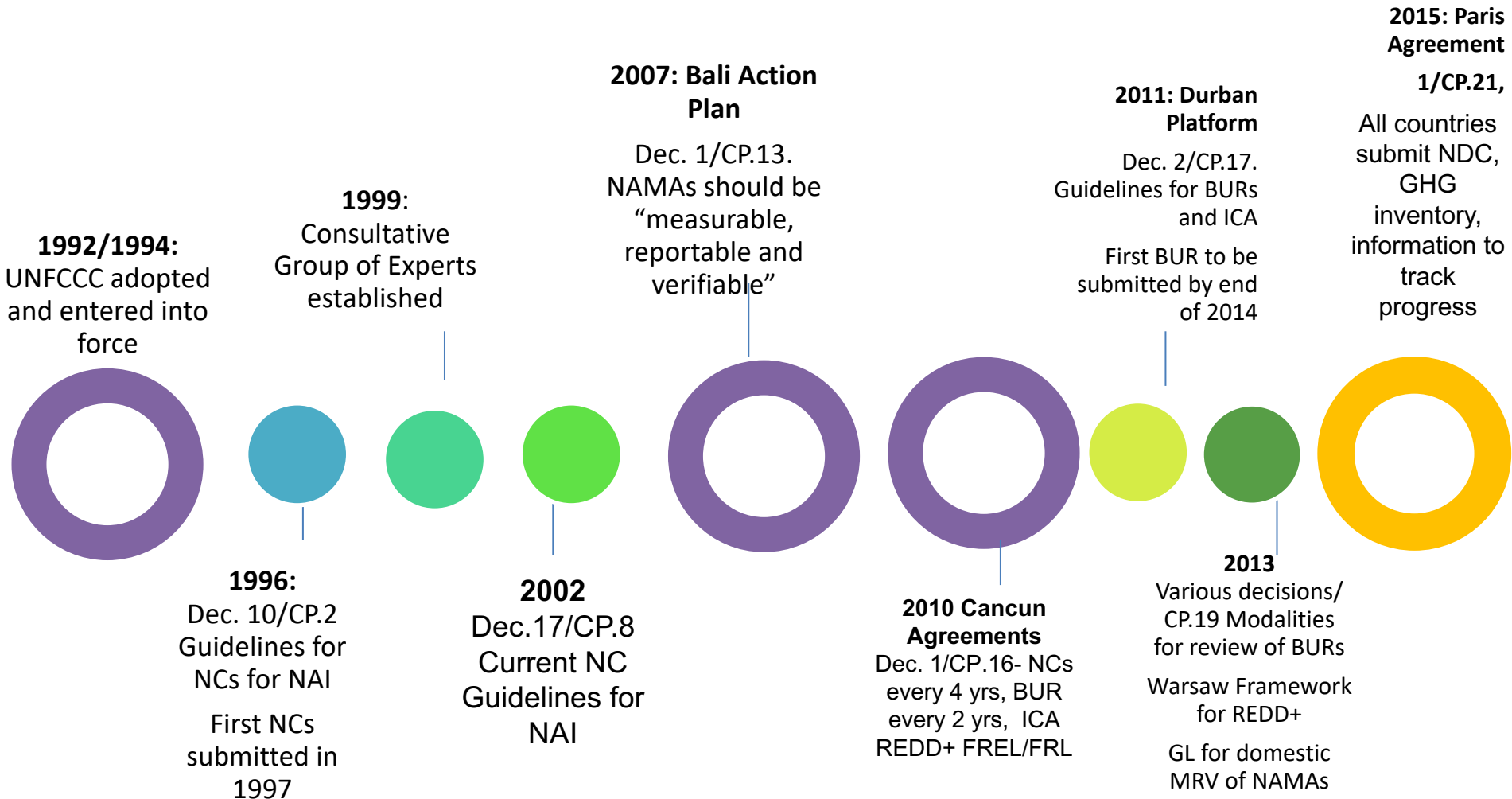
At least biennial reporting for all countries (Article 13)

- National inventory report
- Information to track progress on contributions

-Enshrines REDD+ (Article 5)  
Information will be reviewed  
Details under negotiation

# The World in which we Operate:

## A Deeper Dive



# Addressing Current Barriers and Challenges:

Working more intelligently, strategically and cooperatively

- Nurture and build in-country expertise
- Integrate climate with national priorities
- Initiate “fast start” activities
- Conduct country-level peer assessments
- Broaden the scope of stakeholders
- Develop common core materials/activities
- Use smart IT tools and mentoring
- Invest in pilot projects
- Embed programs in national institutions
- Provide experts with a discussion forum



***For the full strategy, including principles, recommendations and activities, see: <http://capacitybuildingcoalition.org/strategy-doc/>***



# **ABOUT GHGMI**

Programs and Activities

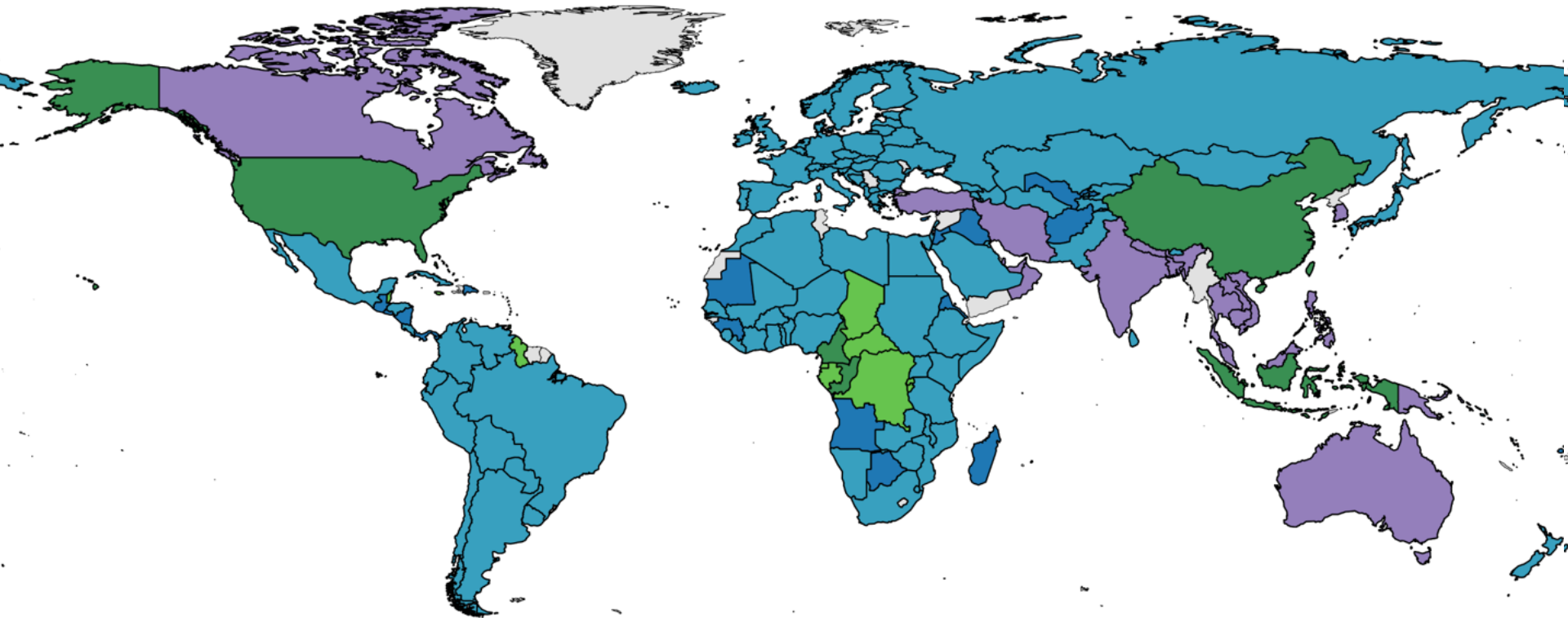
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# Expanding Global Presence

The Carbon Institute

Intensive Training

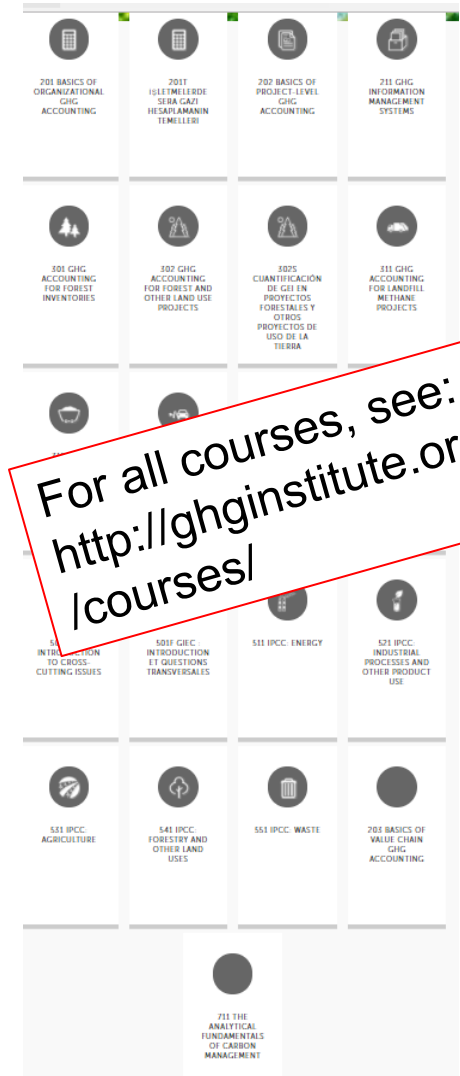
UNFCCC course trainees



# Education Program: Online Courses

For the Measurement, Reporting, and Verification of Greenhouse Gases

- Prioritize cost-effective instructional delivery
- Give access to world-class faculty
- Multilingual
- Rigor and consistency essential
- Scalable without duplication
- Integrated practical examples/case studies
- Attention to pedagogy and learning objectives
- Done in partnership with other organizations
- Catalyze curriculum development at Universities





# Education program

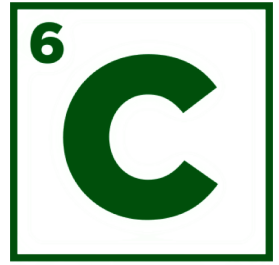
Who do we train?

- All levels of governments
- Verification organizations and DOEs
- Investment and law firms
- Engineering companies
- Academic institutions
- Non-profit organizations
- Journalists and media
- Consulting firms
- Companies from other sectors
  - IT, power, oil & gas, chemical, agriculture, waste, manufacturing, transportation, renewable energy, food & beverage, real estate and infrastructure, industrial process sectors



# The Carbon Institute

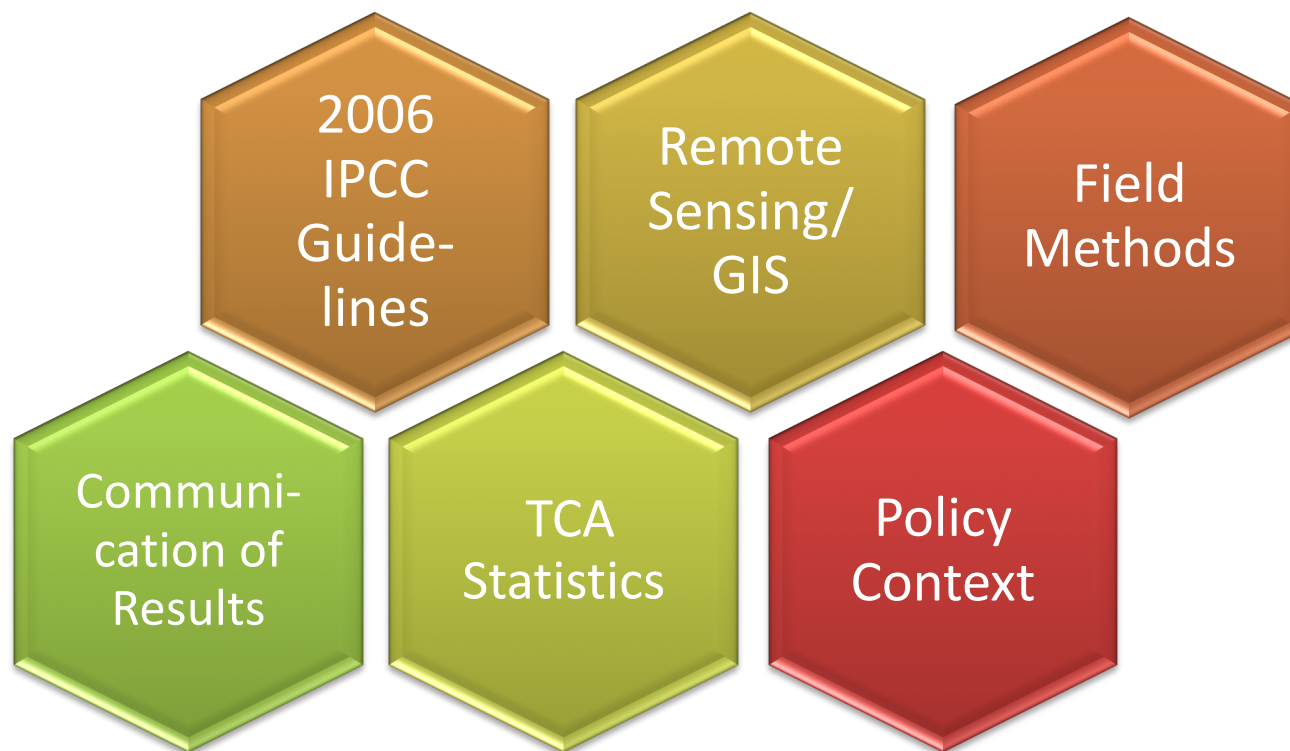
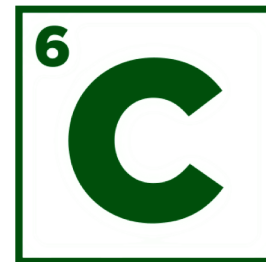
## Applied Science for Government Needs

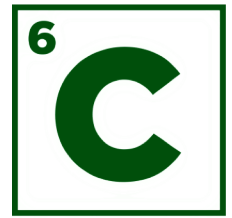


- Government and academic partnerships
- Assess and fill gaps in existing Terrestrial Carbon Accounting (TCA) capacity of government and other experts
- Create world class TCA Certificate programs
- Mentor faculty and graduates
- Focus on comprehensive (advanced) understanding and sustainability of programs

# The Carbon Institute: Course Areas

For a Comprehensive Terrestrial Carbon Accounting Curriculum





## NASA Data of Interest for GHGMI

1. Estimates of burned area, Central Kalimantan, Indonesia
2. Estimates of land cover changes
3. Estimates of peat fire-related emissions
4. LiDAR Data for Forested Sites on Borneo Island, Kalimantan, Indonesia, 2014
5. LiDAR-derived Canopy Height, Elevation for Sites in Kalimantan, Indonesia, 2014
6. Estimated Deforested Area Biomass, Tropical America, Africa, and Asia, 2000
7. Global Carbon Fluxes Associated with Livestock Feed and Emissions, 2000-2013

\*\*\* **An additional area of interest for us** would be whether there are any projects ongoing/planned to determine forest degradation using Landsat data or any forest degradation products for Asia and Africa.

# Research

## Monitoring & Evaluating Capacity Building

- As a field we need to be willing to examine our work and challenge what we know and do. We call on others to do the same.
- Stronger M&E → Stronger Capacity Building → Stronger GHG Mitigation and Adaptation



# Research

## Monitoring & Evaluating Capacity Building

- Key questions to answer:
  - What is capacity building?
  - What is M&E?
- What do current indicators look like?



Basic skills

Applied skills

Motivation

Management  
Structure

Resource  
availability



# Moving Forward

## DISCUSSION AND POSSIBLE COLLABORATION

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## For Discussion

- More data are at our fingertips, how do we access it, how do we use it?
  - Do inventory compilers know how to use it?
  - Data used in variety of ways: scientific inquiry, marketing, voluntary programs, regulatory compliance and trading
  - How to effectively communicate results and drive action?



## For Discussion

- Brainstorming to collaborate on blogpost or other article, e.g.:
  - State of remote sensing for GHG inventory applications (e.g. practicality, resolution of imagery, sectors, regions).
  - Using satellites and sensors to verify emissions reporting (e.g. tracking of NDCs)- or more for AD?
  - Corporations using satellite data for supply chain assessments
  - How to use “top-down” and “bottom-up” data to improve accuracy of emissions estimates?
    - Need contemporaneous studies

# Contact

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