



Regional Carbon Budgets: from methodologies to quantification

Beijing, China
15-18 November 2004

Agenda and Products

Agenda

Monday, 15 November 2005

- 09:00 – 09:30 Opening by Chinese Authorities, Host Institution, GCP Chair
09:30 – 10:00 The Global Carbon Project and Purpose of the Workshop (Canadell)
10:00 – 10:30 What are the scientific and policy requirements for comprehensive and dynamic carbon budgets? (Wk scientific committee - Apps)
- 10:30 – 11:00 *Coffee/Tea Break*
(20 min. talk + 10 min. questions)
- 11:00 – 11:30 talk 1: Current state of the global carbon cycle and top-down estimates of regional net carbon balance (tba)
11:30 – 12:00 talk 2: Drivers of change: land use change and C sources/sinks (Houghton)
12:00 – 12:30 talk 3: Drivers of change: fossil fuel emissions (Marland)
12:30 – 13:00 talk 4: Dynamic regional carbon budget based on remote sensing, eddy flux measurements and mechanistic modeling (Cao, Liu, Yu)
- 13:00 – 14:00 *Lunch (and Poster Session)*
- 14:00 – 15:30 Poster Session
- 15:30 – 16:00 talk 5: Data-model fusion approaches (Raupach)
16:00 – 16:30 talk 6: Biospheric process models: sink/source processes that are/aren't accounted (McGuire)
16:30 – 17:00 talk 7: Coupling carbon processes and economics (Obersteiner)
17:00 – 17:30 talk 8: Coupling carbon sequestration and sustainable development (Tschakert)

Banquet at Beijing Continental Grand Hotel

Tuesday, 16th November 2005

Break-out groups discussion (plenary)

- 09:00 – 09:30 Presentation and discussion WG1
09:30 – 10:00 Presentation and discussion WG2
10:00 – 10:30 Presentation and discussion WG3
- 10:30 – 11:00 *Coffee/tea break*
- 11:00 – 13:00 Break out groups (WG 1 and 3)
- 13:00 – 14:00 *Lunch (and Poster Session)*
- 14:00 – 15:30 Poster Session



Last Update: 28th October 2004

Sectorial Budgets: Methods, Quantities, Issues

15:30 – 16:00	talk 9: Forest (<u>Heath</u>)
16:00 – 16:30	talk 10: Agriculture (<u>Smith</u>)
16:30 – 17:00	talk 11: Grassland (<u>Soussana</u>)
17:00 – 17:30	talk 12: Tropical peatlands (<u>Murdiyarmo</u>)

Dinner (free evening)

Wednesday, 17th November 2005

Regional Carbon Budgets: Methods, Issues, and Quantities

09:00 – 09:30	talk 13: Australia (<u>Richards</u>)
09:30 – 10:00	talk 14: Brazil (<u>Nobre</u>)
10:00 – 10:30	talk 15: Canada (<u>Peng</u>)
10:30 – 11:00	<i>Coffee/Tea break</i>
11:00 – 11:30	talk 16a: China (<u>Zhou</u>)
11:15 – 11:30	talk 16b: China (<u>Fan</u>)
11:30 – 12:00	talk 17: Europe (<u>Reichstein</u>)
12:00 – 12:30	talk 18: India (<u>Chhabra</u>)
12:30 – 13:00	talk 19: Japan (<u>Yamagata</u>)
13:00 – 14:00	<i>Lunch</i>
14:00 - 16:30	Break-out groups session (Groups 1, 2, and 3)
16:30 – 17:30	Reporting and Discussion (plenary)

Dinner: Conference Banquet (in town)

Thursday, 18th November 2005

Regional Carbon Budgets: Methods, Issues and Quantities (continuation)

09:00 – 09:30	talk 20: Russia (<u>Alexeyev</u>)
09:30 - 10:00	talk 21: USA (<u>Ojima</u>)
10:00 – 13:00	Break-out groups session (Groups 2 and 3)
13:00 – 14:00	<i>Lunch</i>
14:00 – 15:00	Reporting and Discussion (plenary)
15:00 – 16:00	Products, Timetable
16:00	Workshop closure

Departures

Dinner (free evening)



Friday, 19th November 2005

Departures

Morning Excursion: Forbidden City

Afternoon Excursion: Emperors Tombs and The Great Wall.

Break out groups

Group 1: Sectorial Carbon Budgets

Critical processes and drivers of the C budget, capability for back- and fore-casting, uncertainties, standardization, and improvements required, including how to incorporate management and the delivery of policy and research relevant products.

Parallel groups:

- Forest
- Grasslands
- Agriculture
- Permafrost/peatlands/wetlands
- Fossil fuel emissions

Group 2: Comprehensive Regional Carbon Accounting

- Key elements required for dynamic and comprehensive regional C budgets
- Focus on methodologies, and data requirements associated to the specific methods.
- Main focus on required improvements and directions for the next 5 years (incremental improvements from current approaches)
- Required improvements and directions for a 10-15-year timeframe.

Group 3: Coupling biophysics, socio-economics, and policy

Coupling carbon fluxes and stocks to socio-economic drivers and land use change, including system management issues.

Regional synthesis of existing results: Time will be allocated during the workshop to provide a forum for scientists from the same region to discuss a possible synthesis paper as contribution to the workshop products. The synthesis itself would take place outside of the workshop but it could be conceptualized at the meeting.

Products

Special issue (10 papers) or **special feature** (4-5 papers)

- Papers from the break out groups (3 papers)
- Possible other relevant plenary presentations
- Possible regional synthesis papers (conceptualized at the workshop but developed after the workshop)

Possible publication outlets:

- Global Change Biology, Biogeosciences, Global Biogeochemical Cycles, others.

Book

- Synthesis of bottom-up regional C budget quantities and reconciliation with top-down estimates (one chapter)
- One chapter per country (or more than one per country's C budget if there is not an attempt to have a synthesis; synthesis will be encouraged).

Possible publication outlets:

- In Springer-Verlag as part of IGBP Book series (expensive but fast).
- Island Press (like the SCOPE-GCP synthesis) (quite fast and inexpensive).
- Others.



Activity Plan

- A set of recommendations based on the group discussions to further develop the activity on “regional carbon budgets” including (time frame of 3 to 5 year):
 - other workshops
 - submission of research proposals to address specific problems
 - writing other papers

Carbon Portal

- An entry Internet Portal will be established with links to all major regional carbon projects and programmes. The Portal will be part of the www.globalcarbonproject.org.