



PMG
Programa Mexicano del Carbono

UAEH
Universidad Autónoma del Estado de Hidalgo

**International
Symposium
on Carbon
in México**
pachuca, Hidalgo 2016

Universidad Autónoma del Estado de Hidalgo
May 18th, 2016; 4-7 p.m.

Meeting



PMG
Programa Mexicano del Carbono



MEETING

CarboNA Meeting

Background

CarboNA (formerly the Joint North American Carbon Program, JNACP) is a joint government-level initiative between Canada, the US and Mexico whose goal is to establish greater cohesion across North America in the fields of carbon pool and greenhouse gas flux dynamics and of carbon related mitigation strategies, through the identification of continental-scale priority issues and promotion of collaborative research in areas of common interest and complementary expertise.

CarboNA's mission is to determine the temporal and regional distribution and magnitudes of carbon pools and greenhouse gas fluxes throughout North America, and to understand how these affect and are affected by disturbances, human behavior, and climate and related changes, in order to predict future climate change and evaluate carbon related mitigation strategies and new technologies.

CarboNA coordination falls under the umbrella of governmental organizations devoted to the international collaboration between Canada, Mexico, and the United States for carbon cycle science research throughout North America and adjacent oceans. It operates with a Government Coordination Working Group (GCWG) with members from government agencies from all three countries and a Science Steering Committee (SSC) consisting of leading scientists actively involved in carbon cycle research.

The presidency of the GCWG is rotated every 2 years between representatives of the three countries. For the 2016-2017 period, Mexico is in charge of coordinating and facilitating the planning and implementation of carbon cycle research in North America that requires or is enhanced by participation from at least two of the

participant countries. The SSC was established to foster joint research on carbon cycle science for North American and adjacent ocean, and to provide guidance on research priorities and activities within joint and complementary research initiatives. This Science Steering Committee consists of leading members of the scientific community from all three North American countries who are actively involved in carbon cycle research.

Current state of affairs in CarboNA

For several reasons, CarboNA's efforts to achieve total cooperation in North America have had limited success, with only few important results obtained. CarboNA's challenge is to implement the intended actions expressed in the trilateral agreement; so, it is necessary to rethink the strategy. It is not an easy task, and it requires political will from all the countries involved, taking into account their differences and national circumstances.

Goals of the CarboNA meeting

Considering the current degree of achievement of the objectives of the trilateral agreement, the main goal of the meeting is to recognize limitations of the current approach, and to rethink the collaborative agenda, based on clear commitments and short, medium and long-term goals, taking into account the restrictions and limitations of the three countries. This is considered as the first step towards achieving the common goals expressed in the trilateral agreement.



Proposed agenda and points of agreement

• Participant introductions

Due to time constraints, the participants in the meeting will be briefly introduced by the CarboNA coordinators.

• CarboNA coordination

At the CarboNA meeting in Toluca, Mexico State, it was agreed upon that the coordination be rotated between the three countries, with 2-year periods for each country. Starting from 2015, after the end of Canada's period, Mexico will be in charge of the coordination. Given Mexico's circumstances, it is requested that its period in the coordination be extended a year, until 2018, when the United States will take over the position.

• Actualization of CarboNA's scientific committee.

The three countries agree to propose candidates to become members of the CarboNA scientific committee, in any of the following thematic areas: terrestrial ecosystems, aquatic ecosystems, atmosphere and social dimension. The proposed candidates must count with extensive scientific experience. Programa Mexicano del Carbono will propose the candidates for Mexico.

• Actualization of CarboNA's government committee.

The three countries agree to designate institutional representatives for CarboNA's government committee, in any of the following subject areas: terrestrial ecosystems, aquatic ecosystems, atmosphere and social dimension. The representatives for the Mexican government will be designated from SEMARNAT, SAGARPA, CONACYT, CONAFOR and CONAPESCA.

• Responsibilities and agreements of CarboNA's governmental and scientific committees.

The agreements and responsibilities to be established are the following:

- a) The CarboNA coordination will be rotated among the three countries, with each country holding the position for two years; and it will be held by a government representative and a scientific representative of the corresponding country.
- b) Whenever possible, the participants shall attend the telephone work conferences and update discussions, which will take place, at least, each semester. The coordination must distribute the corresponding agenda the week before the publication of an invitation to a CarboNA meeting. It is the responsibility of the coordination to keep a log of the points of agreement of the meeting and distribute it to the participants no more than a week after it.
- c) The three countries agree to present a "National Vision Statement", related to the state of the carbon cycle (governmental committee) and advancements in the scientific plan (scientific committee) at the NACP and PMC meetings.
- d) The parties agree to update, and, if required, to redesign, the CarboNA webpage under the supervision of the current coordination.
- e) The parties agree to introduce CarboNA as a tri-lateral program in national and international cooperation agendas, as a mechanism to seek financial support for the implementation of the approved scientific plan.

• CarboNA's operational and scientific plan

Even though there is an approved scientific plan for CarboNA, it is necessary to develop specific operational plans. The proposal is to form tri-lateral work groups, made up of governmental institutions and their scientific counterparts, for work in the following subject areas: terrestrial ecosystems, aquatic ecosystems (inland waters, coasts and oceans), atmosphere, social dimension, bioenergy and human settlements (energy, transport, rural and urban environments, etc.). To carry out this task, it is proposed that:

- a) Each country designates governmental and scientific representatives in each of the proposed areas.
- b) The work group will presents an operational plan proposal to the national coordinations, under the guidelines of the approved scientific plan.
- c) The national coordinations will make appropriate efforts obtain the necessary resources for the implementation of the approved operative plan from national, binational, trinational, regional or global sources.
- d) Each country agrees to make its best efforts to achieve the set goals.

- a) Participation of the legislative branches of government of each country.
- b) Formal inclusion of other governmental agencies that work on any of the areas of interest for CarboNA.
- c) Formal funding mechanisms.

To this end, the national coordinations will discuss the viability of an extension to the agreement.

Summary of CarboNA meeting

May 18th, 2016 (4:00 pm to 7:00 pm local time)
 Universidad Autónoma del Estado de Hidalgo
 Pachuca, Hidalgo, México.

• Capacity building and outreach (extensionism)

Considering the differences in capacity among the countries that make up CarboNA, and the urgent need to carry out actions to enlarge capacities and promote outreach (extensionism) in the areas of interest for CarboNA, it is proposed to make coordinated efforts to introduce the following actions in the bilateral or trilateral agendas:

- a) Student and scientific mobility in the CarboNA subject areas, with support from educational institutions of the participating countries.
- b) Training programs on specific areas of interest (modeling, remote sensing, etc.), under the concept of “training of trainers” to achieve multiplicative effects.
- c) Foster trilateral cooperation for outreach (extensionism), to achive a more effective and efficient transference of knowledge.

• Towards a new cooperation agreement in CarboNA

Considering that the approach on the state of the carbon cycle has changed over recent years, as well as cooperation agendas, it is proposed to update the signed trilateral agreement to include:

Participants:

Present: Rodrigo Vargas (PMC), Nancy Cavallaro (USA), Richard Birdsey (USA), Fernando Paz (PMC), Enrico Yepez (MexFlux), Ramón Sosa (PMC), Victor Escalona SEMARNAT-México), Gregorio Ángeles (PMC), Oscar Briones (PMC), Marcela Olguín (CEC), Craig Wayson (SilvaCarbon), Ben de Jong (PMC), Enrique Serrano (CONAFOR-México), René González (SAGARPA,-México)

Skype: Catherine Ste-Marie (Canada), Nancy French (USA), Hector Reyes (PMC), Werner Kurz (bad connection - Canada), Gyami Shresta (USA)

The session was introduced by a brief presentation by Nancy Cavallaro presenting the original intention for launching CarboNA, cited people that was at the beginning and how bilateral agreements had have ups and downs over years. Emphasized that that CarboNA science plan and working documents are now hosted at <http://nacarbon.org/carbona/index.htm>. Finally it was mentioned that it is worthwhile revisiting the 5 core questions and the 8 emphases.

- 1– Mexican colleagues asked for a 2-year extension of leadership. This request was approved; so Mexican colleagues will lead CarboNA from May 2016 to May 2018.

- 2- Mexico has the responsibility to coordinate the steering group of CarboNA and has identified two potential leaders: Vinisa Reyes or Hector Reyes. The Mexican Carbon Program will communicate with the group of CarboNA ASAP.
- 3- Mexico and Canada have the responsibility to identify participants from the “Government” sector to be involved with CarboNA. Mexico has identified potential participants from SAGARPA and/or SEMARNAT, CONAFOR. The Mexican Carbon Program will communicate with the group of CarboNA ASAP.
- 4- All countries will revise/renew participant list from the “Science” sector. Once all countries have approved the list of the renewed steering group the email list will be updated to facilitate communication.
- 5- Participants from all countries are willing to present advances on collaborative projects on the next NACP meeting (April 2017).
- 6- The steering group of CarbonNA will work with the planning committee of the next NACP meeting if participation of government representatives is required. This action is dependent upon meeting schedule decided by the planning committee and actions will be shared with CarboNA ASAP.
- 7- The next Mexican Carbon Program (PMC) symposium will be in Ensenada, Baja California, Mexico. Due to the proximity with the USA participation by USA and Canadian colleagues is encouraged.
- 8- Three issues were mentioned as fundamental to sell to our governments.
 - a. Blue Carbon
 - b. Production
 - c. Sustain C observations
 - d. Soil C dynamics
- e. Compare dynamics from Pacific and Atlantic coast
- f. Acidification
- 9- Invoked encouragement to participate in regional CC synthesis since (i.e. California would include CH₄ and N₂O budgets).

Not sure where to include it but it was mentioned to “think on or there is work on...” for a Second RECCAP, for an special issue in Biogeosciences... 14 Recaps world wide, 4 ocean regions. (so far missing Mexican participation...)
- 10- During the meeting several questions were asked regarding the current actions of CarboNA. There were no specific agreements, but the group is encouraged to think and participate in current opportunities:
 - a) How CarboNA will move toward tangible actions?
 - i. State Of the Carbon Cycle Report (SOCCR-2) – several members are participants and colleagues are encouraged to collaborate with SOCCR2 as a short-term goal.
 - ii. Blue Carbon – There are opportunities for tri-national initiatives. Members of CarboNA are encouraged to identify opportunities and interested colleagues (maybe through ongoing efforts with CEC).
 - iii. Regional Carbon Cycle Assessment and Processes (RECCAP) project – members will explore the need/interest of participation in the near future.
 - b) How CarboNA will participate in educational activities?
 - i. Explore opportunities between countries and among all three countries.



- ii. Explore opportunities outside North America such as with Europe and South America.
 - iii. Explore opportunities with “virtual” centers. There are some very initial ideas on low-cost educational activities (e.g. Centro de Excelencia Virtual, CONAFOR).
- c) How CarboNA will promote trinational funding?
- i. CEC – be more inclusive and outside common partners such as CONAFOR or CONABIO.
 - ii. New NASA ROSES calls? Only one NASA CMS lead by Rodrigo Vargas is currently under review. We are not aware of other efforts. Due June 15 , 2016
 - iii. NOAA promotes good partnership between USA and Mexican colleagues with cruises in the Gulf of Mexico and the Pacific.
- d) How CarboNA will become more functional?
- i. Try to enhance interaction between science, government, and the joint efforts of science-government across the three countries. The challenge is how to do this.

Finally, a call to all members of CarboNA to reenergize this collaboration platform finding new ways for making it operational.

