DRAFT IN DEVELOPMENT

CBD COP16 - Official Side Event Concept Note - Biodiversity, Renewables and Agriculture

Title: Protecting Biodiversity & Advancing Renewables Through Energy-Water-Food Synergies
CBD Topics: Agricultural Biodiversity, KM-GBF, Implementation of CBD, Capacity-building, Indigenous peoples and local communities, Scientific and technical cooperation
GBF Targets: T01 (Plan and Manage Areas to Reduce Biodiversity Loss); T10: (Enhance Biodiversity and Sustainability in Agriculture, Aquaculture, Fisheries, and Forestry)
}

Background

The impact of unprecedented and rapid human-caused climate change places a million plant and animal species at risk of extinction. Nature loss and climate change are inextricably linked, and thus a failure to address one of these crises will necessarily impact the other. [Source]

Significant policy changes and investment are required to implement the Global Biodiversity Framework and to ensure that nature-based solutions are implemented as part of the UN Convention on Biological Diversity and the UN Framework Convention on Climate Change. [Source] At the same time, transitioning away from fossil fuel production and meeting the UN Global Renewables Pledge (to triple renewables generation by 2030) requires careful land-use planning to avoid negative impacts to natural ecosystems and food/energy/water interactions.

Projected climatic impacts on food production and water supplies make building resilience in renewable energy and agriculture an imperative [Source]. Agrivoltaic systems offer a potential solution by co-locating agriculture and solar photovoltaic (PV) panels and infrastructure, as the shading provided by the PV panels offers multiple benefits, including reduced plant drought stress and reduced PV panel heat stress, leading to increased food and energy production. Agrivoltaic systems provide a foundation for increasing resilience of food, water and energy systems, while offering the potential biodiversity benefits of increasing pollinator habitat, providing safe wildlife migration passages, and enhancing wildfire resilience and recovery.

Objectives

1. Demonstrate biodiversity benefits of dual-use photovoltaics (agriculture, aquaculture) (e.g. augmenting native vegetation for pollinators)
2. Maintain habitat connectivity: Map critical wildlife pathways and formulates strategies to mitigate impacts of renewable energy development and road/rail/urban expansion.
3. Preserve farm and rangelands: Recommend actions on enrolled lands (e.g. providing habitat for grassland plants and animals, reducing soil erosion, improving water quality.
4. Create barriers to wildfires: Outline lessons learned from current state-of-the-art in fire regime modelling and evaluation
5. Ensure local/indigenous community rights: Involve local/indigenous groups through consultations to ensure that cultural/resource lands are recognized and respected.

Proposed Participants (TBC)
- Co-Hosts: Conservation Biology Institute, Fundación Bariloche, REN21
- Proposed Speakers:
  - Andrea Wainer, Knowledge & Data Manager - Sustainability, REN21, France
  - Adrián Monjeau, Fundación Bariloche, Argentina
  - Rosilena Lindo Riggs, Secretaria Nacional de Energía de Panamá 2023-2024
  - Robin Jones, Executive Director, Conservation Biology Institute, US
  - Rosa Montañez, Fundación Natura, Panama
  - Juan Carlos Monterrey Gomez, Special Representative for Climate Change, Ministry of the Environment, Panama
  - Gisel Booman, Chief Scientist, Regen Network, Argentina
  - Andres Rebolledo, Organización Latinoamericana de Energía, Ecuador (invited)
  - Constanza Gomez Mont, NaturaTech LAC (invited)

Preliminary Agenda (90 minutes total)

5 min — Introductory Remarks: Renewable energy and sustainability synergies
Andrea Wainer, Knowledge & Data Manager - Sustainability, REN21 (remote)

10 min — Framing Topic A: Stakeholder engagement for least-conflict renewable siting
Presenter: Robin Jones, Conservation Biology Institute

10 min — Framing Topic B: Food, agriculture, biodiversity, land & energy (FABLE) project
Presenter: Adrián Monjeau, Fundación Bariloche

10 min — Framing Topic C: LAC regional nature-positive renewable initiative
Presenter: Rosilena Lindo Riggs, Panama

40 min — Panel discussion: Optimizing energy-water-food synergies to enhance biodiversity on agricultural lands
- Rosa Montañez, Fundación Natura, Panama
- Gisel Booman, Regen Network (invited)
- Constanza Gomez Mont, NaturaTech LAC (invited)
- Sarah McInerney, Biomimicry Institute (invited)
- Gisel Booman, Regen Network (invited)

15 min — Audience discussion and closing
Facilitated by moderator