Objectives

Blue carbon is increasingly gaining attention from national and international leaders, the scientific community, business actors and civil society. It is timely to bring the issues associated with optimizing the potential of blue carbon to an important summit.

The Blue Carbon Summit has the following objectives:
- to facilitate dialogue across sectors and among stakeholders concerned with blue carbon issues
- to identify gaps and barriers that hinder the mainstreaming of coastal blue carbon in the national development agenda and to meet global commitments
- to outline the roadmap of blue carbon development in Indonesia in line with the upcoming COP24 in Poland and Our Ocean Conference.
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<td>• Satryo Sumantari Brodjonegoro, Indonesian Academy of Sciences (AIPI)</td>
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<td>• Robert Nasi, Center for International Forestry Research (CIFOR)</td>
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<td>• HE Luhut Binsar Pandjaitan, Coordinating Minister of Maritime Affairs, Republic of Indonesia</td>
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<td>• Jatna Supriatna, Research Center for Climate Change, University of Indonesia</td>
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<td>• Alan Koropitan, ALMI, IPB</td>
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<td>• Ketut Sarjana Putra, Conservation International</td>
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<td>• Nyoman Suryadiputra, Wetlands International</td>
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<td>• Victor Nikijuluw, Conservation International</td>
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<td>• Diah Radini Noerdjito, Gede Suantika, Djoko T. Iskandar; ITB and LIPI. High economic value unsaturated fatty acid potency produced by tropical marine diatoms (Nitzschia sp.: Bacillariophyceae) from Karimunjawa.</td>
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<td>• Purnama Alamsyah, Lutfah Ariana, Irene Muflikh Nadhrioh, Ria Hardiyati, Ikbal Maulana; LIPI. Foresight for identifying research priorities for sustainable blue economy.</td>
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<td>2. Marine tourism and shipping industry</td>
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<td>• Nana Saleh, ALMI</td>
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<td>• Meli F. Saragi, CIFOR</td>
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<td>• Frans Teguh, Ministry of Tourism. Prospect of marine tourism in Indonesia: challenges and opportunities towards sustainable tourism and low carbon destination.</td>
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<td>• I Ketut Aria Priat Utama, FRINA, ITS Reducing ship emissions: a review of potential practical improvements in the propulsive efficiency of future ships.</td>
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<td>• Mohammad Naufal, Green Youth Coalition. The strategy of mangrove forest potency development in Labuhan village, Bangkalan regency as a blue conservation and ecotourism object.</td>
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<td>3. Institution and governance system for blue carbon</td>
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<td>• Sudirman Nasir, ALMI, Hasanuddin University</td>
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<td>• Iska Lestari, IPB</td>
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<td>• Tuti Herawati, FOERDIA. Discrepancy of mangrove management in Indonesia.</td>
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<td>• Hendra Yusran Siry, MMAF. Challenges and Opportunities of Blue Carbon Implementation in Indonesia: MMAF Perspective</td>
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**Agenda is subject to change. Visit**
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http://events.globallandscapesforum.org/blue-carbon-summit/livestreams/
## Agenda | Day 2 – Wednesday, 18 July 2018

### 08.30–09.00
**Registration**

### 09.00–10.30
**Subplenary – International Initiatives**
- **Room:** Auditorium (Floor 2)
- **Facilitator:** Daniel Murdiyarso, CIFOR
- **Rapporteur:** Nana Saleh, ALMI
- **Speakers:**
  - Emil Salim, Indonesian Academy of Sciences
  - Emily Pidgeon, Blue Carbon Initiative
  - Lucy Wallington, International Partnership for Blue Carbon
  - Andre Omer Siregar, Ministry of Foreign Affairs, Republic of Indonesia
  - Rili Djohani, Coral Triangle Center
- **Scope:** Blue carbon is a relatively new issue, but the growth of initiatives and networks among stakeholders has gained momentum. Indonesia and other blue carbon countries need to join together to share their challenges and opportunities through various partnerships on this subject. Committed groups include the International Partnership for Blue Carbon (IPBC), Blue Carbon Scientific Initiative (BCI), Indian Ocean Rim Association (IORA), and Coral Triangle Center (CTC). Such a huge wave of momentum driven by a common agenda can only help to further blue carbon research and result in strong collaborations.

### 10.30–11.00
**Coffee Break**

### 11.00–12.30
**Parallel Discussion Forum**

6. **Hydro-geomorphic effects of subsidence, sedimentation and sea-level rises**
- **Room:** Ruang Serbaguna (Floor 4)
- **Moderator:** Sri Widiyananto, ITB, AIPIL
- **Rapporteur:** Bayu Hanggara, CIFOR
- **Speakers:**
  - Dan Fries, National University of Singapore. Sea level rise is a threat to mangroves and their ecosystem services.
  - Yohanes Risky Shellen Ginting, Daniel Murdiyarso, I Putu Santikayasa, Ali Arman Lubis; IPB, CIFOR, and BATAN. Mangrove distribution, sedimentation, and soil carbon accumulation in North Sumatra, Indonesia.
  - Daniel Murdiyarso, Bayu Budi Hanggara, Ali Arman Lubis; CIFOR, IPB, and BATAN. Sedimentation and soil carbon accumulation in degraded mangrove forests of North Sumatra, Indonesia.
  - Aiyen Tjoa, Daniel Murdiyarso; Tadulako University and IPB. Phytoremediation of heavy metal and metalloid; potentials for mangrove ecosystems.
  - Rachmat Sule, Sri Widiyananto; ITB. Gundih carbon capture and storage pilot project: current status of the first CCS project in South and Southeast Asian regions.

7b. **Coastal blue carbon and climate change (Mangrove)**
- **Room:** Auditorium (Floor 2)
- **Moderator:** Barra Robyn, WRI
- **Rapporteur:** Ines Ayostina, Conservation International
- **Speakers:**
  - Haruni Krisnawati, FOERDIA. Incorporating mangroves into national carbon accounting and climate change mitigation actions.
  - Naisa Aqila, Eko Haryono; Gadjah Mada University. Carbon storage quantification in Pasar Banggi mangrove forest, Rembang, Central Java.
  - Agustinus Kastanya, Philipus Kastanya; Pattimura University and Tobelo Polytechnics. Analysis of potential of mangrove ecosystems and their distribution on island clusters in Maluku province to support Indonesia’s nationally determined contribution (NDC).
  - Sigit D. Sasmito, Pierre Taillardat, Jessica N. Cledenning, Clint Cameron, Daniel A. Fries, Daniel Murdiyarso, Lindsay B. Hutley; Charles Darwin University, CIFOR, National University of Singapore, and IPB. Global analysis of mangrove blue carbon stock changes across disturbance regimes.

### 12.30–13.30
**Lunch | Room: Floor 17**

### 13.30–15.00
**Subplenary – High-Level Forum**
- **Room:** Auditorium (Floor 2)
- **Facilitator:** Prita Laura
- **Rapporteur:** Sudirman Nasir, ALMI, Hasanuddin University
- **Speakers:**
  - Ida Bagus Putera Parthama, MOEF
  - Brahmantri Satyamurti, MMAF
  - Safri Burhanuddin, Coordinating Ministry for Maritime Affairs
  - Arifin Rudianto, BAPPENAS
- **Scope:** As a large blue carbon country, Indonesia can play a strategic role in engaging with the global agenda, such as through the Paris Agreement, Aichi Biodiversity Targets and SDGs by implementing its own national agenda. Coordinated implementation has been a challenge, but putting the common issues on a higher platform such as the medium-term development plan (known as RPJM), provides the promise of good outcomes. Work and budget programs of the line ministries of Environment and Forestry (KLHK), Marine Affairs and Fisheries (KKP) and Home Affairs, may well be guided by the Coordinating Ministry of Maritime and Agency of Development Planning (BAPPENAS) using the existing regulatory framework.

### 15.00–15.30
**Coffee Break**

### 15.30–16.00
**Closing Statement**
- **Room:** Auditorium (Floor 2)
- **Speakers:**
  - Bambang Permadi Soemantri Brodjonegoro, Minister for National Development Planning (BAPPENAS), Republic of Indonesia
Join the Blue Carbon Summit Paper Abstract Vote and select your favorite abstract based on the themes of the Summit. The abstracts featured on this voting page have gone through a professional selection process led by a scientific panel from the Akademi Ilmu Pengetahuan Indonesia (AIPI), and now it’s your turn to pick your favorite.

Ask your network to also vote for their favorite abstract and to support the authors and issues they highlight. The vote opens until 19 July 2018 at 23:59PM, GMT+7. We will announce the winner on 20 July 2018.

The author of the paper with the highest number of votes will receive USD 400 cash from the Blue Carbon Summit Committee.

Entries

   Hendra Sugandhi

2. Optimization of hybrid powered refrigerator system (solar cell plus diesel engine) for traditional fishing vessels in Makassar.
   Soetyono Iskandar, Moch. Bruri Triyono, Nurlaela Latief, A. Muh. Idkhan

3. High economic value unsaturated fatty acid potency produced by tropical marine diatom (Nitzschia sp.: Bacillariophyceae) from Karimunjawa.
   Diah Radini Noerdjito, Gede Suantika, Djoko T. Iskandar

4. Foresight for identifying research priorities for sustainable blue economy.
   Purnama Alamsyah, Lutfah Ariana, Irene Muflikh Nadhiroh, Ria Hardiyati, Ikbal Maulana

5. Prospect of marine tourism in Indonesia: challenges and opportunities towards sustainable tourism and low carbon destination.
   Frans Teguh

   I Ketut Aria Pria Utama, FRINA

7. The strategy of mangrove forest potency development in Labuhan village, Bangkalan regency as a blue conservation and ecotourism object.
   Mohammad Naufal

   Maulita Sari Hani, Jamaluddin Jompa, M. Natsir Nessa, Alan T. White, Abraham Sianpiar, Abdi Hasan, Meidiarti Kasmidi, Rafid Shidqi, Edy Setyawan

   Tuti Herawati

10. Low hanging fruit or red herring? Identifying bottlenecks and opportunities which determine mangrove forest landscape rehabilitation (MFLR) opportunity in Indonesia.
    Benjamin M. Brown

    Yusran Nurdin Massa, Paul Emmanuel Muylaert, Laila Adilia, Akhzan Nur Iman, Jajang Sonjaya, Ratna Fadilah, Rio Ahmad, Benjamin Brown

12. Overcoming impoverishment of greenshell mussel fisherwomen in Muara Angke, Jakarta.
    Muh. Wildan Teddy Bintang P. Has

    Anisa Budiayu

14. Participatory resilience assessment to inform blue carbon programs and policies in Papua, Indonesia.
    Rio Ahmad, Jajang Sonjaya, Ben Brown, Regista Rapa, Ahmad Taufik, Wahyudin

15. Linking development planning and financing for marine and fisheries.
    Medrizam

    Felia Salim

17. Sustainable land use bonds – can we replicate it for a blue carbon development?
    Satya S. Tripathi

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18. Travel for benefit? Financing high-end marine tourism.
Bustar Maitar

19. Learning from impact investors in sustainable trade.
Fitrian Ardiansyah

20. Climate change, waves and coastal vulnerability.
Safwan Hadi, Hamzah Latief

21. CO2 sink/source characteristics in the tropical Indonesian seas.
A.R. Kartadikaria, A. Watanabe, K. Nadaoka, N.S. Adi, H.B. Prayitno, S. Soemoromekso, M. Muchtar, I. Tryulianti, A. Setiawan, S. Suratno, E.N. Khasanah

22. Potential Impacts of Climate Change and Ocean Acidification for the Future of Blue Carbon Resources.
Jamaluddin Jompa, Rohani Ambo Rappe, Abigail Moore, Alan Koropitan, Haws Madduppa

23. Sea level rise is a threat to mangroves and their ecosystem services.
Dan Friess

24. Mangrove distribution, sedimentation, and soil carbon accumulation in North Sumatra, Indonesia.
Yohanes Risky Shellen Giting, Daniel Murdiyarso, I Putu Santikayasa, Ali Arman Lubis

25. Sedimentation and soil carbon accumulation in degraded mangrove forests of North Sumatra, Indonesia.
Daniel Murdiyarso, Bayu Budi Hanggara, Ali Arman Lubis

26. Phytoremediation of heavy metal and metalloid: potentials for mangrove ecosystems.
Aiyen Tjoa, Daniel Murdiyarso

27. Gundih carbon capture and storage pilot project: current status of the first CCS project in South and Southeast Asian regions.
Rachmat Sule, Sri Widiyantoro

Rohani Ambo Rappe

Devi N. Choesin, Dian Rosleine, M. Hizrian Ird

MS Sembiring

31. The impact of land-used change on mangrove dynamic and shoreline changes in Muara Gembong, Bekasi, West Java.
R. Bambang Adhitya Nugraha, Agus Setiawan

32. Carbon stock and uptake potential by seagrass meadows and mangrove ecosystem in Indonesia.

Yusmana P. Rahayu, Tubagus Solihudin, Mariska A. Kusumaningtyas, Restu N. Afi Ati, Hadiwijaya L. Salim, Agustin Rustam, Nasir Sudirman, Tim Rixen, Andreas A. Hutahaean

34. Comparison of carbon absorption and storage potential in macro algae Gracilaria verrucosa with Halimeda opuntia in Muara Binuangeun, Lebak District, Banten.
Atika Rahmah, Mufti Petala Patria, Titi Soedjijarti

35. Incorporating mangroves into national carbon accounting and climate change mitigation actions.
Haruni Krisnawati

36. Carbon storage quantification in Pasar Banggi mangrove forest, Rembang, Central Java.
Naisa Aqila, Eko Haryono

37. Analysis of potential of mangrove ecosystems and their distribution on island clusters in Maluku province to support Indonesia’s nationally determined contribution (NDC).
Agustinus Kastanya, Philipus Kastanya

38. Global analysis of mangrove blue carbon stock changes across disturbance regimes.
Sigt D. Sasmito, Pierre Taillardat, Jessica N. Clendenning, Clint Cameron, Daniel A. Friess, Daniel Murdiyarso, Lindsay B. Hutley

39. Allometric model of Rhizopora stylosa in madura island east java.
Mukhammad Muryono, Afsa Imiliyana, Yuliana Lis Agustin, Indah Trisnawati

Schiettecatte Laure-Sophie, Martial Bernoux, Bambang Arifitani, Louis Bockel

41. Seagrass and carbon studies in Indonesian waters.
Wawan Kiswara

42. Challenges and Opportunities of Blue Carbon Implementation in Indonesia: MMAF Perspective
Hendra Yusran Siry
Exhibitions

**Photo exhibition**

The Tree of Life

Mangroves ecosystems in Indonesia: a strategic resource for a local sustainable economy and adaptation to climate change.

By Elisabetta Zavoli

**Science showcase**

Probing Indonesia’s Mangroves

Learn more about Center for International Forestry Research’s extensive global mangrove research at the CIFOR booth during the Blue Carbon Summit.

Peruse a variety of mangrove-related scientific publications and learn more about CIFOR as an organization. CIFOR senior scientist Daniel Murdiyarso and his team will also be on hand at the booth to demonstrate probing mangroves.

Organized by CIFOR

**Science showcase**

Promoting the Culture of Scientific Excellence in Indonesia

Selected publications from Indonesian Academy of Sciences will be showcased, all of those are the effort to promote scientific excellence in Indonesia.

Organized by Indonesian Academy of Sciences

**Science showcase**

Supporting the Indonesian Government for a Better Climate

Learn more about the Indonesia Climate Change Trust Fund’s venture to support the Government of Indonesia to achieve its climate goals.

Organized by Indonesia Climate Change Trust Fund

Other exhibitors

- Indonesian Institute of Sciences
- Belantara Foundation
Background

Blue carbon includes carbon stored in open ocean carbon pools. The dynamics are controlled by global ocean currents and weather circulation patterns and are affected by direct and indirect human interventions in marine and coastal ecosystems. Increasing sea surface temperatures have significantly affected thermohaline and associated temperature-dependent biota. This will impose significant challenges for Indonesia as a maritime country with vast resources. The first point of the Nawa Cita Agenda clearly stipulates the determination of the national leaders to develop Indonesia as a maritime nation – an identity that has been forgotten for a long time and hinders Indonesia in considering the opportunities of the blue economy.

Fishery and marine tourism industries are among major economic activities that generate significant revenues. The yields of caught fishes and aquaculture are closely associated with the resilience of marine and coastal ecosystems. Actions for their conservation and restoration in order to achieve healthy, productive and sustainable oceans and coastal ecosystems are urgent.

Indonesia has globally significant coastal blue carbon ecosystems, which consist of mangroves (ca. 3,000,000 ha) and seagrass meadows (ca. 300,000 ha). The importance of coastal blue carbon has gained significant attention from the international community regarding its roles in climate change mitigation and adaptation. These ecosystems demonstrate their effectiveness in carbon capture and storage, and hence, their high potential for mitigating climate change when conserved and restored. Their ability in land building, proves that mangroves can cope with sea level rises – through adaptation to climate change. It is timely to consider coastal blue carbon ecosystems as part of the Nationally Determined Contributions (NDCs).

Each of these national goals, agenda and targets are closely related to global schemes, such as:

- the Paris Agreement, on issues related to mitigation, adaptation, loss and damage and financial mechanisms (Articles 5, 7, 8 and 9)
- the Aichi Biodiversity Targets, with emphasis on sustainable use of coastal and marine biodiversity resources (Targets B-8, B-10, D-15)
- the Sustainable Development Goals, to promote marine and coastal ecosystems' sustainable management by strengthening their resilience and restoration (Target 14.2)
- the Bonn Challenge, regarding restoration of 150 million ha of degraded landscape in 2020 and 350 million ha in 2030.