

# 2018“蓝碳倡议”国际会议

## Blue Carbon Initiative Working Groups 2018 Annual Meeting



# 会议手册

## Meeting Program

中国·威海

Weihai, China

2018年8月28日-9月1日

August 28-September 1, 2018

## 支持单位 SUPPORTING ORGANIZATIONS

自然资源部海洋战略规划与经济工作小组  
Working Group of Ocean Strategic Planning and  
Economic Development, Ministry of Natural Resources

威海市人民政府  
Weihai Municipal People's Government

## 主办单位 SPONSORS

自然资源部 国家海洋局第三海洋研究所  
Third Institute of Oceanography, State Oceanic Administration,  
Ministry of Natural Resources

蓝碳倡议 (保护国际基金会, 世界自然保护联盟, 联合国教科文组织政府间海洋学委员会)  
Blue Carbon Initiative (Conservation International, International Union for Conservation of Nature,  
Intergovernmental Oceanographic Commission of UNESCO)

## 承办单位 ORGANIZERS

威海市海洋与渔业局  
Oceanic and Fishery  
Bureau of Weihai  
Municipality

威海南海新区管委会  
Weihai Nantai New  
Area Management  
Committee

## 特别鸣谢 SPECIAL ACKNOWLEDGEMENTS

阿拉善 SEE 基金会  
SEE Foundation

## 协办单位 CO-ORGANIZERS

浙江大学  
Zhejiang University

自然资源部 国家海洋局第四海洋研究所  
Fourth Institute of Oceanography, State Oceanic  
Administration, Ministry of Natural Resources

自然资源部 国家海洋局海洋发展战略研究所  
China Institute for Marine Affairs, State Oceanic  
Administration, Ministry of Natural Resources

北京市朝阳区永续全球环境研究所  
Global Environmental Institute

<b>Blue Carbon Initiative Working Groups Meetings Opening Ceremony</b> <b>Day 1 –Tuesday 28<sup>th</sup> August, 2018</b> <b>Main Conference Room at the 1<sup>st</sup> Floor of the Guest Greeting Building,</b> <b>Dongshan Hotel</b>	
<i>All day</i>	Registration for Science Working Group, Hotel Lobby
9:00	<b>Opening Ceremony - Welcome</b> Moderators: Dr. Yan LIU, <i>Member of Integrated Working Group, Ministry of Natural Resources</i> Dr. Bin CHEN, <i>Deputy Director General of Third Institute of Oceanography, State Oceanographic Administration, Ministry of Natural Resources (TIO-SOA)</i> Mr. Xiaohai LIU, <i>Executive Director of Conservation International, China</i>
9:05	Dr. Zhanhai ZHANG, <i>Director General of Working Group of Ocean Strategic Planning and Economic Development, Ministry of Natural Resources</i>
9:15	Mr. Xiaohai LIU, <i>Executive Director Conservation International, China</i>
9:25	Mr. Qingchun JIANG, <i>Deputy Director of Oceanic and Fishery Department of Shandong Province</i>
9:35	Mr. Liang WANG, <i>Executive Deputy Mayor of Weihai Municipal People's Government</i>
9:45	<b>Blue Carbon Development in China</b> Dr. Yan LIU, <i>Member of Integrated Working Group, Ministry of Natural Resources</i>
10:10	<b>Introduction to blue carbon and the Blue Carbon Initiative</b> Dr. Emily PIDGEON, <i>Senior Director, Blue Climate Program, Conservation International, Co-Chair of International Blue Carbon Scientific Working Group</i>
10:20	<b>Blue carbon: from concepts to applications</b> Professor Nianzhi JIAO, <i>Xiamen University, Academician of Chinese Academy of Sciences</i>
10:45	Tea and coffee break

11:00	<p><b>Blue carbon coastal ecosystems</b>  Dr. Jim FOURQUREAN, <i>Professor, Florida International University</i></p>
11:15	<p><b>Blue Carbon and ocean carbon research in IOC-UNESCO</b>  Dr. Salvatore ARICÒ, <i>Head of the Ocean Science Section, Intergovernmental Oceanographic Commission-UNESCO</i></p>
11:35	<p><b>Good practices and achievements of Marine Eco-Civilization in Weihai</b>  Mr. Chuanliang WANG, <i>Deputy Director of Oceanic and Fishery Bureau of Weihai Municipality</i></p>
12:00	<p><b>Presentation of Weihai Declaration</b>  Dr. Bin CHEN <i>Deputy Director General of Third Institute of Oceanography, SOA, Ministry of Natural Resources</i></p>
12:10	Lunch Buffet at Dining Hall, 1 <sup>st</sup> floor of the Guest Greeting Building

<b>International Blue Carbon Policy Working Group Meeting</b> <b>Day 1 –Tuesday 28<sup>th</sup> August, 2018</b> <b>Room 1, 3<sup>rd</sup> floor of the Guest Greeting Building, Dongshan Hotel</b>	
<b>Session 1. Opportunities for Climate Policy for Blue Carbon, greenhouse gas accounting, Nationally Determined Contributions (NDCs), Markets and Other Mechanisms, Part I</b> Introduction and moderator: Dr. Emily PIDGEON, <i>Senior Director, Blue Climate Program, Conservation International, Co-Chair of International Blue Carbon Scientific Working Group</i>	
14:05	<b>Introduction to International Blue Carbon Policy Working Group</b> Dr. Emily PIDGEON, <i>Senior Director, Blue Climate Program, Conservation International, Co-Chair of International Blue Carbon Scientific Working Group</i>
14:05	<b>International overview of blue carbon policy</b> Dr. Moritz VON UNGER, <i>Principal, Climate Policy, Silvestrum Climate Associates</i>
14:20	<b>Recent developments of relevance to the BCI in the context of the UNFCCC SBSTA</b> Dr. Salvatore ARICÒ, <i>Head of the Ocean Science Section, Intergovernmental Oceanographic Commission-UNESCO</i>
14:35	<b>Inclusion of coastal wetlands in greenhouse gas inventories</b> Dr. Hilary KENNEDY, <i>Professor, Bangor University</i>
14:50	<b>Implementation of greenhouse gas inventory in the United States of America</b> Dr. Steve CROOKS, <i>Principal, Wetlands Science and Coastal Management, Silvestrum Climate Associates, Co-Chair of International Blue Carbon Scientific Working Group</i>
15:05	<b>Opportunities and policy goals for blue carbon in China</b> Dr. Wanfei QIU, <i>China Institute for Marine Affairs, State Oceanic Administration, Ministry of Natural Resources, China (CIMA)</i>
15:20	<b>Progress of China's greenhouse gas inventory preparation and thoughts on blue carbon inventory</b> Dr. Shanshan YANG, <i>National Center for Climate Change Strategy and International Cooperation</i>
15:40	Tea and coffee break, Group Photo

**Session 2. Opportunities for Climate Policy for Blue Carbon, Greenhouse Gas Accounting, Nationally Determined Contributions (NDC), markets and other mechanisms, Part II**

Moderator: Ms. Yinglan BO, *SEE Foundation, China*

16:00	<b>Forestry Carbon Sequestration Policy and Measures Reference to Blue Carbon</b> Dr. Nuyun LI, <i>China Green Carbon Exchange Foundation</i>
16:15	<b>Blue carbon project development and verified carbon standards methodologies</b> Dr. Steve CROOKS, <i>Principal, Wetlands Science and Coastal Management, Silvestrum Climate Associates, Co-Chair of International Blue Carbon Scientific Working Group</i>
16:30	<b>NGO(GEI)'s efforts on promoting climate change policy and its implications on blue carbon initiative</b> Dr. Jiaman JIN, <i>Global Environmental Institute</i>
16:45	<b>Tentative Discussion on the Role of Blue Sink in China's National Climate Policy</b> Dr. Guoqiang QIAN, <i>Sino Carbon Innovation &amp; Investment Co., Ltd. (Sino Carbon)</i>
17:15	<b>Discussion</b>
18:00	Dinner Buffet at Dining Hall, 1 <sup>st</sup> floor of the Guest Greeting Building

<b>International Blue Carbon Scientific Working Group Meeting</b> <b>Day 2 – Wednesday 29<sup>th</sup> August, 2018</b> <b>Room 2, 3<sup>rd</sup> floor of the Guest Greeting Building, Dongshan Hotel</b>	
<b>Session 3. Introduction to International Blue Carbon Science Working Group</b>	
9:00	<b>Welcome, introduction to Blue Carbon Initiative and International Blue Carbon Scientific Working Group</b> Dr. Emily PIDGEON, <i>Senior Director, Blue Climate Program, Conservation International, Co-Chair of International Blue Carbon Science Working Group</i> Dr. Steve CROOKS, <i>Principal, Wetlands Science and Coastal Management, Silvestrum Climate Associates, Co-Chair of International Blue Carbon Science Working Group</i>
9:20	Dr. Guangcheng CHEN, <i>Third Institute of Oceanography, State Oceanographic Administration, Ministry of Natural Resources, China</i>
9:25	Mr. Jiming WANG, <i>Oceanic and Fishery Bureau of Weihai Municipality</i>
9:30	<b>Participant Introductions</b>
10:00	Tea and coffee break, Group Photo
<b>Room 2 Session 4a. Blue Carbon in China and the Region, Part I</b> Moderator: Dr. Guangcheng CHEN, <i>Third Institute of Oceanography, State Oceanic Administration, Ministry of Natural Resources, China</i>	
10:30	<b>Coastal salt marshes of China: blue carbon potentials and challenges</b> Dr. Bo LI, <i>Fudan University</i>
10:45	<b>Blue carbon of salt marshes in the Yellow River Delta: measurement and assessment</b> Dr. Guangxuan HAN, <i>Yantai Institute of Coastal Zone Research, CAS, China</i>
11:00	<b>Protection &amp; Restoration for Blue carbon ecosystems in the Yellow River delta: tidal marshes, seagrass meadows and oyster reef</b> Dr. Wei WANG, <i>First Institute of Oceanography, State Oceanic Administration, Ministry of Natural Resources, China</i>
11:15	<b>Net Ecosystem CO<sub>2</sub> Exchange and Its Controlling Factors During the Growing Season in a Salt Marsh in The Yellow River Delta, China.</b> Dr. Qinghui XING, <i>National Marine Environmental Monitoring Center, China</i>
11:30	<b>Comparison of carbon dynamics of tidal marshes dominated by native and invasive plants in the Min River estuary</b> Prof. Chuan TONG, <i>Fujian Normal University, China</i>
11:45	<b>Carbon storage of salt marshes in Nanhai, Weihai, China</b> Dr. Jiaqi LI, <i>Yellow Sea Fisheries Research Institute</i>
12:00	Lunch Buffet at Dining Hall, 1 <sup>st</sup> floor of the Guest Greeting Building

<b>International Blue Carbon Policy Working Group Meeting</b> <b>Day 2 – Wednesday 29<sup>th</sup> August, 2018</b> <b>Room 1, 3<sup>rd</sup> floor of the Guest Greeting Building, Dongshan Hotel</b>	
<b>Room 1 Session 4b. International Blue Carbon Policy Working Group</b> Moderator: Dr. Junbao YU, <i>Ludong University, China</i>	
9:00	<b>Join Session 3, Introduction to International Blue Carbon Science Working Group in Room 2</b>
10:30	<b>Blue Carbon Program in Dongtou Country, Zhejiang China</b> Dr. Jiaping WU, <i>Ocean College, Zhejiang University, China</i>
10:45	<b>How Blue Carbon Can Make a Difference in Wetland Restoration and Mitigation Policy- Examples from Eastern Canada.</b> Dr. Gail L. CHMURA, <i>Associate Professor, McGill University and Isabel GALIANA, McGill University</i>
11:00	<b>China's Incoming Emissions Trading Scheme: Options for a Blue Carbon Offsetting Protocol</b> Dr. Moritz VON UNGER, <i>Principal, Climate Policy, Silvestrum Climate Associates</i>
11:15	<b>Overview of the International Partnership Blue Carbon and linkage with on ground projects</b> Ms. Heidi PRISLAN, <i>Assistant Director, Environment Unit Sustainability and Climate Change Branch, Department of Foreign Affairs and Trade, Australian Government</i>
11:30	<b>Social Responsibility on Blue Carbon in China</b> Dr. Le KANG, <i>Dalian University of Science and Technology, China</i>
11:45	<b>Discussion</b>
12:00	Lunch Buffet at Dining Hall, 1 <sup>st</sup> floor of the Guest Greeting Building



<b>Session 5. Blue Carbon in China and the Region, Part II</b>	
Moderator: Dr. Gail L. CHMURA, <i>Associate Professor, McGill University</i>	
14:00	<p><b>A review of research on soil carbon in China's <i>Spartina alterniflora</i> marshes</b></p> <p>Dr. Xiangzhen QI, <i>Nanjing Normal University/McGill University</i>) and Dr. Gail CHMURA, <i>Associate Professor, McGill University, Canada</i></p>
14:15	<p><b>Carbon storage of seagrass beds and comparisons with adjacent mangroves swamps and unvegetated tidal flats in Southern China</b></p> <p>Dr. Guanglong QIU, <i>Researcher, Florida International University</i></p>
14:30	<p><b>Carbon Storage Capacity of Seagrass Meadows in Sanggou Bay, China</b></p> <p>Dr. Yaping GAO, <i>Yellow Sea Fisheries Research Institute, China</i></p>
14:45	<p><b>Seagrass resource and carbon stock in Hainan</b></p> <p>Dr. Daoru WANG, <i>Hainan Academy of Ocean and Fisheries Sciences, China</i></p>
15:00	<p><b>China Considerations in blue carbon accounting with mangrove restoration</b></p> <p>Dr. Guangcheng CHEN, <i>Third Institute of Oceanography, SOA, Ministry of Natural Resources, China</i></p>
15:15	<p><b>Carbon Sequestration and Sediment Deposits in Mangroves of China</b></p> <p>Dr. Luzhen CHEN, <i>Associate Professor, Xiamen University</i></p>
15:30	Tea and coffee break
<b>Session 6. Framework of the Current Blue Carbon and REDD+ framework</b>	
Moderator: Dr. Catherine LOVELOCK, <i>Professor, The University of Queensland</i>	
16:00	<p><b>Applying lessons learned from REDD+ and other ways to integrate blue carbon in other frameworks and programs</b></p> <p>Dr. Catherine LOVELOCK, <i>Professor, The University of Queensland</i> Dr. Moritz VON UNGER, <i>Principal, Climate Policy, Silvestrum Climate Associates</i></p>
16:30	<p><b>Carbon Methodologies in Agricultural and Forestry ---An Inspiration to Blue Carbon</b></p> <p>Dr. Xiaoquan ZHANG, <i>Senior Scientist for Climate Change, The Nature Conservancy's China Program</i></p>
16:45	<p><b>Framework consortium of blue carbon standards in China</b></p> <p>Dr. Peng ZHAO, <i>Fourth Institute of Oceanography, State Oceanic Administration, Ministry of Natural Resources, China</i></p>
17:00	<p><b>Broad policy view relating to NDCs</b></p> <p>Ms. Heidi PRISLAN, <i>Assistant Director, Environment Unit Sustainability and Climate Change Branch, Department of Foreign Affairs and Trade, Australian Government</i></p>
17:15	<b>Discussion</b>
18:00	Dinner Buffet at Dining Hall, 1 <sup>st</sup> floor of the Guest Greeting Building

**Field Trip**

**Day 3 – Thursday 30<sup>th</sup> August, 2018**

**Meet at Dongshan Hotel lobby at 6:45 am**

<i>7:00</i>	<b>Depart Dongshan Hotel</b>
<i>9:00</i>	Seagrass community in Chudao Village
<i>11:00</i>	National Marine Research Farm
<i>12:00</i>	<b>Lunch</b>
<i>14:00</i>	Wetland-Estuary Park in Nanhai
<i>14:20</i>	Visit Blue Carbon building
<i>14:30</i>	Attend signing ceremony in Blue Carbon Entrepreneurship building
<i>14:50</i>	Coffee and tea break in Blue Carbon Entrepreneurship building
<i>15:00</i>	Arrive salt marsh area and process a blue carbon soil core demonstration
<i>17:30</i>	Departure for dinner
<i>18:00</i>	Dinner
<i>19:30</i>	Departure to Hotel
<i>21:00</i>	<b>Arrive Dongshan Hotel</b>

<b>International Blue Carbon Scientific Working Group</b> <b>Day 4 – Friday 31<sup>th</sup> August, 2018</b> <b>Room 2, 3<sup>rd</sup> floor of the Guest Greeting Building, Dongshan Hotel</b>	
<b>Session 7. Panel Discussion: Criteria for defining blue carbon ecosystems</b> Moderator: Dr. Emily PIDGEON, <i>Senior Director, Blue Climate Program, Conservation International, Co-Chair of International Blue Carbon Scientific Working Group</i>	
9:00	<b>Panel Discussion: Criteria for defining blue carbon ecosystems</b> Dr. Steve CROOKS, <i>Principal, Wetlands Science and Coastal Management, Silvestrum Climate Associates, Co-Chair of International Blue Carbon Scientific Working Group</i> Dr. Catherine LOVELOCK, <i>Professor, The University of Queensland</i> Dr. Miguel CIFUENTES, <i>Researcher, Climate Change and Watershed Program, Centro Agronómico Tropical de Investigación y Enseñanza, Costa Rica (CATIE) (Skype 7:00 PM Costa Rica)</i> Blue carbon Chinese scientists
10:00	Tea and coffee break
<b>Session 8. Blue Carbon Potential Ecosystems</b> Moderators: Dr. Jianguang FANG, <i>Yellow Sea Fisheries Research Institute</i> and Dr. Hilary KENNEDY, <i>Bangor University</i>	
10:30	<b>The potential carbon sequestration function of macroalgae mariculture</b> Dr. Yuzhe MAO, <i>Yellow Sea Fisheries Research Institute, China</i>
10:45	<b>The role of bivalve mariculture in marine carbon cycle and potential carbon sequestration</b> Dr. Zengjie JIANG, <i>Yellow Sea Fisheries Research Institute, China</i>
11:00	<b>Considerable Environmental Benefits of Seaweed Aquaculture in China</b> Dr. Runjie JIN and Prof. Jiaping WU, <i>Zhejiang University, China</i>
11:15	<b>Importance of microbial carbon pump in climate change mitigation</b> Dr. Jihua LIU, <i>Shandong University, China</i> Dr. Yongyu ZHANG, <i>Qingdao Institute of Bioenergy and Bioprocess Technology, CAS, China</i>
11:30	<b>Discussion</b>
12:00	Lunch Buffet at Dining Hall, 1 <sup>st</sup> floor of the Guest Greeting Building

<b>Session 9. International Blue Carbon Reports</b> Moderator: Dr. Nuria MARBA, <i>Associate Researcher, Institut Mediterrani d'Estudis Avancats</i>	
14:00	<b>CO<sub>2</sub> and CH<sub>4</sub> fluxes during the restoration process of salt marsh in Massachusetts, USA.</b> Dr. Jianwu TANG, <i>Associate Scientist, Woods Hole Marine Biological Laboratory</i>
14:15	<b>Carbon sequestration in tidal marshes: what is it, what regulates it, and how do you measure it?</b> Dr. James MORRIS, <i>Distinguished Research Professor, University of Southern Carolina</i>
14:30	<b>Global Science and Data Network for Coastal Blue Carbon.</b> Dr. Patrick MEGONIGAL, <i>Associate Director for Research, Principal Investigator, Smithsonian Environmental Research Center</i>
14:45	<b>New global blue carbon ecosystem maps</b> Ms. Emily LANDIS, <i>Coastal Wetlands Strategy Lead, The Nature Conservancy</i>
15:00	<b>A Novel Sonar Technique for Non-Destructive Measurement of Seagrass Soil Carbon</b> Dr. Faiz RAHMAN, <i>Professor, University of Texas Rio Grande Valley, USA</i>  <b>MMM5 International Mangrove Conference</b> Dr. Dan FRIESS, <i>Professor, National University of Singapore, China</i>
15:15	<b>Challenges and Opportunities in Optimizing Blue Carbon in Philippine Mangroves</b> Dr. Severino SALMO III, <i>Assistant Professor, Ateneo de Manila University &amp; University of the Ryukyus, Okinawa, Japan</i>
15:30	Tea and coffee break

<p><b>Session 10. International Blue Carbon Scientific Working Group Conclusion</b>  Moderator: Dr. Salvatore ARICÒ, <i>Head of the Ocean Science Section, Intergovernmental Oceanographic Commission-UNESCO</i></p>	
16:00	<p><b>Concluding remarks from Policy and Science Working Group meetings</b>  Dr. Salvatore ARICÒ, <i>Head of the Ocean Science Section, Intergovernmental Oceanographic Commission-UNESCO</i>  Dr. Emily PIDGEON, <i>Senior Director, Blue Climate Program, Conservation International, Co-Chair of International Blue Carbon Scientific Working Group</i>  Dr. Steve CROOKS, <i>Principal, Wetlands Science and Coastal Management, Silvestrum Climate Associates, Co-Chair of International Blue Carbon Scientific Working Group</i></p>
16:20	<p>Dr. Guangcheng CHEN, <i>Third Institute of Oceanography, State Oceanic Administration, Ministry of Natural Resources, China</i></p>
16:30	<p>Other Chinese guests</p>
18:00	<p>Dinner Buffet at Dining Hall, 1<sup>st</sup> floor of the Guest Greeting Building</p>

<b>Day 5 – Saturday 1<sup>st</sup> September, 2018</b>	
<b>Room 2, 3<sup>rd</sup> floor of the Guest Greeting Building, Dongshan Hotel</b>	
<b>Session 11. Informal discussions and presentations</b>	
<i>9:00</i>	<b>Updates on existing blue carbon manual “Coastal Blue Carbon: methods for assessing carbon stocks and emissions factors in mangroves, tidal salt marshes, and seagrass meadows”</b> <i>Dr. Jorge RAMOS, Manager, Oceans and Climate, Conservation International</i>
<i>9:15</i>	<b>Discussion</b>
<i>10:30</i>	Tea and coffee break
<b>Session 12. Informal discussions and presentations</b>	
<i>11:10</i>	<b>New blue carbon research development and national synthesis</b> <i>Dr. Guangcheng CHEN, Third Institute of Oceanography, State Oceanic Administration, Ministry of Natural Resources, China</i>
<i>11:15</i>	<b>Discussion</b>
<i>12:00</i>	Lunch Buffet at Dining Hall, 1st floor of the Guest Greeting Building

