

***The International Cooperation and Development Forum
on Marine Economy 2020***

*Hosted by Shenzhen Municipal People’s Government
Organized by Shenzhen SEZ Construction And Development Group Co. Ltd.
Produced by Smadja & Smadja Strategic Advisory Switzerland*

Sheraton Shenzhen Futian Hotel, 15-16 October 2020

"Building a stronger Blue Economy Post Covid 19"

*As of 18th September 2020
Names listed by alphabetical order*

Thursday 15 October 2020	
12:30 – Ongoing	<i>Registration of participants</i>
13:45 – 14:15	<i>Official opening ceremony</i>
14:30 – 15:45	<p>Plenary session <i>Looking at 2030: China’s evolving place in the global marine economy</i></p> <ul style="list-style-type: none"> ✓ What trends will be shaping the development of China’s marine economy over the next 10 years? ✓ How to develop China’s blue economy as an engine of growth and wealth, and encourage even more innovation to have the marine economy grow from around 9.5% of GDP now to around 15% by 2030? ✓ What is needed to increase China's marine resource utilization efficiency and profitability, and bring them to the level of the most developed countries in this domain? ✓ Beyond shipping and fisheries, what are the areas in the marine economy different activities where China has the potential to emerge as a global leader? <p><u>Speakers:</u></p> <p>GAO Shang, Strategic Director, CIMC Offshore Engineering,</p>

	<p>People’s Republic of China Hercules Haralambides, Dalian Maritime University, P.R. China, & The Paris School of Economics (CES) Université Paris 1 - Panthéon-Sorbonne - TBC Paul Holthus, Founding President & Chief Executive Officer, World Ocean Council, United States of America WANG Bin, Director of the Department of Marine Strategic Planning and Economics, Ministry of Natural Resources, People’s Republic of China</p>
15:45 – 16:00	<p><i>Coffee break</i></p>
16:00 – 17:15	<p>Session in parallel <i>Betting on the marine energy as the wave of the future: The technological innovations which will deliver</i></p> <p>Technological innovation is opening up new opportunities for tapping the oceans as an expanding source of renewable energy at economically viable conditions. Whether it is capturing offshore wind energy or thermal energy or plugging into the power of waves and tidal streams or exploring the potentialities of osmotic power – creating through electrochemistry, a concentration cell with saltwater on one side and fresh water on the other, resulting in electricity generation – we are still at the beginning of a long journey to fully leverage the oceans as a source of sustainable renewable energy.</p> <ul style="list-style-type: none"> ✓ What are the next steps in scaling up and making ocean energy harvesting more cost-efficient, as significant cost-reductions are required for ocean energy technologies to compete with other low-carbon technologies ? ✓ How to address the challenges of remaining technical problems and high costs in the development of offshore wind energy? ✓ After the huge progress achieved recently what could be done to accelerate even more the deployment of offshore wind installations in China and in other parts of the world? ✓ How to address the obstacles of capacity building and standardization? <p><u>Speakers:</u></p> <p>CHEN Daoyi, Director of Marine Technology Center, Tsinghua University, People’s Republic of China Henry Jeffrey Chairman Ocean Energy Systems (OES) University</p>

	<p>of Edinburgh, United Kingdom Tim Mundon, Vice President of Engineering, Oscilla Power, United States of America Peng Wei, Deputy Director, National Marine Technology Center, Ministry of Natural Resources, People’s Republic of China</p> <p><u>Moderator:</u></p> <p>FENG Yu, Managing Editor of the Global Times Shanghai Newsroom, People’s Republic of China</p>
<p>16:00 – 17:15</p>	<p>Session in parallel <i>Stepping up the global fight against man-made marine pollution</i></p> <p>What was already a priority challenge given the dramatic spread of the oceans’ man-made pollution has become even more pressing as the huge global proliferation of protective equipment created by the fight against the pandemic, is leading to an aggravation of the seas’ plastic pollution. This is today one of the most lethal threat to marine life and bio-diversity. It is estimated that up to 12 million metric tons of plastic enter our ocean each year. By 2050 there could be more plastic in the oceans -measured by weight - than fish. However, beyond plastic pollutants there are too many other sources of marine pollution such as nitrogen and phosphorous, antibiotics, heavy metals, pesticides, oil and gas, and many kinds of debris entering the oceans directly, through rivers, stormwater or even the wind.</p> <ul style="list-style-type: none"> ✓ What should be done to harmonize national policies against single-use plastic, limiting the use of highly polluting chemicals, improving wastewater management to ensure much greater global efficiency against marine pollution? ✓ What incentives and policies could help expand the circular economy, reducing the throw away mentality in order to prevent pollution instead of having to fight it? ✓ How efficient companies can leverage technologies to make the fight against marine pollution a profitable business? <p><u>Speakers:</u></p> <p>James Huang, Vice President, DNV GL Group and Director of Strategic Development for Greater China, Norway Maggie Lund, Head of Business Development China and Philippines, The Ocean Cleanup, The Netherlands Suresh Valiyaveetil, National University of Singapore Chemistry,</p>

	<p>Singapore Justin Wood, Vice President of Strategic Partnerships, Alliance to End Plastic Waste, Singapore Patrick Yeung, World Wide Fund for Nature China (WWF-China), Ocean Program Manager ZHANG Zhiwei, Senior Engineer of First Institute of Oceanography (FIO), Ministry of Natural Resources (MNR) of China, People’s Republic of China</p>
<p>16:00 – 17:15</p>	<p>Session in parallel <i>Deep seabed resources: The technology and policies to move from exploration to sustainable exploitation</i></p> <p>As the demand for base metals, deep water oil and gas and minerals keeps increasing new technological developments are helping to enable the still emerging deep seabed mining industry meet the demand. 2020 was supposed to be a crucial year for deep-seabed mining. But the coronavirus pandemic has upended the planning to adopt an international mining code during this year. This mining code to be enforced by the International Seabed Authority – a UN organization – will comprise regulations defining the conditions for the extraction of cobalt, nickel and other minerals in the deep ocean beyond national jurisdiction . The July meeting has been postponed to October 2020 with the hope of finalizing the code, but the issue of environmental protection remains a serious one to be tackled, and the pandemic has also slowed down all scientific research about deep sea ecosystems.</p> <ul style="list-style-type: none"> ✓ What is the picture for prospecting and exploration in terms of technological capabilities and where are the most promising regional opportunities? ✓ What challenges to address when drilling deep for oil and gas? How new technological developments could help? ✓ Are the technology developments and prospects for increased demand for oil exploration post Covid-19, inducing operators to look at new investments in deep sea projects to access oil & gas resources very deep under the sea floor. ✓ How to assess the evolution for metal and deep water oil & gas demand in a post Covid global economy? ✓ What kind of safeguards and requirements will reassure investors in the present uncertain economic environment? <p><u>Speakers:</u></p> <p>LI Bo, Deputy Director, China Ocean Mineral Resources R&D</p>

	<p>Association, People’s Republic of China Sam LI, Assistant Professor of Shenzhen International Graduate School, Tsinghua University, People’s Republic of China Andrew Lipman, Director of Subsea and Mining Operations, ABS Great China, United States of America SUN Xiansheng, Former Dean of PetroChina Economic Research Institute; Former Secretary General of International Energy Forum (IEF), People’s Republic of China TANG Xinxiao, Chairman, Shenzhen Jinhang Deep Sea Mineral Development Group, People’s Republic of China</p>
<p>17:30– 18:45</p>	<p>Plenary roundtable <i>What future for the shipping industry in a new international trade landscape?</i></p> <p>The shipping industry is now confronting a changed global environment as a result of trends in the macroeconomic as well as geopolitical domains which have been amplified by the Covid pandemic. In addition to the impact of the global recession generated by the pandemic, the industry has to adjust to the redrawing of global supply chains, the deterioration of the multilateral trade system, with rising protectionist policies, the impact of the new health and sanitations rules. Adjusting to the challenges created by these new trends is made even more difficult as the shipping industry is still reeling from the dramatic decline of global economic activity triggered by the pandemic. The Baltic Capsize Index (BCI) has moved during the year into negative territory for the first time in its almost 30-year history. It is an implicit proxy for industrial activity and production in China and other industrial centers which – after a very steep decline - has now moved up since then.</p> <ul style="list-style-type: none"> ✓ Looking towards 2021 how does the overall shipping industry look like in terms of patterns of activity? ✓ As global supply chains and shipping will be different from how they had worked so far, what actions will help sustain the profitability of shipping companies? ✓ Is a new wave of consolidation of the shipping industry in the cards? <p><u>Speakers:</u></p> <p>Charlie Hockless, Head of China/SE Asia, VesselsValue Ltd, Singapore LI Yanqing, Secretary General of China Association of National Shipbuilding Industry, People’s Republic of China Georgios E. Poularas, Chief Executive Officer, ENESEL S.A., Greece</p>

	<p>Peter Stokes, Senior Adviser and Head of Shipping, Lazard and Chairman of the Global Maritime Forum, United Kingdom Wei Zhuang, Regional Manager Asia, BIMCO, Denmark</p>
<p>17:30 – 18:45</p>	<p><i>Coming up with the right answers to the increasing threats to maritime security</i></p> <p>As the digitization of the marine industry accelerates and ships are more and more connected and integrated into corporate IT networks the issue of marine cybersecurity is acquiring ever more urgency. Most standard marine insurance policies exclude financial protection against any form of cyber-attack, while lax security and poorly-performing firewalls make ocean supply chains, and industries as a whole, exceptionally vulnerable. Ship owners are under pressure to comply with the new International Maritime Organization (IMO) regulations on cybersecurity coming into force in January 2021 and to increase the protection of their assets from rising cyber threats. However, cyber-threats are not the only security challenge facing the maritime industry as it has also to contend with piracy and terrorism. The general public might not realize that the sea is more than ever of great strategic importance, as nearly 80% of global trade is transported in ships’ hulls, and how threats to security at sea have a real impact for almost all countries around the world.</p> <ul style="list-style-type: none"> ✓ While there has already been significant progress in coordinating international action on maritime security, what additional steps are needed to increase the efficiency of the responses to maritime security challenges which involve a number of different players? ✓ How to enhance the role of private sector actors in maritime security? <p><u>Speakers:</u></p> <p>David A. Luttinger Jr., Partner Insurance Practice, Covington & Burling, United States of America MU Lin, Deputy Director of Ocean Research Center, Shenzhen University, People’s Republic of China WANG Yiwei, Jean Monnet Chair Professor, Director of Institute of International Affairs, Director of Center for European Studies at Renmin University of China, People’s Republic of China</p>
<p>Friday 16 October 2020</p>	
<p>08:45 – 10:00</p>	<p>Plenary in parallel</p>

Managing ocean investments for wealth and growth creation in a responsible way

Interest in the blue economy has been growing among investors as this sector represents today between US\$ 2.5 and 3 trillion of economic output and is expected to grow at twice the rate of the overall global economy by 2030. However, financing a sustainable blue economy remains fraught with many challenges, whether it is the lack of industry expertise, or sometimes a lack of investment-grade projects. There is however a growing awareness that a number of investment opportunities now exist in activities linked to climate change mitigation especially the whole domain of marine renewables - the technologies linked to fighting marine pollution and in the domains of coastal and marine tourism as well as in sustainable fisheries and aquaculture.

- ✓ What innovative finance approaches could help reduce risks associated with investing in some sectors of the marine economy?
- ✓ What is required to create or improve the governance framework that will help incentivize responsible private sector investments by reducing risks and promoting innovation?
- ✓ Are there investment areas in the marine economy which look more promising than others?
- ✓ Can Public/Private Partnerships help boost investments in a sustainable marine economy? And what would the success factors be for that?

Speakers:

Maren Hjorth Bauer, Managing Partner and Founder, Fynd Ocean Ventures, Norway

Marisa Drew, Chief Sustainability Officer & Global Head Sustainability Strategy, Advisory and Finance, Credit Suisse, Switzerland

Paul Holthus, Founding President & Chief Executive Officer, World Ocean Council, United States of America

YU Ya, Vice president, China International Marine Containers (Group), People's Republic of China

ZHOU Hua, Partner of China Headquarters, Dentons Law Firm, People's Republic of China

Moderator:

WU Chen, Chief Editor, The Economist Global Business Review,

	People's Republic of China
08:45 – 10:00	<p>Plenary in parallel <i>Global ocean governance : Addressing the need for a big leap forward</i></p> <p>The Sustainable Development Goal 14 of the United Nations' 2030 Agenda for Sustainable Development, is “to conserve and sustainably use the oceans, seas and marine resources ». However, while there is an increasing realization that the pressure on oceans' resources needs to be reduced and that these resources should be used in a much more rational manner, there is also a general recognition that the ocean international governance framework needs to be strengthened, progress in that direction remains fraught with many difficulties. As Areas Beyond National Jurisdiction represent 65% of the surface of the oceans and are beyond any single government authority and surveillance they are subject to overexploitation, pollution and degradation. And these parts of the oceans are rich in biodiversity and resources and play a critical role in oxygen production and carbon storage. In 2015 the UN General Assembly passed a resolution to develop a legally-binding instrument under the UN Convention on the Law of the Sea for the conservation and sustainable use of marine biological diversity in Areas Beyond National Jurisdiction.</p> <ul style="list-style-type: none"> ✓ Why is it so difficult to achieve a more integrated approach to ocean governance, and what are the possible actions for accelerating the development of this much needed integrated approach? ✓ What are the areas where there is the most pressing need for accepted international regulations in Areas Beyond National Jurisdiction ? ✓ While a broad range of commitments have been made by states to adopt ecosystem approaches, integrate biodiversity conservation into ocean management there remain significant differences in how those principles are applied and understood when it comes to activities in Areas Beyond National Jurisdiction (ABNJ). What are the possibilities for achieving binding norms for the application of these principles ? <p><u>Speakers:</u></p> <p>PAN Xinchun, Secretary-General, China Oceanic Development Foundation, People's Republic of China Julien Rochette, Ocean Programme Director, Iddri, France Vladimir Ryabinin, Executive Secretary, Intergovernmental</p>

	<p>Oceanographic Commission UNESCO, France Julia TANG, Director for Marine Strategy, Department of Marine Strategy, Ministry of National Resources, People’s Republic of China ZHANG Chunyu, Research Fellow, Chinese Academy of Social Sciences , People’s Republic of China</p> <p><u>Moderator:</u></p> <p>YANG Rui, Partner of International Affairs of TMTPost, former host of CGTN, People’s Republic of China</p>
<p>10:10 – 11:25</p>	<p>Session in parallel <i>Digitalization and IoT: The way to smart ports and logistics</i></p> <p>Ports are under pressure to add value to the entire supply chain as the expectations increase for one-day-delivery and for flexible distribution networks. The growing demand for distribution facilities located in ports will increasingly lead to the expansion of port-centric logistics. On the other hand, the steady increase of ships size is making it imperative for ports authorities to create the infrastructure and acquire and master the technologies that will enable them to manage efficiently these ever bigger vessels.</p> <ul style="list-style-type: none"> ✓ What does the move from automated ports to intelligent ports mean in terms of acquisition, use of disruptive technologies and ports management? ✓ How will new technologies optimize maritime logistics? ✓ What are the next steps for the ports and logistics industry to adjust to supply chains becoming more circular than linear as a response to the greater consumer demand for greener products and processes? ✓ What conditions to ensure a good return on the investment needed for creating the smart ports and logistics of the 21st century? <p><u>Speakers:</u></p> <p>Richard Hepworth, President, Trelleborg Marine and Infrastructure Operation, United Arab Emirates PENG Junsong, Chief Digital Officer and Vice President, SAP China, People’s Republic of China Boris Wenzel, Managing Director, Terminal Link SAS, France</p>

	<p><u>Moderator:</u></p> <p>Charlene QIAN, China Business Network journalist, People’s Republic of China</p>
<p>10:10 – 11:25</p>	<p>Session in parallel <i>Leveraging the technologies that are reshaping the marine engineering industry</i></p> <p>While ship owners are generally cautious when it comes to new technology, climate change pressures are forcing the shipping industry to accelerate its move towards integrating the latest technologies in the marine engineering equipment sector whether in the domain of electronic and mechanical engineering or decarbonization, looking at all the options that will help reduce cost, increase efficiency and reduce emissions. In the same way, the drive for greater cost efficiency is also increasing the pace towards the digitization of the industry. The smart ship of the 21st century will integrate and leverage the latest capabilities in terms of engineering, leveraging of AI and big data along with a number of connected technologies to improve efficiency, ship performance. Smart ships will also have to make full use of the possibilities offered by robotics, advanced materials, new generation of sensors etc.</p> <ul style="list-style-type: none"> ✓ What are the latest most promising developments in the marine engineering industry? ✓ How to assess the impact of the pandemic with respect to the ability of the shipping industry to finance its move towards smart shipping? ✓ Assessing the impact of new emissions standards on the decarbonization of shipping ✓ How is the marine engineering equipment industry responding to the trend towards increasingly smarter ships and offshore platforms <p><u>Speakers:</u></p> <p>Alf Kare Adnanes, General Manager, ABB Marine & Ports, Switzerland LI Changwei, Chief Engineer, Highland Technology Group, People’s Republic of China Rajesh Unni Founder & Chief Executive Officer, Synergy Marine Group, Singapore</p>
<p>10:10 – 11:25</p>	<p>Session in parallel</p>

	<p><i>From coastal tourism to marine tourism: Strategies for a fast growth sector</i></p> <p>Ocean and coastal tourism has suffered a big blow from the Covid 19 Pandemic. Global ocean tourism was estimated by the OECD at US\$ 390 billion and it will take some time for the industry to recover and resume its growth trajectory. The pandemic will put pressure on cruise companies not only to implement tighter healthcare safety measures and monitoring but also to invest in new technologies such as sterilization robots. Coral reef tourism has been generating US\$ 36 billion revenues per year and the risk is that lost revenues may increase pressure for near-term exploitation.</p> <ul style="list-style-type: none"> ✓ How long will it take for ocean and coastal tourism to fully recover and get back to its previous growth pattern? ✓ To what extent will the pandemic accelerate public expectations and demand for a “blue” blue tourism”? ✓ Will the pandemic generate a shift towards small scale ocean and coastal tourism? ✓ What is the scale of investments needed from ocean and coastal tourism operators in the post Covid era and what is required to ensure the profitability of these investments? <p><u>Speakers:</u></p> <p>Aleksandra Dragozet, Founder & Chief Executive Officer, Sea Going Green, The Netherlands Rick XIE, Chief Operating Officer, Zanadu, People’s Republic of China Mei ZHANG, Founder & Chief Executive Officer, WildChina, People’s Republic of China</p>
11:30 – 12:30	<p><i>The oceans at the front line of the fight against climate change: The technologies and policies to make the difference</i></p> <p>The ocean and coastal areas provide critical ecosystem services such as carbon storage, oxygen generation, food and income generation now endangered by the oceans warming and acidification generated by greenhouse gas emissions. However, oceans are as much damaged by climate change as they are – or should be – part of the solution in fighting climate change. For instance, oceans represent a potential huge source of non-polluting renewable energy helping to reduce greenhouse gas emissions. « Blue carbon » - the carbon dioxide captured by the world’s ocean and coastal ecosystems - may provide a solution for the long-term sequestration and storage of carbon.</p>

	<ul style="list-style-type: none"> ✓ What oceans sustainability actions will provide the best contribution to the fight against climate change ? ✓ How to create the most efficient Public/Private Partnerships in protecting the oceans and thus making them an integral part of the fight against climate change? ✓ What ways to ensure that private sector initiatives towards the sustainability of oceans activities and climate change mitigation remain economically viable? <p><u>Speakers:</u></p> <p>Karin Kemper, Global Director for the Environment, Natural Resources and Blue Economy Global Practice, World Bank, United States of America</p> <p>Nomvuyo N. Nokwe, Secretary General, Indian Ocean RIM Association, Republic of Mauritius</p> <p>Jason Scorse, Director of the Center for the Blue Economy, United States of America</p> <p>John Tanzer, Oceans Practice Leader, WWF International, Switzerland</p> <p>YU Fujiang, Director, National Marine Environmental Forecasting Center, People’s Republic of China</p>
12:30 – 12:45	<i>Concluding remarks: What we take home</i>