



# CAPITAL LINK SHIPPING MASTER SERIES PODCAST

## IMO 2020 – Challenges and Opportunities in Chinese Shipping & Shipbuilding Industry

Presented by



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## Transcript: IMO 2020 – Challenges and Opportunities in Chinese Shipping & Shipbuilding Industry

**Lianjun Li:** Hi, everyone. We are all honored to participate in this podcast today. Let me introduce myself. I'm Mr. Lee Lian Jun, partner of "Li De Xi Bo Li Law Firm". We are honored to be with our guests today. Firstly, let me introduce the Captain Xie Chun Lin, chairman of China Merchants Energy Shipping. The second guest is the vice deputy manager of CSSC (Hong Kong) Shipping, Mr. Bao Wei Dong. And, the technical support manager of DNVGL, Mr. Gao Wei. So, today, with the specialists and guests here, we are going to mainly discuss on the challenges and impact that IMO 2020 brought to the shipping and shipbuilding business. Let us start with the impact and challenges that IMO 2020 has brought to the business. Mr. Xie, can you share your view on the matter as a shipowner?

**Chunlin Xie:** Thank you, Lawyer Li. About the new rules of IMO 2020, we have put in a lot of effort at the early stage to study deeply about it. The judgement from all the information that we've gathered is that there are mainly a few solutions that we have. The first is the installation of Scrubber. Secondly, is the study on LNG fuel, which requires the implementation of a new technology. The third aspect is the implementation of low Sulphur fuel oil. And, each approach has their own pros and limitations. For scrubber, the stability of the technology is yet to be determined and still requires study. The main problem is the lack of practical examples and results. So, shipowners are still waiting to see what it will lead to. For LNG, although it is available, the modification cost for merchant ship in general to implement LNG is a problem. More importantly, the supplier of LNG fuel is not available on all the ports. So, we have finally concluded that the implementation of choosing low Sulphur fuel oil is the solution that will work on a long term. Which I believe, will be a fundamental solution that will be chosen among our peers. Overall, the installations of scrubber are only implemented by the minority. According to our collected data, which isn't necessarily accurate, only 15% of ships has installed scrubber. And, some owners are just interested in installing the scrubber, but that obviously cannot be taken into consideration. The implementation of LNG is still at the stage of researching due to its high cost and the time required for modification on the technology, but more importantly, the issue of unreliable supply. That is why the majority has chosen to implement low Sulphur fuel oil, which is a more feasible approach to fulfil the new rules.

**Lianjun Li:** Mr. Xie, about the cost analysis. For example, a long-term ship rental contract, let alone the containers, some might request for a price increment on the low Sulphur fuel oil, what is the common approach seen in the business to tackle the problem?

**Chunlin Xie:** Based on the recent market research on the clients in long term cooperation, some renters are willing to bear a portion of the risk and the cost. For example, our VLOC team has a long-term cooperation with the Vale S.A. We have reached a mutual agreement based on the common mission and pursuit, to bear the increment in cost because of the installation of scrubber. However, most of the other renters are not willing to bear the increased cost as they think that this is the responsibility of the shipowners. Which has brought huge pressure to the shipowners in terms of the rise in cost.

**Lianjun Li:** Right. Got it.

**Chunlin Xie:** I believe there will be a consensus among in the business reached when the new rules came into force in 2020. It is impossible for the owner to fully bear the price increment and survive. In the end, the renters will have to share the burden. As for the portion, it depends on the market's supply and demand, which would lead to a different ball game.

**Lianjun Li:** Got it. For ship companies, what are the preparations that has done? For example, after 1/1/2020, low Sulphur fuel oil will be supplied, but there will be all kinds of matters and situations. Say, can the main machine adjust to the fuel? Or maybe the standards can't be met? So, what do the shipowners have to do to prepare on this matter to prevent this unwanted situation.

**Chunlin Xie:** For the matter of low Sulphur fuel oil, the international suppliers for the fuel have deeply explore for the solution. We've actually put some of our ships in implementation. Overall, the current available low Sulphur fuel oil are mixed fuel which is lacking in standards and technical parameters. I'm not a specialist in the technical field. However, it seemed like there wasn't any standards that has been announced internationally. But, the request for universal standards and references for technical parameters is common among the industry. Actually, the high Sulphur fuel oil, let alone the low Sulphur fuel oil, has had the case of breakdown instances for in some main machines. Let alone the low Sulphur fuel oil, which also has created problems during duty. I hope that reliable supplier of the low Sulphur fuel oil can take this matter into considerations. They have also been putting in a lot of effort to make sure that the oil being supplied is in good quality to ensure a safe run.

**Lianjun Li:** Alright. Thank you, Mr. Xie. Due to time constraint, we will now have Mr. Bao Wei Dong, the vice general manager of CSSC (Hong Kong) Shipping to share his view on the challenges for shipbuilding factories and leasing companies.

**Weidong Bao:** Alright. Thank you, Lawyer Lee. So, if you look at the ship building factories in China, the preparation for year 2020 can be detected at a very early stage. Not only that our factories are preparing for year 2020, we are also aware of 2050 carbon emission target. So, the factories are aware of those standards and targets and have been working towards achieving them.

Firstly, for the design of the ship, we want to provide the shipowners with energy saving design, including the design on the propulsion system and the outlook of the ship. This is the thing that has been working on for a long time. If we look at the last 20 years, every generation of the ship design that we came up with has always been able to decrease the fuel consumption. Comparing the current design with the design of 30 years ago, the statistics indicated a fuel oil consumption decrement of more than 30%. Which is a significant and apparent contribution to the industry. By cutting down the fuel oil consumption, we can conclude that the emission has also been decreased, isn't it? So, this is solving the problem at the root.

Secondly, the factories have been focusing on developing new kinds of clean energy fuel. This includes what Mr. Xie mentioned, the liquified natural gas(LNG), and the distribution of LNG. We also have methanol as the fuel. These are all considered as clean energy source, including ethane and hydrogen battery. And all of them are hot topics. So, factories have been working on designing and creating their own product of clean energy source. We are anticipating new ship orders in the near future, in about 5 years, of ships that use clean energy source and the number will be taking a big portion, possibly up to 30%. Among the current new ship orders, it is observed that the orders of big oil companies and ship building companies involved mass production of ships that use clean energy source as fuel. This is the beginning of the momentum.

Thirdly, which is the easiest solution, is to install scrubber. In terms of technology, the installation of scrubber is not difficult. There are mainly to types of scenario for the ship building factories. The first is for new ships, which is relatively easier. It is basically adding a device and a system to the ship, which will not be too much of a big deal. The biggest problem is to install the scrubber on the existing ships which involves modification. For the shipowners, they have to bear a high cost for that. And, the time taken for the installation is relatively high, which occupies the time on business. This would lead to rushing for a shorter period of installation time. From the orders that the factories receives this year and the voices heard in the industry, factories are actually waiting to see how the situation goes, which Mr. Xie has mentioned just now. Orders of installing scrubbers are beyond 1000 ships, adding the anticipated voices of 2 to 3 thousands orders, the total anticipates orders are hardly 15% of the total amount.

The number of ships sent for scrubber installation received by the ship building factories in China is beyond 70% of the world orders. Companies tend to choose sent their ships to China for the installation because of the speed of installation, flexibility, high efficiency and the relatively low cost. However, the main challenge that our ship building factories face is the high cost of modification for the installation of scrubber, which is way beyond the

estimated cost. This is because the orders received are all concentratedly distributed in recent period, especially this year, to fulfil the new rule in 2020. So, companies try to make it at this period before year 2020 comes. Under the situation, the supply of raw materials, say, the glass steel pipes, stainless steels, and also some of the special valves that are needed for the installation will tend to come with a high price increase rate due to the sudden increase in demand. Including the demand for sea water pump. There are numbers of pump manufacturers in full load production. Which involves a series of group facilities and devices. I think because of that, the product quality would be a concern as some manufacturers might not follow the standards tightly in trying to make the delivery on time. So, quality is also one of our main concern. But for new ship orders, this would not be a big problem. This is because the workers and devices that are involved in new ship building are more matured and complete. For factories that repair ships, only the mainstream factories are qualified for the installation. But for some shipowners, that have large volume of order in their hand, they might turn to those second tier or third tier factories for ship repairment for the modification. Which would lead to a big issue of quality and should be taken seriously. The quality should not be compensated for the tight timeframe as it could lead to safety issues. For better understanding, the installation of scrubber is basically putting a big water tank on top of the main machine. Which is absurd and never been dealt before as a boater. The older captains has no experience in dealing with ships like this.

**Lianjun Li:** Mr. Bao, I would also like to ask about the water tank that you mentioned. How would it affect the modification depending on the types of the ships?

**Weidong Bao:** The biggest water tank is roughly 60-70tons, with full water level, it would be around 100 plus tons. The problem is that the water are corrosive, with Sulphur dioxide in it. If leakage happens, even due to a small hole, would bring devastating effect to the devices underneath it. Which forces suspended shipping service that causes huge loss. This is not a regular device malfunction. So, I hope that the factories and shipowners can work together to make sure that the quality is assured while producing with a higher efficiency. Another situation is on the ship building factories. The current situation of around 20% of newly built ships are ordered for scrubber installation. As for the existing ships that requires modification, as I have mentioned before, is around 1000 in the process of installation, which are all in full load working condition. And is very spectacular to see more than 10 ships undergoing the installation at the port simultaneously.

**Lianjun Li:** How long does the modification and installation take?

**Weidong Bao:** Well, the expected timeframe is usually around 2-3 weeks. To receive orders, the factories are willing to accept the timeframe at the beginning. But the real deal is over a month. For mass production in smooth progression, it could be shortened into within a month. This is because of the huge workload involved as modification is required from the beginning of the installation up to the final stage of installation for chimney.

**Lianjun Li:** So, there are prediction of less ships in run as many would be on the way for the installation of scrubbers. Is that the situation now? It seems like there is no obvious signs of that.

**Weidong Bao:** This is because the supply and demand for cargo is not balanced. Where the supply has exceeded the demand. So, most of the shipowners will choose to install the scrubber at this period of time. Actually during this period of time, there will also be ballast water treatment system working. In other words, the ships being sent to the factories for scrubber installation has balanced out the supply and demand, which led to a better profit. However, the performance of the overall shipping market has been in different for various sector. For the shipowners, the affected aspect is that the demand has stayed constant. So, to decrease in ship in run in the market has turned down the intensity of the competition with the peers to a certain extend.

**Lianjun Li:** Alright.

**Weidong Bao:** However, I don't think the effect is significant enough.

**Lianjun Li:** So, we've mentioned about the biggest ship building company in China. Is there a name given for the company? For the two?

**Weidong Bao:** Not yet.

**Lianjun Li:** Not yet, right? Mr. Bao, you have been in the south. So, the two big companies have merged and surely will become to be estimated the biggest company in the world in the business. For the China State Shipbuilding Corporation and China Shipbuilding Industry Corporation to merge.

**Weidong Bao:** There is a possibility that it will surpass the current biggest. But if we don't merge now, our business scale will grow into the biggest as well.

**Lianjun Li:** That means the merging will be done in the near future. So, we hope that the shipbuilding business in China will grow into a greater state, where the strong one will come together for a better growth in various aspects, including technical, power. Mr.Xie, correct me if I am wrong. So, the world's biggest VLOC and VLCC ship team is also at the top of the business. right? So, can we say that VLOC is the leading one?

**Chunlin Xie:** For VLOC, we are currently running 31 ships under 40 tons.

**Lianjun Li:** 31.

**Chunlin Xie:** There are 6 more in production in a smaller capacity of under 30 tons. From the business scale standpoint, we are leading in number 1. VLCC on the other hand as a nonfinancial business shipowner, there are currently 52 VLCCs. So, it is also the biggest. VLCC and VLOC are two different markets, which are our main ship team. For the current situation, we are leading our peers in terms of scale. However, we care more about quality instead of business scale.

**Lianjun Li:** So, we have heard about the challenges faced by the biggest VLOC and VLCC ship team, and the biggest ship building factory due to IMO 2020. Let us now hear from the biggest classification society regarding topics of DNV and DNVGL. Let us hear from Mr. Gao Wei, about the challenges that IMO 2020 brought to the classification society. Please.

**Wei Gao:** Alright. Hi, everyone. This is Gao Wei from DNVGL. As the merged company mentioned before, the Chinese name for DNVGL is yet to determined. But it should be announced in the near future as well. As the biggest classification society, we have done adequate preparation for IMO 2020. Regarding the few solutions that have been mentioned before, for example, for the standard of the fuel oil, the classification society has proposed the requirement of ship implementation plan.

On one hand, the work on this is based on our responsibility. At the same time, we also offer consultation services as the classification society to help shipowners prepare in this aspect. Including completing the cleaning and changing process for the fuel oil in this year. To avoid getting their business interrupted, many shipowners would add in low Sulphur fuel oil into the oil tank. Which could help them fulfil the new rules after a period of running time. But there is a risk for this approach, which we have had discussion on this. For example, the standards of the fuel oil, it depends on IMO. I read a news around last week about few big shipowner companies, including the BIMCO, and China Shipowners' Association, they held a meeting mainly to push the progression on announcing the standards. Currently, the standards are not out yet, but will definitely affect the standards of ISO, which should be taken seriously by the shipowners. This is because there are 5 current ISO standards for fuel oil and the newest

version might have a relatively high price. But the increment will be limited for sure. Which is what we have been following on.

For the installation of scrubbers, from the standpoint of ship teams, as mentioned, there are around 4000 ships anticipated for the installation. So, we have also been updating the data on our website, [afi.dnvgl.com](http://afi.dnvgl.com). Which is totally free for registration and you can see the total number of orders from there. So, we can track the data anytime on the website. As for the distribution for the ship teams. Bulk carriers, VLCC, large ore ships and bulk carrier ferries are relatively higher in proportion for scrubber installation. Especially, container ships. As for a whole ship tea, the percentage of scrubber installation in the whole world is less than 15%, at the range of 10-15%. But just looking at the container ships, the number is close to 16% now, or even higher. This is because container ships are faster in speed and consume more fuel oil. That is why the companies are considering scrubber from the cost-effective standpoint.

As for the installation of scrubber, there are a lot of guides to follow from the classification society. First of all, the approval for the drawing and installation. Then, as Mr. Bao mentioned, the difficulty of modification, and we have a lot of project in progress as well. To ensure that all the drawings can be verified and approved before the project timeframe, we have been working on it. For the designs of modifications, which differs from one another is harder. Even some of the factories that does the installation for newly built ships are submitting the drawings as the ships are built by them. For the small design companies, the quality and the feasibility of construction at the end and the “gap” in between, are all concerns. And, we are handling all the different cases now. This is because there are some parts that require the factories to design on their own and carry out the construction, which will affect the timeframe for the installation. That is why Mr. Bao mentioned about the relatively long timeframe for scrubber installation. Some design for particular parts has to be done on the spot, unlike newly built ships that are in whole. We will also keep track on the performance once the installations are done and put into use again. Internal experience sharing sessions, requirement for the shipowners, and tracking on the current projects are what we have been doing.

So, we are anticipating around more than 1000 ships based on the current order. Based on our data, it is around 1800 ships. But, we are probably unable to finish all of the orders before the year ends. So, some orders will be to be postponed. But, overall, the goal of fulfilling the new rules in 2020 for scrubbers and low Sulphur fuel oil should be achieved. However, as Mr. Bao have mentioned, the design companies and shipbuilders in China has noticed the effect of carbon emission limitation in the future. It would make a huge impact as IMO has announced during last year taking year to take year 2008 as the reference year for carbon emission goal of 50% decrement in year 2050. So, we are expecting a big change in the shipping business and shipbuilding market in the next 10 years. And, we think that logistics arrangement, in terms of the pattern arrangement for the route will contribute around 20% to the decrease in carbon emission. To achieve that, the problem of managing the shipping teams and routes and the effect on the concentration of cargos will arise, which we have not seen yet, but will be dealt with in probably the next few years.

Not only there will be the requirement for emission from individual ships, requirement for increase in EDI, but also the limitation on carbon emission in the future, banks have been implementing “professional principle” when evaluating for investments. The principle is mainly based on the carbon emission to access the emission reduction for the project. And that will be one of the decision-making factors on passing on the investment. And this would lead to economic interest chain and affect the cost benefit analysis. Because normally, only the price difference based on Sulphur oxide emission will be considered.

Which is the price difference of high and low Sulphur fuel oil. Where the metrics of carbon dioxide emission has not been on the financial data. At least not currently. But in high possibility to be on the financial data in the future. IMO has been considering on this matter as well in terms of imposing new policies. And, the first batch of

emission reduction rule will be implemented not later than year 2023. Which means we will be seeing a lot of changes in next year. And IMO has to come out with the fourth carbon emission analysis report for the whole industry. This is to be expected in the autumn of next year. And it would be based on the ship fuel oil consumption data to be submitted by 23<sup>rd</sup> of March next year. That would be a useful report that analyses the not only the ship teams, but also on different types of ships. And I am anticipating for the report. Which I think the industry would also be anticipating on the report. Overall, the goal is to bring down the emission. Which would lead us to the topic of energy source replacement and replacement measures.

And that would be the two main topics. For energy source, fuels like LNG and LPD would be implemented. The first LPD fueled ship from Shanghai Huarun Dadong Dockyard Co.,Ltd.will be from Jiangnan. And the gas carrier project will be started soon. And the final selection for fuel that we predict to be in the future would be Ammonia. However, due to its toxicity and growth, and as mentioned in the Global Energy Transformation report, Ammonia is expected to be implemented in the market after year 2035. So, LNG, according to our latest report, will acquire 40% of the usage rate in the market by year 2050. And it was only around 23% in last year's report. The increase in percentage is based on the consideration on current situation, including the pressure of emission reduction. So, the market of LNG will be bigger in the future. Of course, the first issue that has to be solved is the problem of refilling of LNG. Currently, the orders for LNG refilling ships has been increasing. And, China has a lot of refilling ships as well. So, the future for the market is optimistic. The return on investment will mainly be from the policy of carbon reduction of 20% for LNG implementation. As for standardized fuel oil and scrubber, the speed is already low in economic speed, which is 20 knots. And a reduction of 10 knots will mess things up. So, the potential for the ships in economic speed to achieve emission reduction by reducing the speed would be very limited. That is why we are expecting a big challenge for vast number of ships in the next 5-10 years-time. I think that's from me.

**Lianjun Li:** Thank you. I have two questions for you. The first question is, what is the challenge for the classification society to fulfil the requirement of emission reduction. Because the organization will have to set the new rules and verify the design and installation for scrubbers. So, for you, what is the main challenge? Because you have to be the leading force in terms of shipbuilding and the tackling with the requirement for shipowners. The second question is that for the installation of scrubbers, no matter old or newly built ships, the workload for the organization will increase when compared to the pass. Is that right?

**Wei Gao:** OK. So, the modification department has been getting busier and busier. Most of the modification applications that we currently receive will be accessed in our reviewing center in Poland. And they are very very busy at the current stage. So, the first question, our main challenge on the technical standpoint is, for LNG fuel, the market is yet to be matured. Especially the design for the gas supply system. For the fuel itself, DNVGL has been involved at a very early stage. This is because the world's first LNG fueled ship which is launched in year 2000 is under DNVGL.

**Lianjun Li:** Is it the cruise ship in Denmark?

**Wei Gao:** Erm, no. That is the first ferry.

**Lianjun Li:** Oh, yeah. It's a ferry. And we went on board during February when we were in Denmark, and that is fueled by LNG.

**Wei Gao:** That's not the one. The one that you were on is on to Norway, under Fjordline.

**Lianjun Li:** Yeah! That's right.

**Wei Gao:** Right? That is the first LNG fueled RoPax ship. But the ferry that I am talking about is under the Fjord in Norway without the open space. It was modified with the installation for MGV fuel started in year 2000. Now, the world has approximately over 300 ships running with the fuel, and over 100 ships in order.



**Lianjun Li:** Oh, more than 300 ships fueled by LNG.

**Wei Gao:** Yes. Regarding the new 10 rules on VLCC that Mr. Bao mentioned as well as other aspects, including the bulk carrier ships that we can see, Australia's BHP has just called for tender for the MGV fueled Newcastlemax, under 21 tons. So, this is an example of the positive situation in the market on implementing new energy sources.

**Lianjun Li:** Got it. Thank you.

**Wei Gao:** I would like to also mention about the technical aspects. Other than replacing the current energy source, we also have the replacement for technology. Which is the implementation of batteries. The application of battery has been expanding. Not only can it be used as energy storage unit, and cancelling out the wind. Batteries can also be used to propel the ship. Which will be a trend in the future.

**Lianjun Li:** Alright. Thank you, Mr. Gao. We will now be discussing the impact of IMO 2020 from the laws and regulations sectors. Lawyer Lee, please. So, the first question will be on what we clients have been facing and handling for. So, before IMO2020, long-term ship rental contracts were signed, including bare charter and COA. Which has been mentioned by Mr. Xie. So, who is responsible for the situation? This is where different opinions come in.

**Lianjun Li:** As a lawyer, we have to study the contract. So, for long-term ship rental contracts, the supply of the fuel oil is the responsibility of the renter. For laws in UK, it is still the responsibility of the renter. Be it bare charter, time charter or long-term. For COA, basically, if it is long-term, if it is based on the situation and financial situation, the cost is calculated on a long-term ship rental basis. So, the renter might have contributed. Unlike other ship rental contracts, where the fuel is supplied by the owner, so it depends on the overall situation. So, the suggestion of cooperation between owner and renter is the best choice, as this is a long-term contract and simply blaming on the owner will not work out. So, these are the problems that we face for the most. Especially for long-term contracts. And we're actually having contract issue, but not to the extent of having to sort it on the court. So, the problem is that who should bear the responsibility? Also, what should we be attentive to when signing new contracts? I think we've all heard about BIMCO's two policies. Where one of them is a policy for transition and the other one would satisfy the rules in year 2020. With the intention to help in the business, it is relatively a fair policy. Overall, if I supplied qualified fuel oil, but the oil is polluted, it will be the owner's responsibility. So, how do we identify the situation to acquire a balanced situation? Because BIMCO doesn't have a specific policy on the supply of fuel. Based on ISO8217 or 8712, it should be shared between the renter and owner. For time charter, it is different for the owner. So, the current BIMCO policy will not be able to solve the problem entirely. So, it all depends on the negotiation and the type of contract that is signed. So, now, we have the installation of scrubber coming into play. Which has brought challenges to the law. For example, installing devices to the ship that is owned, can lead to financing. And this is just one of the approaches. There are many more, like the rental problem that Mr. Bao mentioned. A lot of the rental companies would do the same thing in terms of financing because owners will have this need.

**Min Li:** We have tried the approach.

**Lianjun Li:** Oh, you have. So, we have other clients that is financing for the installation of scrubber or for other modification for energy source replacement. And, it brought a new opportunity. So, the risk that comes with the installation for scrubber, is also a topic, right? For example, the responsibility of maintenance and misoperation. All these would bring challenges to the law in the future when they are put into service. Whether it should be identified as the issue of maintenance, product quality, the responsibility of shipbuilders, or the issue of design. These are all yet to be determined and should precautionary should be taken to prevent them from happening. For ships that installed scrubber, if the owner and renters are having dispute regarding the quality of the fuel oil, although BIMCO have tried to achieve balance in the situation, it is too complicated to be solved. So, let's have Lawyer Lee to share about his experience on solving disputes on fuel oil, especially in recent years. Please.

**Min Li:** We discovered that disputes of fuel oil has been increasing recently. And the disputes are mainly involved in the issue of non-qualified supplied fuel oil or polluted oil. And when we will always be dealing with a huge sum of monetary compensation for the kind of disputes. As the amount of monetary compensation does not only due to the fuel but also the damage on the main machine of the ship and time loss. And also, the fee for handling the polluted fuel. In most of the contracts, there is one particular terms that is crucial which is the period that the terms to be valid for. Normally, what we see is relatively short, which is 30days, some are even shorter to 20 or 15 days. So, under that circumstances, the owners should carry out inspection for the quality of oil as soon as possible. If the oil passes the inspection, put them in use as soon as possible. So, the specimen of the inspected oil is the critical proof for us to make judgement. It is important that the specimen should not only be taken from the bigger ship, but also at the barge and make sure that the procedures taken are correct, also, the number of samples taken should be sufficient and kept with care. When the situation of non-qualified fuel or polluted fuel is presence, the usage of the ship should be stopped immediately to avoid further damage on the device and owners should immediately send staff to take samples of the oil for inspection as the taken samples will be taken as proof for request of monetary compensation. That's basically the process in a simple sense.

**Lianjun Li:** Due to the time constraint- I think we all have a better idea on the challenges that IMO2020 has brought to the shipping business, shipbuilding sector, classification society and the law and film sector, and also opportunities at the same time. Especially, to listen to these 3 experts here. With Mr. Xie representing the owner, ship building factories, and ship rental companies, Mr. Bao's incisive analysis and Mr. Gao on the challenges faced by the classification society. And, also Lawyer Lee, who analyzed the problem from a law and film standpoint. So, these are all the real problems that will be faced very soon. All sectors, including owners, shipbuilding factories, and classification society should be prepared with measures to overcome the coming challenges. So, I think we can now talk about the challenges that is faced by the shipping industry. For example, the challenges and opportunities that trade war and sanctions brought to the business. Mr. Xie, can you share your view in a simple manner?

**Chunlin Xie:** In that case, we as shipowners, would have more opportunities. However, due to the dispute and friction that we have on the trade, it did not happened. On the other hand, other conflicts around the world, that is regional, for example the issue between Middle East and South America has more or less affected us as shipowners. So, we hope that the world is in peace and the trade and economy of the world can improve so that the shipping business as an indispensable business can have a better development.

**Lianjun Li:** Alright. Thank you Mr. Xie. Mr. Bao, can you share about the hot topics, challenges, and opportunities that the trade war or sanctions has brought to the ship rental business?

**Weidong Bao:** We've already felt the order received by the ship building factories in China has dropped by a significant amount, around 30%-40% compared to last year. And the main reason is of course the trade war. So, a lot of the shipowners are still waiting to see how it goes. As Mr. Xie mentioned, some orders for new ship will be postponed until next year or the year after when a better situation is anticipated. For rental companies and ship builders, several projects have been negotiated during last year and planned to be signed during the beginning of this year. But a lot of companies requested for a postpone. And this has something to do with the shipowners. Most of the orders are made in China and the ships were to carry oil and gas. So, maybe they were planning to explore new markets as mentioned by Mr. Xie, shipping from America to China. So the impact is direct and we definitely felt it.

**Lianjun Li:** Alright. Thank you, Mr. Bao. From the perspective of classification society, Mr. Gao, can you talk about the challenges and opportunities that the trade war and sanctions has brought to the organization?

**Wei Gao:** OK. I would like to first talk more about what Mr. Xie has mentioned. The oil price would increase because of the attack happened to the Aramco as reported last week. The effect on the price of heavy oil for ships will be seen in the following 2-3 months and the impact would be felt directly by everybody. But on the bigger picture, I would like to discuss about the prediction for the future. Of course we don't have the crystal ball, but we

can still somehow predict the situation to a certain extent. Before, everybody was worried about the supply of low Sulphur fuel oil. But there are more and more news coming out lately saying there will be enough low Sulphur fuel oil to be supplied at the end of the year which would lead to an interesting topic that I will talk about now. The impact of energy transition. The prediction at the beginning of the year was 20% of low Sulphur fuel oil and 80% of high Sulphur fuel oil in supply. Now, it is the opposite, 80% of low Sulphur fuel oil and 20% of high Sulphur fuel oil in supply. So, the original situation for heavy oil supply is high with lower profit. But now, the light oil is low in supply with high profit. But that situation might be in reverse in the future. The supply of heavy oil might no longer be easily accessed, which would bring a big impact to the ships with installed scrubbers. This is just my own feeling about the situation, it might not turn out to be true. But based on the current situation, this is my prediction. I would like to hear from you guys and then talk about the matter of energy source transition if time allowed.

**Lianjun Li:** Mr. Gao, I agree with your point. We noticed that the fuel oil supplier have been trying to prepare for the new rules in year 2020 in terms of preparing the supply for low Sulphur fuel oil. And we were concern about the lack in supply. But it seems like it is not a problem now because is achievable in terms of technology. Now, we are more concerned about the oil supply for ships with scrubbers. We as a bigger shipowner company has of course done some preparation for that, in terms of cooperation with the supplier to make sure that the majority of our ships that uses low and high Sulphur fuel oil are able to run smoothly. So, I completely agree with Mr. Gao's point on the concern for the supply issue of high Sulphur fuel oil.

OK. Thank you, Mr. Xie for the information. Because this is one of things that would bring great changes to the business as this would be the root of all topics, right?

**Wei Gao:** I would like to talk more on the challenge of transition of energy source to the business. I think it can be traced back in last year and has slowly extended to several aspects. The transition in energy source would require a better understanding and arrangement for the combination of ship team and the target of emission. Some shipowners, for example, Maersk said that they can achieve 0 emission in year 2030. Which means they are already preparing for the market, including the implementation of zero-carbon fuels, or low-carbon fuels on their ships which came from their own needs. Of course, that would need support from the policies and other as sectors. For this, China has been trailing compared to Europe in terms of the support structure and experiments conducted. They have already started trials for biofuels, including regular supply, and some of the shipowners have been implementing biofuel already. So, this would lead to a change in the shipbuilding industry and in the base policy.

**Lianjun Li:** Alright. Thank you, Mr. Gao. Due to time constraint, the discussion would have to end here. I would also like to thank, Mr. Xie, Mr. Bao, and Lawyer Lee for attending the podcast to talk about the challenges and opportunities that IMO2020 brings to the business. Let's hope that the trade war could come to an end soon and the trade could grow smoothly so that the shipping business would have a better future. Thank you all. I hope that we will have the opportunity to sit down and discuss again in the future. Thank you.

## Biography of Speakers

### MODERATORS



**Mr. Lianjun Li**  
Partner & Head of Shipping Team  
*Reed Smith Richards Butler*

Lianjun Li (M.Sc., LL.M., FCI Arb) has been a partner since 2004 and is a leading lawyer in the shipping team in Hong Kong. He qualified as a solicitor in Hong Kong, England and Wales in 2002. He has extensive experience in international trade and commodity disputes, documentary credit issues, shipping disputes (charterparty problems, ship purchase and sale disputes, bill of lading and cargo claims, P&I matters, ship casualties), ship finance and sale and purchase, international commercial and shipping arbitration and in practical and legal aspects of doing business, negotiation and litigation in China.

He is a fellow of the Chartered Institute of Arbitrators and a Panel Arbitrator of the Law Society of Hong Kong. He is also a listed or panel arbitrator in many well-known arbitration institutions including the Hong Kong International Arbitrator Centre (“HKIAC”), China International Economic Arbitration Commission (“CIETAC”), China Maritime Arbitration Commission (“CMAC”), Kuala Lumpur Regional Centre for Arbitration (“KLRCA”) and Singapore Chamber of Maritime Arbitration (“SCMA”). He is also a supporting member of the London Maritime Arbitrators Association (“LMAA”).

He is a visiting professor to Dalian Maritime University, Shanghai Maritime University, Jimei University and Korean University. He is also a member of Hong Kong Maritime and Port Board, LMAA Supporting Members Liaison Committee (Asia Pacific) of LMAA, the Transport and Logistics Committee of the Law Society of Hong Kong and the SCMA Procedure Committee.

Lianjun studied and worked at Dalian Maritime University and Stockholm University before he came to work in Hong Kong in 1993. He qualified as second officer for ocean going vessel and worked at seas over two years.



**Mr. Min Li**  
Partner  
*Reed Smith Richards Butler*

Li Min is a commercial disputes lawyer with over 14 years of experience. He specializes in all aspects of dispute resolution including shipping, insurance, international trade and commodities litigation and arbitration. He has a significant London, Hong Kong and Singapore arbitration practice and regularly conducts arbitration under LMAA, LCIA, ICC, SIAC, SCMA, HKIAC, CMAC and CIETAC rules. He has lived and worked in Mainland China, Hong Kong and London, and applies his international outlook and local experience in providing long term practical solutions to his clients.

Li Min is a recognised practitioner in Chambers Asia Pacific and is recommended by Legal 500 Asia Pacific where clients have said he is “very professional and hardworking”, has “an excellent understanding of Chinese mores”, and is “excellent for disputes involving PRC shipping law”. He has a wide range of experience in advising shipowners, charterers and their P&I Clubs, financial institutions, commercial insurance companies, and Chinese state owned enterprises on various issues including charterparty, bills of lading, international sales of goods, letters of credit, ship sales and purchases, ship arrest, shipbuilding, and ship finance matters. He also has particular experience in handling high value shareholder and equity related disputes, multi-jurisdictional commercial disputes and worldwide enforcement of judgments and arbitration awards. He also has solid experience in contentious matters involving allegations of commercial frauds and has on various occasions applied for Mareva Injunction orders (asset freezing orders) and Norwich Pharmacal order (court orders to compel the disclosure of information and documents by innocent third parties).

Li Min has represented clients in a wide variety of high-profile cases. He was the lead partner in the case of Shagang South-Asia (Hong Kong) Trading Co. Ltd v Daewoo Logistics [2015] EWHC 194 (Comm), where he acted for Shagang South-Asia and successfully set aside a London Tribunal's Award as to jurisdiction. The decision is an important one for the construction of arbitration clause and determination of seat of arbitration in the context of charterparty. In recent years, Li Min has also been involved in major litigation arising out of insolvency claims in shipping. He was commended in the Legal 500 Asia Pacific 2018 for "leading the team advising COSCO Petroleum on several matters arising out of the OW Bunker collapse".

Li Min is a graduate of Dalian Maritime University with a Bachelors of Engineering in International Multimodal Transportation and a Masters of Law in Maritime Law. He also holds an LL.M in Maritime Law from University College London (UCL). He is co-author of the book Maritime Law and Practice in Hong Kong published by Sweet & Maxwell for the chapters of "Voyage Charterparty" and "Time Charterparty". He also lectures regularly for many educational and commercial institutions, and is a visiting professor to the Law School of Dalian Maritime University.

Li Min is a native speaker of Chinese Mandarin and fluent in English.

## PANELISTS



**Captain Chunlin Xie**  
Chairman of the Board  
*China Merchants Energy Shipping Co. Ltd*

Born in May 1963, Capt. Xie Chunlin is both a senior captain and a senior economist with an EMBA from Shanghai Maritime University. He graduated from the Department of Navigation from Dalian Maritime University in 1983. He is an experienced Master Mariner through years of shipboard services from 3rd officer, 2nd officer, Chief Officer to Captain at Shanghai Maritime Transportation Bureau, and the Deputy Officer of the Monitoring Department of Shanghai Shipping Group. He was also serving under China Shipping (Group) Corporation as the Deputy Director of the Dispatching Sector of the Transportation Department, Managing Director of the Indonesian branch, General Manager of the Netherlands Agency Office, Vice President of the European Sector, and the Chief Representative of the Mediterranean Office. He was the Deputy General Manager of China National Development Corporation Co., Ltd. from March 2009 to September 2012, the Managing Director of China Merchants Energy Shipping Co., Ltd. from October 2012 to December 2018, and has been the Chairman of China Merchants Energy Shipping Co., Ltd. since December 2018.



中船租赁

**Mr. Weidong Bao**  
Deputy General Manager  
*CSSC (Hong Kong) Shipping Co. Ltd*



**Mr. Wei Gao**  
Technical Support Manager of DNV GL, Region Greater China  
*DNV GL*

In August 1995, after graduating from Jiangsu University of Science and Technology with BA degree in shipbuilding engineering, Mr. Gao Wei joined Marine Design & Research Institute of China (MARIC) as naval architect for designing different types of ships in outfitting, hull and general section respectively.

From April 1999 to May 2011, Mr. Gao Wei worked in Lloyd's Register's (LR) in Shanghai Technical Support Office and Copenhagen Technical Support Center in Denmark. Being the surveyor in charge of statutory section and technical leader in statutory department, Mr. Gao Wei engaged well in design assessment and approval of various types of ships for compliance with applicable international rules and regulations and is closely following up new legislation's development.

In June 2011, Mr. Gao Wei joined previous Det Norske Veritas (DNV) now DNV GL Group Maritime China as Technical Support Manager responsible for Pre-contract services and general technical support on which role Mr. Gao Wei is continues providing excellent support to Chinese Shipbuilding industry with his professional knowledge and rich experiences. In 2015, Mr. Wei Gao also received MBA from University of Wales joined with Research Institute of Tsinghua University in Shenzhen.

Mr. Gao Wei is also the member to the Shanghai Society of Naval Architect and Marine Engineering.

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