



Karlene Bylund

Director Commercial, Pilbara Ports Authority



What role do you play in the gas-fuelled shipping sector?

As the Director Commercial at Pilbara Ports Authority I am responsible for all of the commercial aspects associated with the granting of service provider licences and marine service contracts. This includes licences for the provision of bunkering, stevedoring, towage, mooring services, pilotage services and lines boat services.

Since all of our ports are located on the north west coast of Australia, we are responsible for the management of some of the largest bulk export ports in the world. In fact, our three operating ports handle nearly 700 million tonnes of cargo and more than 16,000 shipping movements every year. Approximately 9% of the world's LNG was exported through two of our ports; Dampier and Ashburton, in the 2018/2019 financial year since the Pilbara in Western Australia is a major gas producing region.

As the Director Commercial for the Pilbara Ports Authority I work closely with both Marine Operations departments and the Harbour Masters to establish the operational requirements of the service provider licences. This includes the incorporation of the performance, standards and compliance requirements for the licensees. As such, a key role that I play is in reviewing operational requirements to ensure that the current operating requirements align with best practices as the industry develops and standards are amended.

Recently I had the opportunity to develop a new Pilbara Ports Authority licence for the provision of LNG ship-to-ship bunkering

services for the Port of Port Hedland and the Port of Dampier. They were the first ship-to-ship LNG bunkering licences developed for an Australian port and were executed in April 2020. In 2017, I was also involved with the development of the truck-to-ship LNG bunkering service provider's licence for the Port of Dampier.

Please describe your role in your organisation and what do you enjoy most about it?

The commercial team that I lead is responsible for conducting tenders and contract negotiations across a diverse range of business units at Pilbara Ports Authority's three ports.

In addition to leading a strong team of commercial specialists and advisors, I also play a key role in the negotiation and performance monitoring of regulatory licences for towage, pilotage, stevedoring and bunkering services.

I have also acted as the commercial lead on several significant marine service contracts and projects, including the preparation of; Australia's first LNG bunkering licences for ship-to-ship LNG bunkering, Port of Port Hedland's second towage operator and contracts for the provision of marine pilot transfer services.

Raising Pilbara Ports Authority's awareness of current Government priorities, and better alignment of procurement and contracting processes to align with current Government priorities also comes under my role requirements.

What I most enjoy about my role at Pilbara Ports Authority is the diversity of the matters on which I work. I also enjoy the dynamic industry in which I work, as well as the opportunity to meet and engage with Government, industry and port users. Having worked for Pilbara Ports Authority (and formerly Port Hedland Port Authority) for over 10 years I can honestly say that the role is never dull, and I have had some amazing opportunities to grow and develop over the years.

My current role of Director Commercial for the Pilbara Ports Authority comes with significant challenges, but also provides wonderful opportunities to contribute to matters that are significant, not only to the organisation, but to the State Government and our port stakeholders. I get a great sense of satisfaction from knowing that I add value in that regard.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)

I have always enjoyed working in roles that challenge me and allow me scope to continue to learn. That said, I started my career thinking that I wanted to be in financial management and hence worked in various State Government agency roles after completing my qualifications in Accounting.

It was only after I had developed this aspect of my professional development and was looking for a change in careers that I found a commercial role working at Geraldton Port, on the mid-west coast of

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Karlene Bylund – *Continued*

Director Commercial, Pilbara Ports Authority

Australia. For me that was it, I had found an industry I loved working in! I found it dynamic, challenging and extremely rewarding. I also found that I had a passion for procurement and contracting. I was well progressed in studying a Bachelor of Commerce at that stage, so had the opportunity to pick up options that further strengthened my skills in this area. When I had the opportunity to move to Port Hedland Port Authority, and the Pilbara region, I jumped at it. I was so excited to continue to grow my experience in a commercial role whilst working for the world's largest bulk export port. I have never looked back.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?

When I held the responsibility for the development of Pilbara Ports Authority's standard service providers' licence for the provision of LNG bunkering services for both truck-to-ship and ship-to-ship operations, SGMF guidelines supported me immensely. Reviewing the SGMF Guidelines provided a very useful starting point for determining the appropriate LNG bunkering licence framework and operating requirements when developing the first LNG ship to ship licences to be granted by an Australian Port Authority.

The new licences incorporate competency and standard requirements. The requirements are consistent with the best-practice guidance proposed by SGMF. They are also considered necessary

to ensure the provision of LNG for the operation and fuelling of vessels can be conducted safely and efficiently in Pilbara Ports Authority's ports.

How do you feel this sector has embraced the talent and value of women?

Whilst the maritime industry is typically a male dominated industry, I have always felt as though my talent and skills have been valued by the Port Authorities for which I have worked, regardless of my gender.

My view is that the maritime and port industry values talent and skills over anything else. I think increased diversity amongst any industry can only be a positive. I would certainly strongly encourage anyone who is interested in building a career in the maritime, port, or gas-fuelled shipping sector to work towards that goal, irrespective of their gender.

What excites you or interests you most about this industry and how does this motivate you?

I thrive in challenging and dynamic environments where I can continue to learn and develop. This is when I do my best work. As my career is such a key part of my life, it is equally important to me that I feel that the work I am doing is both meaningful and provides value, both for the organisation and for me personally. The maritime industry is such a diverse and multi-faceted industry.

There are a lot of technical experts in their respective fields that I continue to learn from and respect. No two days are ever the same. This is what motivates me.

Please share something personal about yourself.

You only need to look at my career history or my continuous education journey to realise that continuous learning and development is what inspires me. I was lucky to have a supportive family, both in my youth, and later in my early adult life who encouraged and backed me all the way. I am sure that all that study I did in the very early mornings, whilst raising my kids and working full-time, wasn't easy on anyone in the family, but they all had my back.

The challenge I had initially was finding the right industry and role for me. In that regard equally important was finding an organisation that valued the talent and skills that I had and was prepared to work with me to further develop those skills.

As much as I love my career, my family is the most important thing to me. I spend my weekends at the family farm, a small rural property an hour and half out of Perth with my husband and often our adult children. When not at work or the farm, I love travelling around the globe with my family and exploring far flung and interesting places in this wonderful world. Initially, that was another of my challenges, ensuring that I carved out enough time for myself in this very busy world we live in.



Debbie Turner

Senior Broker, Howe Robinson Partners



What role do you play in the gas-fuelled shipping sector?

In my role as a Senior Broker I advise clients on the use of LNG as a marine fuel. We also provide a consultancy service, broking for new builds which may use LNG as a fuel and generally educating clients and colleagues on benefits of LNG as a marine fuel.

Please describe your role in your organisation and what do you enjoy most about it?

I am head of a new team at Howe Robinson which we started in January 2019. The team is now five-people strong with one person in Houston, three people in London and one person in Korea.

The thing that I enjoy most about my job is that no two days are the same!

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)

I started off my career as an industrial market analyst, although this was not something I had deliberately planned to do. I originally qualified as a high-level Personal Assistant which meant I learnt book-keeping, was able to take shorthand and touch type at over 100 words-per-minute. The college that I attended taught its pupils to become a PA for CEOs. After graduating from college, I started working for a big industrial company which had an off-shoot business that made propellers for ships (Stone Manganese Marine). Almost immediately, and by a remarkable coincidence, I was offered the opportunity to be trained for the role of market analyst in the consultancy firm. Since then I have never looked back!

In 1980, I went to work for Burbank Marine, which eventually became Braemar. The job entailed the reporting of LPG and petrochemicals to the brokers and providing them with analysis of the markets. At that time, Burbank Marine were one of the leading LPG and petrochemical brokers and became part of Braemar in 1999.

In 2002, Braemar gave me the responsibility of establishing a LNG desk. Then, from Braemar I joined Platou in London, followed by SSY where I ran the LNG desk and was also responsible for the consulting work.

It was after I left SSY that I was offered the new challenge at Howe Robinson.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?

Howe Robinson have been members of SGMF since November 2019 and we work with the Society wherever possible.

We have come a long way in how LNG has developed. The world is changing, and I believe LNG can help the transition in the medium term, at least for the next 10-20 years. There are other fuels discussed that can enable the decarbonisation of shipping such as ammonia and hydrogen however, there are a lot more problems and complications for those fuels and the technology simply is not there.

How do you feel this sector has embraced the talent and value of women?

I feel that the shipping sector has embraced the talent of women.

For example, I was headhunted when I was in my early 60s to begin a new desk at Howe Robinson.

However, it is also up to women to put themselves forward. It is by sheer hard work, a lot of travel and getting to know the right people that women can succeed. I also feel it is important to always remain humble.

I have used my experience in this sector to talk about a career in shipping at my son's school and used this opportunity to specifically encourage women.

What excites you or interests you most about this industry and how does this motivate you?

Every day is a very big challenge but it's very good.

Please share something personal about yourself.

I have over 30 years' experience of LNG and LPG. I am a member of the Gastech committee and am often asked to present at industry conferences.

Humility in broking is often forgotten. We are there as a broker, at the behest of the charter or the owner. At the end of the day, we are providing a service so humility, integrity, value added and positivity and very important qualities for success I feel.

What are your hobbies? What do you do in your spare time?

My hobbies include reading, gardening and sports which includes tennis and cricket in the summer and rugby in the winter.



Liu Tieying

Senior Engineer, CCS Wuhan Rules & Research Institute



What role do you play in the gas-fuelled shipping sector?

Since 2016, the main focus of my work has been on LNG bunkering operation safety. In recent years I have developed rules and standards for the LNG bunkering industry, particularly taking the lead on the development of CCS (China Classification Society) and technical standards. These include the Guidelines for Liquefied Natural Gas Fuel Bunkering Operations, the Guidelines for Quantitative Risk Assessment of Oil Gas, and China's transportation industry standard technical requirements for liquefied gas fuel bunkering operation from road tankers to natural gas-fuelled ships.

I have also provided technical solutions for customers in the LNG bunkering field. In the past two years, I have provided customers with comprehensive technical solutions, including risk assessments for LNG bunkering operations, formulations of bunkering operation procedures and an approval in principle for truck-to-ship bunkering solutions.

Please describe your role in your organisation and what do you enjoy most about it?

The CCS LNG team consists of about 20 people with an average age of less than 35 years old. In my role I mainly hold responsibility for LNG bunkering operations and materials.

In the past decade, our team has successively issued a series of rules and regulations for the LNG-fuelled shipping sector, including natural gas-fuelled ships, LNG bunkering ships, LNG bunkering pontoons, LNG bunkering operations, etc. Our team has also provided comprehensive solutions to customers for risk assessment, compatibility assessment, LNG bunkering case analysis, mooring analysis, LNG bunkering and ship optimisation across more than 100 completed projects.

This is a team with solidarity and love, and I am very proud to be one of them.

How did you arrive at this role? (Was it your intention at a young age to always go into this industry?)

When I was young, my dream was to be an architect and to design beautiful houses. However, when I was in college I got into studying a major in bridge engineering by accident. I thought I was going to be a bridge designer, but then, I switched to the field of marine clean energy applications. There are always a lot of small accidents in life, right? There is an old saying in China that it is never too late to learn. No matter if in work or in any other aspect, it is not easy to change the track. The only thing to do is to keep on learning, slowly accumulate, improve your ability in practices, and then slowly reap the benefits.

How have you worked with SGMF concerning the safe and sustainable use of gas as a marine fuel?

CCS, as a member of the board of directors of SGMF, shoulders the responsibility and obligations to promote development and applications of marine clean energy. By the end of 2019, there were more than 290 LNG-fuelled ships, and more than 500 LNG-fuelled ships under construction in China. Therefore, there is an urgent need for LNG-powered solutions, safe bunkering, marine ultra-low temperature equipment and risk assessment, etc. As a member of the CCS LNG team, I have participated in the development of ISO 21593 'Ships and marine technology - Technical requirements for dry disconnect/connect couplings for bunkering liquefied natural gas' and the China National Standard GB/T38520 'Marine cryogenic breakaway coupling'. I also participated in the high manganese steel correspondence group of IMO on behalf of CCS to contribute my knowledge of LNG.

How do you feel this sector has embraced the talent and value of women?

Compared with other industries, there are far fewer women than men in the shipbuilding and marine industry. Generally speaking,

part of reason is that the total number of women choosing to major in engineering is low, but it also shows that women have far fewer job opportunities than men in the industry.

For the work itself, I do not think there is a difference between men and women. It is the attitude towards work, the hard work and the persistence of these personal differences, not the difference between men and women, that makes whether you can do a good job or not. Of course, I also feel that, especially in China, women are becoming more independent and have more opportunities to achieve a good balance in the future.

What excites you or interests you most about this industry and how does this motivate you?

'Green mountains are also gold mountains', General Secretary Xi Jinping said, and China has been committed to promoting green development and building a beautiful China over the years. My work is engaged in marine clean energy applications which help to reduce greenhouse gas emissions, having important significance to the reduction of atmospheric pollution. Although it is just a small part, I am still proud to contribute to building beautiful China. Of course, beauty is not only for China, but also for the world.

Please share something personal about yourself.

I like cooking and try to cook a lot in my spare time. Wuhan, the city where I live, has long summers and winters, but that does not stop me from loving it. My field of work is devoted to environmental protection, which is a very meaningful industry. The road ahead is full of challenges and opportunities. Only by facing challenges can we seize opportunities, and the premise is to keep learning and be prepared. My motto is: work when you are serious, read when you are confused, think when you are alone, and sleep when you are sad.