Logistic synergies in offshore wind projects

Synergies are better than my way or your way. It is an efficient combination and results in our way. The last years in the offshore wind industry, which is similar to oil and gas, have shown that each project and/or location has its own, individual logistic concept and needs an exclusively chartered vessel or even vessels. To reduce cost and increase efficiency this concept has to be questioned.

Alternative solutions such as vessel pooling or shared logistic runs might be an alternative option to establish. First concepts are on the trial and wind park owners are willing to forward responsibilities to their suppliers having more clients and therefore the possibility to share vessel cost over a few projects.

Looking back to the beginning of offshore wind, specialised vessels were rare and mostly found in the oil and gas industry. The high priced tonnage made it difficult for the wind farm owner to find an economical business plan in other words - the whole industry was pioneering its way through the tangle of the offshore wind jungle.

Subsidised parks were developed and soon became the test areas for all kind of trials. Starting with simple environmental experiments, on site as well as onshore and with different types of foundations, turbines or installation techniques.

During this pioneering time, the wind park owners tried to become vessel owners and operators as well. They soon came to the conclusion that their vessel might not be used in a way that would be economical and sustainable.

Even though working offshore wasn't a completely new business everyone was working in, nobody had considered drawing on the knowledge gained from oil & gas, who were the former owners of most of the vessels. This only happened bit by bit and leading to higher standards and also decreased costs after the oil crash in 2014/15.

During the early stages in the wind farming industry, companies tended to not own or operate their own vessels; their logistics were restricted to one project. This low utilisation of the offshore tonnage led to high cost. As the mobilised vessels mostly came from the O&G sector, they were slightly oversized. Medium sized PSVs, with a deck space of more than 600sqm, were at a maximum half loaded and easily had the capability to supply more than one field in just a single run.

Even in the O&G market PSVs are not fully loaded and could supply more than just one

field. Why not use large sized PSVs and have less weather restrictions? This would widen the working range to spread the costs over more projects. Combined logistic concepts are the best way to improve synergy. These operational costs were and still are costs that could be saved. This would contribute to making our industry more sustainable.

Throughout the rapid growing phase, SeaRenergy became a new member in the market, quickly taking the lead as a turn-key solutions' provider. Willing to take responsibility and liability towards wind park owners, we established ourselves as a partner to pioneer an innovative path towards logistical synergies between different projects.

These thoughts led us to our way of thinking on the current situation in the industry, which has changed in a positive way. Vessels being previously owned by wind park owners are now independent and available to the market. The increase in use has certainty resulted in more vessels. The growing market soon ended up with an oversupply. This combined with the oil crisis sent charter prices plummeting, making offshore wind a much more economic industry.

In addition to the independent owners, third party companies started to offer turn-key solutions and use offshore tonnage in a more efficient way. Once again offshore tonnage was used over various projects sharing expertise and using synergies.

Over the last few years offshore wind has proven its economic existence with prices going below €0.05 per kW/h. The industry has reached a point, where shared solutions through the whole EPCI and later the O&M of a wind farm, are absolutely necessary to stay sustainable and share the economic benefit. Unfortunately there are only a very few companies which combined their knowledge to save expenses and maintain this price level.

Owning vessels has now moved into chartering vessels. So there are a lot of different contracts, with different subcontractors, for each task. From time to

time this does lead to miscommunication and later legal issues. Servicing any kind of offshore structure would need 2 or more subcontractors.

First there is the vessel owner and second the specialised company doing the job. This already means there are 3 parties involved in one project. So to cut down the number of necessary contacts to 1 would mean smoother planned operations. The project leader would be a subcontractor, taking full liability and takin away the stress form the client. Even though it might seem the same problems exist, our experience is different. SeaRenergy, as a subcontractor, is able to pool competences and send them from project to project in teams.

A similar phenomenon happened in Hamburg 2 years ago. Joining knowledge and resources ended up in a well-accepted result called “car sharing” A few years back car sharing was a one off. This changed greatly as soon as big companies invested in the concept. Nowadays you do not need to buy a car, nor sign any binding contracts with leasing companies. You only pay when you drive or are stuck in traffic. Find your car through an app and enjoy being able to drive within a business area. No insurance, parking, maintenance or refuelling costs.

The belief, that a sharing concept can only be applied to certain business areas, might be right in one way. However synergies and benefits will only be benefits can only be found if we combine knowledge, spread and implement it. To be efficient a combination of more than one way is a must.

Sustainability, in regards to power generation to us, does not only mean having a clean and green energy source, such as harvesting wind. Sustainability in our eyes should be seen through the whole supply chain. This starts with the onshore planning and ends with offshore construction.

We as SeaRenergy believe in the car sharing concept which, if slightly tweaked, could be applied to our business and transferred to the offshore tonnage market. Vessel sharing, as such exists already, as we only pay for a vessel when using it for our own projects.

To push this further, the belief in a vessel pooling concept gives way to cost saving opportunities for all parties. A few vessels dedicated to several construction or operation sites would split the operational and logistical costs over the involved number of sites. SeaRenergy understands the risk of possible delays that might occur but also sees the benefit of using the synergies between the wind parks.

Vessel pooling and joint-ventures require high flexibility and better logistic connection between the parks. Pushing this forward and lowering expenses, wind park owners must consider a single subcontractor managing all the logistics. If this were the case, we at SeaRenergy would be the subcontractor for more than one wind park owner and would utilise vessels between parks.

Operating out of one logistic hub and serving all offshore sites seems to add sailing time and therefore costs to some of the fields but spread over the different sites and having all equipment ready to ship from one place reduces costs and cuts the number of contacts.

Why should a wind park owner transfer responsibility and liability to a single subcontractor?

We believe in sharing resources to reduce operating costs and concentrating knowledge, which can be delegated to dedicated project teams.

Furthermore we see the possibility of using vessels for different tasks, resulting in higher utilisation. As well as cargo runs to platforms it will be possible to use vessel pooling for unplanned maintenance, cable repair, davit crane repair or quick visual checks. All these things will be able to be quickly coordinated and carried out by one subcontractor. Our pool of vessels allows us to act in the most efficient way but requires transparency from the client.

SeaRenergy provides superior offshore wind energy services in the North and Baltic Sea sees a lot of synergies. We are currently linking up to make future projects more efficient and to keep the renewables energy sustainable.

We are happy to discuss your project in combination with our existing projects and find synergies with you, because synergies are better than my way or your way. It is the efficient combination which results in our way. Cost reduction and increase of efficiency is a key element in making our industry competitive and fit for the future.

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