

Clean Future for Offshore Industry !

Since the record high oil prices and a surge in project initiatives one year ago, the offshore industry is now facing a completely new situation. Lack of finance, lower oil prices and the prospects of decreasing construction and installation costs are driving oil companies to project delays and postponements. The lessons learnt from the turmoil of the financial markets however include that companies should be focusing more on the long term continuity than on the short term profits.

Despite the current decline, it is clear that in the coming decades the world energy demand will grow further. Consumption in Europe and US may stabilize but the development of China, India and Brazil will continue. Renewable energy will be only further developed at significant higher energy prices. For this reason also in the coming decades the world has to rely on hydrocarbons.

As 'easy oil and gas' have already been used, more and more production will be from remote locations and challenging environments. At the same time the public pressure on environmental and climate issues will increase. In view of the available resources and the need for clean fuels, the future role of gas is eminent. In the long term part of the methane may be produced by biogas but most of it has to be produced as natural gas.

Liquification of natural gas offers a volume reduction of 600 which makes large LNG carriers ideal for transport from remote overseas production areas to the consumers. A large fleet of LNG carriers is currently being delivered by yards in the Far East. New import terminals in the US and Europe including Rotterdam are under construction.

The Netherlands with its large natural gas reserves, gas distribution infrastructure, main ports and an innovative offshore and shipbuilding industry is well equipped to play a key role in the natural gas future. Exposed terminals and re-gasification plants require dedicated tug assistance and offloading from vessels with sufficient sloshing resistance.

Short sea shipping of LNG is another spin off. The next step in the LNG chain is the floating production and off-loading. This will enable the production of many known offshore gas fields which are too deep for fixed platforms and too remote for pipe line infrastructure. MARIN is supporting companies to develop their technology in all these areas. An example described in this issue of Holland Shipbuilding, is the real time prediction of quiescent periods in ship motions to connect e.g. LNG loading systems.

The current economic tide offers industry and governments opportunities to invest in cooperative efforts in R&D and innovation which will prepare us for this up-coming challenge.



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