



Oil & Gas Terminals and Maritime Operations

Consultants and Brokers



SINCE 1985, RIVERLAKE HAS BECOME A VISIONARY LEADER IN THE MARITIME INDUSTRY

We develop tailored solutions to ensure your business has the best support in all its interactions, whether:

- Brokerage
- Project management
- Intelligence solutions



Contact our specialist team

| riverlake.ch

COMMITMENT

We work hard to reduce climate damages.

Riverlake was founded in 1985 as a shipping expert for the oil and gas industry. Over more than three decades we have developed our business from a traditional shipping brokerage company to a multi-faceted marine logistics provider.



A major milestone was the development in the field of energy storage. Now we have initiated a move towards renewable energy sources business development in parallel with very significant results. In doing so, we strive to reduce climate damage by designing terminals using renewable energy sources and using the latest technologies to reduce volatile organic compounds (VOCs). While it is essential to move towards greener terminals, the same applies to ships. Riverlake therefore fully supports the International Maritime Organisation's (IMO) call for companies to invest in the development of alternative energies and sustainable technologies.

Riverlake actively participates in workshops aimed at optimising the operation of vessels over time and reducing CO₂ emissions in both the mooring zone and the harbour. The sessions with the International Maritime Organisation (IMO) are directly linked to the "Just in Time" concept. This harmonisation is a prerequisite to enable the arrival of just-in-time ships, and therefore the reduction of CO₂ emissions.

For Riverlake, minimising the industry's environmental footprint is paramount. Together with our customers, we strive to participate in the development of environmentally friendly activities. Riverlake ensures that the long-term commitment required to improve the environment is guaranteed by continuous environmental management.



Consultants and Brokers

Positioning Energy Storage in a sustainable future

PROJECT MANAGEMENT

We are specialist Project Developers and Engineering consultants for the Energy industry, focused on storage of Oil, Gas & Renewable products. We strive to use our knowledge to position Energy Storage and associated logistics in a better and more sustainable future. We have a focus on cost-effectiveness, maximum flexibility and minimal Impact. As engineering consultants, we have a sound and hands-on understanding of a broad range of energy-related infrastructures.



- Liquid bulk storage
- Liquid and gas products Jetties and SPM's/CBM's
- LPG and small-scale LNG Storage and Infrastructure
- Biofuel, Hydrogen and Vegetable Oil storage
- Biomass plants

Knowledge & Skills

Riverlake brings to you a broad spectrum of knowledge and skill. Partners and staff are all highly trained and honed their skills during many years in the industry. As partners we gathered four complementary Masters Degrees. Our extensive training in Petroleum Engineering, Business Science, Mechanical Engineering and Maritime Technology provides us with a solid knowledge base. After university we all ventured out in commercial businesses. We

gained experience on dredgers in Nigeria and Indonesia, on tank terminals in The Netherlands and Sweden, on tugs in too many countries to mention and even in a wheelbarrow factory. This experience gave us the insight for our hands-on pragmatic way of working. We feel at home in ports and on ships. We love to travel the world. That was, and still is, the foundation on which Riverlake was founded in 1985. Knowledge, skills and experience brought us together to serve the oil industry where shore meets ocean.

Geneva

Rotterdam

Curaçao Lagos

Muscat

London

TANK STORAGE

Where shore meets ocean

At Riverlake, we know about tank storage and jetties. We focus on supporting our clients by providing project development services throughout the entire development cycle of a tank terminal and a jetty. Riverlake is your partner and is there to support you in the realisation of your plan.

Framing the process

Traditionally, Riverlake's experienced engineers typically frame the process in a project-style format, where the project milestones are precisely mapped out.

Riverlake has adopted its proprietary [Project Development Methodology manual](#) to explicitly address the development of liquid bulk storage and associated jetties.

Actually, Riverlake supports you as soon as the idea of building a tank terminal, a jetty, an SBM for example starts to emerge.

We have many years of experience in the development of jetties to accommodate tankers that load and discharge liquid bulk and gas in and out of tank terminals.

Challenging locations

We enjoy traveling to challenging locations and that brought us to many interesting places in the world.

Since we started Riverlake in 1985 we have been invited to work on many different projects. It would be too much to list them all, but we can not resist to mention a few of them. Ever heard of Khabarovsk? It is in Siberia, has a refinery and exports its fuel over the Trans Siberia railroad to Vladivostok. Or what about Lagos Lagoon? Actually, the waterways inland of Lagos could provide innovative fuel logistics for Nigeria. We also went to Constantza in Rumania to assess a large oil terminal in the port and did the same for Porto Romano in Albania. We know Spain as the back of our hand because we were involved in many terminal projects there. (we got pretty bored of joining the holiday goers in their charter planes.....). And then we did projects also in South Africa, Benin, Ivory Coast, Oman, Gabon, Norway, Malta, Tanzania, Kenya, French Guyana, Saudi Arabia and, oh yes before we forget, in the Netherlands.



Rotterdam

- 200,000m3 fuel distribution terminal in Rotterdam
- ◆ Renovation of old terminal
 - ◆ Inventory of existing infrastructure
 - ◆ Business requirements definition
 - ◆ Re-development scenario planning
 - ◆ Conceptual design
 - ◆ CAPEX estimating



Las Palmas

- 200,000m3 bunkering terminal in Las Palmas, Spain
- ◆ Concept planning
 - ◆ Technical management support
 - ◆ Management of FEED
 - ◆ Construction Contracting
 - ◆ Construction Management
 - ◆ [Pre]- Commissioning
 - ◆ Operations startup management

RENEWABLES FACILITIES

Riverlake plays a key role in renewable source of energy to reduce CO₂ emissions from the existing coal-fired power plants by co-combustion and green heat production.

Hydrogen

Hydrogen storage is relatively new to the world, but it is expected to make an exponential growth when hydrogen power usage will increase with new technologies in the making every day. To Riverlake it is of key importance to use our knowledge of Storage principles to this new upcoming energy modality and we are ready to help you develop your first footsteps in this new world.

Biomass

Riverlake supports its customers in setting up facilities for the manufacture of biomass pellets, from the initial design stage to the subsequent successful production of the first pellets. We strive to help our customers build an environmentally friendly facility, based on the transformation of wood pellet manufacturing waste. Doing so ensures that the impact on the natural surroundings is as minor as possible.

Solar Energy

Through the combination of the best sites and technologies to produce the most efficient solar energy solutions for its customers, Riverlake, as project developer, creates a vital link in the chain between engineering, procurement and construction.

Wind energy

Leveraging our broad offshore and offshore engineering background, as well as our track record in the operation and maintenance of offshore terminals and vessels, Riverlake can work with you in developing your offshore wind energy ventures.



West Africa

25,000 tonnes production plant making combustible wood pellets from saw dust and chips waste of sawmills

- ◆ Conceptual design
- ◆ Inventory of existing and needed infrastructure
- ◆ Business requirements definition
- ◆ Development scenario planning
- ◆ CAPEX estimating
- ◆ Purchase of production machines
- ◆ Implementation of site
- ◆ Startup



TUGS & OFFSHORE SUPPLY VESSELS

Tugs – Crew Boats – Anchor Handlers – Dredging Support

Brokers for Maritime Operations

We know work boats. Whether they are used in the offshore industry, for port operations or for dredging assistance, we can help you find the right ship. We also go in length to serve you to be able to hire a vessel, including setting up entities if need be, and reflagging. We have experience with Anchor handlers, harbor tugs, crew boats, any type you like. Brokerage is also what our colleagues at Riverlake Shipping are doing with tankers and bulk carriers, so they are a great help. We have good relations with numerous ship owners who are always on the lookout to put their vessels to work. And we have similarly good relations with offshore and dredging companies who might be looking for your vessel. Even in today's difficult environment we stand out successfully by doing that extra step for our clients.

Troubled Waters

Since long the Dutch have been all around with work boats. This is what we enjoy doing.

Already before Riverlake maritime operations brokerage was founded we were travelling the world with all kinds of ships. We were dredging, providing offshore support or port assistance and we did that in many murky waters like Nigeria, Indonesia. At Riverlake we continued, just because we like it! Since 2008 we have seen many seas and shorelines. Some of which were cold and harsh, like Bydaraskaya Bay in Siberia where you have to flee for the ice in November. Others are warmer and who would reject Curacao as office location!

The Offshore Service Base (OSB) offers lay-up or warm and/or cold stacking locations and value added services for offshore vessel owners having floating equipment idle for longer period in the Americas.

The range of services to protect, lay-up and reactivate vessels. These will include risk assessment, a safe mooring, a lay-up plan, dehumidification of space, 24/7 watchmen, routine tasks and maintenance, reporting and record keeping, provision of equipment including generators, permitted workboats, cargo boat, landing craft, warehouse facilities, crew repatriation, garbage disposal, Fresh water supply and bunkers. Riverlake partners with OSB and provide these services on Curacao and in Suriname.



Baydaraskaya Bay

Dredging support in Siberia, Russia

- ◆ Delivery of two dredging support tugs
- ◆ Import, temporary reflagging, crewing and operations of foreign tug via own Russian Shipping company
- ◆ Delivery of additional dredging expertise
- ◆ Heavy duty circumstances



Caribbean Sea

Offshore support

- ◆ Delivery of five support tugs
- ◆ Delivery of four Fast Support Vessels (FSV)
- ◆ Support during import and reflagging

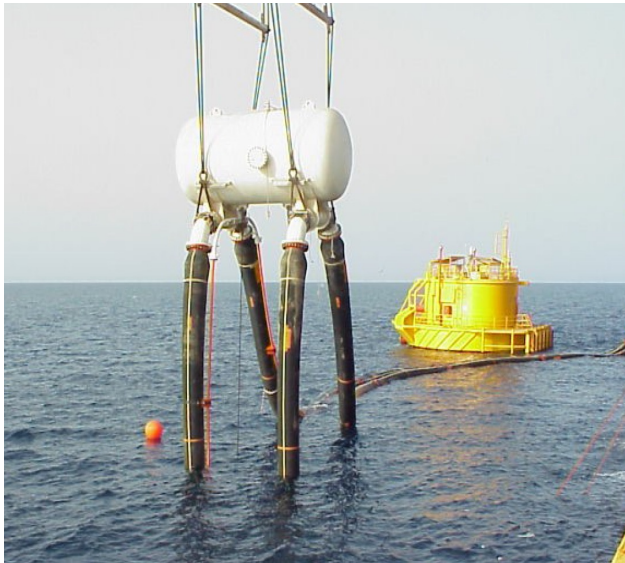
SPM & CBM

Consultancy – Engineering - Commissioning

As Riverlake, we are one of the very few independent companies that have experience with SPM's and CBM's.

Most terminal operators are used to work in ports. Ships are moored at jetties in a safe harbour, well protected from wind, waves and currents. But that is not the only way to load or discharge tankers. Single Point Mooring (SPM) Systems or Conventional Buoy Mooring (CBM) systems are used all over the world to facilitate even the largest tankers. They are connected to the terminal by subsea pipelines, often a few kilometers long. This only works in sheltered waters, but is it sheltered enough? Should we choose an SPM or is a CBM sufficient? What does it actually cost? Not only to install (most often cheaper than building a new port) but also to operate.

We know the answers. We have assisted numerous customers with our consultancy services that enables them to develop, engineer, procure, operate and maintain an appropriate tanker mooring system. We develop the concept, we manage the naval studies and the engineering, we tender the construction and delivery, and we can be the broker to provide you with the required tug, work boat and diving crew.



Past Experience

Some of us have been working with CBM's and SPM's since we left kindergarten. Well, that is actually not true, it is since we left university, but nevertheless we have seen a few. We operated them, we constructed them, and we installed them. All prior to joining the Riverlake crew. There are not that many engineering companies or consultants around that can provide hands-on experience with especially SPM's. So why turning to a supplier without consulting Riverlake first? We have the experience to bring your negotiating position at par.



OKFTZ Nigeria

- Project OKFTZ Terminal, Nigeria
- ◆ Fuel trade and import project
 - ◆ SPM 14 km offshore
 - ◆ Preparation of prequalification
 - ◆ Preparation of tender for engineering and construction
 - ◆ Tender process management



Tema CBM Ghana

- Temporary CBM of the coast of Tema, Ghana
- ◆ Conceptual CBM layout
 - ◆ CBM design
 - ◆ CAPEX estimation
 - ◆ Installation methodology



Red Sea, north SPM

- Inspection & Maintenance of SPM Turret Buoy for VLCC
- ◆ Yearly inspection
 - ◆ Maintenance control & advice
 - ◆ Spare parts delivery
 - ◆ Client representative towards contractors