



Towards a Sustainable  
Industry Together

# Terminal Development





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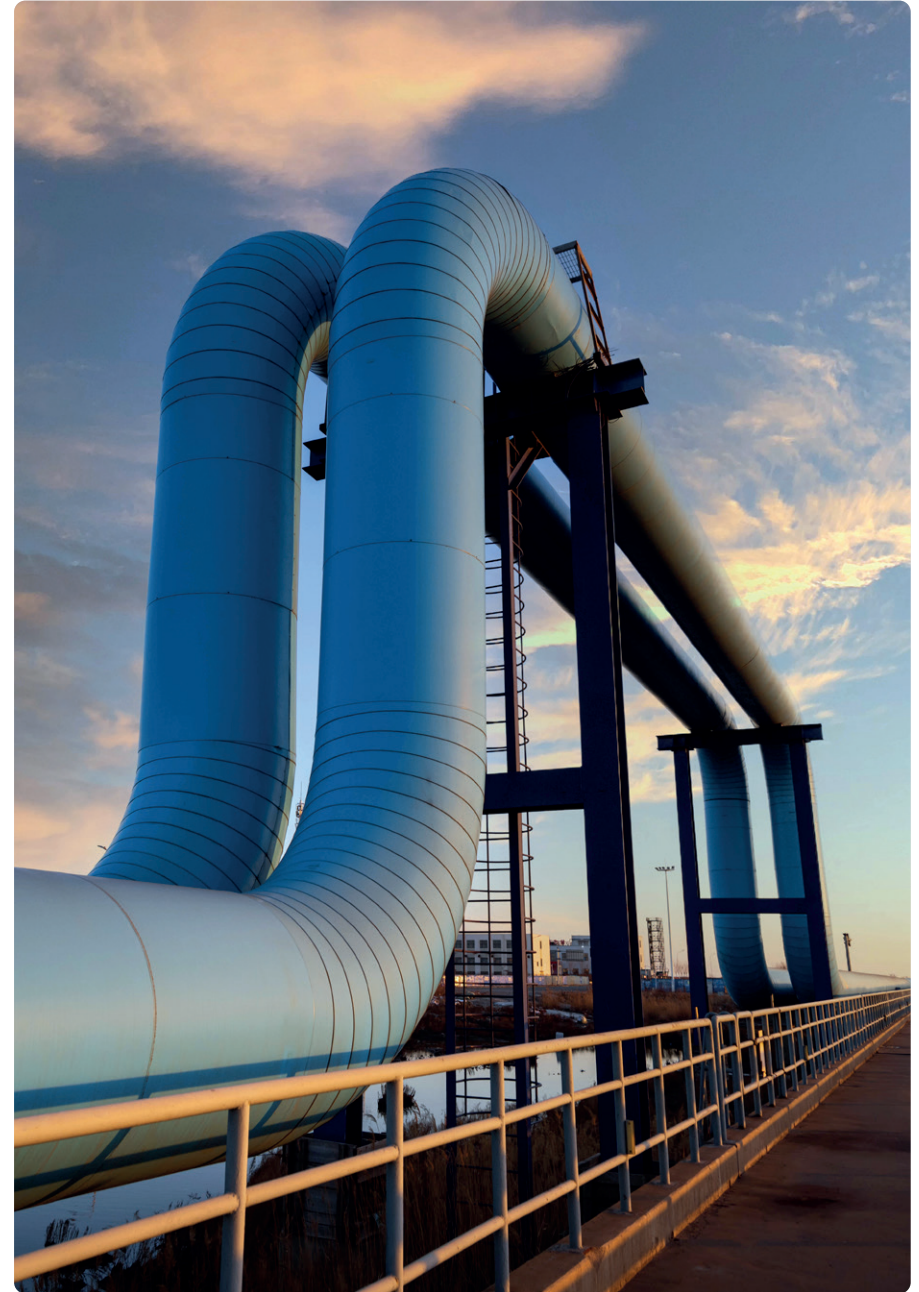
## Consultants and Engineers

# Oil & Gas Terminals and Tanker Mooring Systems

Riverlake specializes in the development of oil and gas terminals and offshore tanker mooring systems. Built on decades of engineering and maritime expertise, our teams combine strong technical capability with deep knowledge of shipping and energy logistics.

We support clients in both greenfield and brownfield terminal projects, delivering integrated services across the full development lifecycle — from concept and engineering management to tendering, construction supervision, commissioning, and operational start-up.

Our approach ensures that terminal infrastructure is technically robust, commercially viable, and fully aligned with maritime operations.



## Development of Oil & Gas Terminals

### Tank Terminal Development

Riverlake supports clients across the full lifecycle of tank terminal development, from early feasibility through commissioning and start-up.

Our structured development approach covers commercial and financial feasibility, logistics and concept design, FEED engineering, procurement and contract tendering, construction management, and operational readiness. Each phase is managed with a clear focus on delivering technically sound and commercially viable infrastructure.

With extensive hands-on experience in developing, acquiring, upgrading, and optimizing terminals, Riverlake provides the expertise required to successfully deliver complex terminal projects.



- Consultancy
- Engineering
- Commissioning

## Development of Oil & Gas Terminals

### Proprietary Methods

#### Terminal Development Methodology

Riverlake applies a specialized terminal development methodology, detailed in our Terminal Development Handbook, to structure and manage tank terminal projects efficiently. This approach helps minimize risks related to budget overruns and schedule delays by guiding projects through clearly defined development phases.

The handbook is publicly available on our website. Complementing this framework is Riverlake's extensive internal technical knowledge library, including specifications, guidelines, drawings, and engineering references specific to tank terminals.

Together, these resources enable our teams to deliver fast, informed, and technically robust guidance on all aspects of oil storage and handling infrastructure.

#### Standardized Tendering

Tank terminal construction is typically delivered through Engineering, Procurement & Construction (EPC) contracts with specialized contractors. Riverlake has developed a standardized EPC tender framework to streamline this process and avoid re-inventing tender documentation for each project.

a efficiently, transparently, and professionally, while ensuring robust contractual structures and clear technical specifications. Our framework also supports public-sector procurement requirements, where transparency and process integrity are essential.

By leveraging established tender documentation and contract templates, Riverlake helps clients accelerate procurement while maintaining full commercial and technical rigor.

#### Operational Procedures and Documentation

Efficient and responsible terminal operations require comprehensive procedures, work instructions, and operational forms, often aligned with standards such as ISO 9001, ISO 14001, and occupational safety frameworks.

Based on experience commissioning and operating multiple terminals, Riverlake has developed an extensive set of operational templates, covering areas such as cargo handling, safety procedures, inspection routines, reporting, and ship-shore operations.

These documents provide a proven foundation for terminal commissioning and operational readiness, and can be quickly adapted to meet the specific requirements of each facility.



## Development of Tanker Mooring Systems

### SPM, CBM and Jetties

Riverlake is one of the few independent companies with extensive experience in Single Point Mooring (SPM) and Conventional Buoy Mooring (CBM) systems.

While many terminals operate within protected ports and jetties, offshore mooring systems offer an efficient alternative for handling large tankers. Connected to shore via subsea pipelines, these systems enable safe loading and discharge operations where port infrastructure is limited or where offshore solutions provide greater flexibility.

Riverlake supports clients throughout the full lifecycle of mooring system development, including concept selection, feasibility assessments, naval studies, engineering management, procurement, and implementation. We also assist in organizing the marine support services required for installation, operation, and maintenance.

Our expertise ensures the selection and delivery of technically sound and cost-effective tanker mooring solutions tailored to each project's operational environment.



- Consultancy
- Engineering
- Tendering
- Commissioning
- Operations
- Maintenance

## Development of Hydrogen (Carriers), eFuels and Energy Management Systems

### Proprietary Methods

The energy landscape is rapidly evolving as fossil fuels are gradually replaced by sustainable energy carriers. Renewable electricity is expected to become the dominant energy source, complemented by alternatives such as biofuels, geothermal energy, and hydrogen. Hydrogen will play a key role in the energy transition. Large-scale applications are anticipated primarily in heavy industry, where hydrogen serves both as a feedstock and as an energy carrier for high-temperature processes. Global energy transport will increasingly rely on hydrogen carriers such as ammonia, methanol, and Liquid Organic Hydrogen Carriers (LOHCs). Within this emerging infrastructure, Riverlake supports the development of future-ready energy logistics through eFuelution, Riverlake's platform focused on sustainable fuel solutions.



## Development of Hydrogen (Carriers), eFuels and Energy Management Systems

### Concept Development & Feasibility

Successful energy infrastructure projects begin with a robust concept and a well-founded feasibility assessment. Through its eFuelution platform, Riverlake supports clients in shaping and validating hydrogen and sustainable fuel projects.

During the concept phase, we align the key stakeholders and project components—including site availability, technology providers, energy supply, and potential off-takers. These elements are then evaluated through comprehensive technical and financial feasibility studies.

The result is a clear investment-ready project framework, supported by a structured business plan covering technical configuration, financial viability, and potential access to subsidies or funding programs.

### Dynamic Simulation

Through eFuelution, Riverlake applies dynamic simulation tools to optimize hydrogen production systems and ensure cost-efficient project design.

By analyzing the interaction between renewable power sources such as wind and solar, grid electricity, electrolyzer performance, and potential storage solutions, we determine the optimal configuration of system components, including batteries or hydrogen storage buffers.

These simulations allow us to identify the most reliable and cost-effective production strategy, forming a robust technical basis for subsequent feasibility assessments and project development.

### Project Development & Management

Through its eFuelution platform, Riverlake supports the development of hydrogen and sustainable fuel infrastructure projects from concept through implementation.

We provide end-to-end project development and management, combining technical expertise, industry partnerships, and structured project governance to guide projects from early concept to market delivery.

Using our structured development framework, we manage key milestones, resources, and technical coordination to ensure projects are delivered efficiently, on schedule, and within budget, providing clients with a clear and predictable development pathway.



Get in touch  
[www.riverlake.ch](http://www.riverlake.ch)

