



Integrated LNG Services

Ensuring your production assets keep on delivering peak performance

Our mission is to keep your facilities working at peak performance, with minimum downtime. To achieve this, we combine an innovative industrial service package with the latest inspection and robotics systems, backed by smart sensors and advanced data management. With these turnkey solutions we help large energy producers and critical infrastructure companies like yours to optimize their assets. And to optimize our own performance, we continually invest in Intero's technology, processes and people.

Reduce Downtime, Eliminate Safety Risks and Environmental Hazards

A Challenging Environment

Gas consumption is rapidly increasing and changing worldwide. However, the high CAPEX investment required for transporting gas by pipeline infrastructure often makes LNG a better alternative. The process involves liquefying (cooling) natural gas at the source and transporting it by LNG bulk tankers to the receiving end where it is returned to its original gas form (re-gasification).

If you own or operate an LNG facility you know how challenging it can be to start up operations or keep them running safely and cost effectively. Our services are designed to support you by reducing downtime and avoiding safety and environmental hazards during the commissioning of new facilities or maintenance shutdowns.

Intero has an extensive service portfolio, which means we can bundle our services into a unique single contractor turnkey solution. That brings efficient communication, smooth project execution, as well as reduced costs and downtime.

Each integrated service package is managed by a dedicated and experienced on-site team, which ensures the project's success.

New Construction / Startup

When you are constructing a new LNG facility, or starting one up, efficiency and safety are crucial. Similarly, testing and cleaning are key elements of every commissioning phase. Interio has experts in chemical cleaning, pigging, flushing, and air blowing for pipeline and process systems. We combine these services with project management capabilities to keep your assets clean. The result is a safe and flawless startup.

Another goal during startup is to minimize leaks. This prevents time-consuming, costly, unplanned emergency repairs. Interio is your specialist in LDAR (Leak Detection and Repair) and offers various leak detection methods. These include: air, nitrogen or nitrogen helium

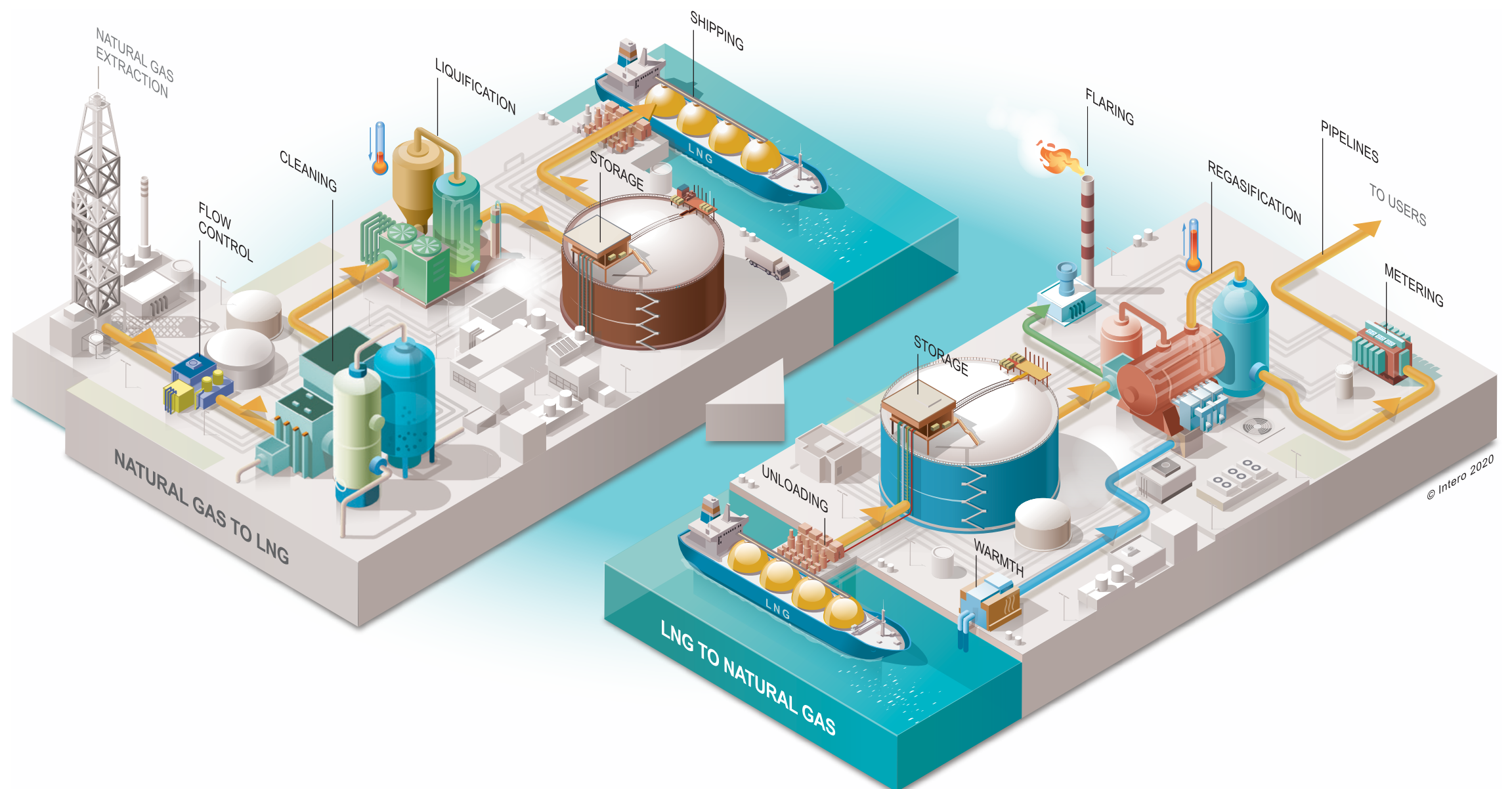
leak testing; ultrasonic inline (safety) valve testing; and infrared or post startup VOC emission measurements. In an ideal world there would be no energy loss or methane emissions.

Maintenance / Turnaround

With over 35 year's experience of working during high risk, high activity periods, Interio has built up considerable operational knowledge and expertise. We can be the go-to party to secure your shutdown's success.

Risk and integrity management are key to protect assets and prevent unplanned events which could ultimately lead to a partial or full facility shutdown. Our ultrasonic internal pipeline and tank bottom inspection services provide critical insights into asset status and integrity.

Interio also offers cryogenic LN2Spike and LN2Cool pumping services to speed up cooldowns as well as simulate operating conditions during pre-startup leak and pressure tests. That prevents loss of valuable production time.



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Confronting Integrity Challenges

Reducing Downtime

- Heating and cooling services
- Leak detection
- Sniffers' emission management software SFEMP

Risk Management

- PRIMS risk management software
- Environmental program development
- UT in-line inspection
- Robotic tank inspection

Cleaning Assets

- Nitrogen sand jetting
- Pipeline pigging
- Air blowing
- Chemical decontamination
- Eco-friendly chemical cleaning
- Purging and drying (nitrogen)

Energy Savings

- Vent and flare loss monitoring
- Thermographic surveys
- Compressed air and vacuum leak detection

Emission Reduction

- Leak detection and repair plus quantification
- Smart LDAR – optical gas imaging
- Methane accounting program
- Sniffers' emission management software SFEMP
- Environmental program development
- Training and competence development
- Benchmarking emission performance

Project Management

- Engineering and preparation
- Planning, logistics and transport
- Site project management
- Reporting

We will keep
your integrity
maintained

Turnkey Services

- Purging and drying
- Cleaning and flushing
- Cooling and heating
- Leak and pressure testing
- Project management
- Support services
- Inspection services
- Emission reduction
- Energy savings

Services are executed during new construction, commissioning, operations and maintenance, or during the decommissioning phase.



Green Chemical Solutions

Intero uses new chemical cleaning technologies to improve the cleaning operations of oil and gas pipelines. These new products are highly concentrated blends of biodegradable surfactants and synthetic solvents capable of wetting and removing the most tenacious deposits encountered in oil and gas pipelines.

The majority of the solvents/chemicals we use are environmentally friendly and biodegradable, with minimal waste disposal costs.





Intero Integrity Services

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Elevating the Standard for LNG Services

Intero Integrity Services is the leading specialist for keeping complex oil, gas, and petrochemical facilities clean, safe, well-maintained, and highly productive. Our unique range of industrial, inspection, and environmental services maximizes your asset availability.

Turnkey. Innovative. Optimized. We listen to customers constantly, so we understand what's important to them: the highest possible performance, protection, and predictability.

Ever-evolving solutions 