Clarke Energy®

Engineer - Install - Maintain

JENBACHER

INNIO

Distributor New Units & Services

| Hydrogen

Leading the Hydrogen Transition

Trusted EPC contractor with a *proven track record.*

LOW CARBON H_2 PRODUCTION

Clarke Energy is a multinational provider of sustainable energy solutions, delivering tailor-made projects backed by a proven track record, a strong balance sheet and industry-leading aftersales service support.

We are an award-winning market leader within the distributed power generation and EPC sectors, with a global installed base of over 9GW.

Supporting the net-zero transition
Hydrogen is key to decarbonising high-CO_2 sectors. Clarke Energy enables your transition by integrating hydrogen into industry and transport for a low-carbon future.

Aftersales support
Our market-leading national service support coverage ensures smooth scheme operation.

Engineer, procure, construct
Inhouse design and project management, including complete build and grid connection.

H_2 ready INNIO Jenbacher gas engines
Clarke Energy is the authorised distributor and service partner for INNIO Jenbacher H_2 gas engines in 27 countries.

Seamless procurement practice
We provide one point of contact responsible for complete project development, mitigating customer risk.

Profound understanding of complete H_2 market
We understand our customer requirements, form solid partnerships, and engineer the best possible H_2 solution.

HYDROGEN PRODUCTION WITH CCS

Carbon capture and storage (CCS) is the process of capturing emissions from energy production before they reach the atmosphere. It is an important consideration when discussing hydrogen, as it enables the production of low-carbon hydrogen while the industry transitions to widespread renewable adoption.

Pairing CCS with hydrogen production allows for large-scale hydrogen availability while minimising environmental impact. Natural gas remains a readily available resource, and with CCS, its emissions can be significantly reduced, making it a viable pathway for expanding the hydrogen economy. This approach supports energy security and decarbonisation efforts simultaneously.

CCS is particularly valuable in hard-to-abate sectors, such as steel and chemical production, where carbon emissions are an unavoidable part of industrial processes. By integrating CCS into hydrogen production, industries can continue to operate efficiently while cutting their carbon footprint.

By linking these two processes together, we can drive meaningful emissions reductions and accelerate the transition to a more sustainable energy landscape.

END-USE APPLICATION

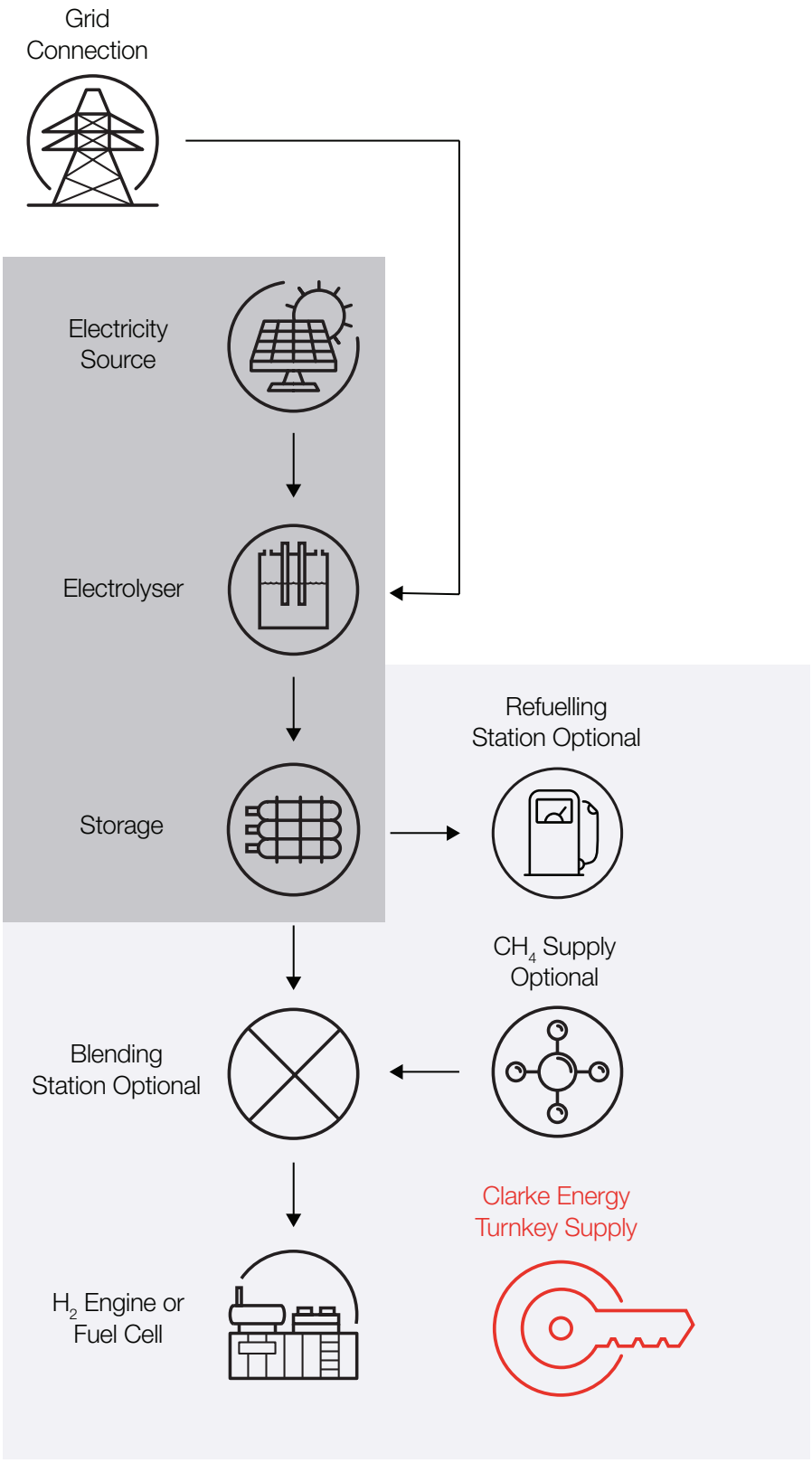
Once hydrogen is produced, it can be used directly in on-site INNIO Jenbacher H_2-ready gas engines to provide reliable power, heat, and cooling solutions. This is an ideal application for sites that require a flexible, sustainable energy source.

Integrating hydrogen into gas engines allows businesses to reduce their carbon footprint while ensuring energy security. Whether through existing or new installations, H_2-ready engines can support various industrial needs, offering an immediate, practical end use for hydrogen. Supporting blends, all the way up to 100% hydrogen, this solution will play a key role in the transition to a net-zero future.

INCORPORATION OF ELECTROLYSER, STORAGE & BLENDING

Clarke Energy takes a flexible approach, delivering power generation facilities for some of the world's most high-profile businesses. Alongside our expertise in distributed energy, we play a key role across the hydrogen value chain—supporting H_2 production through electrolysis, storage and distribution via refuelling stations, and end-use in fuel cells and hydrogen engines.

No matter the project size, we remain committed to achieving your business objectives with quality and customer service at the forefront.



Clarke Energy, a Rehlko Company, is a multi-award-winning global business specialising in the engineering, installation and maintenance of distributed energy solutions.

Clarke Energy supplies a range of different energy efficient, resilient, low carbon and renewable power generation and storage technologies. For gas based projects we are able to produce or accept renewable and low carbon fuels including hydrogen, biogas and biomethane / renewable natural gas (RNG).

To contact Clarke Energy please visit our website.
www.clarke-energy.com