LOOK TOWARD THE FUTURE

Transitioning to Hydrogen Energy in Europe, the Middle East and Africa

Hydrogen-Certified
Diaphragm Gas Meter



Honeywell

A HYDROGEN FUTURE IS FAST-APPROACHING

Spurred by social and environmental evolution, the world is increasing its adoption of renewable energy sources. This clean energy transition is dominated by hydrogen, a sustainable, promising and supported alternative to natural gas. But as hydrogen-based fuel is adopted, solutions are needed to measure, monitor and manage this resource. That's why Honeywell created the world's first 100% hydrogen-certified diaphragm gas meter.

GOING GREEN IS GAINING GROUND

Natural gas is an effective source of energy in Europe, the Middle East and Africa (EMEA). And compared to other primary energy sources, like coal and petroleum, natural gas is reasonably cleaner when burned. But it's not without negative environmental consequences. From a high level, the extraction and production of natural gas yield large quantities of wastewater and greenhouse gas emissions. As environmental mandates and sustainability regulations gain momentum around the world, and natural gas' accessibility becomes increasingly limited, this resource is less suitable than it once was.

INTRODUCING HYDROGEN TO EMEA

Fortunately, most regions in EMEA are adopting technologies and implementing plans to phase out the use of and reliance on natural gas in favour of a cleaner, renewable, available energy source: hydrogen.

This transition, in its initial phases, is heavily supported by legislation and initiatives:

- The European Clean Hydrogen Alliance aims to achieve hydrogen technologies by 2030 with renewable and low-carbon hydrogen production[1]
- The European Commission (EC) has a strategy to import 10 million tons of renewable hydrogen by 2030 for use in heavy industry and transport sectors that are traditionally reliant on coal, natural gas and oil[2]



PREPARING FOR A HYDROGEN-POWERED FUTURE

Mandated pushes for hydrogen and, thus, for decarbonisation and greater sustainability, extend to key players in the energy transition, including utilities. Because utilities manage energy generation, transmission and distribution, they will need proper infrastructure that supports the fast-approaching transition from natural gas to hydrogen.

HONEYWELL SUPPORTS THE HYDROGEN TRANSITION

That's why Honeywell created the world's first-ever commercially available 100% hydrogen-certified diaphragm gas meter. This new gas meter is capable of reading both hydrogen and natural gas for greater adaptability as networks transition to hydrogen. Because it can measure, monitor and manage both — with unparalleled accuracy — the meter eliminates the need for future hydrogen-centric replacements once installed. This helps utilities reduce long-term costs associated with new infrastructure, enhancing their operational sustainability.



EI5 hydrogen-certified diaphragm gas meter

CONCLUSION

The sooner utilities adopt and implement hydrogen-certified meters, the sooner EMEA can effectively facilitate the clean energy transition. Honeywell's diaphragm gas meter is how they can get started.

1. "Hydrogen." European Commission. 2023. https://energy.ec.europa.eu/topics/energy-systems-integration/hydrogen_en.
2. Tatarenko, O., Janzow, N., Rosas, J., & Homann, Q. "The Value of Green Hydrogen Trade for Europe." Rocky Mountain Institute. 2023. https://rmi.org/insight/the-value-of-green-hydrogen-trade-for-europe/.

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THE FUTURE IS WHAT WE MAKE IT

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