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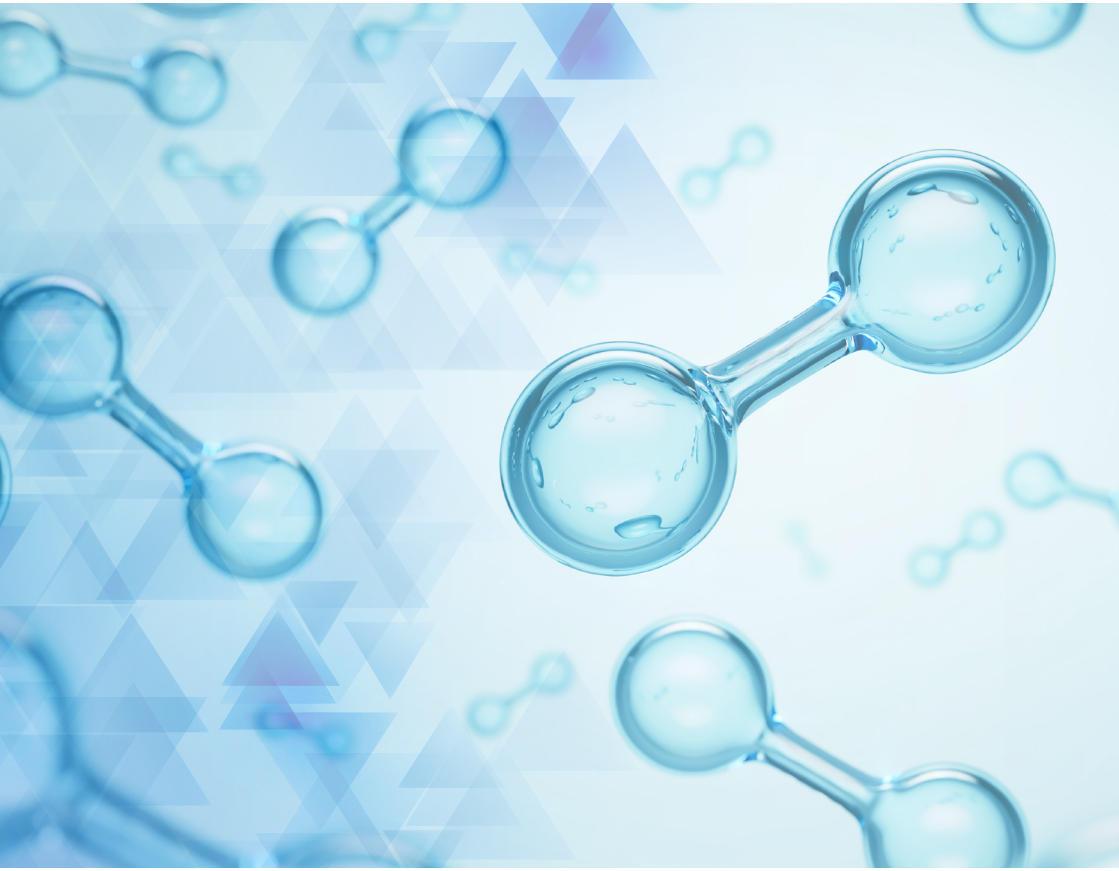

RENEWABLE HYDROGEN AT GFA

COMPETENCIES FOR SUSTAINABLE GROWTH

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Scan QR code to visit GFA's Renewable Hydrogen website

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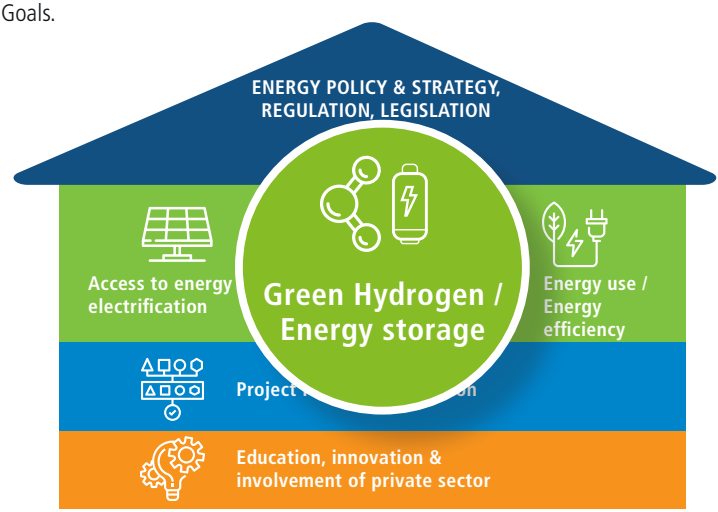
Based in Hamburg, Germany, GFA Consulting Group GmbH (GFA) is one of the leading European consulting firms in international development cooperation.

With 400 employees at headquarters and more than 1,000 staff deployed in projects worldwide, GFA actively seeks to improve the lives of people across the globe by promoting sustainable development and making a significant contribution to the United Nations' Sustainable Development Goals.

To advance this vision of a just world, GFA provides services in 17 strategic business areas, reflected in a decentralised structure of globally operating technical departments and units.

The Energy Department is at the core of the development and implementation of energy projects worldwide, along the entire energy value chain – from sustainable production to consumption.

Embedded in this multi-layered ecosystem, the cross-cutting topics of renewable hydrogen, often referred to as Green Hydrogen (GH_2), and energy storage benefit from the synergies that arise from this integrated knowledge and approach.



COMPREHENSIVE GH_2/PTX EXPERTISE

GH_2 and its derivatives, Power-to-X (PtX), have emerged as a key element in the global energy transition.

GH_2 and PtX offer a promising pathway to decarbonise hard-to-abate industries such as steel, cement, aviation, shipping and heavy-duty transport, while also addressing the intermittency and storage challenges of renewable energy sources (RES). The European Union recognises the importance of hydrogen for global decarbonisation and has set ambitious targets to produce 10 million tonnes of renewable hydrogen by 2030, with the same amount to be imported by that year.[1]

[1] *https://energy.ec.europa.eu/topics/energy-systems-integration/hydrogen_en*

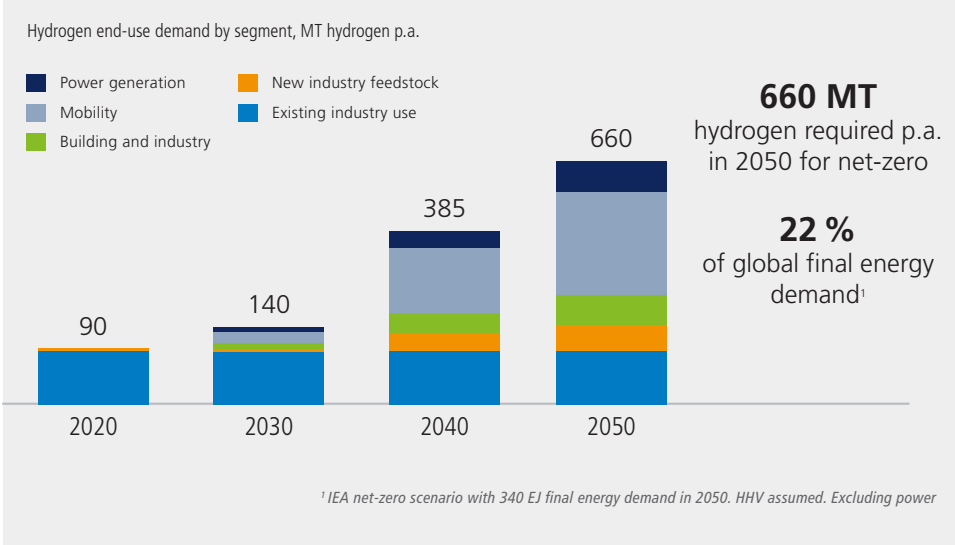


Exhibit 3 – Global hydrogen demand by segment until 2050, (source: Hydrogen Council 2021)

In Germany, the Federal Government adopted a National Hydrogen Strategy (NWS) in 2020 and earmarked € 2 billion from a € 9 billion investment plan for fostering strategic international partnerships.[2]

Countries in the Global South, in particular, can benefit from their favourable geographic profiles for GH_2/PtX production, as they predominantly have optimal RES and low production costs. By taking advantage of this, they can not only meet their own national climate targets but also create export potential that positively contributes to economic and social development. This provides an excellent opportunity for sustainable growth and cross-border cooperation.

Since mid-2019, GFA has been at the forefront of global GH_2/PtX development and has delivered international technical and financial cooperation projects for international development banks and development agencies, such as the German Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH.

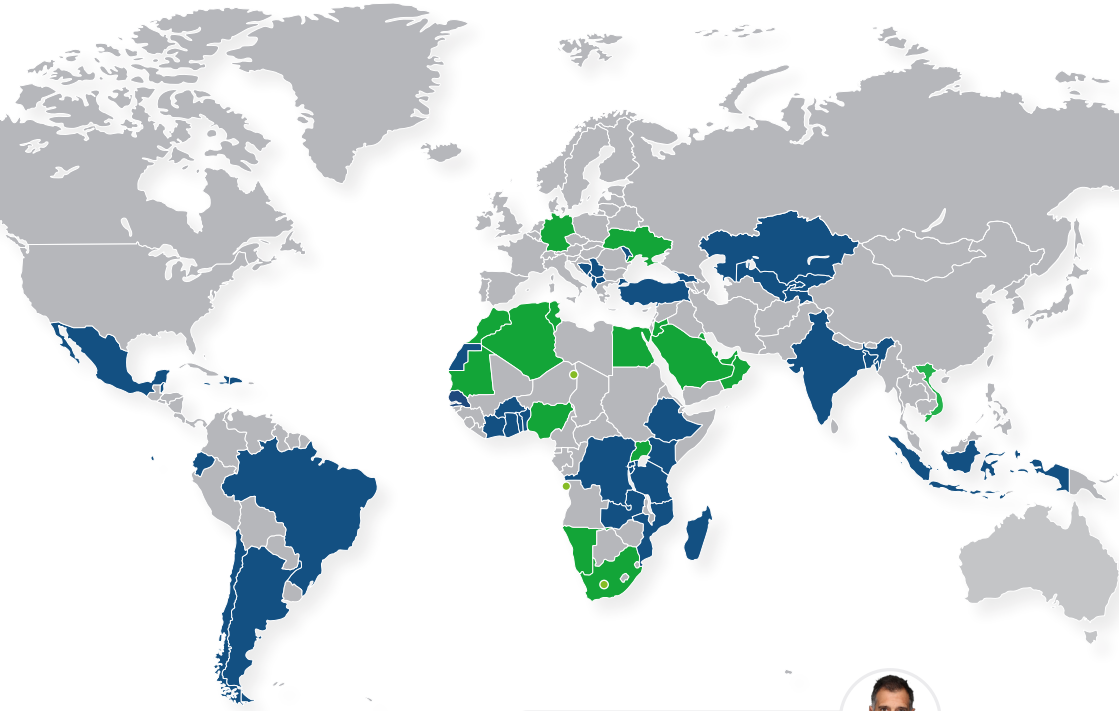
Drawing on our extensive and in-depth sector expertise, we have assisted the governments of Algeria, Jordan, Tunisia, Morocco, Viet Nam, Nigeria, Senegal and South Africa, among others, in creating and enabling regulatory, legal and policy environments for the GH_2/PtX market ramp-up.

[2] *https://www.bmwk.de/Redaktion/EN/Publikationen/Energie/the-national-hydrogen-strategy.pdf?__blob=publicationFile&v=6*

OUR SERVICE PORTFOLIO

OUR SUSTAINABLE ENERGY AND GH_2/PTX PROJECTS

GFA has contributed significantly to shaping the hydrogen ecosystem in the highlighted countries. Detailed references can be found on our website (scan the QR code).



GFA sustainable energy projects

GFA GH_2/PtX projects

Federico Villatico
Senior Hydrogen Specialist and
Advisor of European Commission on GH_2

"With its worldwide experience, established network and extensive expertise, GFA is a high quality partner for the implementation of GH_2/PtX projects of financial and technical international cooperation."

WHAT MAKES GFA SPECIAL

By implementing our services in key future hydrogen markets, we are not only continually applying and expanding our expertise but also strengthening our network.

Our close collaboration with governments, institutions and key decision-makers provides valuable insights into market trends and local developments, as well as access to experienced sector experts. A deep understanding of the regional and local context is critical for any GH_2/PtX project.

We are well positioned for future opportunities thanks to our internal technical capabilities, our broad network of highly competent experts and access to the latest innovative thinking on GH_2/PtX.

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