

<b>Salary Band 4T</b>	<b>Technical Advisor Power-to-X &amp; Green Hydrogen (PtX Hub South Africa)</b>
Reports to:	Component Lead
Duty Station	Hatfield, Pretoria
Duration	until <b>31 December 2027</b>

## BACKGROUND

Achieving climate neutrality by 2050 requires a rapid transformation of global economies towards emission-free production systems. While renewable electricity is central to this transition, certain industrial processes and long-distance transport sectors cannot yet be directly electrified. In these sectors, **green hydrogen and Power-to-X (PtX)** technologies provide essential solutions to enable deep decarbonisation.

Green hydrogen and PtX enable the production of fuels, chemicals and materials traditionally dependent on fossil resources using renewable electricity and non-fossil carbon sources. Sustainable e-fuels and climate-neutral feedstocks are particularly relevant for the defossilisation of **hard-to-abate sectors such as aviation and maritime transport**, where direct electrification remains technically and economically challenging.

Due to its outstanding renewable energy potential, vast platinum group metal (PGM) resources and experience in hydrogen-related industries, South Africa is regarded as a future key supplier of green hydrogen and PtX products. The development of green hydrogen and PtX economy offers opportunities for export diversification, domestic industrial transformation, economic development and job creation, while supporting a just energy transition.

As part of the International Power-to-X Hub, the project “PtX Pathways – Enabling Long-Term Decarbonisation Pathways through Power-to-X” supports the development of a sustainable PtX economy in South Africa, as well as in Morocco and Argentina. In South Africa, the project places a particular focus on enabling sustainable aviation fuels (SAF) and maritime e-fuels, supporting regulatory frameworks, industrial transformation pathways and investment conditions to advance the decarbonisation of these transport sectors.

The project is funded under the **International Climate Initiative (IKI) of the German Federal Government** and is implemented in close cooperation with South African partners. Within GIZ South Africa, the project cooperates closely with hydrogen and broader energy transition programmes of the Energy Cluster.

#### **A. TASKS AND RESPONSIBILITIES:**

The Technical Advisor supports the implementation of the PtX Hub South Africa project and contributes to advancing Power-to-X pathways for the decarbonisation of industry and transport sectors, with a particular focus on aviation and maritime transport.

Key tasks and responsibilities include:

- ❖ Support the overall implementation of project activities, including planning, coordination and monitoring of work packages in line with project objectives and indicators.
- ❖ Develop and support concepts for the production and use of PtX products in South Africa, particularly sustainable aviation fuels (SAF) and maritime e-fuels.
- ❖ Provide advisory services to project partners in government, the private sector and civil society on PtX development pathways and industrial transformation.
- ❖ Prepare and support strategic cooperation with companies in the power-to-liquid and power-to-gas sectors to advance sustainable PtX concepts and pilot initiatives.
- ❖ Coordinate and manage inputs from national and international consultancies, including the preparation of Terms of Reference (ToR) and supervision of assignments.
- ❖ Contribute to the preparation and support of national and international tenders, financing agreements and partnership arrangements.
- ❖ Facilitate stakeholder cooperation and support dialogue platforms, steering structures and industry exchange formats.
- ❖ Conceptualise and implement knowledge management and communication activities, including workshops, seminars, study tours and expert exchanges.
- ❖ Contribute to the continuous development of project activities and identify opportunities to strengthen industrial defossilisation pathways in South Africa.

**Note that the list is not exhaustive and will be further developed**

## B. REQUIRED QUALIFICATIONS, COMPETENCIES AND EXPERIENCES

### Qualifications:

- ❖ Relevant university degree (master's level or equivalent) in engineering, natural sciences, energy systems, environmental sciences, economics or related fields.

### Professional Experience:

- ❖ At least 4 years of relevant professional experience in hydrogen/PtX, maritime or aviation sectors, petrochemical industry, industrial decarbonisation, energy policy or energy project development.
- ❖ Proven technical knowledge in at least one of the above-mentioned fields, demonstrated through relevant professional experience or academic specialisation.
- ❖ Demonstrated experience in project and process management, including coordination of multi-stakeholder activities.
- ❖ Familiarity with the South African energy and industrial policy landscape; knowledge of renewable energy and related regulatory frameworks is an advantage.
- ❖ Understanding of the role of PtX technologies in defossilising hard-to-abate sectors, particularly aviation and maritime transport.
- ❖ Strong interest in green hydrogen, PtX and industrial transformation pathways, with a willingness to continuously deepen technical and regulatory knowledge.
- ❖ Ability to work effectively in a multi-disciplinary, diverse and complex environment.
- ❖ Ability to work independently and as part of a team in a structured and methodical manner.
- ❖ Proficiency in relevant computer applications (e.g. Microsoft Office, Microsoft Teams).
- ❖ Excellent written and verbal communication skills in English.

## C. ADDITIONAL INFORMATION

- ❖ The position will be based at the **GIZ offices in Hatfield, Pretoria**.
- ❖ Willingness to undertake domestic and international duty travel is required.
- ❖ **Applicants must hold a valid work permit for South Africa and either possess, or be eligible to obtain, a passport for international travel.**
- ❖ At GIZ, you will be offered global network and an atmosphere that is characterised by diversity, respect, and genuine equal opportunities. Gender equality promotion is a matter of course for us.
- ❖ GIZ is a signatory of the Diversity Charter. Recognition, appreciation and inclusion of diversity in the company are important to us. All employees shall be valued - regardless

of gender and gender identity, nationality, ethnic origin, religion or belief, disability, social background, age or sexual orientation.

- ❖ GIZ would like to increase the proportion of employees with disabilities. Applications from people with disabilities are most welcome.

#### **D. APPLICATION PROCESS**

**GIZ will only assess applications which meet the following criteria:**

Suitable candidates should apply by submitting a

- ❖ **Cover Letter/Motivation Letter** in PDF format (**max. 1 page**) clearly detailing why they should be the preferred candidate and the value they will bring to work of the PtX Hub South Africa project.
- ❖ A detailed CV in PDF format (**max. 4 pages**), **indicating their nationality**.
- ❖ Proof of eligibility to work in South Africa (copy of SA ID).

**Please quote the job title in the email subject line as follows: “Application for Technical Advisor–Power-to-X & Green Hydrogen (PtX Hub South Africa)”** for the attention of Head of Human Resource.

- **Internal Applicants ONLY** should submit application to: [recruit-pretoria@giz.de](mailto:recruit-pretoria@giz.de) with the job title subject line “**Application for Technical Advisor Power-to-X & Green Hydrogen (PtX Hub South Africa)**” for the attention of Head of Human Resources – Dorothey Taaibosch.

**NB:** Applications from external applicants submitted to [recruit-pretoria@giz.de](mailto:recruit-pretoria@giz.de) **will not be considered.**

- **External Applicants ONLY** must submit their applications by following this link <https://giz.simplify.hr/vacancy/kvakco> to be considered.

Closing date for applications: **04<sup>th</sup> of March 2025**

**Applications without a motivational letter will not be considered!**

**Only shortlisted candidates who meet the above requirements will be contacted!!**