



Catalysing  
 Green Hydrogen  
 Solutions on  
 a Global Scale

## Leveraging international PtX partnerships

In order to reach the goals of the Paris Agreement, significant and rapid emission reductions are needed in all sectors of the global economy. Sustainable, climate-neutral e-fuels and feedstocks based on green hydrogen (Power to X) can contribute to decarbonising a range of industries, including chemicals, fertilisers, steel and cement, as well as parts of the transport sector that cannot directly use renewable electricity.

PtX offers a tremendous potential for our partner countries. Favorable conditions for renewable energy production lead to new business opportunities. Furthermore, the uptake of PtX can contribute to achieving sustainability goals (SDGs) on climate, energy and jobs.

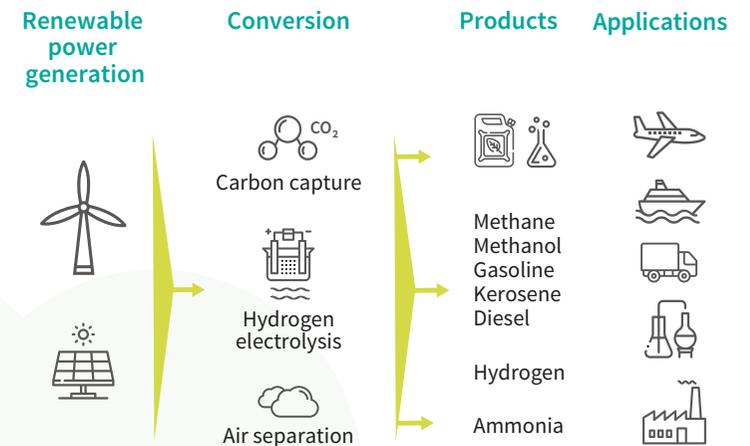
The international PtX Hub aims to leverage these opportunities together with our partner countries by empowering decision makers, providing a network, generating and distributing knowledge and stimulating exchange.

The PtX Hub is located in Berlin, a centre for technological innovation, creativity and political leadership.

## Power to X: How does it work?

Power to X (PtX) describes the conversion of electric power to other forms of energy, represented by the 'X' in the name. First, green hydrogen is produced from water. Then, carbon dioxide or nitrogen is used to transform the hydrogen into either a gas or liquid to serve as fuel or feedstock.

The conversion of renewable energy into synthetic fuels will finally allow the use of green energy in maritime transport and aviation as well as in certain areas of the chemicals sector. In this way, PtX can make a key contribution to international climate protection and to the reduction of fossil fuel dependence.



## We ensure sustainability

The PtX Hub focuses on actively shaping the discussion surrounding the sustainable production and the climate-effective allocation of green hydrogen and PtX products. Agreed sustainability standards are necessary for a fully climate-neutral, as well as socially and ecologically sound PtX production. The PtX Hub ensures the development of sustainability criteria to secure the production of certified sustainable PtX products and reliable long-term conditions for investment.

## We provide a network

Only if countries agree on technology pathways and harmonise regulation, the full transformation to a decarbonised economy is feasible. The PtX Hub promotes partnerships, initiatives and processes for the acquisition of information and the dissemination of knowledge. It is creating contacts and empowering decision-makers from politics, business, science and civil society.

## We foster market development

To ensure a successful Power to X adoption, we aim to prepare the market uptake of PtX business cases on a global scale. We identify market potentials and collaborate with our partners to leverage existing opportunities. We identify global funding and match it with projects. We are working with our global network to develop capacities in partner countries by providing training courses and study visits.

## Key activities of the PtX Hub

### Integrate sustainable PtX into comprehensive climate strategies:

- Integrate sustainability criteria into existing policy frameworks
- Initiate holistic policy dialogues with decision-makers
- Advise national governments on PtX in decarbonisation strategies

### Tap PtX potential in partner countries:

- Identify business cases
- Create feasibility studies
- Identify funding opportunities

### Foster international exchange:

- Organise network meetings and regional dialogues
- Introduce joint initiatives on PtX and sustainability to international processes
- Establish the *Women in Green Hydrogen* network

### Build capacities in partner countries by generating knowledge:

- Analyse country potentials as well as technology and market development
- Conduct training sessions for capacity building in partner countries
- Organise study tours

## PtX requires sustainability rules

For PtX production to be truly climate-neutral as well as socially and environmentally beneficial, ambitious and sustainability rules should apply from the start. Such rules will also ensure reliable long-term conditions for investment. These standards need to take into consideration issues in the fields of ecology, the economy, society and governance.

## Our funders and partners

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On behalf of:



Federal Ministry  
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