

Press release

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Karliczek: Germany and Namibia form partnership for green hydrogen

Federal Research Minister Karliczek and Director General Kandjoze of the National Planning Commission sign Joint Communiqué of Intent to establish a German-Namibian hydrogen partnership

Germany's Federal Research Minister Anja Karliczek and Director General Obeth M. Kandjoze of Namibia's National Planning Commission agreed to establish a hydrogen partnership between Germany and Namibia and signed a Joint Communiqué of Intent (JCoI) in Windhoek and Berlin today.

Remarking on Namibia's and Germany's cooperation in the field of green hydrogen technology, Federal Research Minister Anja Karliczek said:

"The global race for the best hydrogen technologies and the best sites for hydrogen production is already on. We believe that Namibia has an excellent chance of succeeding in this competition. We want to take this chance together. I am proud that Germany is the first country to officially form a hydrogen partnership with Namibia. The Federal Research Ministry will provide up to 40 million euros in funding from the economic stimulus package for cooperation within the framework of this partnership.

"Namibia has enormous potential for scaling up a green hydrogen industry. It has a lot of vast unused space. High wind speeds in Namibia mean that the generation of wind power is particularly profitable. Solar power harbours an even greater potential thanks to over 3,500 hours of sunshine per year. This is almost twice as much as Germany has to offer. We therefore think that one kilogramme of hydrogen from Namibia will eventually cost between €1.50 and €2.00. This would be the most competitive price in the world which would be a huge locational advantage for hydrogen 'made in Namibia'. The National Hydrogen Council estimates that hydrogen demand of German industry alone (excluding refineries) will amount to 1.7 billion tons per year – and this demand is likely to grow further. This estimate underlines that we need large amounts of hydrogen and we need it quickly and at low cost. Namibia can provide both.

"The latest IPCC report is a stark reminder that we must pick up speed when it comes to protecting our climate. The countries that are particularly hard hit by the effects of global warming are those that have virtually no carbon emissions, including Namibia. However, these countries also have a lot of sunshine and wind – both of which are key to generating renewable energy and taking

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advantage of green hydrogen to cut emissions. Namibia was one of the first countries in Southern Africa to recognize the potential of a green hydrogen industry and will present its own hydrogen strategy in November. Germany will play a central role in its implementation."

Dr Stefan Kaufmann, Innovation Commissioner for Green Hydrogen and Member of the Bundestag, added:

"A hydrogen-based economy will be a success if we take joint action at the international level to unlock the potential of hydrogen as an energy carrier of the future. Only then will we be able to deliver on the climate goals of the Paris Agreement. This is why international cooperation in research and innovation for green hydrogen technologies is such a central pillar of the German Government's National Hydrogen Strategy.

"Namibia and Germany enjoy close ties. We are aware of our shared history. Together, we want to take powerful action to shape our future. This is why I travelled to Namibia shortly after being appointed by Federal Minister Anja Karliczek. I am now all the more delighted that our trusting and forward-looking talks then have resulted in today's signature of our Joint Communiqué of Intent. We are combining our strengths to advance the green hydrogen economy to our mutual benefit.

"To be more specific, we are planning to carry out a feasibility study and use its results to implement joint pilot projects and to strengthen capacity building for training skilled professionals on the ground. The feasibility study is aimed at exploring the potential of a green hydrogen industry, including innovative seawater desalination technologies, in Namibia as well as possibilities of hydrogen export to Germany. Based on this study, we will use pilot projects to test schemes for green hydrogen production in Namibia and for hydrogen transport. We will take into account local needs by placing a particular focus on seawater desalination. At the same time, we will also look into the opportunities offered by innovative seawater electrolysis where green hydrogen is generated directly from seawater. Exchange programmes for students and experts as well as scholarships for Namibian students will help us to promote the generation and exchange of expert knowledge. Because even the best technology is worth nothing without skilled people!"

Obeth M. Kandjoze, Director General of the National Planning Commission (NPC) and chairperson of the Green Hydrogen Council (GHC) of Namibia, underlined:

"This administration knows too well, that the work of combatting climate change is not work that starts in 2030, nor in 2050, its work that starts today,



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the 25th of August 2021, the day the German Government and the Namibian Government joined hands and said that today WE BUILD. We build a future that would reflect the aspirations of our people, the visionary leadership of this Nation knows that a planet that is 1.5C warmer, results in a planet that experiences events that used to occur once every 50 years becoming 8.6 times more likely and at 2 degrees these events will occur 13.9 times more frequently. That is not a home we want to pass on to our children.

"Namibia is particularly susceptible to climate change, two thirds of our existing installed generation capacity relies on hydroelectricity, which in turn relies on rain and the flowing rivers at Ruacana. According to the latest labor force survey, 23% of our eligible workers depend on Agriculture - prolonged droughts such as the one we recently experienced area harbinger of catastrophic news for many of our fellow citizens. We have to take ACTION today!

"With the above daunting challenge in mind, the leadership of our two countries has declared an intent to deploy resources to provide scholarships for young Namibian scientists and engineers to hone their skills with fellow German and indeed global like-minded peers as they seek to find a breakthrough in related fields. We have resolved to provide funding to feasibility studies and pilot plants that will deploy cutting edge technology to bring us closer to economically viable solutions that will unlock the potential defined by our scientists."

The NPC is a central planning commission in the Office of the President of the Republic of Namibia, Dr Hage G. Geingob. It is responsible for all issues related to paving the way to the sustainable development of Namibia.

Background:

The Federal Ministry of Education and Research (BMBF) is providing funding for the identification of suitable sites for green hydrogen production in Africa within the framework of the Atlas of Green Hydrogen Generation Potentials in Africa. Preliminary calculations show that Namibia offers ideal conditions for the generation of wind and solar energy and thus for the production of green hydrogen.

However, Namibia is also the most arid country in sub-Saharan Africa. If we can successfully demonstrate solutions for seawater desalination and hydrogen production under such extreme conditions, we could provide a blueprint for other regions and lay the basis for the global scale-up of the hydrogen economy. This is why seawater desalination is at the heart of German-Namibian cooperation.



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Previous analyses have shown that desalination only has a very minor effect on the price of hydrogen as it accounts for only about 1% of production costs. We expect costs in Namibia to be equally low.

Namibia intends to be able to export green hydrogen even before 2025. Due to the country's low population density and moderate population growth, Namibia will be able to meet its own demand for renewable energy and green hydrogen quickly and thus cross the export threshold relatively fast.

Further information:

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