

Green hydrogen as a driver of transformation in Sub-Saharan Africa

Anja Brumme¹, Alexander Golub², Anil Markandya³, Dirk Rübbelke¹

¹TU Bergakademie Freiberg, Freiberg, Germany. ²American University, Washington, DC, United States. ³BC3 Basque Centre for Climate Change, Leioa, Spain

Extended Abstract

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Abstract Summary

Green hydrogen could become a driver of the technological transformation of a small open economy well integrated into the global energy market. It can foster the sustainable transition of the economy by replacing CO₂-intensive technologies, e.g., in the transport sector, water cleaning facilities, and the steel industry. As the renewable energy potential is particularly high in Sub-Saharan Africa, it appears to be promising to install green hydrogen production facilities there, where they can contribute to “greening” the domestic economy while excess hydrogen production can be exported to generate revenue. In this contribution we investigate the example of Cameroon and demonstrate that the establishment of a green hydrogen sector can contribute to sustainable development where economic development goes hand in hand with environmentally friendly technological change. An essential precondition is education because the accumulation of human capital is necessary for implementing and distributing new, innovative technologies, as well as for building market institutions to lower the cost of capital and attract foreign direct investment to support the transformation of the Cameroonian economy.

Presenting Author Biography

Anja Brumme is a researcher at the Chair of Environmental and Resource Economics at TU Bergakademie Freiberg. She has a PhD in Economics. Her current research focuses on energy, the environment, natural resources and climate change.