International Partnership
for Hydrogen and Fuel Cells
in the Economy

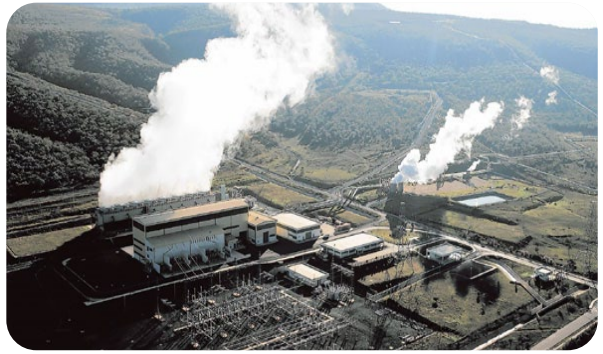
Kenya Update

45th IPHE Steering Committee Meeting

13 – 14 May 2026

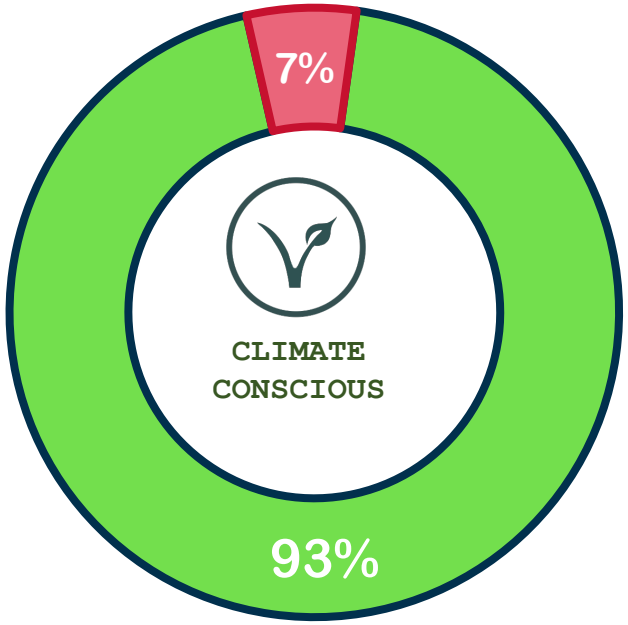
Berlin, Germany

Electricity Generation in Kenya



49% GEOTHERMAL

30% HYDRO

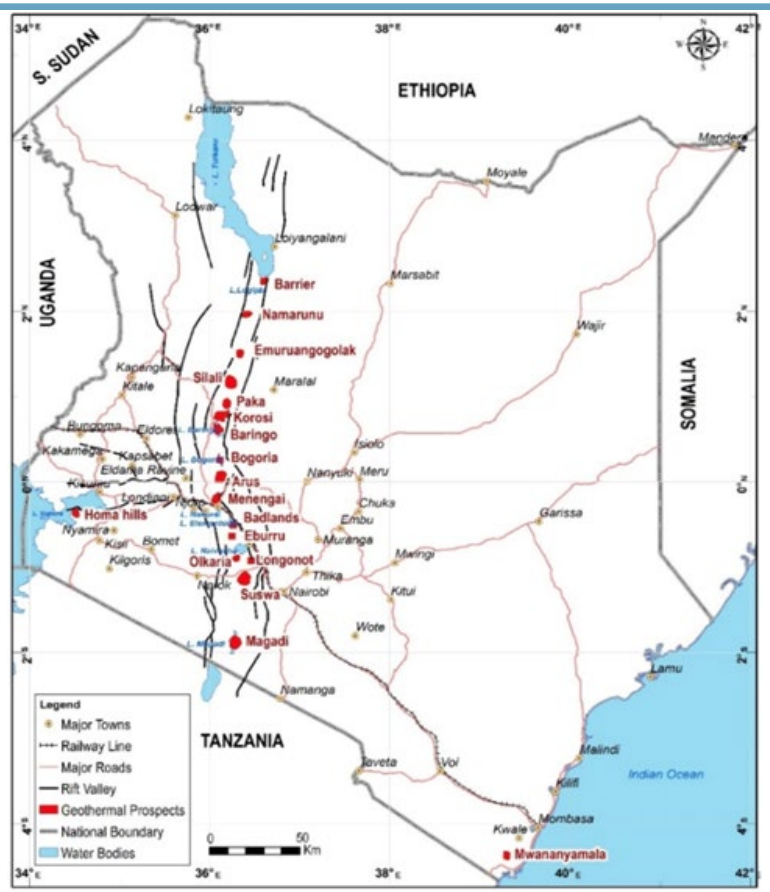


Kenya's Grid is GREEN

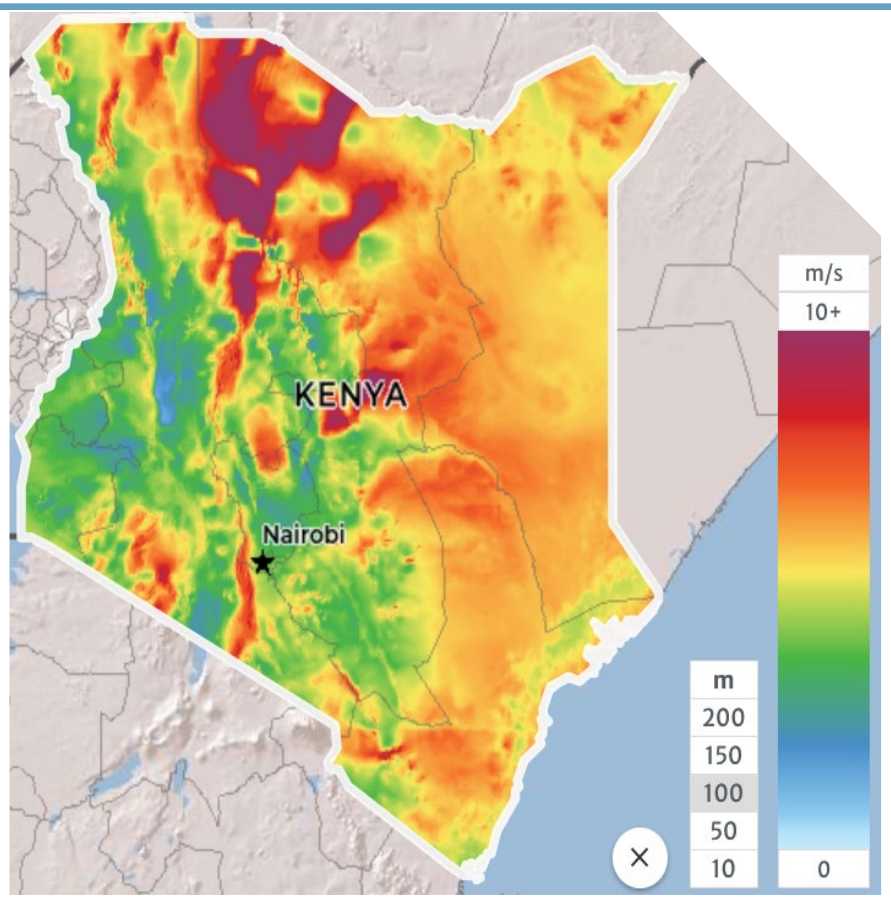
2% SOLAR & IMPORT

12% WIND

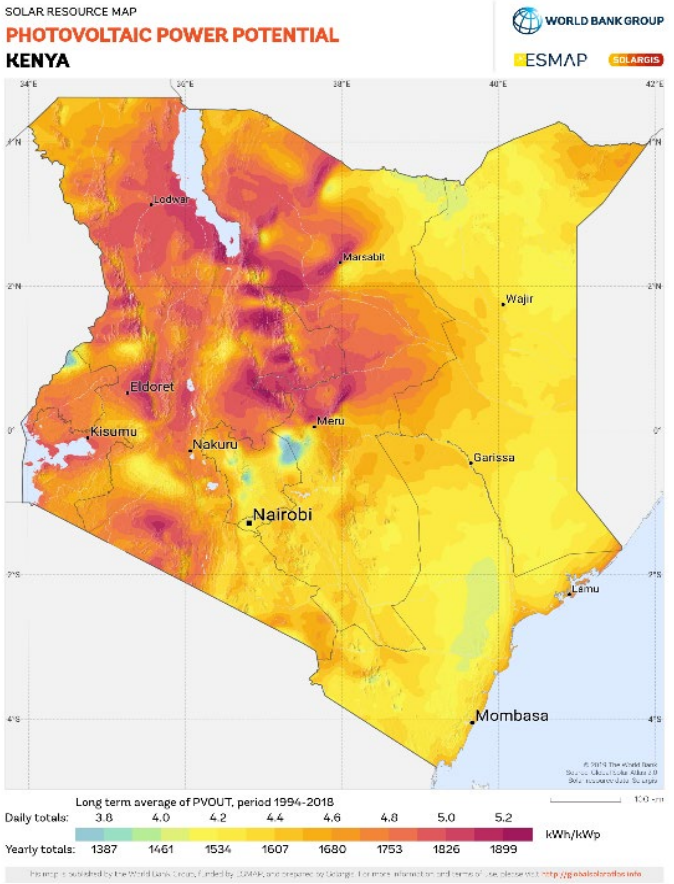
Renewable Energy Potential



Geothermal potential of 10 GWe.

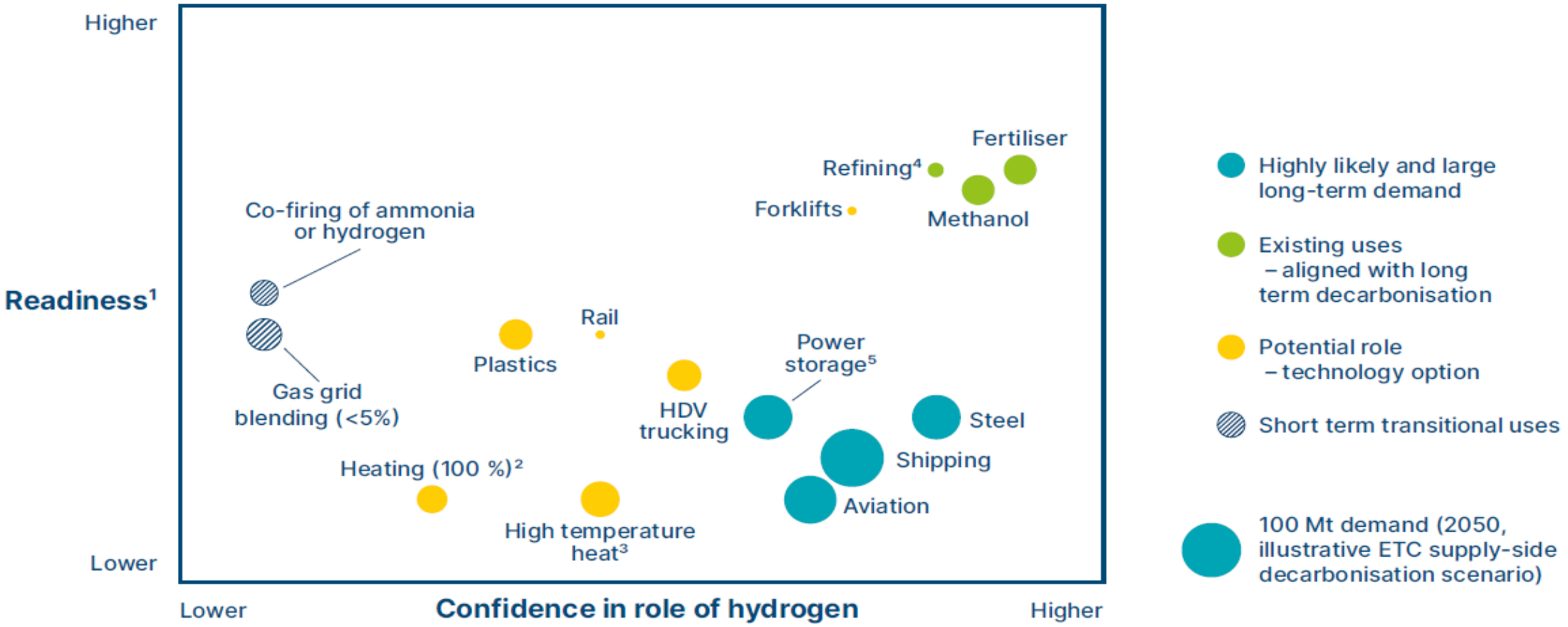


Significant wind potential that can reach 140 GW
High Capacity Factor (lake Turkana ≈60%).



Solar yield that can reach 1,700-1,800 kWh/kWp

Potential Green Hydrogen use cases

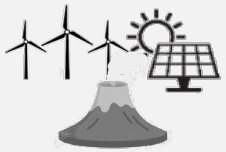
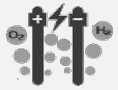


NOTES: [1] Readiness refers to a combined metric of technical readiness for clean hydrogen use, economic competitiveness and ease of sector to use clean hydrogen. [2] 'Heating (100%)' refers to building heating with hydrogen boilers via hydrogen distribution grid, [3] 'High temperature heat' refers to industrial heat processes above ca. 800°C [4] Current hydrogen use in refining industry is higher due to greater oil consumption. [5] Long-term energy storage for the power system.

Potential Green Hydrogen use cases

2023 - 2027	2028 - 2032	2032 and beyond
Domestic market development	**Domestic market growth**	**Domestic and export market growth**

• **Develop policy and regulatory instruments**
• **First commercial-scale green hydrogen project(s) operational**
  • 20% of imported nitrogen fertilisers produced locally (≈ 100,000 tonnes)
  • 100% import substitution of methanol (> 5,000 tonnes/year)
• **Establish cooperations with international RTD centres**
	By 2030
	• **50% import substitution of nitrogen fertilisers (300,000 - 400,000 tonnes/year)**
	• **Pilot projects in other sectors, incl. baseload power and transport**
	• **Production of green shipping fuels**
	• **Explore regional export opportunities for green fertilisers**
		• Roll-out further green hydrogen applications, like transport or green steel
		• Expand existing and explore new export opportunities for green hydrogen products “Made in Kenya”

 **≈ 150 MW new dedicated renewable capacity for green hydrogen**	 **≈ 350-450 MW additional renewable capacity for green hydrogen**	
 **≈ 100 MW of electrolyzer capacity installed**	 **≈ 150-250 MW electrolyzer capacity installed**	
	At least 1 billion USD direct investments **At least 25,000 direct jobs created** **At least 250,000 tonnes CO_2 avoided per year**	

Announcements / New Initiatives *KENYA*

- **Investments/Funding/Policies/Initiatives:**
  - Review of the Green Hydrogen Strategy and roadmap
  - COMESA approved a regional Green Hydrogen Roadmap and Action Plan in April 2026, including plans to establish a regional Centre of Excellence on Green Hydrogen to drive skills development, innovation, and technology deployment.

- **New Research & Development, Demonstration and/or Deployment Activities:**
  - KENGEN partnership with state of Bavaria to put up a demonstration lab in Kenya

- **Key Collaborations**
  - Kenya and Germany through GIZ have a long standing agreement to support the development of green hydrogen in Kenya through several programs.

Examples of Lessons Learned and Impact *KENYA*

Program initiative, policy, regulation or mandate	Lessons Learned/Outcomes
Green Hydrogen and its Derivatives Guidelines	• Defining the **sustainability** criteria • Streamlining the **approval** process • Promote **safety** in production and handling of GH2 and its derivatives • Create **employment** opportunities • Providing a **monitoring framework** for GH2 projects in the country
Established a high-level "**green hydrogen program coordination committee and secretariat**	• Operate as a **"one-stop-shop"** for approval of Green Hydrogen Projects
National Energy Policy 2025	• Include Green Hydrogen development

KENYA– Profile June 2025

Status of Deployments

Kenya is at the **advanced early-stage** green hydrogen **project development** for **fertilizer**, **industry**, and **export** markets.

Leading Government Initiatives

- Kenya aims to achieve near-100% renewable electricity generation including geothermal
- Expand **regional and international** cooperation and partnerships on green hydrogen

Deployment Goals

- Scale **commercial green hydrogen production** before 2030
- **Secretariat** evaluated and approved **12 Projects,** with a combined value of **over 5 GWe.**

Goals or Focus Areas

- Establish **local and international partnerships** to scale up **training and capacity building.**
- Promote **green industrialization** using low-cost renewable energy and **green hydrogen.**
- Position Kenya as a **regional clean energy** and green **hydrogen hub**.

Funding

- Develop a green hydrogen strategy **and roadmap resource mobilization** plan
  - **Germany** committed support for a **100 MW green hydrogen** plant
  - **Green Climate Fund** approved funds for climate and clean energy programs.

Thank you

International Partnership
for Hydrogen and Fuel Cells
in the Economy