Roland Berger

Jul 28, 2022 08:35 CEST

MEA Energy Transition Readiness Index highlights the region's potential as an exporter of green hydrogen

Study Download

- The Middle East and Africa are likely to become a hotspot for sustainable energy – but increased regulation and targeted investments are crucial
- Energy transition progress in the Middle East and Africa scored 26% on the Readiness Index
- Green hydrogen seen as key industry to accelerate energy transition

Munich, July 2022: Siemens Energy and global management consultancy Roland Berger launched on Thursday the Energy Transition Readiness Index for the Middle East and Africa region. Responses from around 400 energy industry experts, who attended the MEA Energy Week conference last month, indicate that the region is well positioned to become a major future supplier of sustainable energy to global markets but will require stabilizing regulations, significant investments, and a substantial increase in collaboration to realize its potential.

Despite its strong prospects to become a hotspot for sustainable energy, the region scored only 26% on the Readiness Index. Experts and decision makers from the Middle East and Africa from across the energy sector were asked to give their expert opinion on progress on 11 energy priorities. Based on an aggregate of participants' responses, Siemens Energy and conference knowledge partner Roland Berger launched the index which describes the perceived energy transition readiness on a scale of 0 to 100%. The survey yielded valuable data and insights that will be used to enhance key strategies

for the energy transition in the region.

The conference participants view green hydrogen's potential aligned with the region's capabilities – in particular due to the availability of abundant and low-cost renewables, existing export infrastructure and financing resources.

The report also highlighted a worrying gap between perceptions and reality when it comes to progress on the energy transition. Conference participants on average estimated that the region's emissions fell by 23% between 2005 and today, with only around one-third correctly identifying that emissions have not fallen at all. In fact, emissions grew by around 50% between 2005 and 2021.

In the Middle East this increase was driven by heavy reliance on oil and gas and high standards of living. In Africa the drivers include population growth, underdeveloped infrastructure and limited options for financing sustainable solutions.

The region makes a relatively modest contribution to global emissions, with 7% of global CO2 emissions stemming from the Middle East and just 4% attributable to Africa. However, it suffers disproportionately from the consequences of climate change in the form of heatwaves and severe weather events.

The gap between perceptions and reality filtered through to participants' expectations for future emissions cutting. The survey found that participants were expecting emissions to fall to 39% of their 2005 level by 2030; a widely optimistic view given the little that has been achieved so far.

"The disparity between the reality of the energy transition and perception in the Middle East and Africa highlights the eagerness of governments and companies to portray their successes when it comes to decarbonization," said Karim Amin, Executive Board Member, Siemens Energy. "This excitement is a good thing and shows that companies and governments are interested but we need to make sure that it is backed up by real action. This should serve as a reality check. We still have a long way to go to decarbonize our energy systems," he added.

Participants were clear that emissions need to fall in the region across the

board, not just in the energy sector but also in areas such as construction, industry and transportation. Decarbonization efforts must be stepped up in order for the goal of carbon neutrality by 2050 to be realistic.

The conference highlighted major opportunities in the large-scale export of green hydrogen as a potential way forward. Green hydrogen and its derivatives were a major topic of discussion during the conference – especially its enormous potential for the Middle East.

The United Arab Emirates has already announced its ambition to capture 25% of the global market for hydrogen, while Saudi Arabia aims to become the world's No. 1 supplier. A total of 46 green hydrogen projects are already underway in the Middle East and Africa, with Oman (11 projects), the United Arab Emirates (9) and Egypt (7) leading the way.

“The Middle East can play a key role in addressing the new priorities of Europe’s energy transition, through the export of green hydrogen and other potential mega projects focusing on cross-continent transmission of sustainable energy” said Pierre Samaties, Partner at global management consultancy Roland Berger.

Hydrogen could also be the key to decarbonizing the region's economies, which are currently strongly focused on fossil fuels, and to decreasing today's reliance on income from fossil fuels, especially in countries such as Saudi Arabia, the United Arab Emirates and Oman.

The Middle East and Africa Energy Week, held from June 27-29, 2022, is part of a series of conferences taking place in different regions globally. During the event, 2,000+ participants actively engaged in discussions, opinion polls and questions. They were also surveyed on the importance of major energy priorities and the progress made towards the energy transition.

---

that focuses on the whole value-creation cycle. By working in interdisciplinary teams across all relevant sectors and business functions, Roland Berger offers the best expertise worldwide for successfully overcoming the profound challenges of our age now and in the future.

Siemens Energy is one of the world's leading energy technology companies. The company works with its customers and partners on energy systems for the future, thus supporting the transition to a more sustainable world. With its portfolio of products, solutions and services, Siemens Energy covers almost the entire energy value chain – from power generation and transmission to storage. The portfolio includes conventional and renewable energy technology, such as gas and steam turbines, hybrid power plants operated with hydrogen, and power generators and transformers. More than 50 percent of the portfolio has already been decarbonized. A majority stake in the listed company Siemens Gamesa Renewable Energy (SGRE) makes Siemens Energy a global market leader for renewable energies. An estimated one-sixth of the electricity generated worldwide is based on technologies from Siemens Energy. Siemens Energy employs around 91,000 people worldwide in more than 90 countries and generated revenue of €28.5 billion in fiscal year 2021.

Contacts

Maximilian Mittereder
Press Contact
PRESS CONTACT GLOBAL PR
maximilian.mittereder@rolandberger.com
+49 89 9230 8180

Silvia Constanze Zösch
Press Contact
PRESS CONTACT GLOBAL PR
silvia.zoesch@rolandberger.com
+49 89 9230 8750

Kerstin Hoppe
Press Contact
Head of Global Marketing and Communications
kerstin.hoppe@rolandberger.com
+49 89 9230 8575