



# Does the UAE Have a Hydrogen Strategy?

---

The publication of the Energy Strategy 2050 in 2017 outlined the Emirati government's goal of making sure that 44% of the energy consumed in the country came from renewable sources by 2050. While solar power farms can provide a significant percentage of that total, [hydrogen is also viewed as the future of clean energy](#) in the UAE.

Despite the enthusiasm for hydrogen in the country, however, the government has not, as yet, published a cohesive Hydrogen Strategy, nor has any individual emirate done the same. Nonetheless, there have been several encouraging developments, partnerships and projects which attest to the huge potential that the hydrogen industry in the UAE currently holds.

## Projects underway

One of the most exciting hydrogen developments that is already in place in the UAE is the Green Hydrogen project at the Mohammed bin Rashid al Maktoum Solar Park in Dubai. Launched last year, the project was a collaboration between the Dubai Electricity & Water Authority (DEWA) and Siemens Energy and is the first hydrogen-generating facility that is powered by solar energy in the whole of the Middle East and North Africa (MENA) region.

Elsewhere, there are also plans afoot to investigate the use of green hydrogen for the transportation sector. A joint effort between Khalifa University, the Abu Dhabi Department of Energy, Etihad Airways, Masdar (the renewable energy division of the UAE sovereign wealth fund) and several international actors, the project will initially solve the problems of using green hydrogen in road-based vehicles. However, it will later investigate the possibility of converting it into kerosene for use in the aviation and maritime industries.

## Strategies launched

Although there is no official Hydrogen Strategy in the UAE, the government has already made its intentions abundantly clear with the publication of the Energy Strategy 2050 five years ago. The aforementioned hydrogen projects are expected to form a key cornerstone of achieving the goals outlined above.

Meanwhile, the UAE has also entered into a partnership with Germany. Given that Germany is keen to wean itself off fossil fuels and views hydrogen as an ideal



replacement energy source, it could pose the perfect market for Emirati hydrogen. On the other hand, the existing infrastructure and expertise found in the UAE, alongside the affordability of solar resources and the abundance of space, mean that the country is well-placed to become a global leader in green hydrogen production.

## **Programmes and partnerships**

Finally, there are a number of initiatives, partnerships and programmes already in place that are intended to further the country's capacity and capability with regard to hydrogen production in the future. The Abu Dhabi Hydrogen Alliance, which is a joint venture between ADNOC, Mubadala and ADQ (all of which are state-owned institutions) is a key case in point.

By uniting the traditional energy generation sector of fossil fuel extraction and processing (ADNOC) with forward-thinking green energy companies (Mubadala and ADQ), the Alliance will benefit from the unique experience and intellectual abilities of each party. Together, they are capable of implementing a roadmap for the rollout of green hydrogen which can fully encompass every stage of its lifecycle.