



How Much Carbon Does ADNOC Capture?

The Abu Dhabi National Oil Company (ADNOC), which is the state-owned oil company of the UAE, currently boasts a capacity of 800,000 tonnes of carbon from its carbon capture utilisation and storage (CCUS) infrastructure. However, the firm has announced big plans to ramp up its efforts in the coming years.

In fact, ADNOC has outlined its intention to increase its CCUS capacity by more than six times in the next eight years, reaching a total capacity of five million tonnes by 2030. As part of that ambitious programme, ADNOC has signed an agreement with the French industry major TotalEnergies, with the pair planning to collaborate on CCUS and low-carbon projects going forwards.

Decarbonising a nation

Like many of the oil-rich nations which surround it, the UAE has built vast stores of wealth by extracting, processing and exporting the crude petroleum and gas found within its borders. However, the third biggest oil producer in OPEC is acutely aware of the need to decarbonise both its energy and its economic portfolio in the coming years.

That's because widespread concerns about the contribution of the fossil fuel industry to the issues of climate change and global warming have prompted governments, corporations and individuals to consider their carbon footprint. As a result, ADNOC currently captures some 800,000 tonnes of CO₂ from the effluent streams of its gas plants – but it is aiming far higher in the imminent future.

A more than sixfold increase

In order to meet the Emirati government's aim of reaching carbon neutrality by 2050, ADNOC has announced it will seek to ramp up CCUS capacity to five million tonnes by 2030. That's a more than sixfold increase in just eight years, signalling the ambition behind the company's modus operandi going forwards.

As well as being pumped underground into storage vessels, [the carbon captured is also used a fuel source](#) and for materials for the petrochemicals and plastics industries. The partnership with TotalEnergies, who are experts in such technologies, will help ADNOC and the UAE achieve their respective goals.



European ventures

The deal, which was announced last December during French President Emmanuel Macron's visit to the Middle East, marks the first time that TotalEnergies have become involved in the region. However, they're far from newbies to the field of CCUS, with two major developments already underway on their native continent of Europe.

In Norway, for example, the company is working in tandem with Equinor and Shell to develop the Northern Lights project. At its completion, it should provide the capacity to remove 1.5 million tonnes of CO₂e from the effluent streams of cement factories in the country. Meanwhile, the Net Zero Teeside project, in which Equinor and Shell are joined by BP, Eni and Occidental Petroleum as partners, is the first of its kind in the UK.