CONSULUM
GOVERNMENT ADVISORY

State-financing the energy future:

The role of sovereign wealth funds in driving the GCC's energy transition

By Duncan Mayall

From oil and gas to leaders in renewables

The GCC has been known for decades as a global hub for oil and gas. But in recent years, the region's governments have announced a series of ambitious targets to position themselves as a hub for a different type of energy: renewables.

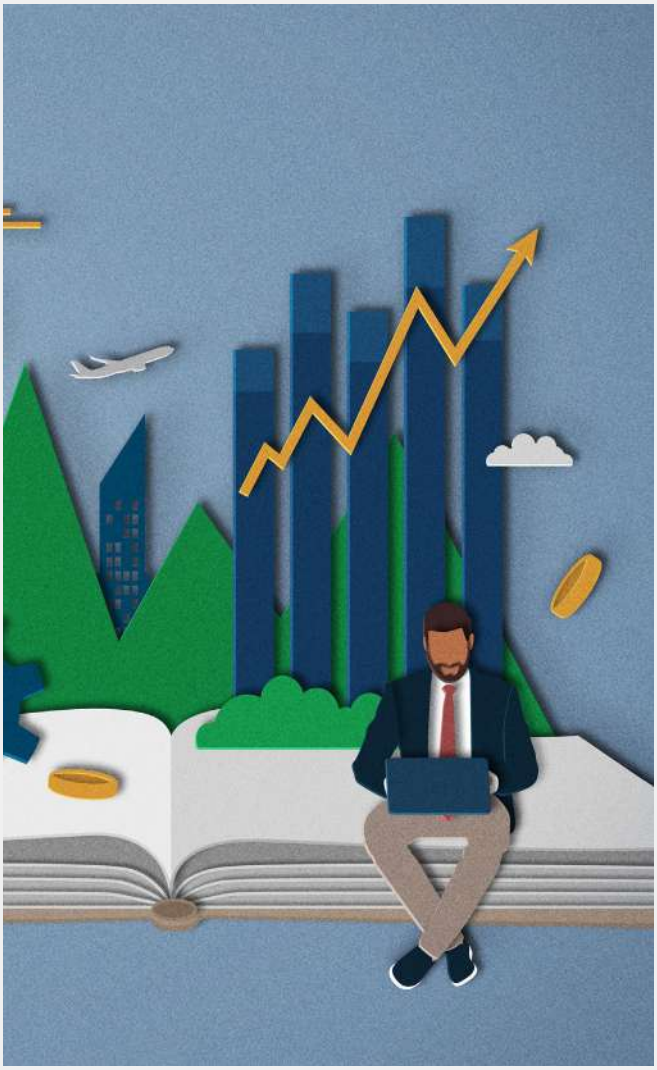
These efforts are being driven by several factors.

First, they are part of a drive to transform domestic energy production to meet the targets they have set for reducing emissions and reaching net zero in the coming decades.

Secondly, countries are looking to future-proof their economies. Recognising the long-term transition taking place from fossil fuel-based energy to greener sources, the GCC is looking to maintain a central position in the global energy sector.

Third, renewable energy has been identified as playing an important role in developing the region's non-oil sector and supporting its broader economic diversification. Renewable energy is both an important sector in its own right and a key enabler of other sectors. This is particularly the case as global emissions are increasingly tracked and taxed, leading investors to respond to these incentives by moving production to locations that can minimize emissions.

> "Recognising the long-term transition taking place to greener sources, the GCC is looking to maintain a central position in the global energy sector."



In order to succeed in developing renewable energy sectors, countries will need to do two key things: they will need to be able to deploy a significant amount of capital; and they will need to attract a new set of technology and skills.

One of the key tools that policymakers within the region have to achieve this are their sovereign wealth funds (SWFs).

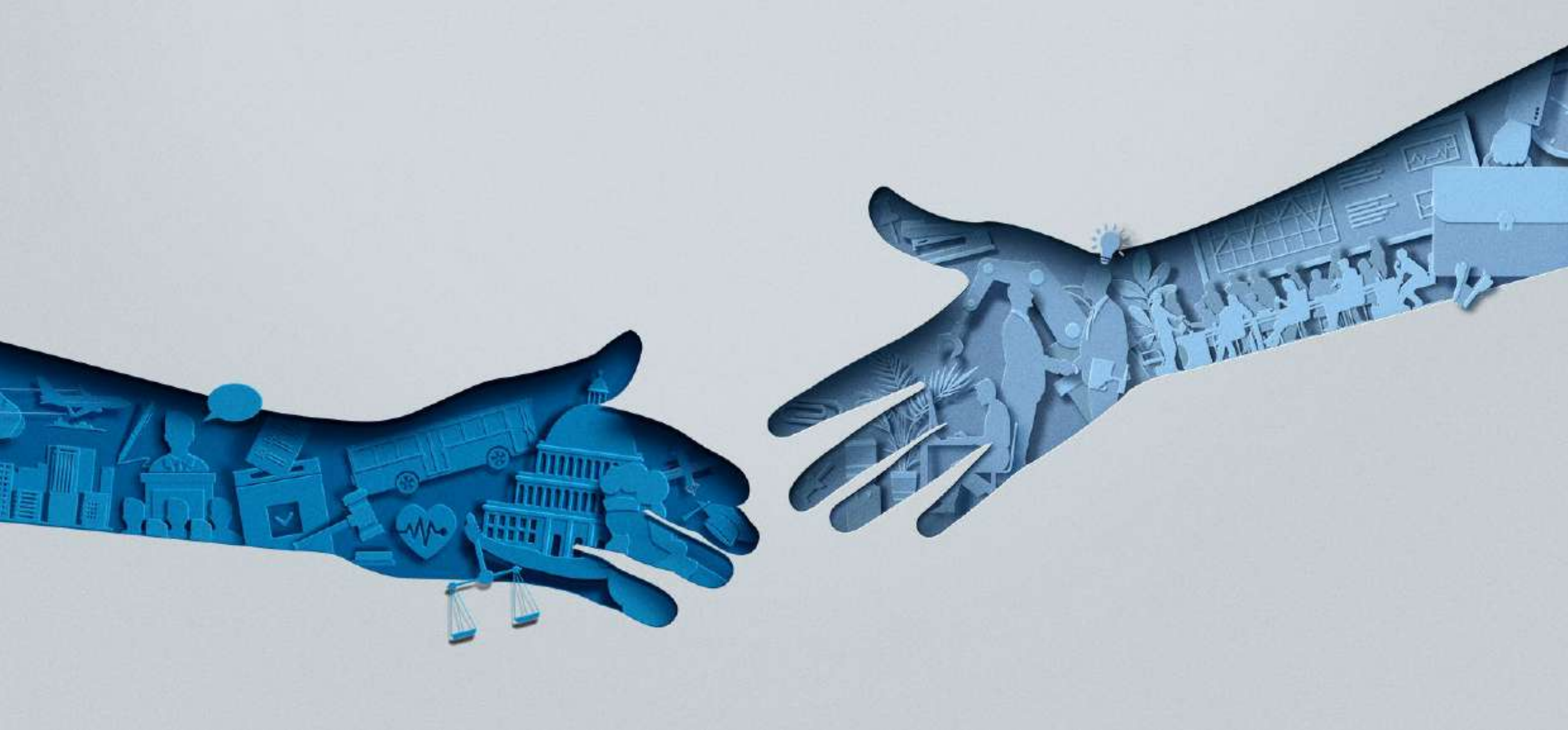
Firstly, these funds possess significant capital. Indeed, according to the International Forum of Sovereign Wealth Funds, SWFs from the GCC manage in excess of $3 trillion.

Secondly, in some cases, these SWFs also have international partnerships that enable them to attract and localize the associated technology and expertise. For example, in July 2024 the Renewable Energy Localization Company, a company fully owned by Saudi Arabia's Public Investment Fund (PIF), entered into joint venture agreements with a series of Chinese companies to localize production of renewable energy components.

As a result, it is perhaps unsurprising that several of the region's SWFs have been given a clear mandate to play a significant role in the energy transition and the development of renewable energy in the GCC. For example, in Saudi Arabia, PIF has been mandated to develop 70% of the capacity targeted under the Kingdom's National Renewable Energy Program.

However, while these trends have been noted in analysis, we are not aware of any research which categorises the ambitions that strategic SWFs in the region have set out or which collates and analyses the investment made to date in a public database.

That is the gap that this paper aims to fill.



Results

1. Significant investment is taking place already.

Seven of the GCC's eleven SWFs have already announced some form of investment in renewable energy (and the author is aware of investment by at least one of the remaining funds which has not been captured in this data set). Investment in the sector is the norm in the region, not the exception. Furthermore, several of these investments are truly significant in terms of the importance of the companies under the ownership of the SWFs or the level of capital being deployed.

For example, as mentioned above, PIF has been mandated to develop 70% of Saudi Arabia's targeted renewable energy capacity. As part of this mandate, the fund has already invested in eight solar power projects in Saudi Arabia to date. These projects are being implemented by Badeel (a wholly owned PIF company) in partnership with ACWA Power and the Saudi Aramco Power Company (in both of which companies PIF owns an equity stake – indirectly in the latter case). These projects aim to produce 13.6 GW of solar PV capacity and represent more than $9 billion of investment.

Likewise, in the UAE, Masdar, the Emirates' leading developer of renewable energy, is now owned by Mubadala, TAQA (an energy company, that is 90% owned by the sovereign wealth fund ADQ) and ADNOC, the national oil company. According to its website, Masdar has now developed renewable energy projects in more than 40 countries across six continents with a combined capacity of more than 31.5GW.

In addition to domestic investment, we have also seen GCC SWFs and their portfolio companies investing in renewable energy internationally. For example, in its recently-released annual review, ADIA (one of the UAE's leading SWFs) notes that its investments 'supported close to 23GW of renewable energy projects, with a further circa 29GW of projects under construction or development.'

"According to the International Forum of Sovereign Wealth Funds, SWFs from the GCC manage in excess of 3$ trillion."

2. Home markets appear to be the focus of SWFs' efforts.

The focus of individual SWFs' investments in renewable energy is largely driven by the nature of their mandate. Funds such as PIF, Mubadala and Mumtalakat, a Bahraini SWF, have a strong domestic focus in their investment strategy, while others such as Abu Dhabi's ADIA invest solely outside of their home market.

> "Funds such as PIF, Mubadala and Mumtalakat have a strong domestic focus in their investment strategy."

Broadly speaking the focus of investment, particularly among disclosed transactions, is towards the domestic economy. This suggests that funds are primarily being deployed to develop renewable energy capacity and associated industries within the domestic economy.

However, this does not mean that there is no other purpose to SWFs' investment in the space. In some instances, there is a clear developmental angle, with GCC funds supporting the growth of renewable energy in poorer economies. Investments by Masdar in Fiji and Mauritania would seem to fall under this category.

Likewise, there are examples of international investments by renewable energy companies within SWFs portfolios which are based on corporate growth opportunities. ACWA Power's announcement of three renewable energy agreements in Uzbekistan in 2022, in addition to a wide spread of international investment across the Middle East, Africa and Central Asia would seem to be examples of this type of investment.

Finally, there are also examples of SWFs investing in renewable purely as an asset class which can deliver attractive financial returns. ADIA's investments, mentioned above, are a clear example of this, as is Mubadala's cornerstone investment in PAG's Asia Pacific renewable energy platform.

3. Subsidiary companies are taking the lead.

While international investment is more mixed, domestic investment in the sector is generally taking place at the portfolio company level.

This is important for two principal reasons.

First, it has enabled co-ordination between SWFs as sources of capital and national oil companies, which have extensive experience in project management and specific expertise in the energy industry. In both Saudi Arabia and the UAE, national energy companies are playing an important role in the development of renewable projects.

Second, it has enabled the involvement of private capital. For example, both TAQA and Saudi Aramco are publicly listed (albeit currently with limited free floats), while ACWA Power's IPO in 2021 was the largest since that of Saudi Aramco and it now has a market capitalisation of $77bn, as of December 2024.

While sovereign capital has remained the main driver in these investments, the use of subsidiary companies enables the involvement of private capital in the ventures.

4. Joint ventures are helping to accelerate technology transfer.

> “It is clear from the GCC states’ public statements that they have the ambition not merely to increase their domestic renewables capacity, but also to develop a local supply chain.”

It is clear from the GCC states' public statements and strategies that in many cases they have the ambition not merely to increase their domestic renewables capacity, but also to develop a local supply chain that will enable them both to capture more of the value from the domestic industry and, potentially, to emerge as leading players in sector exports (something that is particularly evident in the green hydrogen sector).

In developing the renewable energy sector domestically, there appear to be three main approaches. The first, and most direct, are joint ventures established with international firms which are leaders in the field. As mentioned above, the joint ventures signed with Chinese investors by Saudi Arabia's Renewable Energy Localization Company, which is fully owned by PIF, are a clear example of this approach. Likewise, the Oman Investment Authority has signed a memorandum of understanding with Shell Gas & Power Developments.

Second, we see joint ventures in which SWFs, or their portfolio companies, invest in projects internationally, alongside industry leaders. This can create partnerships, experience and networks that can be leveraged when developing the domestic sector. Qatar Investment Authority's joint venture with Enel Green Power aimed at financing, building and operating renewable projects in Sub-Saharan Africa, and Masdar's partnership with DONG Energy and E.ON to develop the London Array project can be partly seen in this light.

Finally, we have also seen examples where SWFs have invested in international funds focused on the renewables sector: for example, ADIA has a large minority LP stake in MGREF1, the world's first offshore wind focused fund. These investments are more likely to be heavily driven by commercial considerations but may also enable funds to develop networks with investors and corporates which can be leveraged in future, potentially supporting efforts to attract capital, expertise and technology to the domestic market.

***

While this paper only captures publicly disclosed investments by the region's sovereign wealth funds, it makes clear that GCC SWFs are already playing an important role in the region's efforts to develop its renewable energy sector.

As significant sources of capital, they are investing, mainly through portfolio companies, in the development of major renewable energy projects across the wind, solar and hydrogen sectors, among others. And as well as providing capital for the development of the sector, they are also helping to introduce international expertise and technology, primarily through joint ventures.

While this paper aims to begin to classify and analyse the role of SWFs in the GCC energy transition there is clearly plenty of scope for further research.

Public data sources may be limited in capturing the full scope of investments by GCC SWFs in the sector. This is particularly the case for international investments which may be driven by financial returns, given that our previous research suggested that GCC strategic SWFs are more likely to disclose information demonstrating domestic impact. Proprietary data sources may reveal further investment in this area.

Furthermore, it is inevitable that not all MoUs or deals that are announced, and on which some of this articles assessments were based, will translate into tangible investments. Additional research could look to draw a clearer distinction between announced and conducted investment.

***

Appendix

Appendix A: Data Table

Please find the data referred to in this article available for download here

Appendix B: Methodology

This paper uses two main methods to assess the extent and character of the GCC SWFs' investments in renewable energy:

- A review of the materials that they have published on their websites, in order to establish what ambitions they have announced regarding renewable energy development.
- A review of public sources including SWF websites, regulatory disclosures and media reports to establish a list of transactions to date.

The methodology chosen does have weaknesses. Relying on publicly disclosed information, particularly concerning SWFs, is likely to mean that the list of transactions only captures part of the total.

It will also mean that the list will include some transactions which are announced but which are not progressed. In part, this can be addressed by classifying the type of announcement that has been made. However, it will still be the case that the list will include transactions at very different stages of development and feasibility.

About the author

Duncan Mayall

Chief Economist

Duncan Mayall leads Consulum's economic analysis work. He has worked for more than fifteen years in government and corporate advisory. He specialises in economic analysis and its application to policy and communications, focusing on FDI and sovereign wealth funds.

Duncan Mayall

If you'd like to speak to the author of this article, please send an email to

contact@consulum.com