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US–Gulf Nuclear Cooperation: Energy and Security

Energy Research Paper

The Al-Attiyah Foundation

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Three of the six Gulf Cooperation Council (GCC) countries are actively developing civil nuclear power programmes. Growing demand for electricity and desalination, ample financial resources, and political systems capable of delivering large-scale projects on time and within budget support this expansion. Given its defence and security role, and its central position in the global nuclear ecosystem, the United States is a key partner in these efforts. However, Iran's nuclear activities—and longstanding US efforts to contain them—continue to cast a shadow over the region.

What do Gulf countries seek from the United States in nuclear cooperation? Where do their interests align, and where do tensions arise? How might these differences be resolved?

ENERGY RESEARCH PAPER

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Director-General of the International Atomic Energy Agency, Rafael Grossi, visits the Barakah nuclear power plant, UAE, 14 December 2021[i]

- GCC Nuclear Landscape: GCC countries might seem unlikely nuclear adopters given their fossil fuel resources, but rapid growth in energy demand has strained traditional gas resources across the region. The UAE stands out as the clear leader, with the Barakah plant now supplying around 22% of national electricity. Saudi Arabia has pursued nuclear ambitions for decades but continues to explore its options across the supply chain, while Bahrain shows interest in small modular reactors (SMRs). Qatar, Oman, and Kuwait are unlikely to pursue nuclear power in the near term, with renewables and gas meeting their needs more conveniently.
- The US Strategic Push: Nuclear power is a rare area of relative bipartisan consensus in the US. The Trump administration has made nuclear cooperation a foreign policy priority, seeking to counter Russian and Chinese influence in the sector and revive its domestic nuclear industry. US law requires a "123 Agreement" — covering non-proliferation safeguards — for significant cooperation, and the US has concluded such deals with only the UAE and Morocco in the Middle East and Africa. The US sees SMRs as its competitive edge globally and views the wealthy GCC states as ideal early clients to help underwrite the financial risk of deploying these still commercially unproven technologies.
- Saudi Arabia's Pivotal Role: Saudi Arabia is the most complex case, as it resists a "gold standard" 123 Agreement because it wants to retain the right to enrich uranium domestically — partly for strategic parity with Iran, partly for energy security, and potentially for future weapons optionality. Negotiations between Riyadh and Washington are entangled with broader geopolitical bargaining, including normalisation of relations with Israel. The rapid expansion of Saudi renewables and domestic gas meanwhile weakens the purely economic and environmental cases for nuclear power.
- War and Uncertainty: The US-Israel war against Iran, which began in February 2026, has significantly disrupted the trajectory of Gulf nuclear development. Safety concerns have grown following strikes near Iran's Bushehr plant, diplomatic bandwidth has narrowed, and the prospect of granting Saudi Arabia enrichment rights has become even more politically problematic.
- Peace Proposals: A proposed regional enrichment consortium involving Iran, the US, Saudi Arabia, and the UAE could theoretically unlock both a peace deal and a US-GCC nuclear framework, but remains a distant prospect given deep divisions over the location and control of any such facility.

- The UAE has successfully installed a large civil nuclear power programme, reasonably on-time and on budget. It could expand it if it wishes. This has displaced gas consumption and reduced emissions.
- However, recent progress in solar power and batteries make these generally a faster and cheaper option for low-carbon electricity generation in the GCC than nuclear power. They are also much less politically problematic.
- Saudi Arabia's plans to eliminate oil consumption in power generation do not depend on nuclear power.
- If successful, SMRs could be deployed in the GCC for power and water desalination and would complement renewable energy.
- Kuwait, Oman and Qatar do not appear likely to deploy nuclear power, although Kuwait, at least, may benefit and would be able to reduce its oil and LNG consumption, cut emissions and improve air quality.

05 ACTIVE CIVIL NUCLEAR POWER PROGRAMMES IN THE GCC

Due to their large oil and gas resources, GCC countries may not seem like natural adopters of nuclear power. However, the rapid economic and population growth since the 1970s, the need for air-conditioning and desalination, and the development of heavy industries, have stretched their resources. Traditional cheap associated gas from oil production, and the more straightforward non-associated gas fields, are now almost fully exploited across the GCC. Only Qatar today enjoys a substantial surplus of low-cost gas. All the other GCC countries have turned to development of higher-cost gas resources (sour, tight, shale, deep, and gas-caps of oil-fields), and, in the case of Oman, the UAE, Bahrain and Kuwait, to imports of gas by pipeline from Qatar or as liquefied natural gas (LNG).

Renewables programmes have been successful, and improvements in batteries offer the prospect of relatively cheap, 24-hour, low-carbon electricity.

Nevertheless, nuclear power may have a role too as a source of large-scale, low-carbon electricity which is independent of weather and seasons, and not dependent on gas imports from neighbours. The development of nuclear power may also have strategic and scientific spin-offs. The GCC countries have mostly abundant financial resources, sufficient land away from population centres (other than Bahrain), and political systems that allow them to execute large, technically complex and potentially controversial projects successfully. They also have good political relations with the key nations involved in providing nuclear systems, fuel and services, including the US, Russia, China, South Korea, Japan and France. This brings the security benefits of support from those countries in the event of serious threats.

At the 27th GCC Summit in December 2006, the GCC announced that it was considering nuclear energy and would commission a study on a joint programme[ii]. The preliminary feasibility study, conducted by the International Atomic Energy Agency (IAEA), indicated that nuclear power generation and water desalination could be a feasible and cost-effective option for the GCC[iii]. However, the UAE decided to move ahead alone in 2007.

The UAE is by far the most advanced in the GCC in nuclear power. It operates the 5,600-megawatt (MW) Barakah plant, containing four reactors, which has been fully operational since September 2024. It is considering possible further investments.

Saudi Arabia has made the second-most progress. It has been through several stages of planning for nuclear power programmes of varying sizes and has held extensive negotiations with the US and others.

Bahrain has more recently expressed interest in SMRs.

Qatar, with its huge and low-cost gas reserves, and its successful solar power programme, has not seen a need for nuclear power.

Oman has had some concerns over the long-term availability of gas for its power and industrial sector. However, its large territory has allowed it to expand solar and wind power rapidly. Its relatively small grid, and smaller financial resources than most of the other GCC countries, make nuclear power a less attractive option.

Kuwait considered nuclear power in the 1970s, and again in 2009, but it abandoned these plans following the 2011 Fukushima accident in Japan[iv].

Growing shortages of power and gas, and slow progress in its renewables installations, could be reasons to reconsider. Kuwait is also nervous about the proximity of the Bushehr nuclear plant in Iran, especially given military strikes on the site by the US and/or Israel in March-April 2026, and the potential for accidents or radiation leaks.

Finally, the GCC Interconnection Authority (GCCIA) successfully transfers electricity between the six countries and is also being connected to Iraq. Regional countries that do not have nuclear power programmes of their own may therefore still buy nuclear-generated electricity indirectly. Alternatively, they could contract with another country to support nuclear construction assigned for their use, while avoiding the political and regulatory complications of building their own. A larger and more robust GCC grid would be better-able to support the financial and technical burden of integrating large nuclear reactors.

The Trump administration in the US has made nuclear power a key priority. Unlike many other energy sources, nuclear enjoys significant bipartisan support, and there is therefore reasonable confidence that such cooperation could continue even following elections in November 2026 and the next presidential election in 2028.

The US's nuclear outreach is intended to build its technological capability, support a revival of the domestic US nuclear industry, and compete with rivals, notably Russia and China. Russia is active in the wider region, having built the Bushehr plant in Iran, and currently working on new reactors in Egypt, Turkey, Bangladesh and India[v]. The US wants to forestall other countries being locked into dependence on Russia for nuclear technology, operations and fuel.

Conversely, it would like to lock in countries itself to its own technological standards and fuel cycle.

For significant civil nuclear cooperation, US law usually requires the conclusion of an should a "123 Agreement", which includes strict safeguards against nuclear weapons proliferation. The US has 123 Agreements with only two countries in the Middle East and Africa: the UAE and Morocco. In the wider region, it also has such agreements with Turkey, India and Kazakhstan[vi], while an agreement with Armenia appears to be in progress[vii].

The construction of large conventional Generation III+ and IV reactors around the world in the last few years has suffered numerous problems with serious cost and schedule overruns, including in the US (Vogtle Units 3 and 4[viii]), France, Finland and the UK. Construction at Vogtle began in 2009 and was expected to begin operations in 2016 for a cost of $14 billion, it eventually came online in 2023 and cost more than $30 billion. The capital cost of $13.5 per watt and the construction timeline of 12 years contrasts with the $4.4/W and 9 years to first generation achieved by the UAE (see below). Along with the greatly improved competitiveness of solar, wind and batteries, this has led many to doubt that new nuclear power is economically viable, outside a few countries whose performance is much better, notably China, and possibly the GCC. For GCC countries considering nuclear power, it does make it doubtful they will opt for US providers of large reactors, or indeed France, as opposed to the proven track record of South Korea, China and Russia.

As an alternative, attention has turned to small SMRs (sometimes used an acronym for Small and Medium Reactors). These range from very small reactors of 1-10 megawatts (MW) or even less, for deployment in remote areas or special sites such as military bases, up to effectively medium-sized conventional reactors, such as Rolls-Royce's 470 MW design[ix]. Many SMR designs are smaller variants of conventional pressurised water reactors (PWRs); others use novel designs with alternative cooling systems or fuels.

The hope is that these reactors can be largely assembled in factories, will benefit from "learning by doing", will have high passive safety, and can therefore be installed much more quickly and cheaply than conventional designs.

This remains uncertain outside military uses, no commercial SMRs have yet been delivered worldwide. US companies are highly active in this space, including several with high-level political links.

The US has accepted that it is unlikely to be internationally competitive with China, Russia or South Korea in building large conventional reactors. However, it believes it could develop an edge in SMRs. Its build-out of AI data centres requires large amounts of electricity, which could be partly provided by SMRs. These are also an important part of its rethought space programme, for powering potential bases on the Moon or Mars. It is therefore important for Washington to find international clients willing to underwrite the substantial cost and risk of deploying the first few new SMRs. The wealthy GCC countries appear an ideal candidate.

09 THE UAE'S NUCLEAR PROGRAMME

The UAE conceived its nuclear power programme during 2008, with the publication of its White Paper on the peaceful use of nuclear energy[x]. The country was enjoying rapid economic growth, low-cost gas supplies appeared insufficient to meet demand, and solar and other renewables were too expensive and immature at that stage to provide a large share of electricity generation.

The three short-listed bidders were the French group of Areva with Suez and Total, GE Hitachi (US/Japan) and the eventual winners, Korea Electric Power Company (KEPCO) in consortium with Samsung, Hyundai, Doosan and US company Westinghouse. The US played a relatively small direct role in the programme, which was mostly provided by KEPCO, with natural uranium, enrichment and assembled fuel supply from the US, Canada, Kazakhstan, the UK/Australia, France, Russia and others[xi]. Waste may be stored in the UAE or transferred to France or elsewhere for reprocessing.

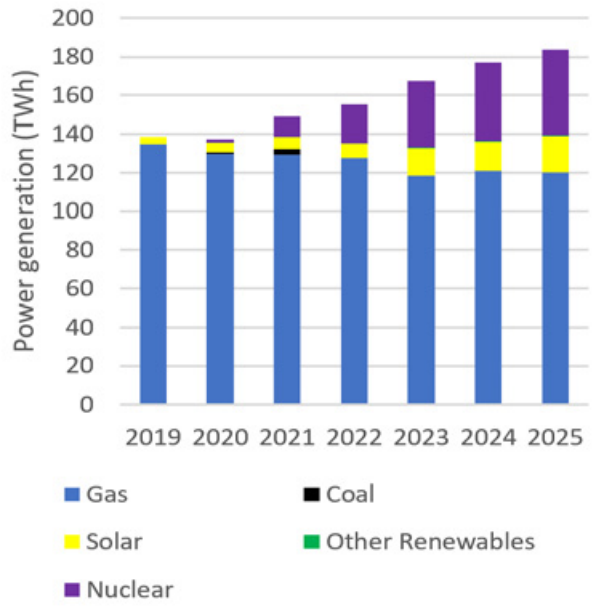
Nevertheless, the UAE recognised that it needed full US approval. The Iranian nuclear issue was sensitive, the UAE launched its programme just five years after the 2003 US invasion of Iraq based on claims of (non-existent) development of nuclear and other weapons of mass destruction, and Israel would in 2007 bomb the Al Kibar reactor in Syria which was suspected of carrying out a covert weapons development. The UAE did not have diplomatic relations with Israel at this stage. Finally, the APR-1400 reactor technology being deployed by KEPCO incorporated US intellectual property from the company Westinghouse, and therefore US licences would be required.

The UAE therefore concluded a "gold standard" 123 Agreement with the US in December 2009, in which it committed to high levels of independent regulation and monitoring, and agreed that it would not pursue uranium enrichment or nuclear fuel reprocessing. The 123 Agreement, named after the relevant section of the 1954 Atomic Energy Act, permits the country concerned to receive nuclear expertise, materials and equipment from the US.

The UAE began building the Barakah nuclear power plant, at a coastal site in the far west of the country, near Qatar and Saudi Arabia, in July 2012. The plant was constructed by KEPCO on the APR1400 advanced pressurised water design. Barakah has four reactors, each of 1,400 megawatts (MW) capacity. Unit 1 began commercial operations in April 2021, and by September 2024, all four reactors were operational. They generated about 39 TWh in 2024, almost 22% of total national electricity, a figure that is estimated to have risen to about 44 TWh in 2025 with a full year of generation from Unit 4[xii]. The reported capital cost was $24.4 billion. Nuclear power has stabilised the amount of generation from gas in the UAE's electricity system, and is the main contributor to low-carbon generation, surpassing solar power, albeit solar is likely to grow more quickly to 2030 (Figure 1).

The UAE's programme encountered some teething problems, relating to the late delivery of the first of this design in South Korea, and to some construction flaws.

Figure 1 UAE Power Generation by Source (2019-2025)[xiii]



Nevertheless, Barakah was built without major cost overruns or delays, a considerable achievement for a country's first nuclear power plant, and considering that a whole regulatory and training system had to be built around it.

As noted, the fourth and final reactor of the initial set at Barakah was completed in 2024. The Emirates Nuclear Energy Corporation has indicated that it could consider building two more APR-1400 reactors at the site. It is also interested in SMRs. It has further considered investing internationally in nuclear power, including in the US. It has strategic partnerships with KEPCO, Samsung C&T, and Nucleo, a France-based developer of innovative lead-cooled fast reactors[xiv]. ENEC has also concluded a memorandum of understanding with China National Nuclear Corporation (CNNC) for cooperation on new nuclear plants, including the development of high-temperature gas-cooled reactors.

The UAE has therefore established a broad-based set of partners covering most of the leading suppliers of nuclear materials, equipment and services. This gives a range of powerful and influential countries an interest in the continuing success of its nuclear programme, and avoids over-dependence on a single provider, whether Russia, the US or China. The UAE was aided in this by its financial strength, which meant it did not have to rely on concessional finance provided by Russia, the model used by Rosatom to win business in Egypt, for example.

11 SAUDI ARABIA: THE MOST COMPLICATED CASE

Saudi Arabia's journey towards nuclear power has been long and complicated. The Kingdom burns on average nearly 1 million barrels per day of oil (crude oil, fuel oil and diesel) for power generation, and higher amounts during the summer months. Fast-rising domestic electricity and water consumption raised concerns that the country was cannibalising its own oil exports, constraining its export potential. Nuclear power therefore emerged as an attractive large-scale alternative, with the additional advantage of its low-carbon nature.

From initial interest in the early 2000s, it signed a memorandum of understanding on nuclear cooperation with the US in 2008[xv]. This Memorandum of Understanding (MoU) said that the Kingdom would not seek enrichment or reprocessing.

The Saudi government decided in 2010 to start a nuclear power programme. In 2012, the King Abdullah City for Atomic and Renewable Energy (KA-CARE), proposed a programme of 16 reactors with a total 17 GW of capacity, with construction starting in 2016 and complete in 2032. In 2013, GE Hitachi and Toshiba/Westinghouse both proposed their reactors to Saudi Arabia. However, the plans were delayed and scaled back. Several cooperation agreements were signed with companies from South Korea, China, Russia, Japan and elsewhere. In 2017, the Saudi Geological Survey agreed to cooperate with CNNC on exploration for uranium in the Kingdom.

Figure 2 Site of Saudi Arabia's Nuclear Reactor Research Facility[xvi]

Most recently, the programme seemed to advance in 2023 and 2024. Saudi Arabia requested offers to build two reactors at the Duwaiheen site, on the coast between Qatar and the UAE, therefore quite close to the UAE's Barakah plant. The reactors are to be pressurised water designs of 1.4 GW. CNNC, KNOC, EDF of France, and Rosatom were the expected bidders[xvii].

However, over the past two years, Saudi Arabia has made rapid progress with the development of domestic gas resources, solar and wind power, and battery storage. Subsidy reform[xviii] has improved energy efficiency and slowed demand growth. The Kingdom now plans for its power generation by 2030 to be 50% gas, 50% renewables, with oil phased out[xix]. This plan does not mention any share of nuclear power.

13 SAUDI ARABIA'S NUCLEAR PLANS HINGE ON AGREEMENT WITH THE US

No US companies were among the four short-listed bidders for the Duwaiheen plant. Given KEPCO's good performance in the UAE, it would be a preferred contender. However, because KEPCO's APR-1400 contains Westinghouse intellectual property, it is highly likely that the US would demand a 123 Agreement before it could be used[xx]. It appears that the US wants KEPCO in future only to work on international projects as an engineering, procurement and construction (EPC) contractor on the Westinghouse AP1000 reactor, rather than as a full developer of the APR-1400.

Choosing China or Russia would be politically problematic and the US would probably react negatively. Despite its strong domestic track record, China has only limited experience in delivering overseas nuclear projects. Cooperation with Rosatom would also be complicated by sanctions imposed following the 2022 invasion of Ukraine[xxi] .

Given the Saudi-Russia history of cooperation and competition in the oil market, it would also be undesirable for Riyadh to hand Moscow another point of leverage. As for EDF, its poor performance of delivery on its EPR in France and the UK is discouraging.

This is a conundrum for Riyadh. However, it could attempt to reverse the leverage, by threatening to award the contract to CNNC, Rosatom or even EDF, if Washington did not meet some of its demands in a 123 Agreement, and relax the constraints on KEPCO.

Saudi Arabia is aware that nuclear cooperation with the US is a valuable negotiating point. In 2018, during Donald Trump's first presidency, he was apparently ready to conclude a 123 Agreement with Saudi Arabia that permitted enrichment, but this was met with strong bipartisan opposition and never progressed[xxii].

In November 2025, Mohammed bin Salman, Crown Prince and Prime Minister, met US President Donald Trump at the White House. It was announced that negotiations on a 123 Agreement had been concluded[xxiii], but without giving details, or mentioning the issue of enrichment. Other important points of negotiation between Riyadh and Washington include, as mentioned:

- Normalisation of relations with Israel along with progress on rights for the Palestinians.
- Security and military cooperation in the war against Iran.
- Working together on critical minerals.
- Saudi stabilisation of the oil market. Major Saudi investment in the US.
- Purchase of American weapons.
- Saudi access to technologies for AI.

Nuclear power is thus one important component in a wider relationship, which has become very personalised. President Joe Biden and the Crown Prince famously had a poor relationship, despite Biden's later attempts to mend it, while Mohammed bin Salman has a much closer relationship with Trump.

Riyadh has resisted conclusion of a classic "gold standard" 123 Agreement, because it wants to retain the option of uranium enrichment on its own soil[xxiv]. This is partly because it has significant uranium resources of its own; partly because it would want parity with regional rival Iran, which carries out enrichment; and partly because it wants to retain the benefits of enrichment.

These include:

- Scientific and technological advancement, including the education of Saudi nuclear specialists.
- Greater security in the fuel cycle, if and when it operates its own reactors.
- Elevated strategic importance, particularly in that it would raise the likelihood of US and other international support in the case that Saudi Arabia faced a serious external threat.
- Strategic optionality to progress other areas of nuclear technology.

It is debatable whether Saudi Arabia might want enrichment as a step towards a potential future nuclear weapon capability. The argument that it wants to be able to enrich its own uranium is somewhat debatable, as it would still need conversion and fuel assembly services to be able to use it in its reactors. Minerals exploration to date suggests that the country's uranium resources may anyway not be economically viable[xxv]. Building the complete nuclear fuel cycle would be very expensive, costing several billion dollars, and would not be economically viable for Saudi Arabia's needs alone.

Reports in 2003 suggested that a high-level Saudi strategy paper considered the option of developing or acquiring nuclear weapons[xxvi]. In 2018, Mohammed bin Salman stated that, if Iran acquired a nuclear weapon, Saudi Arabia would also do so[xxvii], and he repeated this in 2022[xxviii]. In its broader neighbourhood, Israel, Pakistan and India possess nuclear weapons, and Iran might join them in the not-too-distant future.

If Iran were to obtain nuclear weapons, it is likely that Turkey and perhaps Egypt might also seek them; in this case, it would seem nearly essential for Saudi Arabia also to be nuclear-armed.

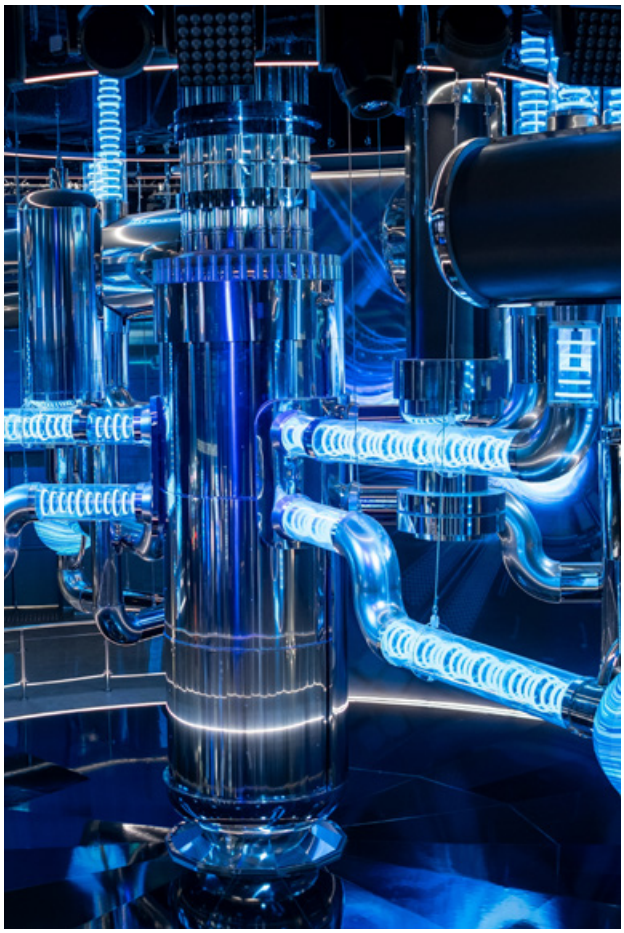
The examples of the Russian invasion of Ukraine, and the attacks on Saudi Arabia by Iran in September 2019 and March-April 2026, and on Qatar by Israel in September 2025, have also heightened the risk of relying on US security guarantees. As a territorially large state with a relatively small citizen population, several politically unstable or potentially hostile neighbours, and huge resource wealth, Riyadh is also aware that conventional weaponry alone might not be enough to deter a major attack.

On the other hand, attempting to obtain enrichment capability or, even further, steps towards weaponisation, in the face of US opposition, would jeopardise Saudi Arabia's key security partnership. The modernisation and diversification of its economy depend on openness to international investment, which any form of sanctions would threaten.

Saudi Arabia does not have diplomatic relations with Israel. The US has made several attempts to draw it into the "Abraham Accords" signed with the UAE, Bahrain, Morocco and some other MENA countries. Riyadh's normalisation of relations with Israel could be a quid pro quo for Washington's provision of nuclear power support. However, this would probably require Israel to make other commitments on the issue of Palestine. As noted, Saudi Arabia does not want to give up its right to enrich.

Any agreement with the US would probably require more intrusive monitoring. Saudi Arabia upgraded its safeguards with the International Atomic Energy Agency in late 2024 by rescinding the Small Quantities Protocol. However, it has not yet signed up to the Additional Protocol, which would allow more stringent inspections[xxix]. If Saudi Arabia were to acquire the right to enrich, it is likely that the UAE would also seek to renegotiate its 123 Agreement accordingly, even if it did not immediately proceed to establish its own enrichment facility.

An alternative route for Saudi Arabia could be via SMRs. It is interested in South Korea's SMART design, and King Fahd University of Petroleum and Minerals is also researching an indigenous design[xxx]. It has previously shown interest in Argentina's CAREM model[xxxi]. These would reduce the financial exposure and avoid the issue of intellectual property and US licensing with the APR-1400.



Like Saudi Arabia, Bahrain signed an MoU on nuclear cooperation with the US in 2008[xxxii]. However, Manama's active interest in nuclear power is a more recent development. Its small territory and small grid (8.78 GW of total generating capacity) make a conventional nuclear reactor unsuitable and would present the country with a large financial burden. Unlike its GCC neighbours, it has a large debt load and only small sovereign wealth holdings. Its domestic gas resources are depleting, raising the prospect of dependence on higher-cost imports. Its limited land area also constrains the amount of solar and wind power it can install.

As noted, it is an adherent to the Abraham Accords, lowering the political sensitivity in the US of nuclear cooperation. It is very unlikely that it would seek to develop nuclear weapons or domestic enrichment.

SMRs therefore appear a reasonable way of supplying electricity on a scale matched to local demand, and without excessive financial exposure[xxxiii]. In July 2025, it signed an MoU on peaceful nuclear cooperation with the US. Nevertheless, it would still be risky for Bahrain to be one of the first customers for an unproven SMR design.

The war against Iran, which the US and Israel launched on 28 February 2026, further complicates the issue of nuclear power in the Gulf.

First, it raises safety concerns. As noted, several attacks have struck the area of the Bushehr nuclear plant in Iran, though without damaging the nuclear facilities themselves. This raises the concern of Iranian retaliation against Barakah, or against future nuclear sites in the Gulf.

Second, the GCC countries and the US are consumed with the war and have little diplomatic or financial bandwidth to progress nuclear power plans at present. Depending on the conclusion of the conflict, their future economic growth and domestic energy demand trajectory is uncertain, making it hard to commit to large new investments in the electricity sector.

Third, a nuclear agreement with Saudi Arabia that permits enrichment would be a dangerous precedent at the moment. It would give Iran more ability to claim parity in negotiations with the US. It would also heighten suspicions that the Saudi civil nuclear programme was intended to progress towards weapons capability. If it were concluded without Riyadh's normalising relations with Israel, the Israeli government and its supporters in the US would strongly oppose it. The US would be seen to have given away an important card without gaining much in return – especially since Saudi Arabia cannot contribute much currently either to investment in the US or to oil market stabilisation. Conversely, it would be very difficult for Saudi Arabia to normalise diplomatic relations with Israel currently, while there is no prospect of progress on Palestinian rights or an end to Israeli attacks on Gaza and the West Bank.

A US peace proposal to Iran reportedly includes the idea of a regional uranium enrichment consortium[xxxiv]. This could include Iran, the US, Saudi Arabia and the UAE. This would be intended to:

- Satisfy Iran's demands for enrichment
- Guarantee Iran against future US sanctions or military attack by including the US and GCC stakes
- Ensure stringent monitoring and control, without the potential for enriching to weapons grade or diverting material
- Ease the concerns of the US's regional partners
- Solve the Saudi requirement for access to enrichment

Although, Iran, for its part, has been open to such ideas[xxxv], the location of such a facility is a serious sticking point. Iran wants to retain its existing nuclear sites. The US, meanwhile, seems to consider that the enrichment site could be on one of the islands in the Gulf. The UAE and Saudi Arabia are unlikely to want to put their nuclear fuel supply in the hands of Iran, particularly after both being attacked during the war.

19 CONCLUSIONS

The US is keen to advance nuclear cooperation with the GCC states, and particularly with Saudi Arabia. It has strong strategic reasons to do so, relating to the wish to normalise Saudi-Israeli relations. Nuclear power is a rare area of energy policy where Republicans and Democrats are in reasonable agreement. The US has fallen badly behind China and some other states in delivering conventional nuclear power, and the GCC is one of the few places where it might be internationally competitive. The GCC is also a promising place for deploying some of the first SMRs, an area where US technology has made good progress, but which remains commercially untested.

However, the commercial and legal complexities involving a possible 123 Agreement with Saudi Arabia and the involvement of South Korea, have repeatedly held back Saudi progress on nuclear power, specifically on cooperation with the US.

The Trump administration might decide to ignore or override such concerns.

The economic rationale for deploying nuclear power in the Gulf is not very strong, given rapid improvements in solar and battery power. It would therefore depend on a successful deployment of SMRs, or a strategic decision by Saudi Arabia. Saudi Arabia, the UAE and (for SMRs) Bahrain appear the only likely GCC states to deploy nuclear power for now.

The US-Iran war beginning has considerably complicated the issue of US-GCC nuclear cooperation. A larger deal on regional enrichment involving Iran could unlock a peace agreement, but still appears unlikely, with major gaps between the parties.

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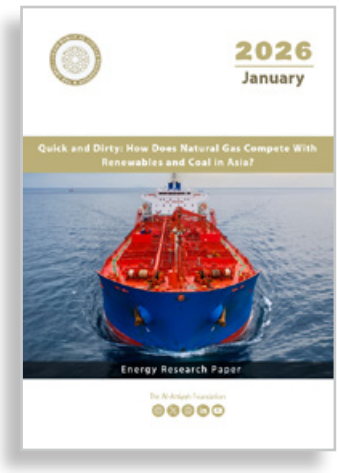
Have you missed a previous issue? All past issues of The Al-Attiyah Foundation's Research Series, both Energy and Sustainability, can be found on the Foundation's website at www.abhafoundation.org/publications



January – 2026

Quick and Dirty: How Does Natural Gas Compete With Renewables and Coal in Asia?

Faced with relatively expensive natural gas imports, many Asian countries have turned to a combination of renewables and coal. This delivers reliable electricity at reasonable costs with some reduction in greenhouse gases and other pollutants.

(QRCODE)

November – 2025

COP30: "The COP of Truth" and the Road to Türkiye

The COP30 conference in Brazil was the first after a series of wider Middle East-hosted COPs, but still the fifth in a row to occur in a significant oil and gas producer.

(QRCODE)

September – 2025

Fuelling Africa's Future: The Role of Natural Gas in Economic Growth and Energy Transformation

Africa's gas sector is in a pivotal phase, with new exporters expanding the region's role alongside established players. Rising European demand creates opportunities, but export growth faces constraints from production shortfalls.

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Our partners collaborate with The Al-Attiyah Foundation on various projects and research within the themes of energy and sustainable development.

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