



## RENEWABLE ENERGY INVESTMENT OPPORTUNITIES IN THE UAE



**Dr. Paul Nimmerfall**

**Senior Legal Counsel**

T: +971 7 23 64 530  
F: +971 7 23 64 531  
E: pnimmerfall@slglaw.cc  
www.slglaw.cc

### Introduction

For the last decades, the UAE's energy market heavily relied on coal, oil, and gas. However, this is about to change. As set out in the country's latest *Strategy for the Future*, the fight against climate change and the transition of the energy landscape has become one of the government's top priorities.

A prime example of these ambitions is the Al Dhafra plant in Abu Dhabi, one of the world's biggest PV projects offering a highly competitive power tariff (allegedly only US cents 1.32/kWh). Other ones would be the Jebel Ali power station in Dubai, a desalination plant which produces around 140 Million Imperial Gallons of water a day, or the UAE's first green hydrogen plant close to the Al Maktoum Solar Park.

As part of its *Energy Strategy 2050*, an enormous investment plan to promote green energy, net-zero targets, and sustainable growth, the UAE aims to invest around USD 160 billion to meet the country's growing energy demand. This offers business opportunities for energy producers, developers, and suppliers.

### The UAE Electricity Market

Until recently, the UAE's electricity system was almost 100% powered by gas power plants. However, with new energy policies in place the UAE wants to move fast towards a more sustainable electricity production. The Ministry of Energy and Infrastructure recently announced that within the next three years at least 20% of the UAE's installed electricity capacity should come from clean sources. Ultimately, the UAE's total energy mix should comprise of 44% green energy, 38% gas, 12% clean coal, and 6% nuclear in 2050.

The UAE's electricity market is structured as a single-buyer market, in which almost all production capacities of independent producers are centrally purchased by public utility companies. Some emirates have also announced a side-sale system under which certain capacities can be marketed to third parties with the authorities' consent. So far, this has not materialized. Other private companies simply use electricity as an input product in their value chain to produce hydrogen or desalinate water.

The UAE's electricity market is divided along the lines of its emirates. There are four main regulatory authorities each having its own price structure, investment plan, and planning process (DOE in Abu Dhabi, DEWA in Dubai, SEWA in Sharjah, and FEWA in Ajman, Fujairah, Ras Al Khaimah, and Umm Al Quwain). The Emirates National Grid (ENG) aims to interconnect these authorities to an integrated power system.

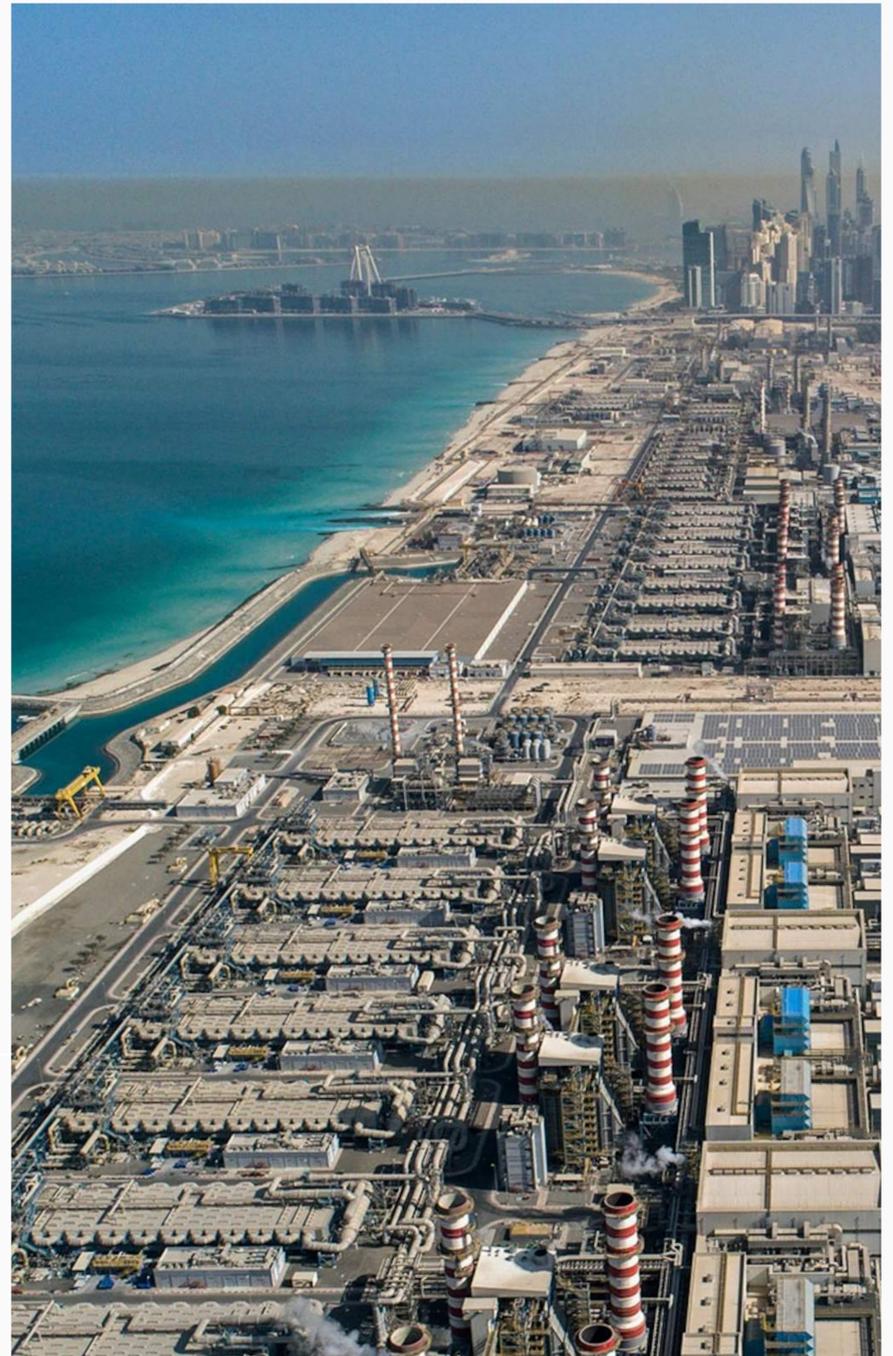
## The Legal Framework

The UEA introduced several strategies, laws, and regulations at both the federal and local level to promote and regulate the production, transmission, and distribution of electricity.

In its *Strategy for the Future and Energy Strategy 2050* the UAE government has emphasized that clean energy is of vital importance. Emirates such as Abu Dhabi (*Economic Vision 2030*), Dubai (*Dubai Clean Energy Strategy*) or Ras Al Khaimah (*Renewable Energy Strategy 2040*) have followed. Although these strategies have yet to be executed, they show two things: Firstly, that governments throughout the UAE support renewable energy solutions and are willing to invest into new technologies. Secondly, that there is growing competition between the emirates to attract investors and lead the way into a more sustainable future.

The UAE electricity market is based on a single-buyer model. Projects are often developed by independent power producers (IPP) who are awarded a contract in a public tender. These bidding processes are governed by local IPP laws (eg, Abu Dhabi Law no 2/1998 as amended or Dubai Law no 6/2011).

The successful bidder is awarded a long-term power purchase agreement (PPA) under which electricity is purchased by a public company or state authority. The PPA is the core document regulating the contractual relationship between the IPP and the off-taker. Therefore, IPPs should pay close attention to negotiate a PPA that is commercially viable long-term (not only the price per kWh but also warranties, termination rights, the duration, and jurisdiction clauses should be considered). To construct and operate a renewable energy facility companies require additional licences and permits from the competent authorities (eg, environmental impact assessment, building permit, trade licence etc). Some emirates also offer licences entitling companies to distribute electricity



on a small scale. However, usually this is limited to self-service (ie, the company itself uses the generated electricity).

Apart from regulatory legislation, private companies are also subject to the Federal Commercial Companies Law or the respective free zone regulations (eg, of RAKEZ or Masdar City free zone).

## Investment Opportunities

It comes as no surprise that the UAE's main renewable energy source is solar power. Most emirates pursue ambitious projects ranging from small-scale plants to solar parks with a capacity of up to 2 GW. Projects include PV plants, concentrated solar power plants, and floating PV plants. Many more will be needed to reach the UAE's ambitious targets.

Unlike many European countries, PV plants in the Middle East are less affected by seasonal effects. However, well-functioning storage systems will still be critical to reduce gas-fired plants.

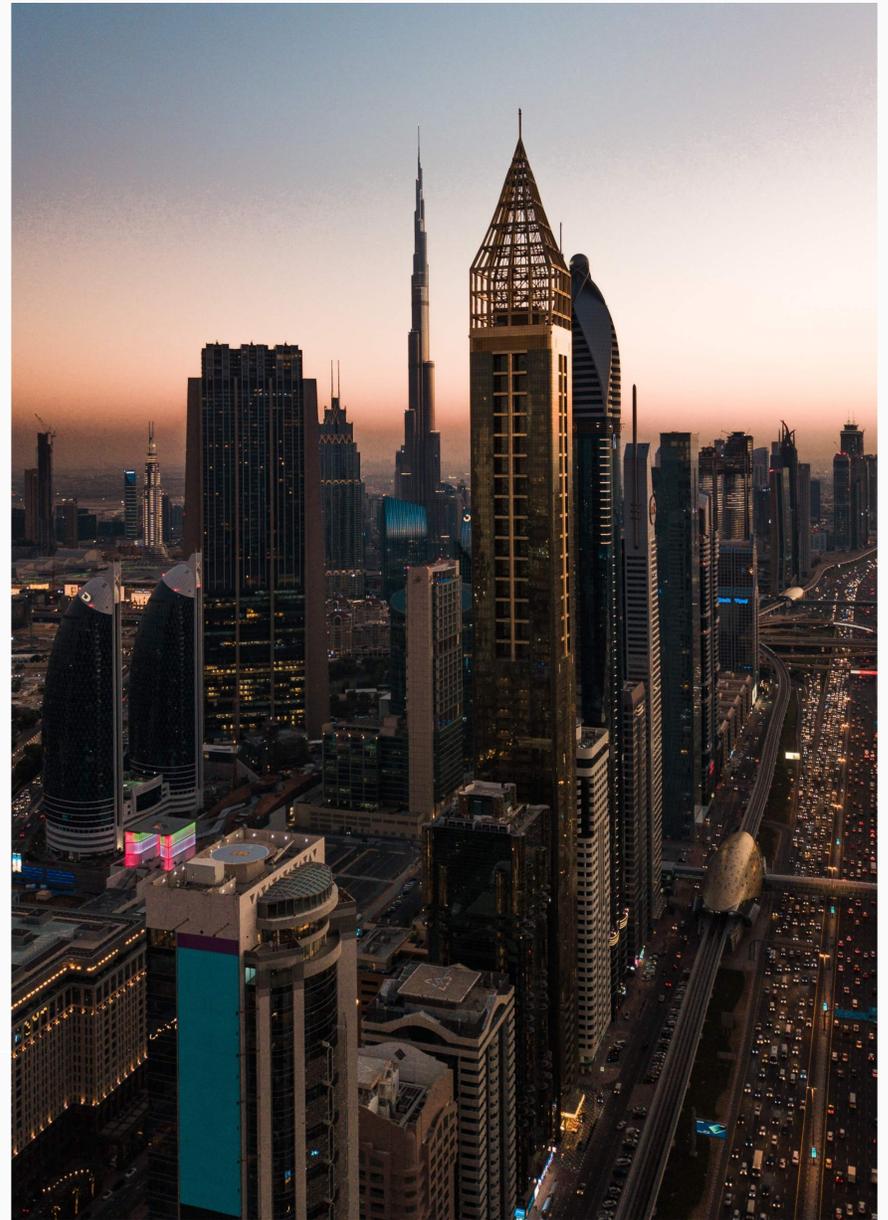
Another cornerstone of the UAE's energy strategy is the production of hydrogen which is produced by splitting water by electrolysis. If the process is powered by renewable energy sources one speaks of *green* hydrogen. The UAE government has pledged to support the hydrogen production across the country to provide energy for key industry and mobility sectors. Several private companies have followed.

In addition to the production of renewable energy carriers such as electricity or hydrogen new green business fields emerge in the wake of the energy transition and reduction of CO<sub>2</sub> emissions. Energy efficiency has played a minor role so far but is increasingly considered by the governments (eg, green building regulations in Ras Al Khaimah). The mobility sector will change drastically in the next decades from fossil-fuelled vehicles to electric and/or hydrogen vehicles. Ultimately, CO<sub>2</sub> reduction will become increasingly important including technologies such as carbon capturing.

UAE officials have announced ambitious targets, however, the path towards a clean and net-zero future is still long, stony, and expensive. Many efforts will be needed to transform the UAE's energy sector. This means business opportunities for energy producers, developers, and operators but also for companies active in related markets of all kind.

By abolishing (most) foreign ownership restrictions, the UAE has recently made a huge step towards a more friendly investment environment.

Under the new legislation no local partner or sponsor is needed for a mainland company (eg, onshore LLC) anymore, unless the company performs *activities of strategic effect*. Although this sounds promising it is yet to be seen how the new law will affect the UAE's energy markets.



**Strohal Legal Group** is an international business law firm focusing on the Gulf region (GCC) and Southeast Asia (ASEAN) advising clients on local and cross-border M&A transactions and corporate, business, and labour law matters, company establishments, energy and climate change law as well as tax law matters. Through our country desks and partner firms in Austria, the Ukraine, and Russia, the firm is also well connected in Europe.

Our energy practice focuses on advising investors on energy projects in the region and on supporting them on regulatory matters. We are further convinced that climate change will, after all, also impact the legal landscape. To stay one step ahead we are therefore already engaged in the various aspects of climate change law.