

Sustainable Investment for Greener Future

Investments into energy efficiency are now a reality in the Middle East

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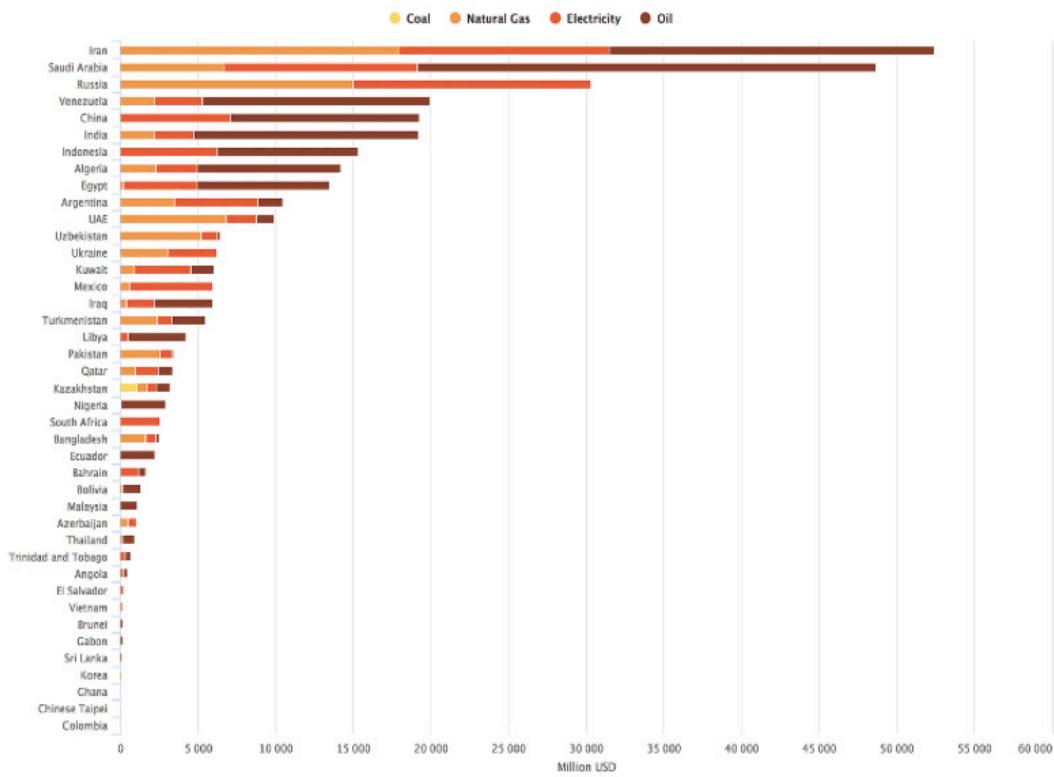


Over the years, oil-rich Arab countries have been developing rapidly attracting more and more people and constructing quickly vast amounts of buildings to host these new comers and to allow them to develop their activities and businesses. Dubai is the typical example of this. The city has developed extremely quickly erecting multiple gleaming residential and office skyscrapers, numerous high-end hotels and all the infrastructure that is needed. During these years, energy was not an issue and was rarely considered when designing these buildings. As a result, the Middle East ends up today with a huge installed base of buildings that are all very nice but that were not conceived to be energy optimized. As an example, about 70% of the existing buildings in Saudi Arabia have no thermal insulation - a madness in a country where temperatures in summer require permanent air-conditioning. That was not a problem when electricity was cheap, the cost to cool these buildings was insignificant and nobody really cared about this.

But this was the past when oil was at a high-price bringing sufficient wealth to the Arab states so they could highly subsidize the energy prices to their citizens.

Energy Subsidies by Country, 2015 (Million USD)

Click on a subsidy type below to add or remove it from the chart



Today with the barrel of oil remaining in a low range, energy subsidies have become unbearable for these nations. For a while they tried to keep these subsidies hoping that the price of oil would increase but after a few years it became financially impossible to sustain. As a result, energy subsidies are being cut progressively across the Middle East. Subsidies for the fuel used in cars were removed by the UAE in 2015 and tariffs for water and electricity are being raised as a consequence. In January 2017 Abu Dhabi doubled the end-user price of water. In Saudi Arabia prices for electricity increased significantly this year and there are plans to raise them further in the near future. Kuwait more than doubled electricity prices in May 2017. In most cases the hikes are impacting commercial, industrial, expatriates and government sectors while protecting the local citizens.

As a result of these price moves, many business owners wake-up with sudden huge energy bills and costs directly impacting their bottom-line. In the industrial sector the impact is severe and can make industries uncompetitive. Saving electricity and water is now a key necessity financially and “energy efficiency” is now becoming the buzz word.

Energy Efficiency

In parallel to the very visible and communicated projects on renewable solar energy, energy efficiency has become a clear objective for the Arab countries to reduce costs. With energy efficiency, end-users will reduce their energy costs and utilities will defer massive investments into new costly power plants. And the population will get the additional environmental benefits that emission reductions bring in addition to contributing to the commitments taken at the Paris agreement.

Dubai

Looking specifically at the UAE, which leads the energy efficiency efforts in the region; as usual Dubai was very quick to adopt a sound energy efficiency strategy and took early actions on establishing a Demand Side Management plan. In particular the Dubai Electricity and Water Authority (DEWA)

has established a company fully dedicated to these activities: Etihad Energy Services Co LLC or Etihad ESCO. Started in 2013, Etihad ESCO has executed large energy efficiency projects both in buildings and lighting that are now creating significant reduction on consumptions. Etihad ESCO is investing into the existing buildings to improve them using the ESCO model where the savings generate enough returns for the end-users to be financially attractive. In 2016 Etihad ESCO cut the electricity consumption of its clients by 54GWh generating close to US\$10 million of cost savings.

But by focusing on Dubai, it is easy to overlook what the other UAE emirates are effectively doing on energy efficiency.

Sharjah

North to Dubai, the Sharjah emirate, known for its cultural activities and variety of museums, and where most of the Dubai workforce is living, is also now very active. In Sharjah, an important change was made three years ago by the ruler to appoint a well-known local personality, Dr Rashid Allem, as Chairman of Sharjah Electricity and Water Authority (SEWA). Dr Rashid revolutionized SEWA and changed its way of operating bringing it to the 21st century by adopting methods and ideas that you would see in companies such as Google or Facebook while still protecting its authenticity. And this is the vision that he defined for SEWA: “To be among the best authentic organizations in the world”. In 2015, SEWA published “The Declaration of Sharjah City of Conservation”.

The Declaration is a comprehensive and ambitious plan with the goal to make Sharjah the first City of Conservation in the region by promoting Sharjah's regional and international image to take a lead in sustainability and environmental matters. The Declaration has clear objectives and clear strategies in that matter. It is ambitious and challenging while being realistic and attainable. It also defines the actions that SEWA is taking for conservation and the actions that are shared with other key entities in Sharjah, as well as with the residents. The plan is comprehensive and action has started. For example,

the Declaration states that power saving bulbs will be used for street lighting in the Emirate of Sharjah. Today SEWA have retrofitted many of the street lights with LEDs and installed solar powered street lights in remote areas. And the plan goes on and on about what will be done to improve Sharjah. This is very encouraging and with action and methodology, these goals will be achieved.



Abu Dhabi

South of Dubai, the Emirate of Abu Dhabi is also focusing on energy efficiency through a global plan named “Tarsheed” that was created and managed by the Abu Dhabi Water and Electricity Authority (ADWEA). Tarsheed addresses multiple aspects for the conservation of electricity and water. One recent initiative is the launch in March 2017 of Kafa'ati to improve energy efficiency of the existing buildings in the emirate. Through Kafa'ati, Energy Services Companies (ESCOs) will be contracted to reduce the electricity consumption in Abu Dhabi buildings. ESCOs will be asked to invest in the buildings to improve their efficiency and will be paid through the savings that will be generated. Up to 3,000 buildings are to be retrofitted through Kafa'ati to increase energy efficiency and bring an annual consumption reduction of 446GWh by 2022.

National Energy Services Company was recently formed by the Saudi Public Investment Fund (PIF) with the objective to drastically improve the energy efficiency of buildings. With the recent increase of electricity tariffs in the Kingdom, investing in buildings to reduce their consumption provides a fast return on investment. Only a few years will be necessary to see the electricity cost savings surpass the investment needed to achieve these savings.

This recent regional move towards more energy efficiency is much needed and follows a global trend. Triggered by the increase of energy costs to end-users, it will help the Arab countries reduce their dependency on fossil fuels but also promote more responsible behaviors towards energy and water consumption by their citizens.

Saudi Arabia

The UAE is clearly leading the energy efficiency efforts but other countries are close followers. Saudi Arabia is following the path of Dubai by creating a company dedicated to reducing the consumption of energy in the Kingdom's existing buildings. The

