

UNDER ESCO GUIDANCE

The success of retrofit projects undertaken by Etihad ESCO plays a big role in attracting new clients, says Ali Al Jassim, CEO of Etihad Energy Services

Under the leadership of Ali Al Jassim, Etihad ESCO (energy service company) has retrofitted approximately 2,200 facilities (offices, staff accommodation, and villas) which helped Dubai to save 170GWh of electricity and 470 MIG of water until 2017. Al Jassim, who is the CEO of Etihad ESCO, is taking on more ambitious aspirations with a target to retrofit 30,000 buildings by 2030, in line with the Dubai Demand Side Management (DSM) strategy.

Etihad ESCO recently signed an agreement with Jamal Al Ghurair Group to retrofit two of their industrial facilities in Abu Dhabi – Gypsemna and Porcellan, as part of the first retrofit project to be undertaken by Etihad ESCO in Abu Dhabi.

Al Jassim says: “We conduct regular trainings and workshops for developers to help them understand the need for energy efficiency measures. Free energy audits are also provided for some buildings, along with a detailed evaluation report made available to the owners. Building owners get in touch with Etihad ESCO for retrofit projects after studying these evaluation reports, which give them a clear understanding of the existing energy consumption situation. The success of retrofit projects undertaken by Etihad ESCO so far also plays a big role in attracting new clients.”

But are retrofit projects sustainable? Al Jassim says that the sustainability of retrofit projects is achieved by ensuring the feasibility of a project’s Energy conservation measures (ECM) by spending adequate time and effort in evaluating the expected building retrofit project. A proper technical and financial analysis performed as part of this helps in making retrofits sustainable. He says: “A lot of planning goes into making a building’s performance more efficient and sustain-

able, both financially and environmentally. Retrofitting at an early stage, in the form of a planned preventive maintenance, helps make retrofitting projects more sustainable. It is better not to wait until retrofitting becomes unavoidable.

“Seemingly unnoticeable sustainable procurement practices can also seamlessly convert inefficient buildings into highly efficient ones. Ideally, sustainable procurement must cover a wide range of retrofitting ranging from replacement with LED lamps to Emirates Authority for Standardization and Metrology (ESMA) labelled five-star equipment.”

Al Jassim proudly believes that the ESCO model has been extremely successful in implementing energy saving projects, as it demonstrates a well-defined business model. “It clearly defines each party’s role, guarantees savings, transparency and is effective in building more trust amongst the stakeholders,” he says.

Providing banks with adequate technical information, supported by financial feasibility study with the cash flow containing all necessary details that make the project valid and feasible, is important to gain their approval. He says: “In addition, we believe green funding is an added

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value to any bank. Not to forget stakeholders must have the same level of understanding and must speak the same language.”

The concept of ESCO project is gradually becoming more prominent and the rising awareness will help overcome the financing challenges, says Al Jassim. “We now have a dedicated green funds principle entity, which is specialised in providing the required financing for retrofit and sustainable projects. The increasing awareness on sustainability in the region is another beneficial factor, with public awareness campaigns building financiers’ trust on ESCOs.”

Dubai’s energy targets

Dubai’s target to save 30% reduction in energy by 2030 is a major driving force for the energy market, which has played a significant role in enhancing awareness among building owners, in addition to encouraging more ESCOs to enter the retrofit market. An ambitious target such as this cannot be achieved without public support.

DSCE established TAQATI in January 2016 as the dedicated Program Management Office for the Dubai Demand Side Management Strategy. TAQATI is set up under Etihad ESCO to achieve the DSM (Demand Side Management) targets. TAQATI has launched several campaigns such as the ‘My Energy My Responsibility’ campaign to help market focus on the need of energy efficiency and successfully contribute to Dubai’s 2030 strategy.

However, the Middle East has seen several heavily glazed buildings that are known to consume more energy. On this, Al Jassim says that regular workshops and training programs have contributed to driving awareness among building developers, thereby making them realise the importance of sustainability right from the design phase.

He adds: “By establishing a sustainability department, Etihad ESCO is engaging in the design phase of new buildings, which allows us to incorporate the best practices and standards as early as from the pre-design stage. On the other hand, retrofitting existing heavily glazed buildings is the only efficient solution to cut down energy consumption of these buildings. Retrofitting with the implementation of proper ECMs helps in reducing wastage of energy wherever possible.”

Solar angle

Moving on to other retrofit markets such as solar, Al Jassim says that SHAMS Dubai and the net metering concept have played significant roles in boosting the solar projects market in Dubai, leading to the creation of multiple solar projects with different capacities.

The SHAMS Dubai initiative encourages households and building owners to install Photovoltaic (PV) panels to generate electricity and connect them to DEWA’s grid to allow transfer of surplus generation. It is “enabled by a strong regulatory framework from DEWA and involves active private sector participation”.

“Enabling customers to install solar panels to produce their own power reduces their electricity bill every month. Any surplus electricity not used immediately is sold back to the grid at the same price, and at the end of the month only the net amount is billed to the customer. Should a customer produce more energy in one month than he / she has consumed, DEWA allows carrying over these kWhs to the next month. Dubai’s openness to new and sustainable technologies is a key factor driving solar retrofits market,” says Al Jassim.

With governments establishing necessary legislation to help clients with financial difficulties in installing solar PV panels, the popularity of solar projects is rising in the region. Solar energy is a technology that can be harnessed to roll out retrofit schemes that not only reduce the financial burden on building owners, but also deliver long-term savings for end-users.

He says: “Although the Middle East represents only a small part of the international retrofitting industry, with the US, Europe and China taking up 90% of the global market share between them, the regional solar retrofitting industry is enjoying a buoyant period as more governments identify the need to refurbish and overhaul older buildings as a core element of their strategies to prevent wastage that adversely affect Middle East’s ongoing energy efficiency measures.”



Ali Al Jassim,
CEO of Etihad Energy Services.