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### **ENERGY**

# INCREASING ENERGY EFFICIENCY IN DUBAI WITH ESCOs

Dubai set an ambitious target to improve energy efficiency throughout the emirate, aiming for a 30 percent reduction in energy demand by 2030. The Regulatory and Supervisory Bureau (RSB), an entity created in 2010 to support Dubai's economic, social and environmental objectives through effective, independent, and transparent regulation, was tasked to find a way to support this goal. They viewed Energy Service Companies (ESCOs), which provide a variety of energy savings, conservation, and retrofitting services, as a potential means to help organizations implement the necessary energy efficiency measures. However, there are very few ESCOs operating in Dubai, so the market was largely underdeveloped and untapped. The RSB decided that they first needed to establish a regulatory framework for ESCOs to encourage the development of new ones and to promote their usage by companies seeking to reduce their energy consumption. The RSB chose DNV GL to lead the creation of a transparent and solid regulatory regime for both ESCOs and the organizations using them for several reasons, including our demonstrated competence in drafting regulations, and our knowledge of verification and measurement. Another factor was our expertise in ESCOs and their roles in demand-side management (DSM) programs, as well as our knowledge of the principles behind ESCOs and performance contacting. We were also selected because of our significant local presence, complemented by DNV GL's broad global expertise, which enables us to provide recommendations that are tailored to Dubai's needs while taking into account best practices from other areas.

Because ESCOs are so little known in Dubai, we needed a way to provide confidence in the ESCOs for those who engaged them

to implement their energy efficiency programs. We created an Accreditation Scheme specific to Dubai, which, while not mandatory, ensures that the companies that participate in the program are financially stable and possess the appropriate skills. We also developed a Measurement and Verification Standard to establish a consistent methodology for the ESCOs, tailored to Dubai's unique environment. To ensure that the legal framework was consistent for all ESCOs operating in the Emirate we worked with a local law firm to develop contract templates for Shared Savings and Guaranteed Savings, as well as a Dispute Resolution System.

For the project to be successful, intensive stakeholder management and collaboration was required. To ensure that the process was transparent and comprehensive and that the stakeholders were able to express their opinions, concerns, and suggestions, we implemented a consultation method that is widely used in the United Kingdom, but has never been used in Dubai. This method uses a document that contains discussion topics related to the project and offers several possible options. It also provides questions for the stakeholders to gather their opinions and concerns regarding the available options. Workshops are also held to brief the stakeholders about the project and clarify any outstanding questions.

To that end, we liaised with stakeholders from more than thirty organizations, including regulatory authorities, governmental institutions (Dubai Electricity and Water Authority, Dubai Municipality, Supreme Council of Energy, and the Dubai Airport), financial institutions (Standard Chartered, Emirates NBD), property developers, ESCOs, and building owners and managers. We analyzed the feedback from all stakeholders, addressed the issues they raised, and communicated the outcome of their suggestions and input. To ensure acceptance of the regulations, we also held face-to-face meetings with key stakeholders. The process was designed to make sure that the concerns and suggestions of all the stakeholders were fully addressed, and that both the ESCOs and other stakeholders were satisfied with the final regulatory system.

As a result of our work, Dubai now has an established, comprehensive regulation system for ESCOs that is paving the way to meet its energy efficiency goals. Several companies have already gained accreditation, and there is a system in place for more companies to become accredited. As additional companies become accredited, more and more organizations will be able to take part in the energy efficiency programs needed to reduce Dubai's energy consumption significantly.

### About DNV GL

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### In the Energy industry

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