

OPERATIONAL REVIEW

GENERATION

TAQA has set ambitious growth targets for cleaner and more efficient power generation and water desalination in the UAE and beyond as part of our 2030 strategy. We've taken significant strides towards achieving these ambitions in 2021 while enhancing in-house capabilities and further optimizing our operating portfolio. Demonstrating our focus and strength, TAQA is building on several landmark partnerships and investments.

Supplying more than 90% of Abu Dhabi's power and water, TAQA's Generation business comprises a total of 23 GW* of gross operating power generation capacity, including 1.2 GW of renewable energy, and 913 MIGD of water desalination.

We have 14 assets in the UAE, including independent water and power plants. In addition, decommissioning is beginning with Taweelah A2, offset by an additional three projects under construction. The Generation business has six international assets located across Ghana, India, Morocco, Oman, Saudi Arabia and the United States, with 4.9 GW of gross power generation capacity internationally and a further 940 MW under construction.

Meanwhile, TAQA's desalination capacity in the UAE stands at 913 MIGD, with a further 205 MIGD under development.

TAQA's Generation business plays a key role in the overall growth strategy of the organization.

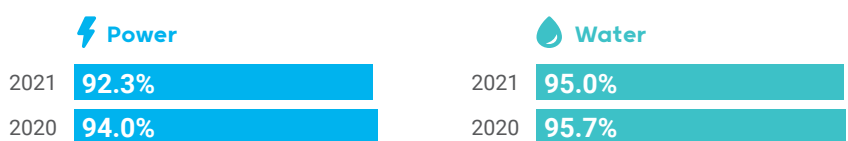
2030 Strategy Generation Targets



In addition, TAQA has three flagship UAE projects under construction, representing an additional 200 MIGD of reverse osmosis desalination, 2 GW of solar PV and 2.4 GW of combined cycle power generation using the world's most efficient H class turbines.

TAQA has the right to participate, through minimum 40% interest, in all future Abu Dhabi power generation and water desalination projects announced by the Emirates Water and Electricity Company (EWEC) up to 2030.

Fleet wide average technical availability



Commercial availability



*Includes Taweelah A2, AMPC and Sohar Aluminium plants



Total Generation revenue:
AED 12.3 billion
(27% of Group revenue)

International Generation revenue:
AED 4.1 billion
(9% of Group revenue)

Financial performance

The Generation business’s financial performance is mainly driven by the availability of its power generation and water desalination plants, as all projects, with the exception of Red Oak and Sohar Aluminium, operate under take-or-pay off-take agreements. During 2021, the average technical availability (capacity weighted) was lower by 1.7% for power generation and 0.7% for water desalination plants. This was due to technical difficulties faced at some projects, especially older UAE assets. However, there was substantial improvement in the international fleet’s technical performance, especially Ghana which stabilized after a long period of frequent and prolonged outages.

Sohar Aluminum benefited from the post-COVID economic recovery, reflected in both the volumes and price. London Metal Exchange prices increased by approximately 50% compared to the previous year. Sohar Aluminium also successfully completed the refinancing of its AED 2.2 billion long-term loan, contributing significant cash to its shareholders in the form of dividends and shareholder loan repayments.

Overall, Generation revenue and adjusted EBITDA were broadly unchanged between 2020 and 2021, though the contribution to Group net income at AED 643 million was AED 244 million below last year. This largely reflected one-off accounting adjustments that increased net income in 2020 and reduced in 2021. Adjusted for these, financial performance was very strong with Sohar Aluminium contributing an additional AED 280 million of net income.

Generation highlights (AED million)

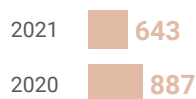
Revenues



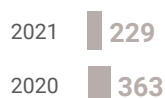
EBITDA



Net Income (TAQA portion)



CAPEX



OPERATIONAL REVIEW

GENERATION (continued)

Operational Highlights

UAE Highlights

In the UAE, the off-take agreement for the Taweelah A2 project concluded in October. Production halted, as contractually required, and the Taweelah A2 project company initiated decommissioning activities.

Various UAE assets faced technical issues, including Taweelah B, Taweelah A1, Umm Al Nar, Shuweihat 3 and MIPCO, leading to lower overall year-on-year fleet performance, with technical and commercial availability at 0.9% and 1.6% lower, respectively. These issues were resolved by the long-term service provider and mostly fell within insurance cover.

The commissioning of nuclear generation capacity operating at base load in Abu Dhabi also impacted the operations of certain assets—particularly power generation-only plants, which were dispatched at lower levels.

Projects under construction have been impacted by the COVID-19 pandemic, largely owing to macroeconomic and global supply chain disruption. However, the risk allocation and contractual structures of these projects should ensure that TAQA's financial position remains secure.

TAQA executed MoUs with Abu Dhabi Ports and Emirates Steel in 2021 to jointly explore and collaborate in the development of green hydrogen facilities and collaborated with ADNOC on the development of a co-generation plant in Ruwais to service industrial customers with power, water and steam utilities.

TAQA executed MoUs with Abu Dhabi Ports and Emirates Steel in 2021 to jointly explore and collaborate in the development of green hydrogen facilities.

Case Study

Ambition: A new global clean energy powerhouse

In December 2021, a global clean energy powerhouse intended to spearhead the drive to net zero by 2050 under the Masdar brand was announced through a new partnership between the Abu Dhabi industrial and investment giants: TAQA, Abu Dhabi National Oil Company (ADNOC) and Mubadala Investment Company. Subject to further regulatory approvals, TAQA will take a leading role with a 43% stake in Masdar's renewable energy business with Mubadala retaining 33% and ADNOC holding 24%. In addition, TAQA will take a 24% stake in Masdar's green hydrogen business, with ADNOC holding 43% and Mubadala holding the remaining 33%.

Once completed, the strategic partnership will bring together more than 23 GW of current and committed renewable energy capacity, making Masdar one of the largest renewable energy companies in the world and supporting Masdar's ambition to more than double its portfolio to more than 50 GW of clean energy by 2030.

43%

**share in Masdar's
renewable energy**

International Highlights

TAQA, along with Marubeni Corporation, announced a partnership to develop a green field cogeneration steam, power and water desalination project serving the needs of the world's largest integrated oil and gas company, Saudi Aramco in **Saudi Arabia**.

In **Oman**, TAQA completed the refinancing of Sohar Aluminum's long-term debt, with a total facility amounting to AED 2.2 billion – resulting in a special distribution and repayment of a shareholder loan to TAQA of AED 804 million – and further benefitted from improvements in London Metal Exchange prices resulting in a substantial rise in profitability.

In **India**, dispatch demand for the Neyveli project was higher than expected in 2021, improving the financial performance of the project due to financial incentives received as through higher production.

However, the off-taker came under financial stress during the year resulting in payment delays. This created liquidity constraints for Neyveli which were managed through short-term borrowings and working capital management. The situation improved during Q4 2021.

Improving business and operational conditions were seen in **Ghana** and **Morocco** with Morocco achieving high operational performance and availability improving its financial contribution to the Group. In addition, and in line with the Group's ambitions to diversify toward cleaner energy, TAQA Morocco submitted a bid for the 100 MW Solar PV Masen PV 2 project.

In Ghana, availability has significantly increased compared to previous years – an outcome of a transformation program to address technical issues with the asset over the past three to five years. The transformation program has resulted in an approximate 20% increase in technical availability in 2021.

The Red Oak generation facility in the **United States**, for which TAQA holds an 85% tolling agreement, was affected by the lower demand in the regional power market throughout the pandemic and an increasing preference for renewable producers that caused significant pressure on margins. This has pushed the dispatch levels of gas fuel-based power producers to historically low levels.

2022 Outlook

The key focus in 2022 will remain on growth and execution through on-schedule project delivery by preemptively assessing and managing risks, as well as further developing our project pipeline.

This includes optimizing current assets, continuing with the operational transformation process in Ghana and achieving technical completion, preparing for the Flue Gas Desulphurization Project in India and bidding and developing new renewable projects in Morocco as well as planning for the rehabilitation works for the extension of units 1 to 4.

In addition, TAQA will begin the UAE's first commercial-scale decommissioning project for the Taweelah A2 plant, establishing a roadmap for future decommissioning works in the country. We will continue to evaluate opportunities to optimize the value of and returns from our assets through various schemes such as refinancing, off-take extension and further operational excellence and transformation initiatives. Meanwhile, we will continue leveraging capabilities and exploring new strategic partnerships to build on our strengths and drive ambitious growth in domestic and international markets.