Digitalisation crucial to satisfying investor needs amid evolving post-subsidy market challenges

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It is not an understatement to say that 2020 has been one of the most turbulent years in recent history, with the Covid-19 pandemic leading to seismic shifts in industries the world-over. But despite significant supply chain disruption, the renewables industry has remained remarkably resilient compared to conventional power and wider infrastructure asset classes.

A growing variety of investors have subsequently entered the space, expecting to grab a slice of the pie and reap the dual benefits of non-correlated returns and greener credentials. But the renewable energy market is not so black and white. Broader trends at play in the space are generating new investor needs, and renewables owners must adapt their offerings to meet these accordingly.

Indeed, the renewables market has been undergoing a shift of its own amid the phase out of state-backed subsidies, with portfolios growing more diverse and owners adopting more merchant-led approaches. This has raised several new challenges in the industry as projects have become increasingly exposed to volatile power prices.

Whilst the renewables sector has continued to perform strongly during the pandemic, the coronavirus has brought these new market risks to the fore, and developers and renewables project owners now need to provide investors with confidence around the business case of their projects to encourage future investment.

Understanding market conditions and their impact on a project will be a crucial part of post-subsidy asset management. Indeed, in a 'fully merchant' environment, the task of managing the financial risks involved in energy sales may be equal to – or greater than – the challenge of maintaining technical performance.

Renewable energy owners need to adopt digital software platforms that can future-proof portfolios by mitigating technical and market risks in tandem. Only by meeting this challenge will owners be able to satisfy and retain new investors in a post-subsidy environment.

Driving investor confidence - data transparency

The wave of new investors entering the renewable energy market has substantially increased competition in the sector. To make up for their lack of industry experience, many investors have sought to improve their understanding of the market, and demand for renewables owners to provide greater transparency on asset performance data has correspondingly grown.

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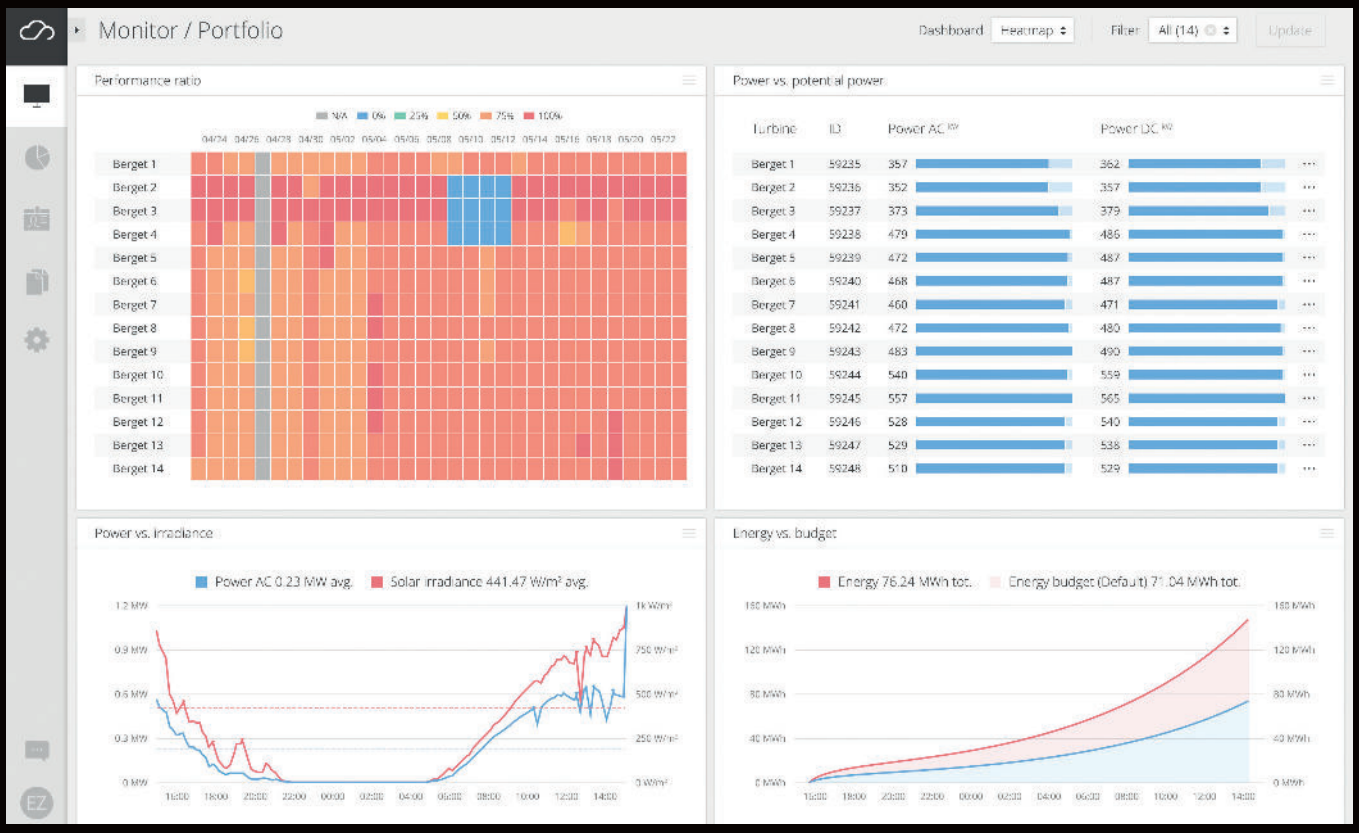
Sophisticated monitoring systems which can provide highly accurate data on individual asset and broader portfolio performance are already available on the market. By identifying trends in asset performance, such software can identify underperformance and non-compliance to OEM and ISP backed availability contracts and even predict when assets will fail, enabling renewables owners to maintain assets on a preventative basis - reducing downtime and extending asset life expectancy.

Advanced asset management systems can also enable renewable energy owners to receive continuous insights into the status of their portfolio remotely, instead of having to rely on static reports from on-site teams. Renewables owners that implement these platforms can therefore provide investors with enhanced oversight of technical performance - enhancing their understanding of assets' capabilities and allowing them to more effectively identify and acquire assets which fit their investment strategy.

However, attaining this level of data transparency can be problematic, particularly in larger portfolios.



Technical challenges - asset diversity

As the renewable energy market has matured, portfolios have diversified both technologically and geographically, with new markets and innovations such as floating solar and wind now accessible for project development. Though this has enabled renewables owners to spread risk, incorporating multiple asset classes into one portfolio has left operators facing a new set of problems.

Individual technologies often come with their own unique performance monitoring systems, which, whilst extremely useful for monitoring the performance of individual asset technologies, are ill-suited to managing assets across large portfolios where multiple technologies are in play. This is down to the fact that bespoke monitoring systems produce data in non-comparable formats, leaving renewables owners unable to easily calculate portfolio-wide asset performance or identify macro-trends which could inform broader decision-making.

Demonstrating to investors that a portfolio can generate the revenues it claims can therefore prove rather difficult. Fortunately, independent software providers have developed technology-agnostic asset management systems to solve this.

Such systems can draw information from any bespoke monitoring system into a comparable format and are fast becoming an essential for large portfolio owners, enabling them to set portfolio-wide performance benchmarks. Implementing such software is key to optimising asset performance as portfolios scale and diversify, and ultimately providing greater returns for investors.

In addition, by gathering detailed information from across asset classes and technologies, technology-agnostic management systems can rapidly identify and mitigate underlying issues in underperforming assets, minimising operational and financial impacts.

Market challenges - merchant risk

These challenges around data transparency and technical complexity have been two of the main drivers of software innovation to date. But as portfolios expand and the shift towards merchant-led approaches continues, exposure to market-specific power price fluctuations and other financial risks is also growing.

Marrying these external factors with technical asset performance data is essential to managing portfolio risks and reporting to investors. Indeed, in fast-moving markets, renewables portfolio owners who cannot centralise asset performance data alongside data on market-specific risks, will likely miss out on opportunities to woo new investors.

This is particularly true in light of Covid-19, which ably demonstrated that significant fluctuations in energy demand and price can and will happen, leading to negative power prices and assets being forcibly curtailed. These challenges are becoming an increasingly significant threat to renewables owners and present a potential obstacle to investors as the market evolves towards a 'fully merchant' environment.

To tackle this, renewables operators need to implement a more active, hands-on asset management style to demonstrate to investors that market risks impacting post-subsidy projects can be mitigated effectively. Moving towards asset management platforms which integrate data from the assets, external forecasting and electricity price data is therefore crucial to encouraging new investors to commit capital to renewables projects over the long-term.

Conclusion

Renewable energy operators urgently need to recognise how greater exposure to merchant risk is driving new investor needs and look to implement strategies which can future-proof their portfolios in a post-subsidy market. Digital asset management technologies which can provide data transparency across both internal asset performance data and external market factors are no longer a 'nice-to-have', but a critical part of portfolio management that is fundamental to attracting investment.

We may still be a long way from 'full automation' of renewable energy assets, but integrating these data streams is the next step towards a portfolio operating system that comprehensively accounts for the technical and financial risks that impact profitability.

Indeed, the success of the transition towards merchant-led approaches hinges on the continuous development and implementation of sophisticated digital asset management approaches. Project operators who can demonstrate their ability now to manage assets, maximise returns and reduce project risk will be the first to benefit from rapidly growing investor appetite.

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