

Simple, risk-free and profitable

P3P increases export revenue by an average of 4%, with Ørsted's Renewable Balancing Reserve

P3P Energy Management AE Ltd is a leading supplier of Combined Heat and Power (CHP) energy solutions to the industrial and commercial sector. The company operates a 3MW CHP plant for Britain's largest commercial tomato grower. Electricity is produced by the plant as a by-product of the growing process, which is then exported to the grid, generating revenue for P3P.

The challenge

P3P recognised that by accessing the imbalance market, further revenue could be made from the CHP plant, but needed a way to access this without additional resource or investment.

The solution – Renewable Balancing Reserve (RBR)

RBR provided a solution to P3P's challenge, as it gave a new opportunity to access the imbalance market and create new revenue without commitment or risk.

"If I were to describe RBR in three words, it would be: straightforward, riskless and profitable.

Energy Manager, P3P

Instant alerts

Ørsted monitors system imbalance and alerts P3P when there is an opportunity to help balance the system. Responding to the alert, P3P then changes on-site generation by activating the CHP plant remotely at the times needed.

"If you get a call but can't respond, it doesn't matter. When we're able to respond, I can do so remotely, activating the engine from my phone. It's so simple and otherwise has no impact on the running of the site, so you really can't lose.

Energy Manager, P3P

Guaranteed price

Each month, P3P sets its strike prices per MWh of flexibility delivered across each day. This is the minimum price it would accept to provide volume. When P3P responds to an alert, Ørsted guarantees the strike price P3P has set. If the imbalance market closes at a higher price, P3P also takes a share of this.

Risk and commitment-free participation

Although RBR is available 24/7/365, P3P can choose when to take part. If the company is unable to participate, it simply doesn't respond to the alert, and there's no penalty. This makes RBR entirely risk and commitment free, differentiating it from other National Grid balancing schemes.

The result

Through RBR, P3P has earned additional revenue from the CHP plant, which is shown as an adjustment on its monthly invoice from Ørsted.

Due to the tomato growers' requirements for heat and CO₂, on average P3P was available to take part for just over half of the 48 settlement periods in a day, over a year.

During the times P3P was able to take part, it was able to increase export revenue by an average of 4%, creating an average of £273 of additional revenue per hour. With no additional impact to on-site operations or running costs, P3P has been able to access this revenue without extra investment.





This is an entirely risk-free way to earn new revenue. There's no obligation to participate, it's really easy to use and Ørsted's customer support is good.

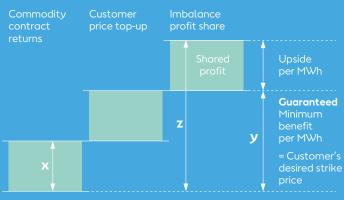
Energy Manager, P3P



High imbalance price

System imbalance price greater than customer's strike price

N2EX price x £/MWh Customer's desired strike price y £/MWh Imbalance price z £/MWh price top-up



Low imbalance price

System imbalance price less than customer's strike price

x £/MWh Customer's desired strike price y £/MWh Imbalance price z £/MWh

price top-up absorbed by Ørsted

Guaranteed

= Customer's

Imbalance explained

National Grid manages the electricity network in real-time to keep it running efficiently and safely. This includes making sure that frequency and voltage are both within acceptable limits.

Each day suppliers disclose their anticipated volume for the day ahead. Imbalance occurs when generation does not match the demand. When this happens, National Grid takes action to balance the network by asking generators and consumers to change generation or consumption to counteract the difference. This incurs costs, which are passed on to suppliers.

Renewable Balancing Reserve helps businesses unlock the value from the imbalance market. It works by reducing imbalance costs for Ørsted as well as providing a revenue earning opportunity from the System imbalance price.

The resulting savings/earnings are then shared with participating customers.

