

Guide

# Monetising your energy assets: Optimisation agreements



# Foreword by Mike Mahoney, Lead Originator

The global energy system is undergoing rapid transformation towards a sustainable, zero-carbon future, leading to significant opportunities for both flexible and storage assets. Renewable generation and battery energy storage systems (BESS) play an especially crucial role in providing clean energy and balancing the grid, whilst offering attractive revenue streams for their owners.

The European Commission's commitment to at least 42.5% renewable energy by 2030, with an aspiration of 45%, as detailed in the Renewable Energy Directive<sup>1</sup> and REPowerEU plan, underscores the scale of growth expected in Europe's renewable energy sector. This target necessitates a massive deployment of new wind, solar, and other renewable energy technologies across the continent.

Similarly, the UK government has set ambitious targets for renewable energy, aiming to decarbonise the electricity system by 2035<sup>2</sup>. This includes increasing wind and solar capacity significantly, positioning the UK as a leader in the global race for clean power.

This significant growth in renewable and flexible generation is transforming the energy market, creating new opportunities for asset owners to optimise revenues and maximise returns.

Within such a dynamic market, optimisation agreements are emerging as powerful tools for asset owners. These agreements enable optimal asset utilisation for traditional power plants and emerging technologies and offer a pathway to both reliable income and risk mitigation.

The following guide, "**Monetising your energy assets: optimisation agreements**," is designed to equip you with the knowledge and insights necessary to leverage these agreements effectively. Through understanding the key considerations and benefits across the different optimisation agreements, you can decide on which one aligns with your financial and operational goals and maximises value from your energy assets.

We believe the insights provided within this guide will empower you to navigate the complexities of an evolving energy market and achieve optimal outcomes for your energy assets.



<sup>1</sup> [https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-targets\\_en?form=MG0AV3](https://energy.ec.europa.eu/topics/renewable-energy/renewable-energy-directive-targets-and-rules/renewable-energy-targets_en?form=MG0AV3)

<sup>2</sup> <https://www.gov.uk/government/publications/british-energy-security-strategy>

# Optimisation agreements explained

An optimisation agreement is a contractual arrangement which allows you, as an asset owner, to partner with an energy company to optimise the use of an energy facility. The energy company provides expertise as well as market access, so you can mitigate risk and maximise revenue.

In creating these agreements, asset owners benefit from a flexible and strategic approach to monetising their energy assets, including traditional power plants, gas peaking plants and emerging technologies.

Through entering into an optimisation agreement:

## Energy Company

The energy company supplies the fuel and manages both charging and discharging strategies.



**Energy Asset**



## Asset Owner

Asset owners retain ownership and operational control of the facility, receiving guaranteed payments or profit-sharing options. This provides a stable revenue whilst reducing market risks.

# Tolling agreements explained

A tolling agreement is a type of optimisation agreement where the energy company pays a predetermined fee (the “toll”) to use your energy asset. Although you, as an asset owner, still retain full ownership, the energy company is typically granted control over the operation of the facility, including production processes and output.

Tolling agreements have been widely used by owners of traditional power plants, offering a stable revenue stream resistant to market volatility, as well as greater flexibility in managing operational risks and optimising asset utilisation. It’s also attractive to energy companies, as despite taking on downside risks, they are able to capitalise on high prices and volatile markets.

Tolling agreements are especially useful for energy asset owners, who are vulnerable to energy market volatility due to increased arbitrage opportunities and the need for enhanced grid stability services, as well as the growing importance of peak shaving and renewable energy integration. However, through receiving a predictable revenue stream from the energy company, asset owners are able to secure a consistent return on investment, even in the absence of robust government support schemes.

Through entering into a tolling agreement:

## Energy Company

The energy company pays a predetermined fee (the “toll”) to use your energy asset, and is granted operational control over the facility



**Energy Asset**



## Asset Owner

Asset owners retain full ownership but allow the energy company operational control over the facility. In return, they receive a stable revenue stream irrespective of market volatility.

# Floor price agreements explained

Floor price agreements are optimisation agreements which offer a risk-mitigating mechanism to the asset owner. This type of agreement allows you, as an asset owner, to participate in the energy market whilst mitigating the risks associated with price volatility.

The energy company, often acting as an optimiser, manages the sale of energy generated by the asset. You will receive a share of the market value achieved by the optimiser each month, and the agreement guarantees a minimum return (the "floor price"), offering protection from potential losses during periods of low energy prices or market downturns.

This arrangement incentivises investment in renewable energy by providing a stable revenue stream to asset owners, whilst allowing energy companies to leverage market flexibility and the value of renewable energy generation.

## Energy Company

The energy company acts as a market intermediary, optimising energy sales to maximise revenue for the asset owner while ensuring they receive a guaranteed minimum return through risk management strategies.



Energy  
Asset



## Asset Owner

The asset owner provides the energy asset and shares in the revenue generated by the energy company, with a guaranteed minimum return, mitigating market price risk.

# Route-to-market service explained

A route-to-market service offers asset owners a range of options to monetise their energy production. As an asset owner, the "merchant pricing" approach allows you to retain the greatest share of revenues but exposes you fully to market price fluctuations.

In a route-to-market service, you will receive the greatest share of the market value achieved for any energy sold by the optimiser each month. This can be very rewarding during periods of high energy prices. However, this type of agreement also carries significant downside risk during price downturns, as asset owners will be fully exposed to any market price fluctuations.

## Energy Company

The energy company acts as a sales and trading intermediary, handling the sale of electricity generated by the asset owner to maximise revenue.



Energy  
Asset



## Asset Owner

The asset owner focuses on generating electricity, while the energy company navigates the complexities of the energy market. The asset owner retains the greatest share of revenues but is fully exposed to market price fluctuations.

# Which optimisation agreement is right for you?

As an asset owner, the choice between tolling agreements, floor price agreements and route-to-market services will depend upon your risk tolerance and revenue objectives.

As illustrated in the graph below, different optimisation agreements offer varying levels of risk and reward.

- 1. Route-to-market services** enable you to benefit from favourable market conditions in exchange for taking on more risk.
- 2. Tolling agreements** offer a predictable revenue stream through guaranteeing a fixed fee for the use of your assets, regardless of market prices.
- 3. Floor price agreements** offer a balance between these two extremes, providing both downside protection and the opportunity to participate in market upside.

## Optimisation Agreement Revenues

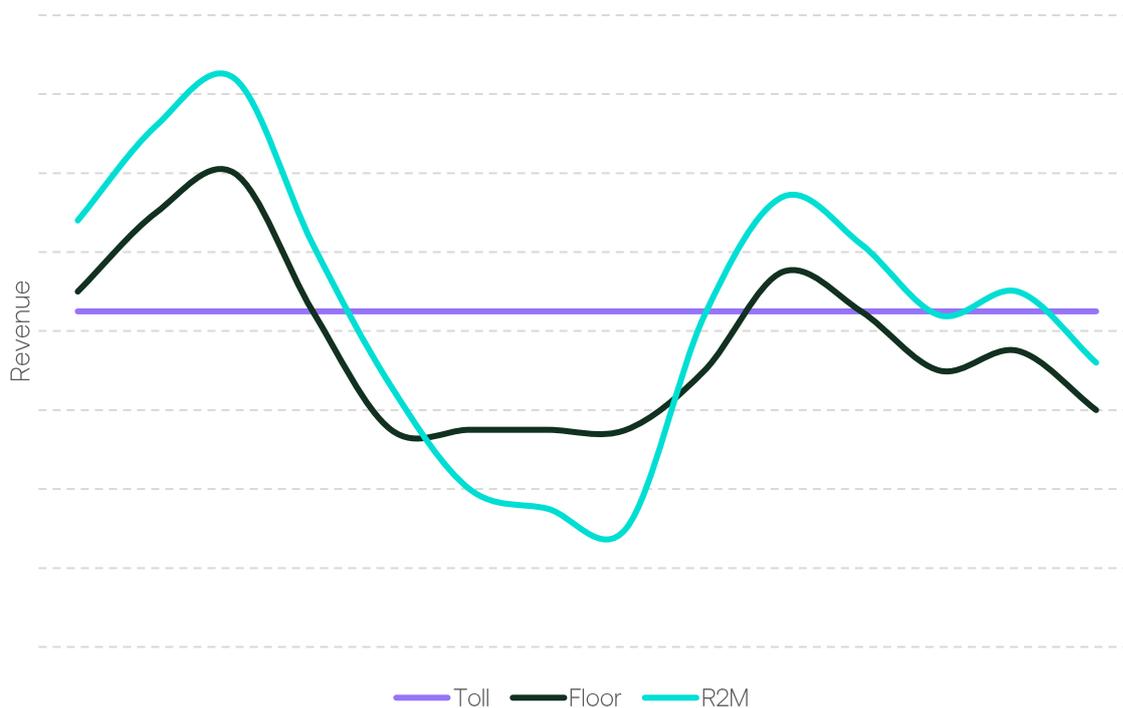


Figure 1 Illustrative revenue profiles from different types of optimisation agreement

# Key considerations for optimisation agreements

When deciding on an optimisation agreement, there are numerous factors which need to be considered as part of the tender process. Here is a checklist on what you should explore with an energy company when deciding on an optimisation agreement.



## Pricing

You should critically assess the pricing structure of the optimisation agreement, carefully considering the balance between securing a steady income stream and capturing potential upside gains.

**Tip:** Conduct a thorough market analysis to understand current trends and future projections. This will help you to negotiate a pricing structure which can maximise your revenue potential



## Contract length

The duration of a contract will significantly impact both price and your risk exposure. Shorter-term agreements are generally more sensitive to market conditions, whilst longer contracts may introduce greater risk to the optimiser alongside greater discounts.

**Tip:** When considering contract length, be clear on what's important for your business. Longer agreements tend to be more suitable for new developments which are seeking to secure funding.



## Asset performance

The capabilities of an asset will critically influence its valuation. Factors such as response time, efficiency and run-time inform which products and markets are best-utilised and can help determine the trading strategy.



## Maintenance

Clearly define the maintenance responsibilities and establish availability targets. This is essential for ensuring optimal asset performance and avoiding any disputes.

**Tip:** Include a detailed maintenance schedule and performance metrics in the contract, to ensure both parties are aligned on expectations.



## Regulatory framework

The regulatory environment plays a crucial role in determining the viability and attractiveness of tolling agreements.

**Tip:** Stay updated on regulatory changes and consider consulting with market experts to ensure your agreements comply with current and upcoming regulations.

# Unlock the potential of your energy asset with SmartestEnergy

At SmartestEnergy, we offer three tailored contract structures to meet your needs as an asset owner:



## **Traditional toll:**

Guaranteed monthly revenue



## **Floor agreement:**

Secure minimum payment plus profit-sharing



## **Route-to-market service:**

Expert market access and optimisation

## **By partnering with us, you can:**



## **Maximise Returns:**

Our proven expertise ensures efficient operation



## **Minimise risk:**

Benefit from guaranteed income and regulatory compliance



## **Retain control:**

Maintain ownership and operational oversight

With our proven expertise, your asset will operate efficiently, delivering maximum returns while aligning with your financial and operational objectives

## **Contact us today**

If you're an energy asset owner seeking to explore the potential of tolling agreements, we invite you to contact our Origination team. Our experts can provide tailored advice and assist you in navigating the intricacies of this strategic approach.

Contact our Origination team at [SEOrigination@smartestenergy.com](mailto:SEOrigination@smartestenergy.com) today for expert advice and personalised support.