



Statkraft

Energy Solutions for Business

UK & Ireland

The background of the slide is a collage of three images. The top right shows a large concrete dam with water behind it. The bottom right shows a wind turbine in a green field at sunset. The bottom left shows a snowy, rocky landscape.

**YOUR POWER,
OUR RESPONSIBILITY**

Introduction

The world must rapidly reduce emissions to meet challenging climate change targets. We can help.

Statkraft believes that renewable energy is both a solution to climate change and more economical than conventional fossil fuel energy. Our vision is to provide pure energy. We aim to support our customers in the “renewables revolution” needed to achieve net zero carbon emissions. We have developed a full range of products to meet all our customers’ energy needs on this radical journey. As the market evolves, we aim to pre-empt what our customers will need and adapt our offering to suit. Our ambition is to be a leading player, innovative and resourceful; creating value whilst balancing the customer’s and the environment’s needs.

Unity, our trading platform, allows more than 20 GW of our customers’ intermittent renewable generation to be scheduled seamlessly into the market place across Europe. Unity uses a combination of computer algorithms and expert trader supervision to enable flexible generation assets and customer consumption to be deployed optimally. Adding this extra flexibility allows more renewable generation to be built. Unity makes billions of calculations a year and steers devices in real time, adjusting to best utilise the changing availability of wind and solar resources.

Unity also enables our customers to fix prices over various durations, or take “spot” power prices if they think they will fall. This gives them market access without needing to build their own expensive infrastructure.

Statkraft has contributed to the building of multiple billions of Euros of new generation assets using our “bankable” long term Power Purchase Agreements (PPA). Statkraft’s strong credit has enabled many third party projects to gain finance for their new build projects, saving 70 billion tonnes of CO₂ over their life in the UK alone.

Increasingly, we are working with suppliers, and directly with end consumers, to provide clean energy supply which can be backed by our 10 TWh of long term UK PPAs. We lease and sell renewable-based equipment and optimise customers’ flexibility within the energy market. We also trade a wide range of renewable certificates around the globe, so customers can see where their clean energy is sourced.

This booklet introduces Statkraft, along with our key product groups for the UK and Ireland. Please contact us if you have any questions.

Duncan Dale

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UK & Ireland

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Overview



Founded in 1895, Statkraft is Europe's largest renewable energy generator. It has an A- credit rating and is owned by the Norwegian State.



Statkraft is a global player in clean energy project development. It is characterised by its flexibility, honed from managing 16 GW of its hydro assets. Statkraft is the largest marketer of third-party renewable power in the UK, Germany and across Europe as a whole, integrating 20 GW of generating power and over 20 TWh of reseller volume.



Our pan-European trading platform, Unity, is available to integrate our wholesale customers, generators and power users to the live energy markets. Unity provides a wide range of products; balancing, fixed and floating energy prices, options and the optimisation of flexible generation.



We support industrial and commercial users with the “renewable revolution” through clean energy supply, solar generation, storage, electric vehicle charging, power control, measurement and optimisation within the market.



We sell long-dated risk management products that, combined with our bankable reputation, enables customers to raise debt to build new renewable and flex assets.

Customer Offering



Power Purchase Agreements (PPAs)

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UK Renewable PPAs

Statkraft has over 4 GW of renewable PPAs in the UK under long-term contracts of up to 20 years - made up of a mixture of onshore and offshore wind, solar, hydro and biomass sources. We are also active in the short-term PPA market with terms as short as 6 months.

Renewable PPAs are direct contracts between generators and Statkraft. We have a large and diverse portfolio of assets, a sophisticated trading platform, Unity, constant monitoring of weather and active certificate trading. This allows us to provide attractive pricing and a wide range of products for our customers. Customers can be paid on a floating or fixed price for up to 3 years ahead for all, or part, of their volume. Unity can also optimise customers' bidding into the balancing market to enhance profits. We also provide long-term bankable floors to help customers raise debt. Increasingly, we have blended and extended our longer-term contracts to help subsequent re-financing of projects. Our customers range in size from 0.1 MW to 350 MW. The UK Renewable PPA is usually a mix of some or all of the features listed below.

Route-to-Market PPA

Statkraft takes the intermittent balancing risk and sells power and any associated certificates to the market.

Risk Management

Power prices can be fixed or left floating for all or part of the volume. Minimum incomes can be guaranteed (floors) to raise debt.

Renewable PPA Optimisation

Unity can be used to optimise income in the balancing market, or switch off the generator if the net income is negative.

Co-located Renewable Plus Storage PPAs

Site-wide optimisation of co-located and hybrid sites involving multiple technologies, such as solar and storage.

For more information please contact:



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Armistead Wind Farm | 12.3 MW | 20 Year PPA

We have a long working relationship with Statkraft and have always received excellent customer service. We are pleased to enter into new PPAs for these five projects. Their offer of new commercial terms on two of the projects was very competitive and we also welcomed the opportunity to renegotiate the original terms on the other three contracts.

Phil Whyman

Commercial Finance Manager, Renewable,
Banks Renewables



Corporate PPAs

Increasingly, our customers are seeking to show commitment to renewable generation through Corporate PPAs. Corporate PPAs are when some, or part, of a specific renewable project's physical power, or its pricing, are taken by an end consumer. It is necessary for the end consumer to have an adequate credit strength to assume a long-term risk and enable finance to be gained.

Statkraft can support both generators and end customers with finding their partners and managing the balancing and volume related risks. We work with clients on Corporate PPAs in both the UK and Irish markets.

Statkraft have also developed products with the capability to hedge volumes down to 0.2 MW for ten years, enabling end consumers to build up their long-term price exposure gradually and mitigate the risks of renewable projects. This product also helps reduce the generator's credit risk by building a portfolio of offtake credits.

Corporate PPA – As Generated

Physical delivery and re-delivery of fixed price power from an intermittent asset to a corporate load requirement. Statkraft will manage the generator's "as delivered" volume to fit the customer's demand at any given time. Plus REGOs.

Corporate PPA – Baseload

Physical delivery and re-delivery of fixed price power from an intermittent asset to a corporate load requirement. Baseload shape generally linked to volume generated. Plus REGOs.

Corporate PPA – Virtual

Financial delivery at a fixed price and volume as generated for both Corporate and Generator. Statkraft can also arrange physical delivery of power for the generator.

Virtual PPA – Wind-shape

Provision of power shaped to Statkraft's wind-portfolio volume and REGOs.

For more information please contact:



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“

We spent a good deal of time looking for a partner who would recognise the value of our portfolio of University members. Statkraft emerged as being both highly credible and experienced with our consortium members. Statkraft facilitated gaining commitment and helped make a complex deal much easier.

Richard Murphy
Managing Director, The Energy Consortium

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UK Flexible Generation and Battery Storage PPAs

Batteries and gas engines provide the reliability and flexibility required to keep the lights on when there's not enough wind or sun. Our leading trading platform, Unity, uses dynamic optimisation techniques and continuous forecasts to maximise our customers' gross margins.

Statkraft can schedule flexible assets in real time to move between wholesale market energy optimisation and ancillary services for the grid, at different times of the day. We optimise between the Day Ahead Market (DAM), within-day trading and into the Balancing Market; sometimes trading the position several times without actually having to run the asset. This service can be utilised at large scale stand-alone projects, or smaller projects on customers' premises where various industrial "wire" charges have to be optimised as well. Statkraft can also provide long-term guaranteed minimum income payments (floors) to enable debt to be raised for some flexible assets.

Grid-scale Battery Storage Optimisation and Route-to-Market

Management of ancillary service market access (e.g. frequency response markets).

Flexible Gas Generation Optimisation and Route-to-Market

Management of procurement of gas and carbon certificates for the facility.

Co-located Renewable Plus Storage PPAs

Provision of comprehensive route-to-market services for the entire site, managing imbalance on the renewable generation, while also trading and optimising the co-located storage asset. Site-specific constraints can be given to Statkraft for optimisation, allowing for a high-degree of adaptability for the solution.

For more information please contact:



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Creyke Beck Battery Storage Project Cottingham, Humberside | 49.9 MW

We have partnered with Statkraft because of its industry-leading trading capabilities and innovative approach to future energy markets.

Tom Vernon
Managing Director, Statera Energy



Irish Renewable and Flexibility PPAs

Statkraft entered the Irish power market in 2018. We provide renewable subsidy based PPAs, Merchant PPAs and Corporate PPAs, as either physical or financial products. We also manage grid ancillary service products and offer our Flexibility PPAs.

Renewable Subsidy PPA (REFIT and new RESS market)

Physical PPA to deliver the full REFIT or RESS Irish market renewable subsidy support price and manage balancing risk.

REFIT Contract for Difference (CfD)

Financial contract to guarantee delivery of REFIT reference energy price and manage imbalance risk for customers with an existing PPA.

Merchant PPA

Physical PPA to deliver power against the Day Ahead Market (DAM) and to manage imbalance risk. We can also offer fixed prices using a financial product.

Corporate PPA

Delivery and redelivery of fixed price physical power from an intermittent asset to a corporate load requirement. Load shape and renewable certificate (GOO) delivery as per corporate requirement. Alternatively, we can provide a “Virtual Corporate PPA” as a financial product to fix prices and market the generator’s physical power separately.

Ancillary Service Route to Market (RtM)

Management of the sale of ancillary services (DS3) products from wind farms and batteries.

Battery Storage PPA

Management of DS3 services and wholesale power market optimisation of flexible storage assets using Unity. This includes the import and export of power and can include a guaranteed minimum income (floor).

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Direct Renewable Supply

Backed by Statkraft, Bryt Energy are helping Britain embrace a low carbon, sustainable energy future, making a difference to businesses, communities and the planet.

CUSTOMER JOURNEY



SUPPLY

Bryt Energy provides zero carbon, 100% renewable electricity sourced solely from wind, hydro and solar. Offering bespoke contracts, such as fixed, flex and pass-through, we put the customer in control.



GENERATE

We provide on-site generation solutions, allowing consumers to become an energy producer to offset energy costs. Customers can also enjoy the benefits of self-reliance by increasing security, reducing carbon and cutting costs.



STORE

With a variety of energy storage systems, we help customers choose the right solution for their business. Energy storage, along with a 100% renewable supply, allows customers to embrace energy flexibility and maximise value.



OPTIMISE

Using a combination of the latest technologies (including energy dashboards, on-site controls and Unity) customers can optimise their electricity usage to simultaneously reduce carbon, reduce costs and increase flexibility.

**For more information
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Bryt's product offering of 'Natural renewable energy' was, of course, our first reason to select working with them. This was soon supported with fantastic rates, which on their own would have been enough of a reason for us to work with Bryt.

However, the service has, quite simply, gone above and beyond and frankly puts other suppliers to shame! I felt massively supported throughout the process of switching all our seven contracts to them, and my ongoing requests for information or assistance has been met promptly and with ease. Quite simply, exceptional!

Why any business would gain supply elsewhere would baffle me! Environmentally friendly options shouldn't be more expensive and should be a better product/service – Bryt deliver this.

Adam Hall

Head of Sustainability, Internet Fusion Group



Private Wire Solar

Our solar proposition allows companies to generate on-site power at a cost that is 35% lower than the National Grid price, from day one, with no upfront investment.

We provide a turn-key solution, installing solar PV panels on-site, free of charge, and take care of all the planning, admin and maintenance. You just pay a fixed, low rate for the zero-carbon energy produced, which saves you money and boosts your green credentials.

There isn't a lease involved in the installation, so no accounting costs appear on your balance sheet. You just get predictable energy savings on your bottom line from day one which, over the contractual term, can add up quite significantly.

Key features:

- **Off Balance Sheet:** Our solar asset resides on your premises but not on your balance sheet.
- **No Lease:** Ensures no registered restriction in your premises.
- **Hassle Free:** Turn-key, fully funded, insured, operated and maintained by us.
- **Save Money:** Long-term savings on energy costs over the lifetime of the arrangement.
- **Zero Carbon:** Delivers a big step forward towards your clean energy commitments.

Statkraft Solar Solution and Battery Storage

All the previously listed benefits with the addition of a battery, so excess power from the solar asset can be stored and discharged later in the evening, offsetting grid power at peak times.

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Lange Runde solar energy plant | Emmen | Built on farmland | Planned to use the grassland under the solar panels for sheep grazing



Behind the Meter Storage

We provide energy storage solutions at customers' sites for operational resilience and cost reduction. Costs can be saved by shifting the time of use on-site and optimising the whole customer's flexibility back into the market in real time using Unity.

Energy storage can also mitigate connection costs and minimise constraints associated with greater power consumption. For example, this enables the installation of electric vehicle charging infrastructure in advance of connection upgrades. The benefits are enhanced if the customer has the right sort of supply tariff; power can be imported overnight when energy and wires charges are low, then used at peak time when prices are usually much higher.

Customers with on-site solar and relatively low demand often benefit from energy storage, allowing them to shift power to high cost periods and reduce exports back to the grid.

Funded Solar & Storage

Funded solar and a range of long-duration storage solutions with long-term PPA, as well as supply and optimisation services.

Storage (Bryt Equipment Sale) - Resilience

Range of storage solutions to provide site backup and/or UPS resilience, in conjunction with supply contract, and flexibility optimisation using Unity.

Storage (Bryt Equipment Sale) - Constraint Management

Range of storage solutions that provides peak shaving to avoid capacity costs or import constraints in the distribution system. Used in conjunction with supply contract and optimisation using Unity.

Storage (Bryt Equipment Sale) - Cost-saving

Range of storage solutions to reduce costs by optimising for the live energy markets and other time of use industry charges. In conjunction with supply contract and optimisation using Unity.

Bryt Storage Supply & Optimisation (No Equipment Sale)

Flex supply contract and VPP optimisation of own storage solutions (either deployed by Bryt or an already operational/third party).

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Electric Vehicle Charging (EV)



Statkraft is one of the largest EV charging players in the advanced Norwegian market.

We provide fast and rapid charging equipment, solutions and services to commercial customers for office charging, “destination” charging sites, and fleet charging. Bryt provides clean energy and flexibility optimisation through Unity for EV charging operators.

Statkraft owns 96% of Grønn Kontakt which has 230 fast charging stations across Norway. Grønn Kontakt also offers smart charging solutions for housing cooperatives, industry and public parking spaces.

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Reseller Trading Services

Statkraft supports power suppliers (resellers) who then on-sell to end customers. We risk manage over 20 TWh of reseller volume in Europe. Our solutions range from simple power trades to full merchant risk management of power, backed by our long term PPAs.

We can provide suppliers with a daily, half hourly price curve; they inform us through the Unity Customer Portal what customers they have won each day, along with their historic data for forecasting and hedging. This product allows the supplier customer to concentrate on their end customer acquisition and leaves most of the price and volume risk with Statkraft.

We trade many forms of renewable certificates including ROCs, REGOs and GOOs in structures that manage working capital and share volume risk. These REGOs can be from our own long term PPAs or from third parties.

Credit often holds back suppliers from growing. Statkraft has developed some innovative solutions to work with suppliers to manage this problem.

Reseller Route-to-Market

Provision of wholesale market access, balancing and shape management services.

Virtual PPA – Wind-shape

The volume of power flexes with the amount of wind or solar generation in Statkraft's portfolio, along with the appropriate REGO certificates.

Traded Products

Provision of wholesale market products.

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Global Renewable Certificates

Statkraft trades a wide range of renewable and carbon certificates from around the world. The experience of the interrelationship between the different countries' systems enables Statkraft to provide a wide product range and better pricing. We work with both end consumers and resellers to enable customers to meet their renewables goals. For example, customers might sign a PPA for a new renewable project and top up with GOOs to match its specific load in a “core” country, while also buying IRECs in developing countries to be able to claim that they consume green power globally.

Guarantee of Origin (GOO)

Proof that one consumes green energy for Scope 2.

REGO

Renewable Energy GOO – a UK version of the above.

FIT/CfD GOO with or without Power Flows

GOO with additional benefits for suppliers in the UK.

ROCs

Renewable Obligation Certificates used in the UK.

European Union Allowances (EUA)

Right to emit one tonne of carbon in Europe.

International Renewable Energy Certificates (IRECS)

Proof that one consumes green energy for Scope 2. Similar principles as GOOs.

Certified Emission Reduction (CER) or Offsets

Roughly 8% depending on country can be surrendered by cheaper offsets.

Voluntary Emission Reduction (VER)

To offset on a voluntary basis.

California Carbon Allowance (CCA)

Right to emit one tonne of carbon in California.

California Carbon Offset (CCO)

Roughly 8% can be surrendered by cheaper offsets.

Regional Greenhouse Gas Initiative (RGGI)

Right to emit one tonne of carbon on US East Coast.

US RECS

Renewable Energy Certificates in various States in the USA.

PPA for Developers in Poland

Both financial and physical (last is outsourced).

PPA for Commercial & Industrial (C&I) Customers in Poland

Various options to match loads (pay as produced, baseload, shape etc.).

Green Power in Germany

Selling green (GOO) and plus power to local municipals, and C&I customers in Germany.

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