EOS

ENERGY OPTIMISATION SOLUTIONS

REDUCING CARBON EMISSIONS & ELECTRICITY COSTS HIGH ENERGY USER INDUSTRY INITIATIVE

Summary

- EOS offer a zero cost battery storage solution to heavy industry which can cut electricity costs between 15-25% depending on usage profile.
- Supply EOS with access to Half Hour Data and bills for the last 12 months & we will give you a proposal within a month detailing our estimates of cost savings for you.
- We currently have a project pipeline of over 200 MW of battery to roll out to energy intensive users including heavy industry & also a high proportion of data centres.
- To progress please contact ebuckley@energyoptimisation.com



- Proven renewables developer with an 8 year track record
- Backed by the Quinbrook Infrastructure Fund which has assets in excess of 10bn USD.
- Already committed or invested in over £300m in projects in the U.K.
- Strong technical knowledge in house & through its partnership with Private Energy Partners.
- Notable EOS projects include the 220MW Uskmouth Battery Storage development of which a portion already sold to E.ON.

UK power market background

- UK power prices are set to increase and are already a high percentage of customer running costs
- Supercharger measures are of considerable benefit but this is an opportunity to cut electricity costs still further.
- Sustainability and decarbonisation of the grid are now front and centre for industry
- This is an opportunity to realise material operational improvements to cost and security of supply at no additional cost to the customer, and within a short time horizon
- Impact of P375 metering from June 2022 provides flexible assets with access to balancing markets



What we do

- Install on the customers site a fully funded, sustainable energy optimisation facility
- Utilising the latest battery-based energy storage technology (BESS), renewable generation (where applicable) (BESS+) and integrative control systems
- Non disruptive, containerised solution (plug & play), notionally another layer of power resilience to infrastructure
- Create flexible, secure and dynamic charge and discharge protocols
- To deliver cost reduction on a shared savings/revenue basis
- Under a long term (15 year) Property Lease with variable rent payments to host
- Fully benchmarked with real time measurement and verification
- Leveraging opportunities for on-site generation (Solar, CHP) & EV Charging 06/11/2024 © Copyright EOS 2021



The customers business



• Energy intensive business or organisation with consumption above 5GWhs per annum or spending more than £650,000 per annum on power



• Freehold owner or 15 years to run on your lease



• Access to Half Hour Data and bills for the last 12 months



Imperative to reduce energy costs



• Increase opportunities to reduce carbon emissions and help decarbonise the grid.



What we will do

- Assess savings & revenue opportunity from HH and Billing Data
- Reduce transport costs (DUoS & TNUoS) Red Zone avoidance
- Wholesale Markets & Balancing Mechanism (BM) Trading arbitrage in real time with support BM access from P375 Metering
- Dynamic Firm Frequency Response/Dynamic Containment
 revenuesfrom Nat Grid
- Capacity Market (CM) benefits
- Negotiate better purchasing agreements with Licensed suppliers
 through disaggregation
- Integrate any existing or proposed on site renewable generation (or CHP) (BESS+)



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Key benefits

- Up to 10-15% savings potential against Baseline Electricity Costs (BEC)
- Power resilience and redundancy time of use on-site renewable generation no disruption to existing electricity supply
- Peak shifting from high carbon intensity grid periods to low carbon intensity periods – demonstrable CO2 reduction 100 % of the Carbon Saved is for your own reporting (circa 40.1 Metric Tons per year for every MegaWatt of BESS Deployed on your Site)



• Zero capital cost – zero operational cost – IFRS 16 Leases compliant



Co-location– leveraging solar dramatically increases savings

- Any solar installed will make a material difference to cost savings
- Co-location can be up to 5KM from the onsite BESS
- Matching the BESS capacity with solar would cut electricity costs by & additional 25%
- Installing solar matching half the BESS capacity would reduce electricity costs by an additional 15%.
- Solar can be roof top, car park or greenfield.





Peak shifting from high to low carbon intensity periods



— Grid Carbon Intensity - gCO2e/kWh

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System configuration



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Private virtual power plant



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EOS Thank you

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