

Spotlight on Renewable Technical Services

Renewable Technical Services (RTS) is a multi-disciplinary team providing support, coordination, expertise and strategic perspective to clients from pre-construction to operational phase of Renewable Energy projects. Services include Strategic Advisory, Concept/Site Identification, Constraints Analysis, Modelling & Design, Technical Due Diligence, Owner's Engineer, Technical Advisor and Asset Management. For more information please contact Bruce Caldwell, Head of RTS at bruce.caldwell@itpenergised.com.



Advisory

We work with our clients to provide strategic advisory across the project lifecycle, from initial concept to decommissioning. By maintaining that project cycle outlook we ensure our role as trusted advisor for the long term benefit of the project or programme.

Concept / Site Identification

Working with landowners we undertake initial desktop appraisal of development opportunities through resource potential, grid capacity and known high-level constraints.



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Constraints Analysis

To inform early stage design and feasibility we undertake analysis of constraints on development. Working closely with our electrical grid & environmental teams we will undertake analysis of local grid capacity and export opportunities, analysis of environmental / planning constraints, and outline engineering constraints e.g., land, shading, fire, noise etc. By managing and integrating consideration of constraints at an early stage in the design process we help optimise design and provide time and cost efficiencies.

Modelling & Design

As the market for Battery Energy Storage Systems (BESS), Solar and Wind projects continues to grow, informed and accurate modelling and design input for these projects, either as standalone or colocated, is crucial to provide deliverable schemes. The design team has undertaken numerous BESS, Solar PV and Wind designs across varying stages of the development lifecycle, from initial planning submission level all the way to pre-FEED pre-EPC (Engineering, Procurement and Construction) submission. Projects have included small, standalone rooftop systems of 200kWp all the way to large commercial scale grid connected schemes on complex topography. Our optimisation of sizing on collocated assets against resource and grid parameters has provided vast improvements to project economics. The team have vast experience using tools such as PVSyst, AutoCAD, Helioscope and RatedPower, and have backgrounds in consultancy, Developer and EPC; we approach projects from many perspectives, providing client confidence.

Technical Due Diligence

Our technical due diligence support provides clients with the confidence that the asset will perform as expected, as part of an EPC negotiation, transaction, investment or refinancing and our advisors have a wealth of experience in reviewing proposed Renewable Energy system designs from greenfield, pre-construction, "Ready to Build" and operational sites, for tender. We assess schemes from a development, buildability and operational perspective and we review system components specified, contractual agreements, financial modelling, grid agreements, as well as perform sensitivity analyses to validate proposed designs. We provide both buyer and seller due diligence.

Owner's Engineer

Our Owner's Engineer services provide project management and quality assurance support during all stages of a project's lifecycle. With our extensive experience across BESS, solar and wind technologies, we have built strong relationships with EPCs and component manufacturers, enabling us to provide reliable support in planning, management, and supplier evaluation for plant construction and operation, as well as offering valuable insights and recommendations to optimise project outcomes in terms of economics and safety; including the role of Principal Designer. We provide a single point of contact backed by specialist expertise in all areas, to provide a coordinated Service.

Asset Management

Our Asset Management experts oversee the day to day running of sites, maximising both technical and financial performance, and currently manage over 130 MW of wind and solar assets across 50 sites in Scotland, England and Wales. Our Financial AM service includes managing all contractual arrangements to increase revenues and minimise OPEX; managing landowner and council planning relationships and monthly reporting including P&L. Our Technical AM services ensure that all assets are maintained and operated to deliver optimal performance, minimise downtime and maximise ROI. This includes daily site monitoring, site inspections and timely resolution of any technical issues.

