

ENERGY PERFORMANCE GUARANTEED

Protecting Energy Investments

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BACKGROUND

The UK construction industry is preparing for another wave of Renewable Heat Incentive (“RHI”) applications, claims and disputes. The use of a performance guarantee will again be scrutinised as clients aim to protect their investments and avoid any potential dispute.

The RHI is a government-backed financial incentive encouraging the uptake of renewable technology.

The UK RHI Government spend is due to top £1 billion annually by 2020.

As the Northern Irish Government commences an independent public inquiry into the £700 million, 20-year overspend on the Non-Domestic RHI, the UK Government RHI spend is due to top £1 billion annually by 2020¹ – an increase of 100% from the 2016 cost² (this year, payments are capped at £780m).

DRAFTING AN ENERGY PERFORMANCE GUARANTEE

An Energy Performance Guarantee with an energy service company (ESCO) or a contractor is an agreement on the total energy to be generated and

used by an installation, referred to as the ‘energy balance’.

Like any investment, a renewable energy project must be defined sufficiently and be subjected to technical, economic assessment and due diligence to prove that the investment will be profitable and sustainable.

A life-cycle costing exercise would normally be essential at an early stage to scrutinise, refine and enhance the scope of work³, and to then allow a reasonable and viable performance guarantee to be drafted.



DEFINING THE ENERGY SCOPE

- i. How much energy generation is required to satisfy the investment criteria?
- ii. Is this achievable in the long term?

For example, has a margin of risk been allowed for in terms of; variations in seasonal demand, design and modelling errors, operating schedules that deviate

¹ Ares, Elena (Briefing Paper 6328 – Renewables Heat Incentive) *House of Commons*, 3 April 2017.

² Department for Business, Energy & Industrial Strategy (RHI Budget Caps) 1 November 2017.

³ For detailed guidance on life cycle costing see ‘BSRIA - BG 67/2016’.

within the assumed operational parameters, plant availability and variations in equipment performance.

The energy balance can now be used in the client's design, scope of work and in the energy performance guarantee as a **target** figure.

Can the plant manufacturer or supplier guarantee the performance output of the plant?

EXECUTION

Upon project completion, the contractor can demonstrate the **actual** energy balance and confirm if the **target** energy balance has been met. The contractor may detail the results and provide supporting evidence, such as BMS data, delivery notes, commissioning reports, meter readings, calibration certificates, and fuel analysis (from an independent laboratory). It is advisable at this stage for a client or a contractor to have the results reviewed by an independent and competent engineer.



WHAT IF THE TARGET ENERGY BALANCE IS NOT ACHIEVED?

An agreed energy performance guarantee should form part of the construction contract. Ongoing monitoring and review may highlight a breach of contract when the **actual** energy balance falls below the **target** energy balance. If a breach of contract exists, then an appropriate remedy – as defined in the contract – would be triggered.

PRE-CONSTRUCTION CHECKLIST

- i. Has a viable life cycle costing model been developed and scrutinised independently?
- ii. Can the plant manufacturer or supplier guarantee the performance output of the plant?
- iii. Has the performance guarantee allowed for an appropriate margin of risk?

- iv. Is the tender documentation clear and concise?
- v. Does the contract documentation allow for loss of RHI revenue to the client if the construction completion is delayed?

CONSTRUCTION CHECKLIST

- i. Has the contractor allowed for the performance guarantee in their budget and programme?
- ii. Is the contractor's proposal compliant with the authorising body? I.e. OFGEM
- iii. Has the contractor produced a commissioning plan?
- iv. Has the client finalised all contractual documentation required by the authorising body? I.e. OFGEM.
- v. Is there a contractor in place to operate and maintain the plant, and does their contract include a 'back-to-back' performance guarantee?

COMMENTARY

As many energy system installations have now had the opportunity to bed in with performance monitoring over time, clients are more aware of the performance versus the investment made. We have seen, and expect more, scrutiny in the performance of installed systems, which are likely to lead to further claims against performance guarantees over the coming years. Expert witnesses will be looking to the above checklists and industry guidelines to assess such claims in order to allow us to develop a robust opinion.

ABOUT THE AUTHORS



Gerry Brannigan is an Executive Director leading the Buildings & Property sector in HKA. He is a chartered engineer, fellow of CIBSE and has been appointed as an expert witness on building services (MEP), sustainability and building performance issues on over 40 occasions since 2012.

As well as undertaking individual expert witness appointments, Gerry has experience managing and co-ordinating multi-disciplinary expert teams on complex construction litigations involving delay issues.

He has experience giving evidence in arbitrations, adjudications, dispute adjudication boards, mediations, a deposition, formal meetings of parties and has provided written evidence to arbitrations and investigations on behalf of insurers. Gerry is listed in 'Who's Who Legal' as an expert witness in construction, consulting and arbitration.



Robert Eadie is a chartered Senior Engineer with over 10 years' professional experience in the building services industry mainly acting as principal contractor with a responsibility for design, construction and commissioning.

Robert has worked throughout the UK on major projects in the aviation, energy and IT sectors.

Recognising the importance of building performance Robert is a specialist in commissioning activities and soft landing procedures. He is currently undertaking a Masters in Construction Law at Strathclyde University furthering his interest in contract law and legal process with an emphasis on arbitration and dispute resolution.