

Dr Waven Pyke - Northmore Gordon

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Dr Waven Pyke

Waven is a Chemical Engineer with 9 years consulting for a wide range of industries including sewage treatment plants, paper mills, schools, compressed air systems, power generation, steam generation, mineral processing, metal processing, paper mills, and environmental rehabilitation. Expertise include energy audits, Measurement & Verification of savings, greenhouse gas accounting, NGER compliance thermodynamic modelling, process modelling, solid fuel chemistry, development of specialist laboratory processes and tests, uncertainty determination, coal gasification, plant data analysis, and programming custom software in LabVIEW. Capability and experience in Quality Assurance including internal audits, process improvements, and quality system development for NATA accreditation. Let Waven Pyke assist and guide you in your next energy project.

Related guidance

Meet the team

Our services

Measurement and verification

Certificate services

Carbon advisory

Energy audits

Who is Dr Waven Pyke and what is his role at Northmore Gordon?

Dr Waven Pyke is the Engineering Manager, M&V; at Northmore Gordon. He holds a BE (Chem) and BSc, and is a Chemical Engineer with 9 years of consulting experience across a wide range of industries. His role focuses on measurement and verification services, which are critical for establishing credible evidence that energy efficiency projects deliver their intended savings. M&V; requires technical expertise to design appropriate baselines, select measurement boundaries, handle operating variables and produce results that satisfy scheme requirements and support investment decisions.

What industries has Waven Pyke consulted for?

Waven Pyke has consulted for a wide range of industries including sewage treatment plants, paper mills, schools, compressed air systems, power generation, steam generation, mineral processing, metal processing, and environmental rehabilitation. This breadth of experience means he understands how energy use and operating constraints vary across different sectors. Facilities in these industries often have complex utility interactions, production schedules and measurement challenges that require both technical depth and practical problem-solving to establish meaningful efficiency opportunities and verify outcomes.

What are Waven Pyke's key areas of technical expertise?

Waven Pyke's expertise spans energy audits, measurement and verification of savings, greenhouse gas accounting, NGER compliance, thermodynamic modelling, process modelling, solid fuel chemistry, laboratory process development, uncertainty determination, coal gasification, plant data analysis and custom LabVIEW programming. This combination is directly relevant to complex industrial assessment and evidence generation. Thermodynamic and process modelling support feasibility studies and investment cases, while his plant data analysis and programming capabilities enable automated interpretation of site information. This expertise underpins our delivery of credible measurement and verification services.

How does Waven Pyke's experience with compressed air systems apply to energy assessments?

Compressed air is a significant energy cost in many industrial facilities. Waven Pyke's experience in this area means he understands the questions essential to effective assessment: distinguishing leakage from unnecessary demand, evaluating compressor sequencing and control strategies, and recognizing how pressure settings and operating conditions affect system performance. Assessment requires both a leak survey and power profile to understand the complete picture. His expertise helps identify practical opportunities within operational constraints and develop measurement approaches that demonstrate savings credibly without assuming every site can achieve identical results.

What is the significance of Waven Pyke's quality assurance experience?

Waven Pyke has capability and experience in quality assurance including internal audits, process improvements and quality system development for NATA accreditation. In the context of measurement and verification, quality assurance is essential. It ensures that data collection methods are consistent, calculations are reproducible, uncertainties are documented and results can withstand scrutiny from scheme administrators or investment committees. NATA accreditation experience particularly demonstrates competence in meeting recognised standards for evidence quality, which is directly relevant to certificate projects and client confidence in reported outcomes.

How does Waven Pyke's background in thermodynamic and process modelling support investment decisions?

Thermodynamic and process modelling allows assessment of equipment performance, heat recovery opportunities and technology alternatives without waiting for on-site measurement or relying on vendor specifications alone. This capability supports the 'Build the Case' stage of our delivery approach, where feasibility studies and investment cases require credible analysis of proposed options. Modelling can reveal interactions between systems—for example, how reduced cooling load after insulation affects equipment sizing in a later project—and help compare alternatives on a common financial and operating basis. This underpins sound business cases and prioritisation across multiple opportunities.

What role does Waven Pyke's NGER compliance expertise play in energy and carbon reporting?

NGER (National Greenhouse and Energy Reporting) is a mandatory reporting scheme for organisations meeting the threshold criteria. Compliance requires accurate emissions accounting, boundary definition and supporting evidence. Waven Pyke's NGER compliance expertise means we can help organisations establish correct reporting boundaries, document emissions inventories and prepare evidence for regulatory scrutiny. This is relevant to the 'Perform' stage of project delivery, where ongoing reporting and governance support ensure that efficiency improvements and carbon reductions are properly documented and that organisational claims meet scheme requirements.

How does Waven Pyke's expertise in uncertainty determination benefit measurement and verification?

Uncertainty determination is a technical discipline within measurement and verification that quantifies the confidence and potential error range in calculated savings. Rather than presenting a single number, credible M&V; work documents assumptions, adjustments and uncertainty. This transparency allows

clients, scheme administrators and investors to understand the reliability of reported results. Waven Pyke's expertise in this area enables Northmore Gordon to design M&V approaches proportionate to the decision at stake: high-stakes certificate claims and large investments require rigorous uncertainty analysis, while simpler assessments can acknowledge larger ranges. Proper uncertainty handling builds credibility and informs risk-based decision making.

What is the practical value of Waven Pyke's plant data analysis and LabVIEW programming skills?

Plant data analysis and custom LabVIEW programming enable automation and interpretation of complex datasets from industrial sites. Rather than relying on manual spreadsheet analysis, custom software can process continuous monitoring data, detect anomalies, calculate performance indicators and generate reports. This is particularly valuable where sites have SCADA systems or high-frequency metering data that would be impractical to analyse manually. These skills support both the 'Assess' stage—where baseline establishment and opportunity identification depend on good data interpretation—and the 'Perform' stage, where ongoing monitoring and performance management require automated workflows. This enhances both the depth of assessment and the sustainability of measurement systems.