

Director, 2Sustain Consulting Ltd



Education: BEng (Hons), Electronic, Communication and Computer Engineering, University of Bradford, United Kingdom, 1989

Office Location: Dorking, Surrey, UK

Total Years of Experience: 25

Professional Associations:

Engineering Council, United Kingdom Chartered (CEng), 1994

Institute of Measurement and Control Associate Member, 1994

Institution of Engineering and Technology IET (formally the IEE) (Fellowship app. pending) Chartered Member, 1994

Association for Project Management (APM) Corporate Member, 2000

Institute of Asset Management (IAM) Associate Member

Nationality: British

Countries of work experience:

UK, Ireland, Republic of Georgia, Cameroon, Poland, Turkey, Italy, Botswana, Saudi Arabia, Kuwait, Bahrain, USA **Quick Summary**: Paul has been a member of the senior manager team at Black & Veatch (B&V) a global engineering consultancy, having been a P&L centre dept manager, project director, project manager, bid manager and schemes programme manager for many high profile projects for clients during his career. Many related schemes have been collaborative alliance/ partnership type arrangements, requiring close client inter-working leading to shared outcomes, and ensuring that projects address prioritised business needs.

Paul has a good level of experience and broad understanding in most areas of engineering, including mechanical, electrical, process, utilities, control & instrumentation, smart systems, and telecommunications. It is this broad knowledge coupled with communications, presentation, people-skills and management skills that has allowed him to progress within companies to senior management positions. Paul is, by profession an Electrical/Controls Engineer. He has strong experience of feasibility studies, master planning, front end engineering designs, conceptual design, detailed design, outline designs, financial analysis, due diligence /management consultancy, contractor's design reviews, and project management.

Paul is a leading force in driving a Sustainable Solutions business line; focusing upon: marine energy, biomass/biogas energy, waste to renewable fuels, asset optimisation, smart-integrated-infrastructure (SII), automation, energy efficiency, and using sustainability as a driver for innovation and business improvement. For more information see www.2sustain.co.uk

Representative Experience:

2Sustain Consulting Ltd, Director Dorking office (near London) 2013 - ongoing

Using the experience and learning from working for a series of large global engineering consultancies & end clients, Paul provides client oriented consulting support focused around asset-centric industries and helping to enhance the performance of those businesses.

Black & Veatch, Associate Vice President

Regional Director of Client Services and Sustainable Solutions Redhill UK, EMEIA Head Office (near London) 2009 - 2013

Paul led strategic business development and Project Director roles for the growing workload in the field of 'Sustainable Solutions' and Government & Industry clients. Operating across geographies and sectors, he built a strong capability to help clients to address their needs associated with climate change mitigation and adaptation and sustainability. Key clients where Paul was involved at Project Director level included for example: Environment Agency (EA), BAA Airports, Carbon Trust, UK Government department of energy & climate change (DECC), Inexus/Brookfield infrastructure multi-utility company, Hitachi HZI waste to energy, Advanced Plasma Power, Anglian Water, Southern Water, and United Utilities.

London Development Agency, Head of London Decentralised Energy, London, UK; 2007 - 2009

Reporting to the Mayor's office, successfully employed to advance and build buyin to London's focus on energy efficiency, low carbon decentralised energy, district heating, CHP and renewables. Working as part of the London Climate Change Agency. Member of management team of London ESCO JV with EDF.



Black & Veatch Ltd., Deputy Alliance Manager & Programme Manager, Joint Anglian Water / B&V Alliance Office, Peterborough, UK 2004 - 2007

Having led and won the alliance agreement bid, Paul was appointed deputy alliance manager for the startup of '@One Alliance' and the sub-programme manager for approx £125m of the overall £750m programme. Work involving managing cradle to grave implementation of investment programme from mandate of the business problem through to implementation, commissioning and handover of working water and wastewater plants. Due to the successful work and business focus, B&V are now involved in 10year framework agreement till 2015+.

Other work included: project director for UK government dept. of climate change, project for Hydrogen, Fuel Cell and Carbon Abatement Programme Manager;

Site based Delivery Project manager (PM) for Southern Water, Horsham sludge & works optimisation £13m engineer/procure/construction (EPC) project.

Black & Veatch Ltd., Technical Director, Redhill Office; 2000 - 2004

Deputy Manager for the B&V Infrastructure Technology/ M&E Group and P&L. Responsible for over 90 staff providing services to the UK water industry, Renewables and Power Industries. Project Manager for:

- Disi to Amman, Jordan, \$750m transmission project. I was technical manager for development of this BOOT project. With B&V as an equity holder in the consortium. B&V were nominated the preferred bidder for the BOOT concession.
- AES Sonel, Cameroon West Africa: Scheme Manager for £3m consultancy fees involving owner's engineer role for 300km 132kV electric transmission line, 50MW power generation plants, SCADA, network improvements, hydro-power assessment. Acting as senior manager in the client's company on behalf of the client. Focused at improving the country's electric utility.
- Consultancy support services to Southern Water's chief engineers C&I/telemetry dept
- Cameroon Electricity Company 'Sonel' acquisition, techno-economic due diligence for AES
- UK Gov Oil & Pipelines Agency control & major accidents and hazards (COMAH) reporting
- AES Telasi (Power Distribution Company) infrastructure improvement in Republic of Georgia;
- Watford, National Grid Rail Link Power Supply, independent engineer;
- Secure Underground Anti-Terrorist Data Centre detailed design services.
- Southern Water, strategic support to C&I chief engineers office

Renewable/Low Carbon Energy. Responsible for business development and overall management of the section within the Black & Veatch Energy Services Group UK business unit, and creation of 'Renewables' section leading to development of a new client base with Carbon Trust marine energy challenge, EPRL, Scottish Coal, BP, Meridan Energy (New Zealand), etc. Lead engineer for:

- Transmission Network Improvements, AES Sonel, Cameroon Africa.
- Bahrain Ministry of Electricity & Water, master plan (C&I/SCADA).
- BAA Terminal 5 Heathrow Underground Infrastructure. (energy aspects)
- AES Acquisition Due Diligence (confidential).
- Telecommunications 'Carrier Hotel' market analysis for UK/Europe.
- AES-Telasi, Power Distribution Company, Georgia CI, Telecomms Upgrade
- AES Krammi Hydro Power Station, telecoms upgrade.
- Italian Province Telecomms / & Infrastructure Development Opportunity Advisor.
- Data Centre Detailed Design Services.

Binnie Black & Veatch Ltd., Senior Engineer / Project Manager, UK/Overseas; 1996 - 2002 Project Manager for:

- United Kingdom Government national oil pipeline site alarm upgrade project;
- AES Telasi, Georgia (Power generation, transmission and distribution) infrastructure improvement



- Southern Water / Scottish Power C&I / communications support projects;
- UK Government oil pipeline network pump station, instrumentation & comms study & upgrade.
- Subiya Water Transmission Project, Kuwait. (C&I Engineer)
- Oil & Pipeline Agency national network, United Kingdom. (C&I Engineer)
- Ascension Island, peer review of petroleum storage (C&I Engineer)

Binnie & Partners, Electrical / C&I / Communications / Lead Engineer, UK, 1992 – 1996 Wide range of M&E/process biased projects for UK water companies & industrial effluent treatment.

Monsanto Chemicals, Instrumentation / Electrical Engineer, Europe/Africa Div, UK, 1989–1992

Monsanto Chemicals Inc (Europe-Africa division), Electrical & Controls engineer working for the Engineering Services Group, providing specialist engineering for capital projects within the rubber chemical, agrochemicals and fine chemical groups. Projects have included: automation of a surfactant plant, bulk chlorine storage and emergency scrubbing plant upgrade, methanol storage improvements, product drying and dust handling automation, industrial effluent waste treatment plant.

- Rubber accelerator production plant and chlorine storage improvements: project value: £200k, design engineer for replacement of liquid chlorine weigh tanks with batch flow coriolis flow meters for sequential addition to reactors. Prepared process and instrumentation (P&I) diagrams, safety critical interlock system, member of HAZOP team, writer and issuer of contractor work request documents and responsible for procurement and project scheduling.
- Industrial effluent treatment facility: project value £6m construction, detailed designer for distributed control system covering treatment facility and remote communication network to power station.

ABB Automation (formerly Kent-Taylor), Applications Engineer, (University Sponsored), Stevenage, UK, 1985 – 1989

ABB Automation Ltd, trainee applications engineer working on instrumentation, communications and distributed control system (DCS) projects for fine chemical, nuclear and petro-chemical clients.

- Design and configuration of DCS software for Italian polymer 'EniChem' manufacturer
- Prototype design and testing of dual redundant peripheral switch and radiation counter interface device for BNFL 'Thorp' reprocessing DCS project, Sellafield.
- Panel build dept, on-tool experience, DCS control panel build for BP Exploration
- Film developer light intensity set-point profiler panel instrument design, based upon MOD30 design platform.
- BNFL 'Thorp' nuclear reprocessing DCS configuration work.

Personal Attributes:

Personal attributes:	Enthusiastic with a bit character; able to grasp, perfect and develop skills quickly; a proven ability to communicate well at all levels; a proven track record of project/programme management and departmental management; ability to meet targets while working under pressure. An aptitude for strategic planning and business planning. An outgoing personality who can quietly motivate people. Excellent references available regarding motivating teams. Good at both developing business and undertaking it.
Psychometric:	Meyer Briggs characterisation "ISTP"; innovator score = 125 on innovator/adaptor scale.
Interests:	Looking after the family, Travel (e.g. Iceland, USA, Africa, etc), Squash, Wine, Good Food and eating out, local community interests, Scout Association (weekly leader), supporting youth groups.
Referee:	Personal and corporate professional references available upon request.