

# Ben Vaughan

Associate & Energy Business Leader — New Zealand · Arup

CENG IMECHE

PENG PEGNL

CMENG ENGNZ

BSC HONS MECHANICAL ENGINEERING

BOSIET OFFSHORE SAFETY

Auckland, New Zealand  
bernard.vaughan@me.com  
ben-vaughan.com

**20 yrs**

PROFESSIONAL  
EXPERIENCE

**AU\$2B**

HYDROGEN FUNDING  
ASSESSED

**US\$22.5B+**

TRANSACTION VALUE  
ASSESSED

**CAD\$20M**

CAPEX SAVINGS —  
WEST WHITE ROSE

**4**

CONTINENTS, 16  
COUNTRIES

## EXECUTIVE PROFILE

Engineering leader with 20 years across offshore oil & gas, energy advisory, and infrastructure — now leading Arup's New Zealand energy consulting business. Track record spans billion-dollar offshore structure design, government hydrogen-funding assessment, M&A technical due diligence across six continents, and direct contribution to New Zealand's national energy strategy. Three chartered engineering registrations across the UK, Canada, and New Zealand. Equally effective setting technical direction, leading multidisciplinary teams, developing client relationships, and shaping policy conversations.

## CORE STRENGTHS & EXPERTISE

Energy Transition &  
Renewables

Technical Due Diligence & M&A  
Advisory

Offshore & Complex Project  
Delivery

NZ Energy Strategy & Policy

Hydrogen & BESS / Storage

Grid Connection & Solar PV

Asset Integrity & ESG  
Assessment

Business Development & BD  
Leadership

## CURRENT & RECENT EXPERIENCE

2023 — PRESENT

**Arup**

Auckland, New Zealand

### Associate & Energy Business Leader — New Zealand

Relocated from Newfoundland to lead and grow Arup's New Zealand energy advisory and engineering business. Responsible for strategy, client development, delivery quality and team growth across the full energy sector.

Doubled the size of the NZ energy team; empowered team members to grow the opportunity pipeline alongside project delivery.

Project Director and manager for engineering delivery on grid-scale solar farm developments in New Zealand, including Bay of Plenty projects.

Deputy Project Director and Lead Assessor — ARENA Hydrogen Headstart (AU\$2B): led comparative techno-economic assessment of applicant projects and feedback meetings with ARENA to inform funding decisions.

Authored the NZ Business Energy Council's perspective on the Government's proposed Energy Strategy, presented to government (May 2025).

Presenter at the 2025 Renewable Energy Forum: offshore wind in Taranaki and impacts on the NZ wholesale electricity price.

Member, Energy Sector Technical Advisory Group — Aotearoa NZ Sustainable Finance Taxonomy (Centre for Sustainable Finance: Toitū Tahua).

Served offshore in June 2025 as Arup's engineering representative during the tow and installation of the West White Rose CGS — a structure whose systems I had previously designed in Canada.

2022 — 2023

**ERM**

North America / International

## Principal Technical Consultant — Technical Due Diligence

Led and delivered technical and ESG due diligence for banks and private equity investors across energy-transition and infrastructure assets internationally.

North America: Texas commercial microgrids (Resilience-as-a-Service), Alberta unconventional oil, Ksi Lisims LNG (BC), Braya Renewable Fuels refinery conversion, California school bus fleet, Viterra decarbonisation assessment.

Europe: Fluxys gas network and LNG portfolio (Project Neon — Belgium, TAP, Dunkerque LNG, NEL/EUGAL pipelines); Italian multiproduct pipeline; Scottish Power data centre substation capacity review.

Africa and South America: Engen downstream buy-side TDD (South Africa); Shell SPDC Nigeria seller-side HSSE due diligence and ESAP support; Wintershall Dea GHG accounting programme.

Managed bid-to-close delivery, client relationships, and subcontractor teams across the full project lifecycle.

## EARLIER EXPERIENCE

2020 — 2021

**Pennecon / Genoa Design**

Newfoundland, Canada

### Senior Technical Project Engineer / Document Review Officer

Authored Pennecon's Engineering Management Policy and rolled out training across the Services & Maintenance group; Member in Responsible Charge (MIRCh) for mechanical engineering. Separately, supported 3D model and configuration management for the US Coast Guard Polar Security Cutter programme at Genoa Design International.

2017 — 2020

**Arup**

St. John's, Newfoundland

### Lead Mechanical, Electrical & Instrumentation Engineer — West White Rose Project

Lead engineer for all MEI, controls and automation systems on the West White Rose Concrete Gravity Structure — the fixed-platform base for Cenovus's offshore NL drilling development. Full responsibility for power generation and distribution, ballasting, marine operations support and ancillary systems design. Design innovations saved CAD\$20M in Capex; revised contracting strategy generated CAD\$5M+ in new Arup revenue. Member in Responsible Charge (MIRCh) for mechanical engineering.

2016 — 2017

**Arup**

London, UK

### Senior Mechanical Engineer — Energy Infrastructure & Investor Advisory

Technical due diligence across gas networks, pipelines, and LNG assets (National Grid Gas Distribution, SAGE terminal, Redexis). Mechanical systems design for the Wushi CGS and LNG carrier-to-FSU conversion study. Value-engineering of cryogenic systems for the Long-Baseline Neutrino Facility (LBNF/DUNE), identifying ~US\$560K in combined Capex and operating savings.

2014 — 2016

**RDS (KCA Deutag)**

London, UK

### Senior Mechanical Package Engineer — Mariner Platform, Equinor (North Sea)

Detailed design of the drilling facilities for Equinor's Mariner North Sea platform. Led the Ancillary Drilling package — 10 sub-orders, 6 engineers. Managed technical compliance with Statoil requirements and QA/QC interfaces with DSME fabrication yard, Korea.

2010 — 2014

**AMEC Natural Resources**

South Korea & UK

### Mechanical Engineer — Multiple Roles (Clair Ridge, Ichthys FPSO, Corrib Gas Terminal)

Site engineering resident at HHI's Ulsan fabrication yard for BP's Clair Ridge North Sea drilling modules (commissioning, QA/QC, T&I). Prior roles in London: rotating equipment requisitioning for Clair Ridge; mechanical engineer on Ichthys FPSO FEED (INPEX, Australia) and the Corrib gas terminal (Shell, Ireland). Tamarack oil sands processing study (Canada).

2008 — 2010

**GBM Mineral Engineering**

London, UK

### Mechanical Engineer — Mining & Process

Engineering design for a 1 MTPA gold processing plant in Kyrgyzstan: bulk materials handling, acid wash and elution circuits, reagent storage, lime crushing, and plant-wide piping layouts.

## SELECTED PROJECT HIGHLIGHTS

### West White Rose CGS — Offshore Oil & Gas

Lead MEI engineer for a fixed drilling platform offshore Newfoundland. Design innovations delivered CAD\$20M in Capex savings; contracting strategy generated CAD\$5M+ new revenue for Arup. Served offshore during the 2025 tow and installation campaign.

Arup · Cenovus · 2017-2025

### ARENA Hydrogen Headstart — AU\$2B Government Programme

Deputy Project Director and Lead Assessor for ARENA's flagship renewable hydrogen funding programme. Led comparative techno-economic analysis of competing applicants and feedback meetings with ARENA to inform allocation of AU\$2B in government funding.

Arup · Australian Government · 2023-2024

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### NZ Energy Strategy — Policy Authorship

Authored the NZ Business Energy Council's industry perspective on the Government's proposed Energy Strategy, covering energy security, affordability and decarbonisation. Presented to government, May 2025.

Arup · NZ Business Energy Council · 2025

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### National Grid Gas Distribution — Seller-Side TDD

Technical lead for Arup's independent engineering assessment supporting National Grid's sale of a majority interest in its UK gas distribution business. Analysed asset classification, integrity management and operational risk.

Arup · National Grid · 2016

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### Fluxys Gas Infrastructure — ESG Transaction Advisory

Technical and ESG due diligence for the acquisition of a 19.87% interest in Fluxys (Project Neon): ~12,000 km transmission pipelines and four LNG terminals across Belgium, TAP, Dunkerque, NEL/EUGAL, and international assets.

ERM · Energy Infrastructure Partners · 2022

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### Digital Products — SwiftBrief & GridConnect

Founder of ClearCurrent Limited. Shipped SwiftBrief — a privacy-first iOS speed-reading app on the App Store (2026). Building GridConnect, a web platform making NZ grid topology, nodal pricing and VSPD dispatch data directly interrogable for analysts and developers.

ClearCurrent Limited · 2025-Present

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## EDUCATION & PROFESSIONAL CREDENTIALS

### BSc Mechanical Engineering — Honours

University of KwaZulu-Natal · Durban, South Africa · 2007  
Concurrent practical experience at Illovo Sugar KZN mills throughout studies.

### PEng Professional Engineer

Engineers & Geoscientists Newfoundland & Labrador (PEGNL) · Canada

### BOSIET Offshore Safety — BOSIET / CAEBS

OEUK Offshore Medical Certificate · Current

### CEng Chartered Engineer

Institution of Mechanical Engineers (IMechE) · United Kingdom

### CMEng Chartered Member Engineer

Engineering New Zealand (EngNZ) · New Zealand

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## EARLY FOUNDATIONS

**Illovo Sugar Ltd — Engineer in Training (2005–2008, KwaZulu-Natal, South Africa).** Concurrent with tertiary study, worked across multiple mills for Africa's largest sugar producer: equipment failure investigations, brownfield plant modifications, and QA/QC of third-party contractors across coal and bagasse-fired operations. This provided a practical grounding in industrial plant environments before formal engineering practice. **Pre-university practical and entrepreneurial experience (2001–2003):** hands-on industrial site work including rope access, supervised pickling/passivation crews on petrochemical plant stainless steel, and ran a small reclaimed brick business from a demolition site. Early exposure to contractor environments, site safety, and the commercial reality of creating value from opportunity.