

David J Henson

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Career Summary

P & L leader with 20 years of project management, process engineering, business development and commercial experience with international companies. Proven track record of team work, personnel management and positive outcomes. Experienced in technology development and business creation including funding in new and emerging markets. PhD Chemical Engineering, fluent German, presentable Spanish. Green card/EU work & residence permit holder.

Professional Experience

IHI-E&C

Nov 14 – Jan 16

Project Director – Cove Point Liquefaction Facility – JV with Kiewit Energy

5.2 MTPA LNG liquefaction facility for Dominion Resources, Lusby Maryland, \$US 3.8 BN

- Integrated Engineering, procurement, site engineering and commissioning responsibility
- Operational centres in Houston, Kansas and Mumbai

Siemens Energy Oil and Gas

Segment Leader, Conceptual and Engineering Services

Oct 11 – Oct 14

\$230MM global businesses with 1,500 personnel, providing engineering services to the international Oil and Gas market.

- Siemens Process Safety (\$50MM) for asset integrity, pressure relief and flare analysis with engineering service centres in Houston, Singapore, Bucharest, Abu Dhabi and Rio; Replaced management team and converted business structure to licence and services model, globalised with 2 hi value centres in India and Romania, reduced staff turnover 15>3%. Overhauled Software development methodology, reducing NCC's and improving on time delivery to industry standards.
- XHQ (\$15MM) for operational and data intelligence (OI) software with 3 service centres in Singapore, Rio and Houston; Replaced management team and reduced turnover from 15 <3%. Developed cloud based analytics as a services, with external R&D funding of \$5MM. Introduced reseller and server partner model for increased market coverage and penetration
- Chemtech (\$150MM) for full-service multidiscipline engineering Rio Brasil and Lima Peru; installed claim change management culture and seller doer methodology to reduce execution NCC from 6 to 3 %. Diversified portfolio to include conceptual design and upstream capabilities. Led M&A activity. First of kind hydro-acoustic subsea valve operation technology, developed in Brasil for Petrobras. Led \$15MM R&D joint development with University of Rio, including relocation to new building on technology park.
- Conceptual Engineering (\$15MM) – commercialisation of pressurised oxy fuel turbine technology, including selection and finalisation of joint development partner Maersk Oil (AP Moeller Maersk). Executed \$30 million DOE funded demonstration plant in California, achieved first licence sale of oxyfuel technology for EOR, multiple feasibility studies, engineering and equipment transactions for US facility.

Siemens Energy Oil and Gas

Director of Emerging Technologies

Oct 09 – Oct 11

Responsible for identifying and developing emergent technologies and solutions for Oil and Gas Division.

- Identified and developed oxy fuel combustion as a technology platform for oil and gas.
- Drove internal technology development and supported emerging business for 3 BU's : Compression, Industrial Power and Oil and Gas Solutions ; subsea R&D and VC investments including artificial lift/ESP technologies, pump and pipeline service technologies, all electric solutions, Xray core analysis, heat recovery systems, down-hole technologies, liquid fuel vaporization technology, flow assurance, imaging and micro seismic technologies, flare gas reduction, energy storage and unconventional gas monetisation.
- Co-author and reviewer technology roadmaps and development programmes, including Oil and Gas Division and Energy Sector R&D budgets (both internal and external funding) and programme management.
- Technology interface to Siemens Corporate Technology, and to external organisations such as RPSEA, DOE, MIT.
- Technical consultant for Siemens Venture Capital and Siemens Financial services for investments and project opportunities. Steering committee member for Siemens Subsea Electric Grid, including R&D and acquisition budget approval (60 MM €) and acquisitions of Bennex (Penetrators), Poseiden (consulting) and Expro (leads and connectors). Integration manager for Bennex (US assets).
- Technical consultant for Siemens Pension Fund (Oil & Gas investment portfolio)

Epropp USA and Ecopropp (Australia) – Board Member

July 09 – present

Epropp is a technology company commercialising fly ash based ceramic proppants for the unconventional oil and gas market. Company has developed ceramic proppants manufacturing processes with market-leading crush strength, density and cost, filed IP portfolio and is presently negotiating facility/licence investment in US. Founding member of the team; responsible for technical oversight, financing, and business model development. Achieved reverse merger on Australian Stock exchange, Director of public listed company.

Vecor Building Systems - Board Member

Jan 09 – 2011

Start-up company commercialising engineered building products from fly ash to serve the construction industry. Vecor has developed a portfolio of proprietary technologies that enable high-value and comprehensive beneficiation of fly ash resources whether in or destined for landfill. Vecor technologies address unmet market needs by providing cost-efficient, high-quality sustainable raw materials to manufacturers, and significant reduction of solid waste liabilities for coal power generators.

CHOREN Industries

President Choren USA - Houston

Sept 07 – Oct 09

CHOREN is a private company commercializing a proprietary gasification technology in US, Canada, and Latin America. Choren raised \$150MM in equity investment from SHELL, Daimler and Volkswagen and private investors, for a first of kind BTL facility of \$300MM.

- Achieved second licence sale for Choren Carbo V technology in Chile (ENAP) for BTL technology.
- Execution and expansion of corporate strategy and business plan for US, Canada and Latin American market entry for synthetic biofuels and intermediate chemicals, renewable power and coal/petcoke/biomass based syngas projects.
- Established Houston based sales and conceptual team, qualified FEED engineering partners and created project development office, consisting of 8+ staff. Led project development, feasibility studies, FEED and licensing work for US, Canadian and South American clients.
- Achieved \$2.2 Billion loan guarantee from DOE and EXIM for US BTL project, including site selection, permitting, feedstock and offtake contracts and financing.
- Identified and assessed new technologies and markets in the field of gasification, torrefaction, CO2 removal, gas cleanup, biomass treatments and synthesis and expanded business strategy to include coal and petcoke/syngas projects within the Americas.

Business Development Manager Germany / USA

May 06 – Aug 07

- Achieved company first external license sale to Expander Energy (Canada) for BTL technology.
- Prepared project and technology deployment plans and executed them successfully for US market, including Build Own Operate and technology licensing framework.
- Established US business entity CHOREN USA LLC, including financing from parent company and equity partners.
- Led a team of 5 to assess and review for US projects and obtained board approval and funding to develop.
- Developed scope of works packages and contracts/IP packages for scouting phase team from SHELL, Linde, and CHOREN for world first commercial scale BTL facility.

UHDE GmbH

1996 – May 2006

Project Engineer/Bid Manager

Oct 05 – May 06

Shedden Uhde Pty Ltd

Melbourne EPCm joint venture between Clough and Uhde, with approximately 400 staff. Oil and Gas/Petrochem.

- Led proposal team of 8 to win Orica Cyanide Plant Expansion project of approximately \$40 MM.
- Led proposal team of 5 for Nufarm Coogee Chlorine Plant Expansion \$20MM.
- Assisted proposal team of 4 for Thai Petrochemical refinery project to upgrade gas treatment plant \$25MM.
- Assisted as owners engineer for BioDiesel startup company, including technology selection and financial analysis.

Engineering Manager Brownfields and Construction Contracts Manager

Mar 05 – Oct 05

Basell Polypropylene plant Expansion TIC \$120 MM

- Managed brownfield engineering, construction contracting and site establishment activities at Shell Geelong refinery \$120 million. Assisted in project planning and scheduling, reporting and performance monitoring.

- Developed contracting strategy and managed equipment, prefab and site labour construction contracts in complex trade Union environments. Managed QM, FAT and vendor expediting for complex package units.

**Project Manager/Estimator/Engineering Manager
Queensland Ammonium Nitrate Plant (QNP) TIC\$10MM**

mid 2004 – 2005

- Seconded to QNP Plant. Responsible for multidiscipline improvements/debottlenecking in operating facility including co ordination with diverse maintenance and site subcontractors. Union site and labour laws, remote location.
- Led team of 15 owners engineers and 7 subcontractors/suppliers, increased plant throughput by 12%.

Sabbatical period under the continuous employment of Uhde

mid 03 – 04

Deputy Head of Project Management Chloralkali Division

02 – mid 03

- Responsible for licensing, procurement and technology for small – medium projects to €50 MM and directly led team of approximately 15 Sales, PMs, and Technical staff. Management-team member for a division of 60 staff.
- Assisted Sales and Marketing Department for larger projects and partners (Bayer, Westlake, ICI, Bechtel).
- PM for technology conversion projects in Germany (Donau Chemie €16MM) and Algeria (Skikda Chemicals €34MM).
- Identified as 'Star User' and participated in 'TKBest' for the development of in house design platforms for technologies.

Lead Process Design Manager/Commissioning Manager

99 – 02

Qatar Vinyl Corporation (QVC) Qatar NaOH/EDC/VCM project, €500+ MM

- Fast track LSTK green field petrochemical facility, Gulf region. On time, on budget.
- Signature to Signature responsibility for Conceptual, Feed, Detail and EPCM/Commissioning.
- Directly led team of 12 senior technology engineers in Germany and 30 engineers in India. Interface with client and partner engineers and PM's from Elf Atochem, Norsk Hydro and Technip)

Engineering, Project and Commissioning Manager

99 – 2000

Akzo Nobel, Skoghall Sweden. Chloralkali conversion, Engineering cost plus fee, project management €35MM OEM.

- Engineering and project manager, leading team of 6 engineers and 4 procurement for close co operation with owners in house engineering and central design group. Commissioning management team of 3 plus 20 operations staff.

Commissioning Manager

97 – 98

Olin Corporation, Alabama USA Sunbelt Chlorakali Conversion Fixed Price \$150MM OEM, \$300MM TIC

- Mechanical completion, commissioning, start-up, guarantee test run and plant acceptance.
- Interface and management of German and Japanese commissioning personnel (6 plus 40) within American environment and operations. Liaised and coordinated American engineering and construction companies on site (Rust, BE&K).

Commissioning Manager

97 – 98

Kothari Petrochemicals, India. Fixed price new build \$25 MM OEM, \$220 MM TIC

- Training of staff and execution of Mechanical completion, commissioning, test run and plant acceptance.
- Management of on site costs and resources during mechanical completion and commissioning phase.
- Average age of commissioning team – 26 yr. Start up 2 weeks ahead of schedule, 5% under budget.

Trainee Process Engineer

96 – 97

Chimcomplex, Onesti Romania. Fixed price Technology conversion of organic chemical facility \$80MM OEM, \$150MM TIC

- Commissioning team member, start-up, test run and plant acceptance roles. Post commissioning operations superintendant.

Education and Training

Society of Petroleum Engineers member

Siemens General Management course 2011, Siemens Advanced Management course 2013

Doctor Philosophy Chemical Engineering 1995 University of Queensland, Australia - Low shear stress wall slip in polymer processing Exchange programme University of Delaware.

Bachelor Engineering, Chemical, Honours 1991. University of Queensland, Australia - Exchange programme University of Illinois.