



PEOPLE • EXCELLENCE

INNOVATION • GROWTH

Smart Project Delivery

Our **Engenium** colleagues are helping large scale mining clients implement green energy into their operations.

ENGENIUM JOINS STANTEC



Founded in 2003, Engenium has developed a reputation as a trusted multi-discipline engineering and advisory services consultancy, having assisted many of Australia's most influential mining, resources, and industrial infrastructure clients in the delivery of their projects from concept through production. Most recently, the firm has helped large scale partners transition to renewable energy, develop battery minerals projects, and achieve critical sustainability goals and objectives.

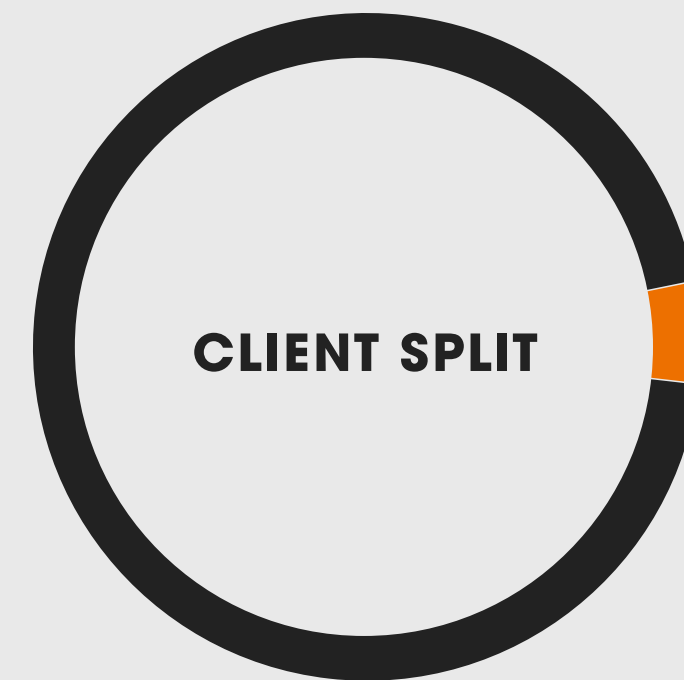
Headquartered in Perth, Western Australia, Engenium has multi-year framework agreements with many of the country's major mining houses and is involved in both brownfield and new greenfield project developments. Additionally, the team is at the forefront of the energy transition and clean energy technology, having worked on studies, pilot plants, and full-scale production plants to advance critical minerals projects into an operational state to meet global demand.

Recently, Engenium has helped large scale mining clients implement green energy into their operations, including solar power, battery energy systems, steam regeneration, wind, and other renewable energy sources. The global push toward addressing climate change by transitioning to renewable energy has driven long-term demand not only for iron ore but also nickel, copper, lithium, manganese, cobalt, and other materials needed in batteries, solar power, wind power, and carbon capture technologies.





- 78% Mining
- 13% Energy & Renewables
- 9% Industrial Transport, Water



- 5% Public
- 95% Private

TOP CLIENTS

- Rio Tinto
- BHP
- Fortescue Metals Group
- Roy Hill
- Alinta Energy
- TransAlta Energy
- Origin Energy
- Alcoa
- CBH Group
- Newcrest Mining
- BCI Minerals



Wayne Peel
Managing Director
Engenium

Joining Stantec enhances our ability to service larger projects, with the depth of a global firm that operates across the globe. Stantec's values align with our commitment to sustainability leadership and to putting people first. We are thrilled to join their global community.



José Granado
Country Leader, Australia
Stantec

We are very pleased and excited to have Engenium join Stantec! Their highly skilled people, great culture, and strong client relationships will bring about the opportunities for our collective teams to expand our presence in the Australian mining industry and beyond. Our combined focused attention and investment on innovation will ensure we do mining better by providing our clients with smarter, more efficient, and more sustainable solutions.



SOUTHERN CROSS ENERGY NORTH (SCEN) RENEWABLES PROJECT

LOCATION:
Goldfields, WA

CLIENT:
TransAlta Energy

- SERVICES:**
- Project Delivery
 - Engineering
 - Advisory Services

Engenium is managing the mature development and execution stages of the SCEN Renewables project for TransAlta and is a major partner in the integrated owners project team. TransAlta owns and operates the power supply networks for BHP Nickel West’s Leinster and Mount Keith Operations. This project will see the installation of a 20 megawatts of AC power solar photovoltaics farm at Mount Keith, an 8.5 megawatts of AC power solar photovoltaics farm at Leinster, and an estimated 10 megawatts battery energy storage system and 66/33 kilovolt overhead transmission line connection to the existing gas and diesel generation island network. This project is a significant step forward for both BHP Nickel West and TransAlta to renewables in Australia.



Image courtesy of Alinta Energy

CHICHESTER SOLAR/GAS HYBRID ENERGY PROJECT

LOCATION:
Pilbara, WA

CLIENT:
Alinta Energy

- SERVICES:**
- Project Delivery
 - Engineering
 - Advisory Services

To provide gas-fired and solar-generated power to two existing mines to reduce non-renewable energy consumption, Engenium managed the project execution of 60 kilometres of 220 kilovolt power transmission line extension, with an associated 3 kilometres of 33 kilovolt and 11 kilovolt lines to connect existing power stations to the network. Engenium also managed the construction of a 60 megawatt single axle solar farm, two 220 kilovolt substations, as well as associated control systems. The project involved extensive brownfield tie-in works with a blue-chip mining company’s existing assets.

Image courtesy of Pilbara Minerals



PILGANGOORA LITHIUM-TANTALUM PROJECT

LOCATION:
Pilbara, WA

CLIENT:
Pilbara Minerals

- SERVICES:**
- Project Delivery
 - Engineering
 - Advisory Services

Engenium provided project delivery expertise for this greenfield mine development, from the definitive feasibility study through to construction. The first stage of the project targeted production of 2 million tonnes per annum of material to produce both lithium and tantalum-based products.



Image courtesy of BCI Minerals

MARDIE SALT AND POTASH PROJECT

LOCATION:
Pilbara, WA

CLIENT:
BCI Minerals

- SERVICES:**
- Project Delivery
 - Engineering
 - Advisory Services

Engenium is the appointed project management consultant for developing this large-scale, multi-generational solar evaporation operation. The new greenfield project will produce high purity sodium chloride salt and sulphate of potash fertilizer to supply the growing chemical and agricultural industries.

Image courtesy of Roy Hill



ULTRAFINE IRON RECOVERY PROJECT

LOCATION:
Pilbara, WA

CLIENT:
Roy Hill

- SERVICES:**
- Feasibility Study
 - Engineering
 - Construction Support

Engenium was engaged to complete the detailed design for tie-in works of an ultrafine iron recovery plant into an existing process plant. Engenium’s multi-disciplinary team were tasked with using point cloud data and flowsheet information from the client and equipment vendors to ensure sufficient capacity of supply to the new plant, as well as operational agility. Engenium was subsequently engaged for further debottlenecking work with the operator involving the addition of a new desands module.



Image courtesy of Fortescue Metals Group

ELIWANA MINE PROJECT

LOCATION:
Pilbara, WA

CLIENT:
Fortescue Metals Group

- SERVICES:**
- Project Delivery
 - Feasibility Study
 - Engineering
 - Advisory Services

Engenium provided the definitive feasibility study and detailed design of this new iron ore mining hub. The scope included a 30 million tonnes per annum processing facility and associated infrastructure including mine buildings, camps, telecommunications networks, electricity, water, sewage, and wastewater facilities.



ELIWANA RAIL PROJECT

LOCATION:

Pilbara, WA

CLIENT:

Fortescue Metals Group

SERVICES:

- Project Delivery
- Feasibility Study
- Engineering
- Advisory Services

Engenium provided engineering services including railway design, project management, and construction from the prefeasibility stage through to commissioning. The railway consisted of a total of 141 kilometres of mainline railway, two full length sidings and a smaller siding designed for bankers, as well as two dual-purpose bridges (rail and road) over Rio Tinto infrastructure and over 5 million cubic metres of earthworks construction.