



# Performance Excellence in Resources and Industrial Projects

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# Building on strong foundations



DELIVERING EXCELLENCE IN COMPLEX MULTI-DISCIPLINARY PROJECTS



**\$7.6B+**

Work in hand



**15,000+**

Employees



**25+**

Countries



**5**

Continents

## Global experience delivered locally

**BESIX Watpac is an Australian multi-disciplinary contractor backed by a century of global expertise and financial strength. A wholly-owned subsidiary of the award-winning BESIX Group, we specialise in complex construction across all sectors.**

With vast international experience and a robust balance sheet we deliver large-scale complex infrastructure projects across Australia and New Zealand. Combining Watpac's four decades of intimate local knowledge, delivery excellence, and trusted long-standing partnerships, we bring the best of the world's capability together.

Whether it's the tallest building in the world, the iconic Burj Khalifa or the Grand Egyptian Museum - from stadiums to hospitals, schools, bridges, resource and industrial projects, port infrastructure, water treatment plants, secure facilities, airports, defence assets and more - *ours is a reputation built on quality.*



- Sun Metals  
Refinery Expansion  
Townsville, QLD



## In-house engineering expertise

Our in-house team of 150+ engineers operates from three global hubs in Brisbane, Dubai and Brussels. We set new standards in construction through expert structural, geotechnical, sustainability, digital and façade engineering as well as rapidly evolving concrete technology. Our specialists are embedded in project teams to interrogate the design; de-risking projects, maximising value and delivering certainty.



## Partner of choice

Leveraging our rich Australian history, we collaborate with our clients and partners to deliver excellence on every project. As genuine relationship contractors, we are invested in our client's success. Proudly, eighty per cent of our business is repeat. A private company with a flat structure, our lean, agile approach guarantees innovative and cost effective solutions.



## Local content specialists

From urban centres to regional Australia, we actively support local jobs and Indigenous participation while building better communities. This is fundamental to our core beliefs and exemplifies our personalised approach to project delivery.

*Resources and industrial project expertise >>*



# Engineering smart solutions

## Heavy and complex industries

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The resources and industrial sectors have never played a more critical role in driving our national prosperity and achieving profitability in a competitive global environment demands optimal efficiency in every facet of the operation.

Now more than ever, industry needs an infrastructure delivery partner which is committed to a deep appreciation of critical success factors and which has the depth of engineering capability and experience to drive cost savings and program certainty.

BESIX Watpac optimises constructability to efficiently deliver complex resources and industrial facilities. From waste to energy, to refineries, renewable electricity generation, such as hydro-electric schemes, and multifaceted military manufacturing facilities, our remarkably diverse portfolio demonstrates our long-standing commitment to excellence.



*More than a construction contractor, we strive to add value by engineering improved methodology for enhanced efficiency and safety.*

Beyond construction, today's resources and industrial infrastructure demands seamless integration with specialist contractors for the installation of increasingly specialised and complex systems. This emphasises the critical need to plan, co-ordinate and liaise with fit-out consultants to secure or improve program.

Of course, all methodology will be scrutinised for safety. It is the overarching principle of everything we do, and safety will never be compromised in the pursuit of time or cost savings.

We are also deeply conscious of the resources sector's contribution to regional and remote communities. Every project we undertake, regardless of scale or complexity, is therefore viewed through the lens of social procurement to ensure an enduring economic legacy through employment, skills training and Indigenous participation.

# Delivering efficiency, safety and quality

Our in-house engineering team interrogates design to improve constructability, safety and program.

## Live environment experts

We specialise in live operating environments and the seamless integration of extensions or expansions of existing facilities. This is achieved by engineering the best methodology to enable staged handover, avoid disruption, and ensure minimal impact. Safeguarding mission-critical operations with zero unplanned disruptions is paramount.

*While we will never compromise on safety and quality, we also understand that for our clients, time is money.*

## Collaborative engagement

The most effective delivery of industrial projects requires deep collaboration and understanding of the functional brief to ensure we can add the greatest value in the way each project is delivered. Construction methodology is critical to the efficiency of the project schedule, as well as safety, and we need to engage our clients as a team to determine the best approach.

We also collaborate with specialist M&E Contractors to ensure we are all working together to safely deliver real time savings in the program. Similarly, our supply chain relationships ensure we source the right materials at the best price. This transparent approach to all aspects of the project maximises opportunities and minimises risk.



## In-house engineering

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Our acclaimed in-house engineering team thoroughly assesses design and construction methodology of every project. Whether its innovative use of structural steel, tailored concrete technology or advanced traveling formwork, our engineers take globally acquired learnings and apply them to our client's advantage.

## Sustainable and future-proofed solutions

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We help clients to future-proof their assets. We plan and build in flexibility and redundancy to accommodate future expansions, meet ongoing sustainability and where applicable enabling a planned approach to deconstruction of a short-term facility.

Our integrated approach achieves low-risk, program and cost certainty.

- ✔ Design Management
- ✔ Industry leading value engineering capability (access to more than 150 in-house engineers)
- ✔ Fully integrated cost plan incorporating scope and time
- ✔ BIM Modelling, methods and sequencing
- ✔ Services, technology and commissioning
- ✔ Project management excellence
- ✔ Workforce training and development
- ✔ Community and stakeholder engagement.

# Innovation and program excellence

TOWNSVILLE, QUEENSLAND



**6 months**

early delivery



**81%**

delivered by North Qld subcontractors



**12.3%**

Indigenous employment

## Sun Metals Refinery Expansion

Delivered in a live operational environment, this expansion will significantly increase the refinery's zinc production capacity. The project requires highly technical sequencing and our methodology engineering has resulted in several innovations including the use of a rolling travelator as formwork for the concrete roof.

We developed bespoke methodology for the unique requirements of the building. Because of the highly corrosive environment, the design called for a structural steel frame which was fully encased in concrete for protection. This required great attention to detail and quality control for the installation and welding of the reinforcing steel.



CLIENT

**Sun Metals Corporation**



VALUE

**\$135M**



EXPERTISE

**Construct Only**



TIMELINE

**2019 - 2021**



- ✔ *Fast-tracking delivery of the project through the innovative rolling formwork methodology reduced the construction program by six months*
- ✔ New electrolysis building and ferric oxide facilities constructed to support or replace existing structures
- ✔ Leaching and purification works assist in accommodating more load through the plant

“ *This is an extremely technical build, which really shows what we can do in the industrial sector. If we can build this, we can build anything* ”

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Wade Cummins  
Northern Area Manager,  
BESIX Watpac

# Sustainable energy solutions

DUBAI, UNITED ARAB EMIRATES

## Dubai Waste to Energy Plant

One of the largest resource recovery facilities in the world, this project represents a significant step forward in innovative sustainability. Solid waste destined for landfill that cannot be recycled or recovered, is heat-treated and converted into a renewable energy source.

- ✔ Five thousand tonnes of solid waste per hour converted into energy at full capacity, 1.825 million tonnes per year
- ✔ 171 megawatts produced per hour
- ✔ 120,000 homes in Dubai will be powered by this plant



CLIENT  
**Municipality of Dubai**



VALUE  
**\$964M (approximately)**



EXPERTISE  
**Public Private Partnership**



TIMELINE  
**2018 - 2020**





DUBAI, UNITED ARAB EMIRATES

## Landfill Gas-to-Energy

### Repurposing landfill gas

CLIENT **Dubai Municipality**

EXPERTISE **Public Private Partnership**

- ✔ Methane captured from landfill will be recovered, processed and converted into energy
- ✔ 24 kilometres of piping
- ✔ 9,000 cubic metres of landfill gas treated per hour
- ✔ 12 megawatts of electricity produced

AJMAN, UNITED ARAB EMIRATES

## Ajman Sludge-to-Energy Plant

### Harnessing waste product

CLIENT **ASPCL**

EXPERTISE **Design + Construct**

- ✔ Biogas produced from sewage sludge will be captured and converted to green electricity
- ✔ First plant of its kind in the United Arab Emirates
- ✔ Produces 50 per cent of Ajman Wastewater Treatment Plant's energy needs
- ✔ Up to one hundred million litres of wastewater treated a day
- ✔ 400 kilometres of sewer lines



ONSLow, WESTERN AUSTRALIA

# Remote location expertise



**3** months

early delivery



**0%**

safety or environmental incidents

## Wheatstone LNG Project

BESIX, in a joint venture with Thiess, delivered a Material Offloading Facility (MOF) for the Chevron operated Wheatstone LNG Project in Western Australia, as well as a 960-metre breakwater.

The challenge of working in a very remote location, often over open water and under difficult environmental conditions, was overcome through best-practice design and construction methodologies as well as an unwavering focus on safety. This not only achieved an excellent safety result, but also enabled the project to be delivered three months ahead of schedule.



CLIENT

**Bechtel for Chevron Australia**



VALUE

**\$360M**



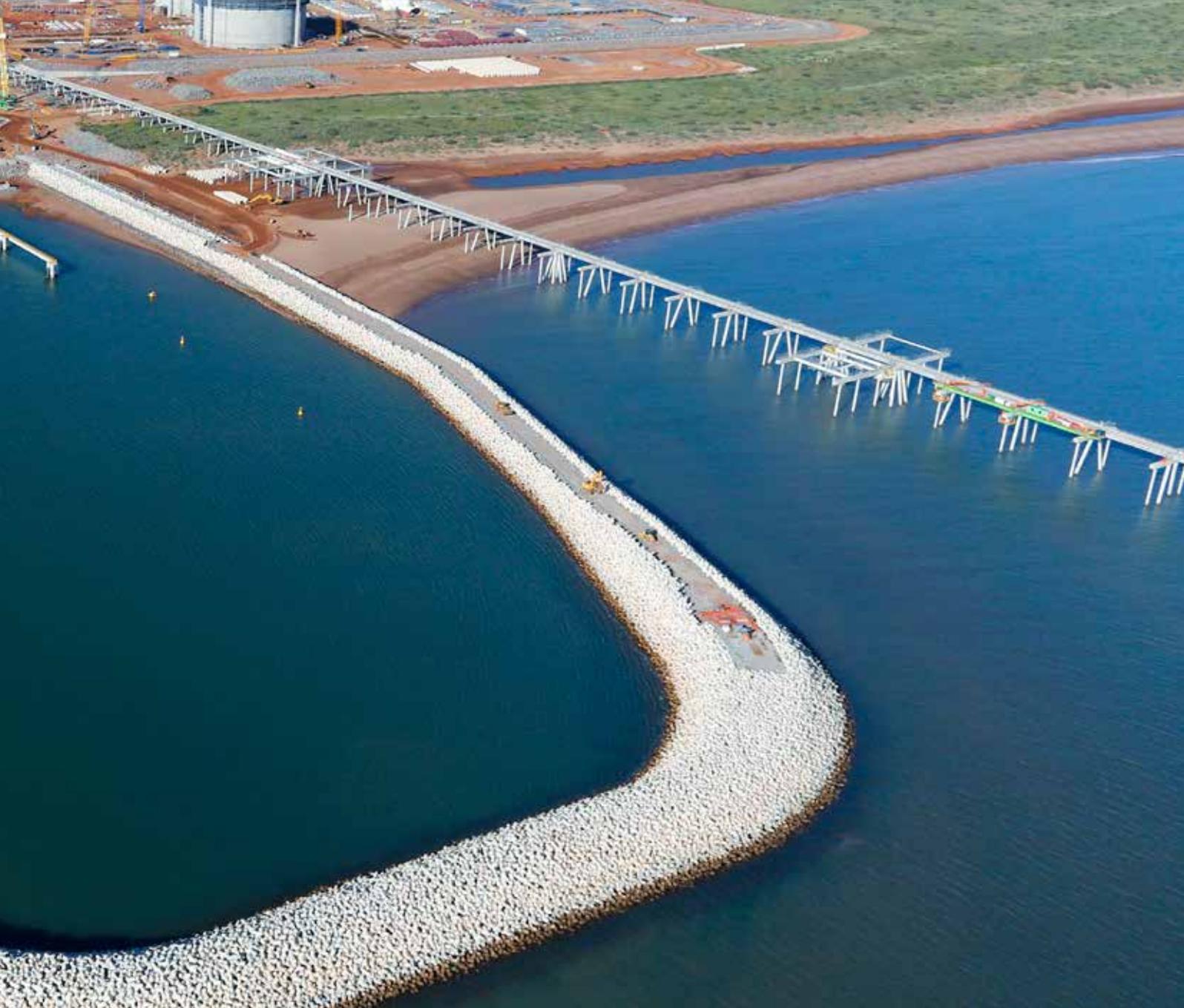
EXPERTISE

**Design + Construct**



TIMELINE

**2011 - 2015**



***Our ability to work proactively with the client to find design solutions combined with our safety culture, high performance and reliability made us one of the most trusted subcontractors on site.”***

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Fabian Boucher  
Operations Manager, BESIX Group

- ✔ Combi-wall retaining structures with anchor walls
- ✔ Two quays  
South quay: 250 metres  
East quay: 175 metres
- ✔ 960 metre rubble mound breakwater protected by concrete armour units
- ✔ 20 thousand square metre deck slab

# Automation excellence



## Gabbro Terminal

The automated port terminal has enabled the rapid delivery and storage of Gabbro, a coarse-grained rock used in asphalt and concrete, one of Qatar's main commodities.

The world-class infrastructure constructed at the port features a four-lane in-loading conveyor system and cranes that transport the resource from the ship to warehouses.

- ✓ Faster and safer delivery and storage of Gabbro
- ✓ Reliance on transport trucks eliminated
- ✓ Reduced carbon emissions
- ✓ Reduced dust pollution
- ✓ Design coordinator engaged to manage intercontinental team and ensure streamlined design and delivery



CLIENT

**Qatar Primary Metals Co.**



VALUE

**\$380M**



EXPERTISE

**Construct Only**



TIMELINE

**2013 - 2016**



NACHTIGAL, CAMEROON

# Nachtigal Hydropower Project

## Powering communities

CLIENT **Nachtigal Hydro Power Company**

EXPERTISE **Design + Construct**

- ✔ Hydroelectric power plant that will increase Cameroon's national electricity production by a third
- ✔ 420 megawatt of electricity produced at maximum capacity
- ✔ 1.5 kilometre long, 14 metre high dam
- ✔ 3 kilometre canal

PONT-SUR-SAMBRE, FRANCE

# Pont-sur-Sambre

## Bolstering electrical markets

CLIENT **Poweo / Siemens A.G.**

EXPERTISE **Construct Only**

- ✔ 400 megawatts combined gas-steam cycle electricity generating station
- ✔ Complex civil works that required a high level of environmental integration in compliance with industry standards
- ✔ Siemens' first power station in France





REDBANK, QUEENSLAND

# Fast-tracked delivery



94%

local industry participation



4%

Indigenous employment



102

apprentices

## MILVEHCOE (Military Vehicle Centre of Excellence)

Australia's first Military Vehicle Centre of Excellence is a large multi-disciplinary factory and testing facility in which Rheinmetall Defence Australia is delivering the Boxer Combat Reconnaissance Vehicle for the Australian Army.

Our staged delivery methodology enabled a fast-tracked handover of the first building while works continued. Due to the sensitive nature of the advanced military equipment, the project was delivered under stringent security. A mix of specialty facilities including a vehicle test track, electromagnetic compatibility chamber, and a fully enclosed weapons test firing range were also delivered.



CLIENT

Queensland Government



VALUE

\$170M



EXPERTISE

Managing Contractor



TIMELINE

2018 - 2020



- ✔ Comprehensive jobs and training plan
- ✔ 39,000+ square metre production facility
- ✔ 19,000+ square metres of landscaping
- ✔ 80 per cent of waste generated was recycled off-site
- ✔ 450 workers on site at peak construction



*The staged handover fast-tracked Rheinmetall's access to the facility so they could commence production and manufacture as soon as possible.*

Client feedback

# Partner in excellence

WE EXCEL IN CREATING SUSTAINABLE SOLUTIONS FOR A BETTER WORLD



## Excellence

We are committed to operational excellence, high performance and delivering on our promises safely.



## Co-creation

We collaborate with our clients and partners to drive innovation that makes a difference.



## Respect

We are genuine, considerate and act with integrity and candour.



## Passion

We seek to inspire, going the extra mile to achieve results that exceed expectations.



## Unity

We work as one team to achieve our shared purpose.





^ Wheatstone LNG Project



### Best for project teams

Our teams are hand-picked specifically for each project. We bring together the best people, consultants, sub-contractors, delivery partners and networks to ensure the right technical skills, cultural fit and client focus to achieve on-time and on-budget project delivery.



### Culture of excellence

By investing in the development and wellbeing of our people, we create a culture focused on safety and exceeding client expectations. This is underpinned by our values and supported by our in-house leadership program, formal continuous improvement processes and structured knowledge sharing across the BESIX Group.



### Flexible, streamlined project delivery

We partner with our clients to deliver projects through various contracting methods, including Public Private Partnerships (PPPs), Managing Contractor, Early Contractor Involvement (ECI), Design and Construct (D&C), or Construct Only. Irrespective of the contract model, we embrace a flat management structure to enable streamlined communication between all project stakeholders to make clear and efficient decisions.



### Building Information Model (BIM)

Building Information Modelling affords numerous benefits to the design, construction and operation of a project. Our dedicated BIM Manager oversees design development and coordination of the BIM datasets. By working closely with the design team and cost planner, efficiencies are fully leveraged and any clash detection identified. This enables constructability issues to be resolved well before construction begins. BIM processes can be further utilised to verify BIM elements to the as-constructed form. Ideally the BIM datasets are then used to optimise asset life and facilities management.



### Safety, quality and sustainability

While our systems are certified to Australian, New Zealand and ISO standards, it is our commitment to continuous improvement that ensures we bring best-practice safety, quality and environmental outcomes to all our projects. We have experience in delivering commercial projects to achieve a minimum 5 Star Green Star Design and As-built Ratings.

***Partnering with an experienced, collaborative contractor is essential for a high-quality, future-proofed asset; delivered with excellence.***

# Maximising local benefits

SUPPORTING LOCAL JOBS AND PROCUREMENT OPPORTUNITIES

▾ Project activity since 2014



**80%+**

Average portion of total construction hours by local trades and businesses



**500+**

Jobs created for Indigenous people



**2,000+**

Career pathways for apprentices



**2M+**

Training hours achieved across 60 projects

**We believe the benefits of social procurement should flourish during construction and long after the project is completed. This places jobs, diversity, training and skills development front of mind at every step of project delivery.**

With strong local connections, particularly through regional Australia, we are committed to maximising local jobs, Indigenous participation, social benefit and homegrown content.

Partnering with clients and community leaders, we inject millions of dollars into local economies through the creation of career pathways and apprenticeships and by enhancing local business capability.

Engaging early with local industry, we evaluate supply chain capability, training and skills development opportunities - delivering long-term economic and social benefits to the community.



▴ Indigenous smoking ceremony at a BESIX Watpac project site - held within a designated safety exclusion zone with all works ceased.



*BESIX Watpac has taken a really personal approach with our local community. They have responded to anything the community wanted to talk about. Nothing has been too difficult.*

Client feedback



Meet the contractor barbecue



## Our blueprint for vibrant communities

- ✓ Procurement and tendering processes are transparent, fair and locally driven
- ✓ Trade packages are broken down to reduce risk and create local opportunities
- ✓ Sub-contractors are connected with Indigenous people and are supported to succeed
- ✓ Training pathways are established through local tertiary institutions including universities and colleges
- ✓ Benefits are created beyond construction such as support for community programs

BESIX Watpac's Reconciliation Action Plan artwork



Discover more at [besixwatpac.com.au](https://besixwatpac.com.au)