

Who We Are



For more than three decades, the team at Turnkey Industrial Engineering has focused on one overriding goal: **to do the very best we can for our customers.**

We genuinely care about the quality of our work and we are proud of the high number of repeat customers and long-term working relationships we have developed over the years. This applies to all areas of our expertise, whether it be mechanical, electrical or automation engineering, plant maintenance, plant equipment installation/relocation or any other projects requiring well-thought-out, expertly managed engineering solutions.

Our company was founded on engineering excellence, and we are immensely proud of the skills we bring to precision planning and project management, as well as our many successfully completed projects, some of which have won awards. This has everything to do with our team of over 100 qualified industrial engineers and tradespeople, project managers, skilled experts, and the wealth of experience they bring to the table. Turnkey is proudly Australian owned and operated, capable of handling projects from end to end – from design and drafting all the way to implementing effective maintenance programs. From our expansive, well-equipped fabrication and manufacturing facilities in Ingleburn NSW, we serve not only Greater NSW but also projects across Australia. Our customers know what to expect from Turnkey: **honesty, value for money, experience and proven reliability.**



Australian Institute of
Project Management

PROJECT MANAGEMENT
ACHIEVEMENT AWARDS
2016 NATIONAL WINNER
CONSTRUCTION AND ENGINEERING



Quality
ISO 9001



Health &
Safety



ISO45001
Occupational
Health and
Safety

Management Team



CAMERON STANTON

Managing Director



NATHAN KIELY

General Manager
Mechanical & Electrical
Major Projects

Our dedicated team of highly skilled engineering, automation and installation experts are critical to the success of all our projects. Having a range of experts in different fields enables us to select engineers and technicians that are a perfect fit for a particular project.

At the helm of Turnkey is a management team led by Cameron Stanton, an industrial engineer whose professional focus has been in plant design, engineering, construction, maintenance and operation. Cameron has managed the engineering and construction of over 10 manufacturing and mining facilities in Australia and the Americas. Cameron led Turnkey to win the 2018 National Australian Institute of Project Management (AIPM) Construction | Engineering achievement award for its outstanding execution in building the Rincon Lithium Carbonate plant in Argentina.

Nathan Kiely has over 25 years' experience in the commercial, industrial and infrastructure sectors. Nathan has been involved with some of Australia's largest Infrastructure projects such as NorthConnex & WestConnex Tunnels. His unique specialisation is managing complex, large-scale projects and client liaison.

With this specialised experience comes innovation, tailored solutions, overall improved efficiency and long-term value for our clients.

Our Vision and Core Values

OUR MISSION

To deliver value by being a leading, innovative engineering solutions provider to Australia's infrastructure, industrial and resource sectors, whilst always ensuring the safety of our people and caring for the environment.

OUR CORE VALUES



Integrity

We do what we say we're going to do and we go the extra mile for our customers.



Adaptability

We make the changes necessary for an improved outcome.



Respect

We accept and respect each other's differences and believe in building relationships based on honesty, mutual trust and openness.



Zero Harm

We are committed to a safe and healthy workplace, environmental responsibility and sustainable developments.



Courage

We are not afraid to think differently, to be innovative, and to seek out continuous improvements.



Excellence

We always strive for superior quality, setting high targets and working hard to exceed them.



Added Value

During planning and execution, we ensure that every action adds value.

OUR VISION

To be the partner of choice for effective engineering solutions Australia-wide



What we offer is an end-to-end solution that incorporates design, construction and handover.

We set the project up for success so that all our customer has to do is "turn a key," get started and achieve the results.

Engineering & Procurement Construction (EPC) Management

Over the last 30 years Turnkey has successfully delivered a range of EPC projects across the Manufacturing, Infrastructure, Mining and Government sectors.

Our experienced, multi-disciplined team gives us the capability to deliver both large and small industrial engineering projects from initial concept through to commissioning, operation and maintenance planning.

No matter how complex the project, Turnkey utilises proven, consistently reliable in-house processes that include clear scoping plans, robust project hierarchies and best-practice project management systems. Our conceptual design, project management, fabrication and construction management teams oversee all aspects of a project from initial concept through to final commissioning. This capability allows us to offer single point accountability for all aspects of the project, providing our clients with seamless, low-risk, fully AS compliant solutions.

Concept & Feasibility

Utilising its resources and experience, Turnkey carries out detailed FEED studies (including conceptual, pre-feasibility, feasibility and other definitive studies) to address any technical issues and set a preliminary budget.

1. Concept Design
2. Desktop & Feasibility studies
3. Budget estimates CAPEX/OPEX
4. FEED studies
5. Value engineering

Define Project Scope

Taking the time and effort to thoroughly establish all aspects of a project has a direct impact on how well the project will be executed. This includes confirmation of the scope and having accurate sign off with the client to ensure the delivery of project expectations. Detailed and thorough HAZOP studies ensure that systems are set up to protect the safety of those working on the project and in the completed plant, with all measures in place to prevent injury and achieve Zero Harm.

1. Confirm scope
2. Layouts & general arrangements
3. HAZOP study
4. Confirm budgets

Manufacture

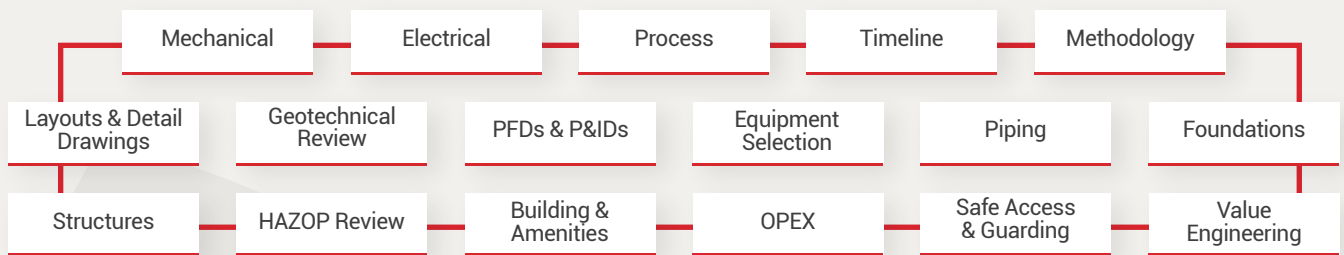
With our fully equipped workshop facilities and significant fabrication and manufacturing capabilities (including extensive machining capacity such as heavy plate/section rolling, submerged arc welding, heavy manipulators, etc.), Turnkey has the capacity to handle every stage of the manufacturing process from raw materials through to final calibration.

1. Timetable & logistics
2. Management & coordination
3. Procurement
4. QA system & checks

Construct

We have extensive experience in multi-disciplinary construction management and execution, installation of structural steel, mechanical and electrical works and process equipment. This enables us to provide complete construction packages including mechanical, electrical and plant automation, with the capacity throughout the region to provide modularisation and off-site preassembly.

1. Subcontractor selection
2. Health & Safety implementation
3. Site management
4. QA system & checks



Project Management

Turnkey's professional and experienced project managers, project engineers, cost engineers and planners all have PMP Certification (or are training to be certified). We provide full project management services to local Australian standards, utilising the latest state-of-the-art software systems. With immediate, transparent information sharing, any issues are analysed and addressed for speedy and efficient resolution.



Design & Engineering

Turnkey provides solutions that are specifically designed to meet our clients' requirements. At every stage of the process, we maintain open lines of communication to ensure that all aspects of the project remain in line with our customer's expectations.

1. Design input
2. Constructability
3. Prefabrication methods
4. Design output
5. Design review
6. Drawing approval

Procure

Procurement specialists are assigned to each project to ensure added value from the start of the project lifecycle. Specifications and scope of work documents are reviewed, and a package register and contracting plan is developed in conjunction with the project manager and engineers. A risk analysis is completed to identify opportunities and threats and a baseline plan is drawn up and agreed upon for organising, monitoring and control functions.

1. Prequalification
2. Proprietary equipment selection
3. Supplier qualification
4. Tender process
5. Purchasing & shipping

Commission

Turnkey employs highly experienced specialist commissioning engineers and technicians to support our professional engineers and project teams in troubleshooting faults and dealing with the complex mechanical, electrical and control related issues encountered on large-scale industrial projects.

1. Programmed & coordinated
2. Site management
3. As built drawings
4. Training
5. Value engineering

Service & Support

Turnkey offers service and support throughout the project lifecycle, including the installation, configuration and maintenance of equipment. By providing experience, technical information and ongoing assistance, we make every effort to keep our customers' operations up and running, reducing downtime and improving productivity.

1. All aspects of project scope
2. Operations personnel
3. Spare parts
4. Onsite & remote

Case Study:

NEXUS Battery Recycling Facility

Project Summary

NEXUS PTY LTD

Name	NEXUS Battery Recycling Facility
Location	Bibra Lake, WA
Completed	2021
Value	\$20m
Scope	EPC Fixed Price Plant Build - design, construct and commission the recycling plant. In-house works performed include Project Management, Concept Design, Mechanical & Electrical Engineering, CAD drafting, Procurement, Mechanical & Electrical installation of OEM process equipment with associated Structures, LV Electrical Power and Instrumentation (MSB, MCC & PLC panels fabricated at Turnkey's Ingleburn manufacturing facility), Mechanical Services, Fabrication and Installation of Structural Steel equipment supports and platforms, Complete QA/QC and HSE Site Management.

The NEXUS Battery Recycling Facility is Western Australia's first used lead acid battery recycling facility.

Commissioned in late 2021, the operation has a licensed capacity to process approximately 30,000 tonnes of used car batteries. This is a welcome and exciting development for the WA battery recycling industry. It should eliminate the need and cost associated with freighting batteries to the Eastern State recyclers and reduce the environmental impacts and associated risks of long-distance transport.

The recycling process requires the breaking down of used automotive batteries to extract and recover their component parts for re-use. This involves crushing (where batteries are physically broken down), primary separation of battery components (separation of metallic lead, lead paste and plastics) and secondary separation of plastic battery components. The process finishes with the immobilisation of plastic separator waste, the production and packaging of recycled products and waste materials, and treatment of generated wastewater.

16,000

Total Hours Worked



1,750

Reported Take 5s and Hazards



650

Risk Assessments



Zero

Lost Time Injury Frequency Rate



Zero

Medical Treatment Injury Frequency Rate



Zero

Total Recordable Injury Frequency Rate



Scope of Services

Turnkey was awarded a greenfield EPC contract by NEXUS to build the Battery Recycling Facility in Perth.

The project scope included the concept design, regulatory approvals, buildings, infrastructure, and installation and commissioning of the plant and equipment. This successfully completed project further establishes Turnkey as an industry leader of small-to-medium industrial engineering greenfield and brownfield projects in NSW and Australia-wide.



Case Study: Springvale

Located in Lithgow, NSW, the Springvale Mine produces the coal used by the nearby Mount Piper Power Station.

The Mount Piper Power Station provides approximately 15% of NSW's power. This new facility treats the mine water and delivers water to the power station for beneficial reuse. The Springvale Water Treatment Plant ensures environmental and operational compliance in relation to water outflows and most importantly, enables continued operation of both the mine and the power station.

Project Summary

ABERGELDIE COMPLEX INFRASTRUCTURE

Name	Springvale Water Treatment Plant
Location	Mt Piper Power Station, Blackmans Flat, NSW
Completed	2021
Value	\$20m
Scope	Project Management, Engineering and Procurement, Complete QA/QC and HSE Management, Low Voltage Electrical Supply and Installation, Mechanical Services, Installation of Structural Supports.



105,815



Total Hours Worked

4,166



Reported Take 5s and Hazards

1,422



Risk Assessments

Zero



Lost Time Injury Frequency Rate

Zero



Medical Treatment Injury Frequency Rate

Zero



Total Recordable Injury Frequency Rate



Scope of Services

Turnkey was contracted to install over 240km of LV cable, along with the installation of a major portion of the mechanical support infrastructure at Springvale Water Treatment Plant.

Some of the key works included cable hauling through underground conduits from MSBs to plant areas; mechanical installation of cable trays and pipe bridges; running and termination of cables from trays and conduits to all plant, equipment and instruments; and complete traceability of all work via ITPs, ITCs and FAT compliance processes.

This project was delivered with an outstanding health and safety track record, achieved through the dedicated adherence to health and safety systems by all levels of personnel on site from management through to all construction trades. Our processes and systems focused on strict induction and onboarding of personnel, which translated into a culture of adherence to permits, risk assessments and Take 5 protocols, creating a safe working environment for all personnel.



Case Study: Rincon Lithium Carbonate Demonstration Project



Project Summary

RINCON LTD

Name	Lithium Carbonate Demonstration Project
Location	Engineering & fabrication of mechanical & electrical components (including reverse osmosis filters): Sydney, NSW. Construction: Salar de Rincon, Salta, Argentina
Completed	2018
Value	EPC \$27M
Scope	EPC of the whole project from concept design to commissioning and operational support. (All disciplines, provision of construction management and supervision including project engineers).

The Lithium Carbonate Demonstration Project was an innovative, novel and complex undertaking to engineer, construct and commission a demonstration plant within one year. The plant had to effectively model a new sustainable end-to-end lithium-extraction process, producing high-grade lithium carbonate with low-waste from non-concentrated brine in Salta, Argentina. The project sought to develop local capability to operate the plant, optimise the new lithium-extraction process, and demonstrate commercial viability for investors.

160,000



Total Hours Worked

5,600



Reported Take 5s and Hazards

2,122



Risk Assessments

Zero



Lost Time Injury Frequency Rate

Zero



Medical Treatment Injury Frequency Rate

Zero



Total Recordable Injury Frequency Rate

Scope of Services

Turnkey's specific objective was to design, construct and commission a demonstration plant for use in Salta, Argentina in less than a year.

The purpose of this highly complex, multinational project was to prove the commercial viability of the innovative, first-of-a-kind, proprietary lithium-extraction process (aka the 'Stanton Process') engineered by Turnkey Industrial Engineering. This new process, which involves extracting lithium-carbonate from raw brine sourced from salt lakes, is far and away the most cost effective and sustainable method of mining lithium ever produced worldwide.

For this project, Turnkey was awarded the Australian Institute of Project Management's 2018 Project Management Achievement Award (PMAA) in the construction and engineering category. This award recognises and honours outstanding achievements in program and project management.



The Turnkey Advantage

Multi-disciplined

A proven capability to deliver a true "Turnkey" Solution. In-house Mechanical & Electrical engineering and tradesmen, construction, and maintenance services.

Breadth and Depth of Experience

Through decades of experience, our team has become true experts at precision planning and project management.

Award-winning Innovation

Turnkey's recognition from the Australian Institute of Project Management is testament to our dedication to excellence, innovation and precision engineering.

Outstanding Safety Record

We take safety seriously, as demonstrated by our enviable, long-standing safety record, which is a result of effective planning, ongoing training and careful delegation.

Genuine Care

No matter the size or scope of the job, we offer our customers an honest, ethical service and a genuine partnership based on trust and reliability.



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