



GR PRODUCTION SERVICES
OPERATIONS – MAINTENANCE – PROJECTS – ADVISORY

Technical Advisory Network

ADVISORY



ADVISORY

GR Production Services is a leading provider of fully integrated, safe and sustainable production solutions to the energy and resources industries.

We are uniquely positioned as both an independent operator and operations, maintenance and projects service provider with a track record of over 25 years, enabling GR Production Services to bring a production mindset when advising clients.

Working closely with our clients, we have been able to develop innovative practices to support outcomes that deliver against expected safety, sustainability, cost, productivity, maintenance and integrity measures. This culture of collaboration has been key to our successful history. Our Technical Network team of qualified personnel assist our clients in dealing with a range of issues. To learn more about our provision of advisory consulting services visit grps.com.au

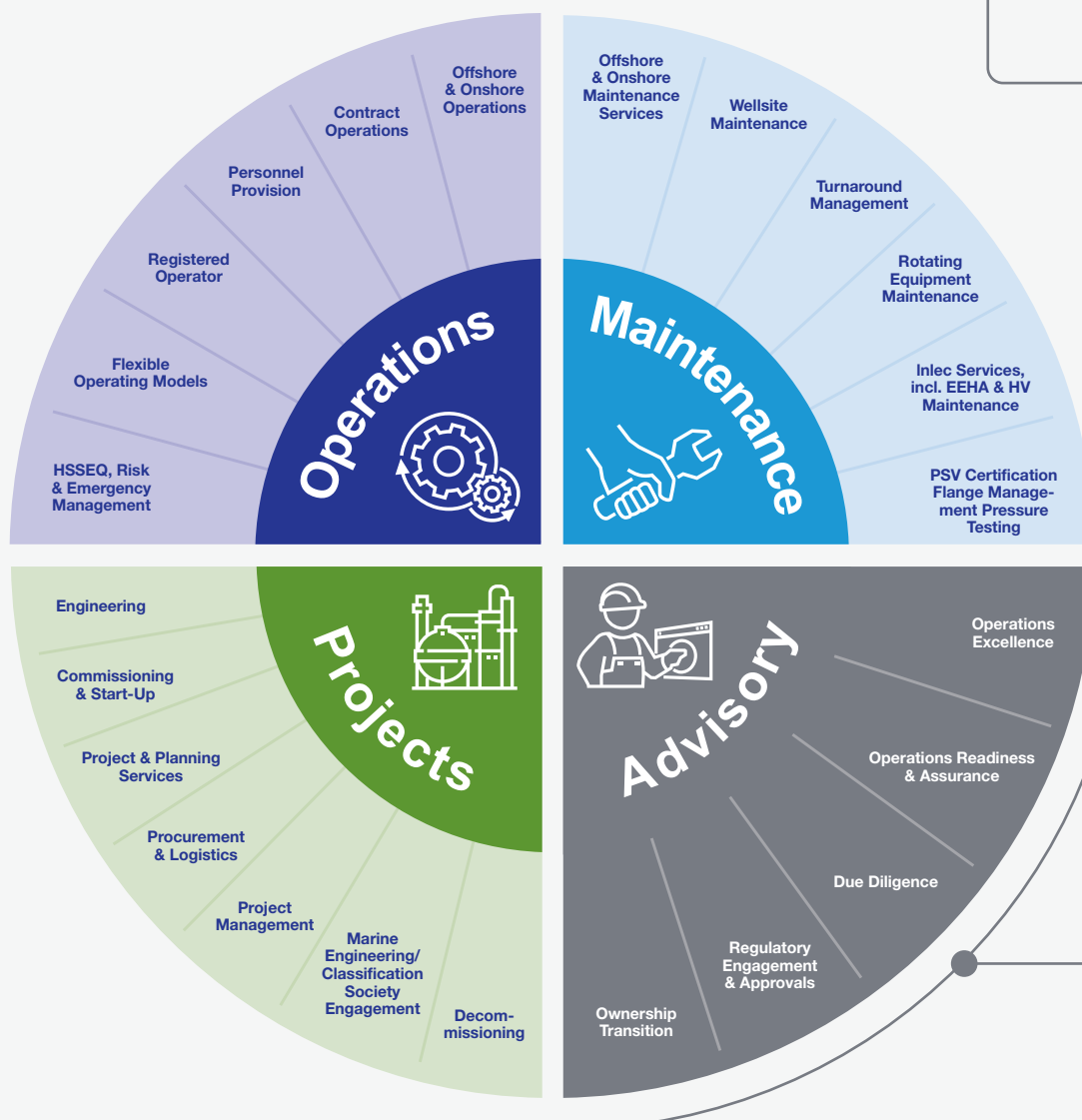

OPERATIONS

MAINTENANCE

PROJECTS

ADVISORY

Fully Integrated Services



Technical Network of flexible advisory services.



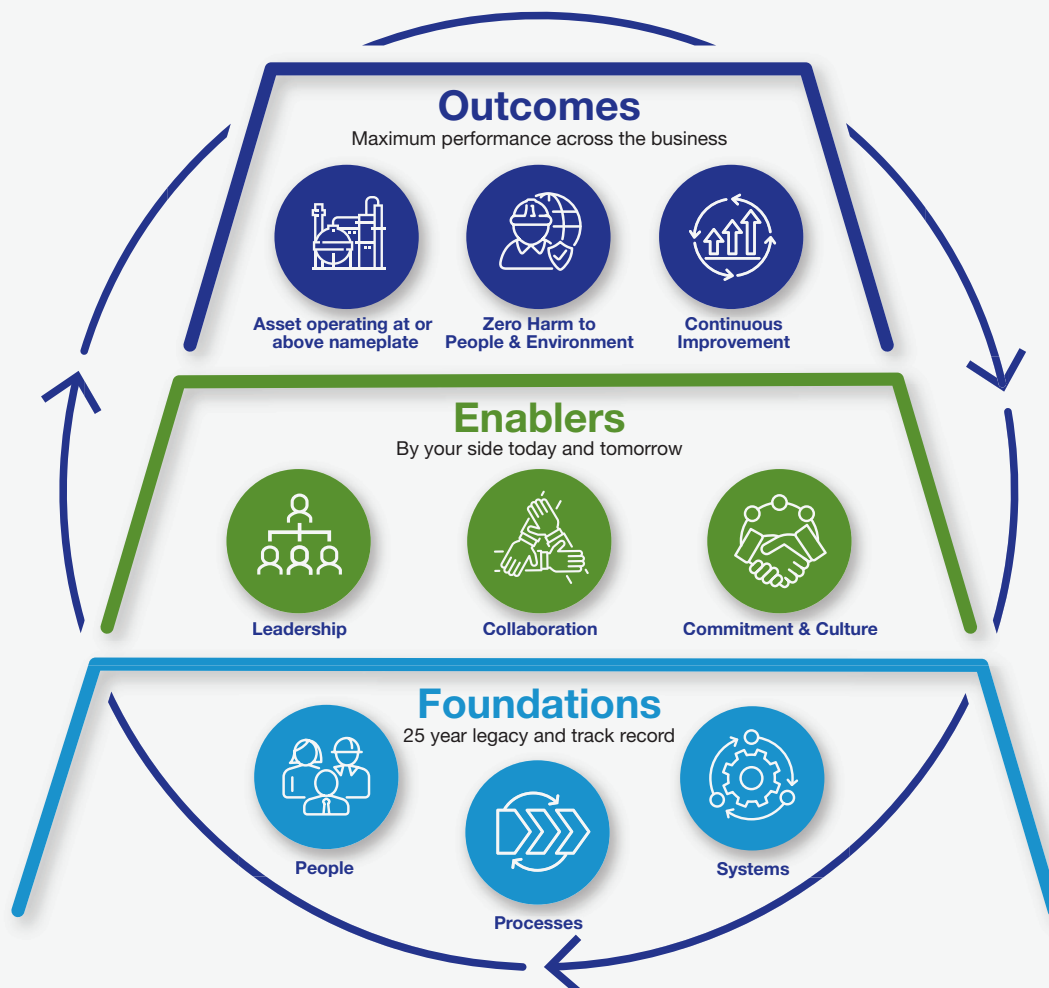
Our team are highly experienced in all areas of energy and resource asset advisory support. They can assess the physical and technical feasibility of a project, review regulatory requirements, identify opportunities to optimise schedule, review the supply chain and evaluate the operating philosophy.

Our Technical Network of professionals provide flexible advisory services including:

- Operations Excellence Frameworks and Delivery
- Operations Readiness and Assurance
- Due Diligence Assessments
- Ownership Transition Services
- Regulatory Engagement and Approvals

Delivery Excellence Framework

Target: Operate and Maintain asset at technical, organisational and commercial optimum; **'The best you can be'**.





Advisory Projects



Santos - Patricia Baleen Facility (Gas and Liquids)

(2002 - ongoing)

Client

Santos

Summary

GRPS operated the Patricia Baleen plant for nine years providing full operations and maintenance, projects and advisory services through the provision of multi-skilled personnel.

Key Services

- Design, commissioning, debottlenecking, power generation facilities using gas engines
- Utilising Computerised Maintenance Management System (CMMS) "Maximo" which allows site personnel to identify required maintenance, plan, schedule and control site work activities



CO2CRC - Carbon Storage Project

(2016 - ongoing)

Client

CO2CRC

Summary

The CO2 research facility in the onshore Otway Basin is located near the town of Peterborough approximately 250km south west of Melbourne. The aim of the CO2CRC Otway Project is to demonstrate that carbon capture and storage (CCS) is a viable option for CO2 mitigation under Australian conditions.

Key Services

In 2006, we were engaged to design and install the wells and topside facilities required to execute the initial testing under Phase 1 for CO2CRC.

Since that time, GRPS have overseen the drilling of further wells and implementation of further surface based equipment for the execution of further research based projects.

Advisory services provided to our client include:

- Due Diligence Assessments
- Physical and Technical feasibility studies
- Updates to the site management system documents for new works
- Managed all approvals from the client and state regulator
- Production operations and maintenance processes
- Implementation of an auditing process and conversion of existing documents and procedures to GRPS' ISO Certified Integrated Management System (IMS)



Advisory Projects



APA - Orbost Gas Plant Upgrade Projects

(2015 - 2022)

Client
APA

Summary

GRPS previously operated and maintained the plant for OMV and subsequently Santos from 2001-2011 and have detailed knowledge of the plant which we bring to the APA organisation to maximise scope delivery efficiency and cost reduction.

Key Services

- Transitioning the CMMS system from Santos SAP to APA Maximo solution;
- Provision of Construction Interface Management support
- Development of Plant Operations Procedures (both greenfield and update to existing brownfield procedures)



Northern Endeavour FPSO – Laminaria/ Corallina Field – Production ReStart Economic Assessment

(2019 - 2022)

Client
Australian Government

Summary

We were to review and report upon the potential economic viability of restoring the Laminaria and Corallina Fields to production following the period of production suspension, which was ordered by the Australian National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) in July 2019, for safety reasons. We assessed the potential remaining developable oil resource (Contingent Resources) in the fields and the likely costs that would be associated with re-starting the production facility, accessing new development opportunities and the ultimate abandonment of the asset. This economic assessment undertaken on the asset potential also considered the ongoing costs of the production facility and the additional financial outlay required to develop the remaining oil. The substantial costs associated with the ultimate abandonment of the field post-production were a major component of this analysis and the need for these to be offset by the revenue of any production.

Key Services

- Ongoing operational expenditure forecast
- Asset transition, repair, and reinstatement cost estimate
- Subsurface status and field development potential
- Existing well re-instatement opportunities
- New well development opportunities
- Re-start production forecasts
- Decommissioning/abandonment requirements and cost estimate
- Full economic evaluation (for multiple oil price scenarios)
- Risk Analysis
- Strategic conclusions and recommendations



Advisory Projects



Moranbah Gas Plant

(2022 - ongoing)

Client

Queensland Pacific Metals Energy (QPME)

Summary

QPME contracted GRPS to manage a range of transition services associated with the acquisition of the Moranbah Gas Plant (MGP) and transfer of operator from Arrow Energy to GRPS. Services included operations readiness and advisory for the safe management of gas production from the MGP. The transition took place in two stages, first included the transfer of ownership of the asset. Second included the completion of the Operations Readiness scope and when GRPS transitioned operatorship of the asset.

The transition included people, systems, processes and procedures. The CMMS build was a key scope of work and transferred all existing Arrow Energy Maintenance Management system content from SAP to the IBM Maximo.

GRPS' sister company Mipac are also supporting the project with SCADA and IT decoupling and transition services. For ongoing and operations engineering requirements, our team leverage RPEQ engineering capability from GR Engineering Services (GRES) Brisbane office.

Key Services

- Streamlined services fit for purpose for asset size
- Leveraging experienced team from other CSG projects and lessons learned database
- Inhouse RPEQ engineering and process controls expertise
- Transitioned on schedule and budget
- Optimised asset operations model (lean team) leveraging large, embedded Queensland workforce for campaigns (no need to hold large team of non-productive workforce)
- Local points of contact and accountability
- Existing regulatory relationships



Advisory Projects



Vali and Odin Field Development

(2022 - ongoing)

Client

Vintage Energy

Summary

GRPS is the operators of the Vali and Odin Field development in the Cooper Basin, QLD

operator (Mode 1 contract, full GRPS Management System based scope). The site location is approximately 2 hours northeast of Moomba, on the Queensland side of the SA/QLD border. Three wells were drilled and completed by Vintage Energy and tied into the Santos infrastructure via a pipeline that was installed in late 2022. From there, the gas flows back to the Santos Moomba plant for processing via twin 100mm nominal bore synthetic pipelines. These connect to the Santos network at the Beckler tie-in point, in South Australia just over the border, approximately 14km from the Vali facilities.

The GRPS operations team at the Vali Site in the Cooper Basin (QLD) successfully commissioned the Vali-3 well to supplement gas volumes from the Vali-1 well commissioned in early 2023. Whilst all the facilities have been commissioned a further well (Vali-2) is planned to be commissioned. In addition to ongoing remote operations management, GRPS was engaged to provide early support for the design and planning for a new gas source from the nearby Odin field where facilities have been constructed to connect into the Vali pipelines..

Key Services

Our advisory role commenced with the provision of preparation services in the areas of regulatory compliance, technical support (control system related), and detailed Operations Readiness activities such as operating and maintenance procedures. Commissioning and a subsequent period of stabilising production continued before a reduction in presence and site surveillance transitioned to campaign visits for surveillance and maintenance. At all times the asset is monitored remotely via a satellite connected control system that has been designed by our sister company Mipac.



Advisory Projects



Triangle - Cliff Head Oil Field

(2006 - 2022)

Client

Triangle Energy

Summary

The Cliff Head onshore and offshore platform is operated and maintained by GRPS, providing a full range of operations, maintenance and technical integrity services. The facility consists of an unmanned wellhead platform, pipeline to shore and onshore stabilisation plant. GRPS supported our client to transition the safety case and personnel following the transition from Roc Oil to Triangle Energy.

Key Advisory Services

- Safety case transition from contract operator (GRPS) to client including planning, development, and review
- Advisory consultation on transition and movement of personnel
- Environmental aspects study of safety case
- Advisory services on maintaining safe operations in the field
- Planned site supervision and support services
- Provision of guidance with maintenance systems and transmission of data
- Review of currency of all documentation



MEPAU Perth Basin (Waitsia & Xyris)

(2009 - ongoing)

Client

MEPAU

Summary

GRPS provides operations and maintenance services, facilities engineering and project management services, maintaining high safety and operational performance whilst managing costs in a marginal field environment.

Key Services

- Review and advisory services for transition of all processes and procedures
- Review of documentation suite
- Development of Safety Management System and Safety Case
- Seamless transition support for all personnel
- Arrangement of enterprise agreement and engagement of personnel
- Guidance and advice on industry best practise





Locations

