



MULTI DISCIPLINE PROJECT DELIVERY AND MANAGEMENT SERVICES  
FABRICATION - PRE-ASSEMBLY-CONSTRUCTION - COMMISSIONING

LEADING YOUR PROJECTS

COMMITMENT TO OHS EXCELLENCE

SOLID STRATEGY AND EXECUTION EXPERTISE

RISK CONSCIOUS STRATEGY DEVELOPMENT

COMMITMENT TO MANAGEMENT LEADERSHIP

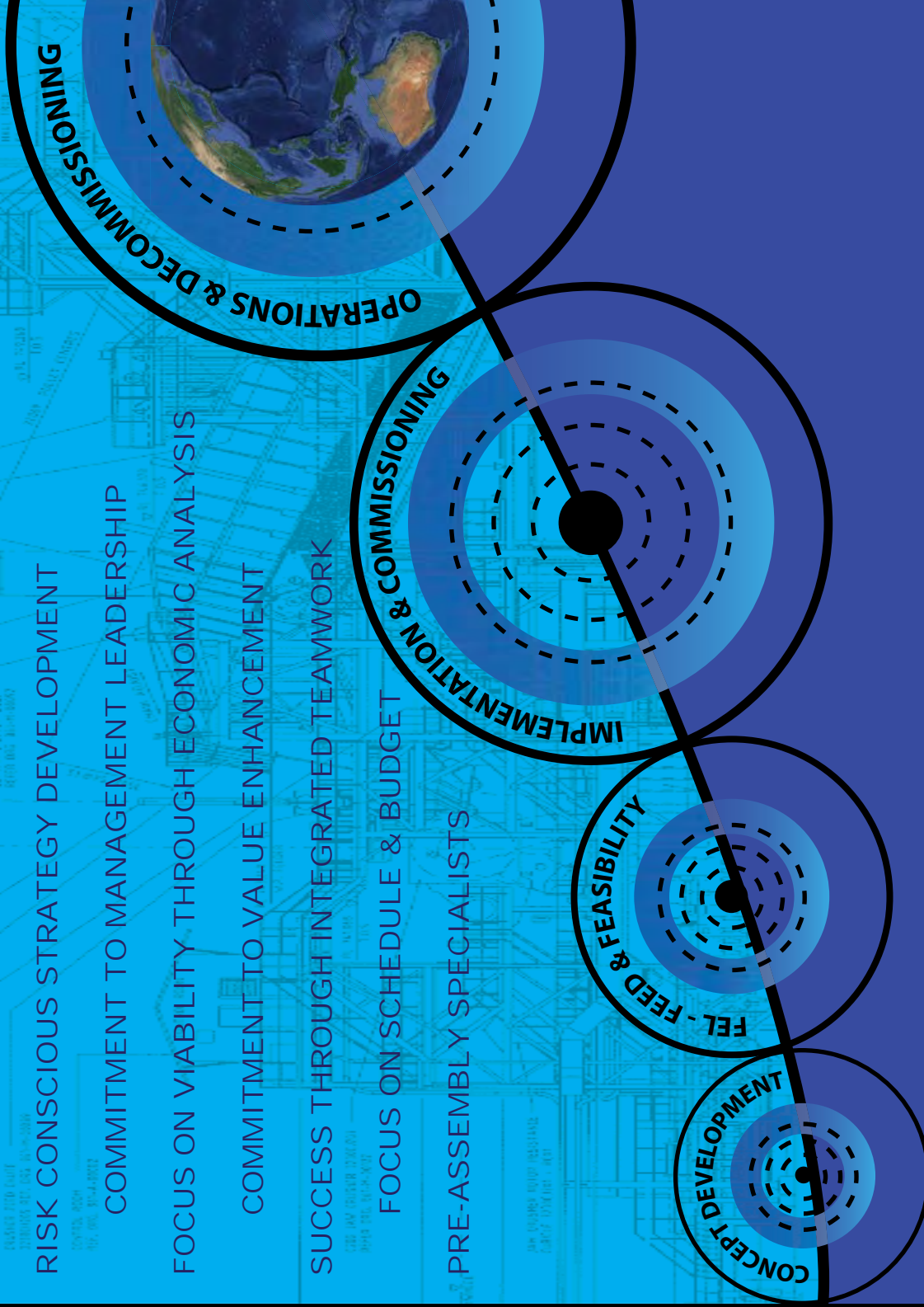
FOCUS ON VIABILITY THROUGH ECONOMIC ANALYSIS

COMMITMENT TO VALUE ENHANCEMENT

SUCCESS THROUGH INTEGRATED TEAMWORK

FOCUS ON SCHEDULE & BUDGET

PRE-ASSEMBLY SPECIALISTS



OIL & GAS - CSG - PETRO-CHEMICAL - MINERALS PROCESSING - MINING  
AND HEAVY INDUSTRY SECTORS  
[WWW.SIGMAENGINEERING.COM.AU](http://WWW.SIGMAENGINEERING.COM.AU)

KEY TEAM PERSONNEL

Senior Project Managers  
Senior Safety Managers  
Senior Construction Managers  
Construction Superintendents & Supervisors  
Project & Construction Engineers  
Contracts & Procurement Specialists  
Materials Management & Logistics Specialists  
Planners & Schedulers  
QA-QC & Commissioning Personnel

CLIENT BASE

APLNG  
Origin Energy  
BHPBilliton  
Xstrata Coal  
Anglo Coal  
Xstrata Nickel  
Alcan  
Inco Australia Ltd

SIGMA ENGINEERING COMMITMENTS

Assist Clients to Achieve Best Practice Workplace Safety Performance

Assist Clients to Achieve Best Value Project Development Through Project Specific Economic Evaluation and Risk Identification

Pursuit of Project and Construction Delivery Solutions Based on Economic Analysis, Risk Considerations and Viable Execution Strategies

Pursuit of Pre-Assembly and Installation Delivery Solutions Based On Economic Analysis, Risk Considerations and Viable Execution Strategies

Assist Clients to Identify and Implement Optimal Contract, Procurement, Logistics, Materials Management and Quality Strategies and Models to Ensure Execution Success

Provide Clients with Committed, Experienced and Qualified Personnel for Strategic Development And Tactical Execution of Works



# DEVELOPMENT & CONSTRUCTABILITY

Design Management for Pre-Assembly Definition  
Site Assembled Component Optimization  
Design Input for Support Infrastructure  
Project Engineering & Discipline Input  
Design Input for Civil Infrastructure  
Vendor & Contractor Integration  
Design Input for Pre-Cast

## MULTI DISCIPLINE EXPERIENCE BASE

# PRE-ASSEMBLY SEQUENCING PLACEMENT & RISK EVALUATION

Sequencing for Maximized Safety  
Critical Equipment & Infrastructure Identification  
Sequencing to Maximize Efficiency  
Sequencing to Reduce Labor Densities  
Integration of Installation Contractors  
Identification of Lift & Transport Design Studies  
Feedback of Key Criteria to Designers

## HIGHLY EXPERIENCED PERSONNEL

ON-SITE CONSTRUCTION  
& PRE-ASSEMBLY

TRANSPORTATION

LOAD OUT & SHIPPING

OFF-SITE PRE-ASSEMBLY

OFF-SITE FABRICATION

Total development of all Project Phases, Concept development, FEL, FEED and implementation including fabrication & installation management.

Highly dedicated team providing stand alone service or integrated secondrees for broader development by Client execution teams.

Commitment to value addition through economic & risk validation applied to execution methodology.

Application of proven technique, known resources and highly experienced personnel.

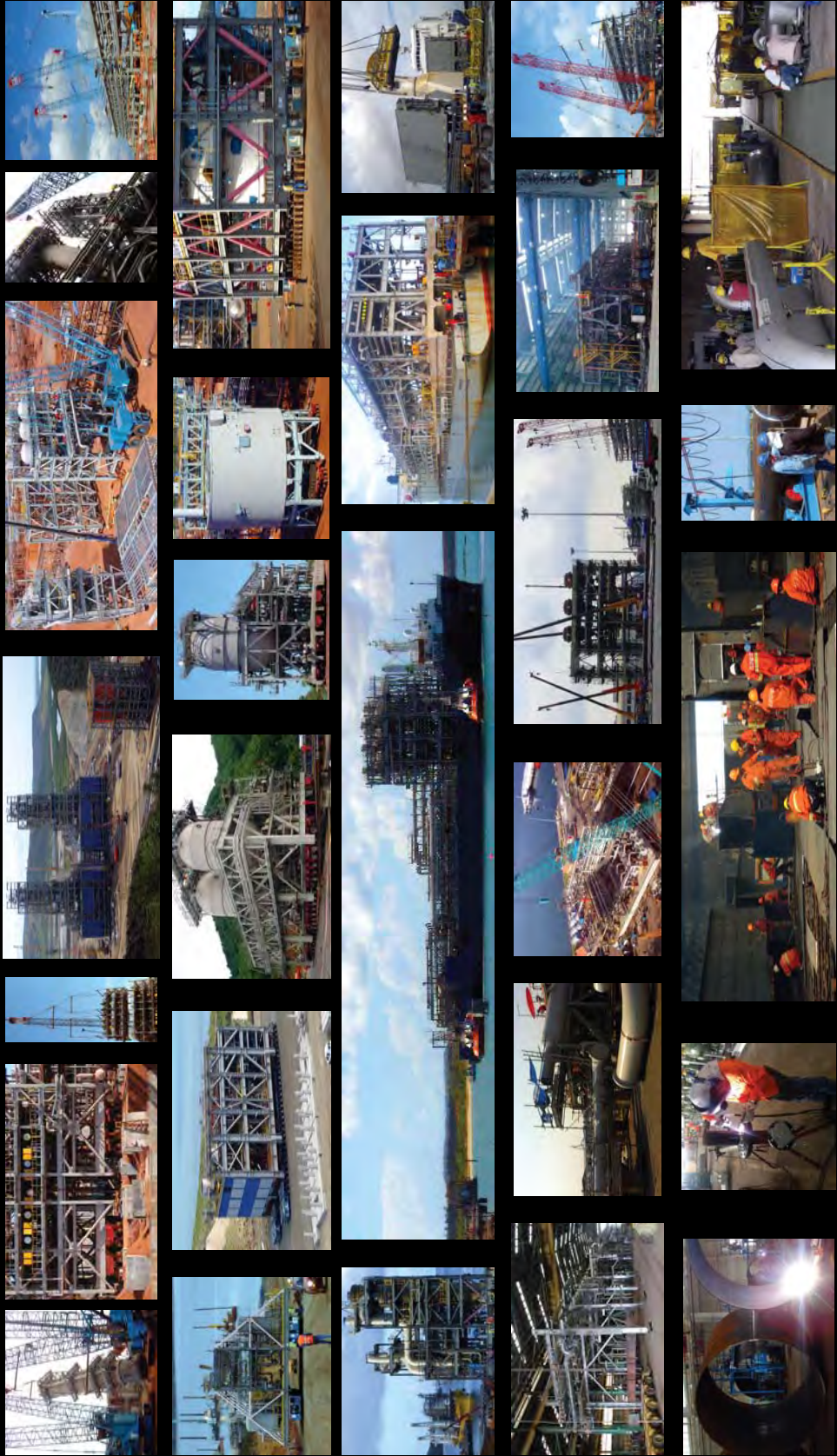
SCHEDULE FOCUSED

COST CONSCIOUS

MOTIVATED

CAPABLE

LEADERS



FOCUS ON EXECUTION SUCCESS

## INSTALL - COMMISSION

Maximum Safety Focus - Lifting- Fall Protection & Access  
Site Commissioning Focus on Lock Out & Tagging  
Integration of Site Teams with Off Site Punch Listing  
Integration of Off Site & Site Survey  
Targeted Input to Minimized Small Bore & Electrical On Site  
Integration of Commissioning Team with Off Site Handover  
Integration of Off Site QA-QC with Site Commissioning

DEDICATION TO ADDING VALUE

## COMMERCIAL INTEGRATION

Evaluation of Project Specific Supply Chain Opportunities  
Balance Commercial Structure with Engineering Detail  
Integrate Transport with Fabrication & Construction  
Structure Shipping Contract to be Construction Flexible  
Structure Fabrication & Assembly for Unit Rate Application  
Maximize Client Flexibility for Materials & Equipment Supply  
Maximize Warranties for Future Operational Utilization

## ECONOMICS, PLANNING & EXECUTION BUDGETS

Risk Assessment of Execution Modeling  
Definition of Execution Structure  
Onshore/Offshore Resource Review  
Development of Cost Data  
Economic Evaluation of Fabrication Scale  
Economic Evaluation of Logistics  
Economic Evaluation of Support Infrastructure  
Budget Development from Scale Optimization  
Develop High Level Planning Pre Scheduling  
Develop Tactical Level Schedules  
Integration of Execution, Cost & Scheduling  
Integration of Commercial Strategies  
Integration of Safety Requirements Costings  
Integration of Environmental Constraints  
Develop Board Presentations & Reports

STRONG STRATEGY  
& IMPLEMENTATION  
EXPERTISE

EXTENSIVE  
COMPLEX  
PROJECT  
EXPERIENCE