35. STUDY TEAM

The Arrow LNG Plant Environmental Impact Statement has been a collaborative effort by multiple individuals and organisations. Key team members from the proponent, lead environmental consultant, and environmental impact assessment specialist consultancies are acknowledged in this chapter.

35.1 Proponent – Arrow CSG (Australia) Pty Ltd

The proponent organisation for the Arrow LNG Plant is Arrow CSG (Australia) Pty Ltd (Arrow Energy). The management and technical team consisted of individuals from Arrow Energy and representatives from Shell Projects and Technology, who are responsible for the delivery of the front end engineering and design (FEED) on behalf of Arrow Energy (Table 35.1).

Table 35.1 Arrow LNG Plant management and technical team

Team Member	Project Role	Qualifications and Years of Experience	
Hilary Mercer	Vice President – LNG and Integration	MA EngSci (Hons), ChemEng, M.I.Mech.E.	
Paul Neilson	EIS Manager	BSc (Geoscience), GradDip (Education). 15 years experience.	
Gerard Coggan	EIS Strategic Advisor	BEng (Civil and Environmental), MEngMgmt, DipProjMgmt. 15 years experience.	
Michael Lampp	LNG Plant EIS Project Manager	BSc (Earth Science and Geology). 15 years experience.	
Kate Johnson	EIS Coordinator and Downstream Approvals Manager	DipEnvMgmt, DipHort. BLaw (in progress). 6 years experience.	
Linda Wulf	EIS Coordinator	BA (LIS), BBus (HRM), Dip (LS). 14 years experience.	
Shannon Kratzmann	EIS Coordinator	2 years experience.	
Johan Goudriaan	Front End Design Team: Project Manager	MSc (MechEng). 30 years experience.	
Frederic Viel	SGSI Home Office Team Lead Project Engineer and Tunnel Project Manager	MSc (Eng Math), PhD (Eng Math). 15 years experience oil and gas.	
Rajeswari K.Ramasany	SGSI Home Office Environment and SP Senior Consultant	MSc (Env Diagnostics), PhD (EnvSci). 15 years experience (2 years in oil and gas).	
Derek Calderwood	LNG Project Engineer	BEng (Chem) (Hons). 8 years oil and gas experience.	
Ian Rogers	Residence Engineering Team Civil Engineer	MEng, MSc, DIC, CEng MICE. 25 years engineering experience (11 years in LNG).	
Kevin Daubner	Marine Advisor	Master Foreign going, petroleum and Gas endorsements. HND Nautical Science. 37 years in industry, 27 years at sea, 5 years as Captain.	
Shahida Abdullah	Front End Design Team: Senior Project Engineer	BSc (ChemEng). 15 years experience.	

Table 35.1 Arrow LNG Plant management and technical team (cont'd)

Team Member	Project Role	Qualifications and Years of Experience	
Alexandre Santos	Lead Process Engineer	MSc (ChemEng). 15 years experience.	
Fabien Nieber	Front End Design Team: Project Engineer for Modules and Construction	BCivil Eng/BComm. 8 years experience in civil and construction (4 years on LNG 6 years in construction).	
Huib Verschoof	Front End Design Team: Lead Project Engineer	MSc (Chemical Equipment). 14 years experience in oil and gas.	
Yue Feng Zhao	Front End Design Team: Process Engineer	MSc (Chemical Process). 8 years experience in oil and gas.	
Chio Yong Hii	Front End Design Team: Lead Discipline Engineer	BSs, CEng. M.I.Mech.E. 28 years experience in oil and gas.	
Sanjeev Kumar	Front End Design Team: Utility Engineer	BTech (Mechanical Engineering). 18 years experience in oil and gas.	
Tom Chupick	Preparation support and TA2 verification of GHGEMP and utility integration issues.	BSc (Chemical Engineering). 15 years energy, utility and co-generation experience (LNG sites, refinery technology and operations).	
Sajali Hj Kip	SGSI Home Office Environment and SP Principal Consultant	BSc (Physiology and Chemistry). 29 years upstream oil and gas (22 years environment).	
Teri Lillington	Health Project Owner	B.M., B.S., G.D.O.H., F.A.F.O.M. (R.A.C.P.). Occupational and environmental physician. 23 years experience in occupational medicine speciality field, 29 years total experience as a medical practitioner.	
Simon Chynoweth	Technical Reviewer for Hazard and Risk Study	BSc and PhD (Math). 23 years of experience in the oil and gas industry and 15 years in major hazards and HSE.	
Lai Chin Yin	Major Hazard Management Expert	MSc (Env). 7 years experience in oil and gas.	
Geoffrey Borg	Technical Reviewer of Soil and Groundwater studies	MSc (Hydrogeology and Groundwater Management). 18 years remediation of contaminated land.	

35.2 Environmental Lead - Coffey Environments Australia Pty Ltd

Coffey Environments Australia Pty Ltd (Coffey Environments) were commissioned by Arrow Energy as lead environmental consultant on the Arrow LNG Plant. The Coffey Environments management and technical team is shown in Table 35.2.

Table 35.2 Coffey Environments EIS project team

Team Member	Project Role	Qualifications and Years of Experience	
Barton Napier (Senior Principal)	Project Director Strategic Advisor	AssocDip of Applied Science (Computing), Certificate of Technology (Survey and Mapping). 35 years experience.	
Emma Waterhouse (Principal)	Project Manager	BSc (Botany and Zoology), MSc (Resource Mgmt) (Hons). 20 years experience.	
Kristen Wicks (Consultant)	Supporting Project Manager	BSc (Zoology and Ecology). 3 years experience.	
Michael Wright (Principal)	EIS Author/Technical Reviewer	BEng (Civil). 15 years experience.	
Andrew Jensen (Senior Consultant)	Studies Coordinator/ EIS Author	BSc (Geography) (Hons). 6 years experience.	
Joanne Lockyer (Associate)	EIS Author	MAppLaw (Environment Law), BA (History and Political Science). 10 years experience.	
Tasha Latham (Associate)	EIS Author	MSc (Planning and Environment), BSc (Environment), 9 years experience.	
Victoria Alivanoglou (Senior Consultant)	EIS Author	BEng (Env) (Hons), GradCert (Mining). 6 years experience.	
Fiona Mulvenna (Consultant)	EIS Author	BA (International Development and Environmental Studies). BSc (Earth Science). 4 years experience.	
Lucy Thomas (Consultant)	Studies Coordinator/EIS Author	BSc (Zoology). 2 years experience.	
Michael Drowley (Consultant)	Studies Coordinator/EIS Author.	BSc EGS (Hons). 3 years experience.	
Chris Mahoney (Associate)	EIS Author	BA International Economic Relations (Macro-economics), MA Urban and Regional Planning (Environmental Planning). 11 years experience.	
Rebecca Hewlett (Principal)	Technical Reviewer	BSc (Hons), MSc (Freshwater Ecology). 17 Years Experience.	
Helen Unkovich (Senior Consultant)	GIS Support.	BSc. 6 years experience.	
Gareth Lewis (Senior Consultant)	GIS/Drafting Support.	BA (Graphic Design) (Hons). 6 years experience.	
Felicity Thompson (Graphic Designer) Dean Jones	GIS/Drafting Support. Administrative Support.	BA Visual Arts (Photography Major, Design Minor). 11 years experience. N/A	
(Project Assistant) Julie Pearce (Consultant)	EIS Author	BEnvSc (Wildlife Conservation and Biology). Diploma in Natural Resource Management. 1 year experience.	

Table 35.2 Coffey Environments EIS project team (cont'd)

Team Member	Project Role	Qualifications and Years of Experience	
Merrilyn Barnes	Studies Coordinator	BAPPSc (Conservation and Park Mgmt).	
(Senior Consultant)	(previous)	16 years experience.	
Christopher Armour	Studies Coordination/EIS	BEng (Env).	
(Consultant)	Author (previous)	2 years experience.	
Chelsea Kavanagh Studies Coordination/EIS		BSc. (Marine Biology and Zoology)	
(Consultant)	Author (previous)	2 years experience.	
Rebecca Lumley	Project Manager	BEnvl Science (Ecology) (Hons),	
(Associate) (previous)		MEnvMgmt (Natural Resource Management)	
		7 years experience	
Melissa Ellis	Studies Coordinator	BSc (Chemistry and Maths), MSc (Eco-toxicology) (Hons).	
(Senior Consultant)	(previous)	6 years experience.	

35.3 Environmental Impact Assessment Technical Specialists

A number of technical specialist consultancies were engaged by Coffey Environments to complete detailed impact assessments for disciplines covered by the EIS. These organisations and individuals are shown in Table 35.3.

Table 35.3 EIS technical specialists

Discipline	Company	Team Member	Qualifications and Years of Experience
Macro-economic assessment	ACIL Tasman	Paul Balfe	MBusAdmin, BSc (Geology and Mineralogy) (Hons).
			30 years experience.
Micro-economic	AEC Group	Ashley Page	BAg Econ (Hons).
assessment			12 years experience.
Visual	AECOM	Wendy Davies	BSc (Hons), DipLA.
Assessment			9 years experience
		Rachael Piper	BSc (Hons) (Landscape Design and Ecology) DipLandscape Architecture.
			12 years experience.
Surface Water	Alluvium	Rohan Lucas	BEng (Hons).
Hydrology Assessment			BSc (Earth Sciences).
		Jason Carter	BA (Environmental Studies) (Hons).
Health Impact	Arup	Lisa McKinnon	BSc (Australian Environmental Studies).
Assessment			14 years experience.
		Euan Gardiner	BEng (Civil) (Hons).
			12 years experience.
	Curtin University of Technology	Jeffrey Thomas Spickett	BSc (Hons), MSc, PhD.
			16 years experience.
Coastal	BMT WBM	Paul Guard	BEng (Civil) (Hons).
Processes and Hydrodynamics			8 years experience.

Table 35.3 EIS technical specialists (cont'd)

Discipline	Company	Team Member	Qualifications and Years of Experience
Aquatic Freshwater Ecology	Aquateco	Greg Vinall	BSc (Hons) (Aquatic Science) PhD (Research) 17 years experience
Assessment CQU Marine Ecology	Centre for Environmental Management, CQUniversity Australia	Dr Ralph Alquezar	BSc (EnvSc), PhD.
		Kirsty Small	15 years experience. Dip EnvSc. 15 years experience.
		Anne-Maree Frost	BSc (Hons). 5 years experience.
		Wayne Boyd	BSc, PhD Candidate. 20 years experience.
CQU Marine	AB marine	Adam Balkin	Open Coxswain.
Ecology - Marine Boating component	•	Brett Buckle	Master Class 5 MED Class 2.
Indigenous Cultural Heritage	Central Queensland Cultural Heritage Management Pty Ltd	Luke Godwin	BA (Hons), PhD. 30 years experience.
Assessment		Scott L'Oste- Brown	BA (Hons). 20 years experience.
		Jason Scriffignano	BAppSc. 15 years experience.
Contaminated Land Assessment	Coffey Environments	Matthew Chenery	BSc (Australian Environmental Studies), GradCert Bus. Mgmt.
		Sarah Richards	18 years experience. BSc (Geology), MSc (Environmental Geology). 10 years experience.
		Kristen Wicks	BSc (Zoology and Ecology). 3 years experience.
Land-use and Planning Assessment	Coffey Environments	Glenn Boddington	BUrb. Reg. Plan, G.D. Mgt., MBA, MPIA, MEIANZ, AFIAM, MDIA.
Marine Ecology Assessment	Coffey Environments	Dave Gwyther	21 years experience. BSc (Zoology), MSc (Marine Biology), PhD (Fisheries Biology). 25 years experience.
		Chelsea Kavanagh	BSc (Marine Biology and Zoology). 2 years experience.
		Chris Armour	BEng (Environmental). 2 years experience.
		Lucy Thomas	BSc (Zoology). 2 years of experience.
Waste Management Assessment	Coffey Environments	Shelley Innes	PGradDipEnvEng, BSc (Geology) (Hons). 17 years experience.

Table 35.3 EIS technical specialists (cont'd)

Discipline	Company	Team Member	Qualifications and Years of Experience
Acid Sulphate Soils	Coffey Geotechnics	Ron McMahon	BEng (Agricultural). 32 years experience.
Management Framework		Adrian Collier	BEng (Civil).
Traniework			16 years experience.
Geology, Landform and Soils Assessment	Coffey Geotechnics	Lucy Ellis	BSc (Hons) MPhil, PhD.
Groundwater Assessment	Coffey Environments	Michael Blackam	BAppSc (Environmental and Exploration Geology). BAppSc (Hydrogeology) (Hons).
			12 years experience.
		Ben Petrides	BSc (Geology and Chemistry) (Earth Sciences) (Hons), PhD (Hydrogeology). 10 years experience.
Bushfire Assessment	Eco Logical Australia	David Peterson	Fire Protection Association Australia BPAD Certified Practitioner (BPD-PA-18882). GradDip Design for Bushfire Prone Areas BEnv. Sc. (Hons). 14 years experience.
		Steve Edwards	GradCert (Applied Science (GIS)). 35 years experience.
		Rod Rose	GradDip (Design for Bushfire Prone Areas), AssocDip (Environmental Control). 10 years experience.
Terrestrial Ecology	Ecosure Pty Ltd	Phil Shaw	MPhil (Environmental and Applied Science), BSc (Ecology). 23 years experience.
		Trudy Thompson	BSc, Certificate IV ProjMgmt. 5 years experience.
		Beth Kramer	MEnv Mgmt, BSc.
		Detti Klamei	6 years experience.
		Nick Murray	Dr. Philosophy (Ecology)Candidate, BSc (Ecology) (Hons), BSc (EnvSc). 9 years experience.
		Christy Englezakis	BAppSc (EnvSc), BHealth Sc (Environmental Health), GradCertProjMmt.
		Donita Cabailan	9 years experience.
		Bonita Scheier	BSc. 9 years experience.
		Jesse Rowland	BEnv Mgmt (Sustainable Development). 4 years experience.
		Cici Legoe	MAppScience (Wildlife Health and Population Management), BVeterinary Medicine and Surgery. 8 years experience.

Table 35.3 EIS technical specialists (cont'd)

Discipline	Company	Team Member	Qualifications and Years of Experience
Terrestrial Ecology (cont'd)	Ecosure Pty Ltd (cont'd)	Chris Hansen (Hansen Botanical Assessments Pty Ltd)	BBiomed Science, BSc (Hons). 11 years experience.
		Russell Linnane	Certificate IV Cons and Land Mgmt. 12 years experience.
		Jesse Rowland	BEnv Mgmt (Sustainable Development). 4 years experience.
Traffic and Transport Assessment	GTA Consultants	Beth Meehan Davin Brown	BE (Civil) (Hons), RPEQ. 10 years experience. BE (Mechatronic). 4 years experience.
Non-Indigenous Cultural Heritage	Heritage Consulting Australia	Allan Lance	BA (Archaeology) (Hons).
Consultation	JTA Consultants	Jan Taylor Melissa Salisbury	BA (Economics & Government), LLB 20 years experience B Beh Sci (Psychology), MSPD 5 years experience
		Victoria Clark	BA LLB 1 years experience
Air Quality	Katestone Pty Ltd	Andrew Balch	BSc (Atmospheric Science, Geomorphology). 15 years experience.
		Sarah Menzell	BSc (Hons). 3 years experience.
		Andrew Vernon	MSc (Air Pollution Management and Control), BSc (EnvSc). 7 years experience.
		Christine Killip	BTech (Atmospheric Science). 17 years experience.
Climate Change and Greenhouse	PAEHolmes	Chaim Kolominskas	BE Env (Hons), MEnv Mgmt Pol. 10 years experience.
Gas Assessment		Li Fitzmaurice	BSc, MSc (Atmospheric Science), PhD (Atmospheric Science).
Preliminary Hazard and Risk Assessment	Planager	Karin Nilsson	BE (Chemical Engineering) 20 years experience
Noise and Vibration Assessment	Sonus	Chris Turnbull	MEngSc, BE (Hons) (Mech), MAAS. 17 years experience.
Social Impact	SKM	Boushel, Owen	BA, MASR.
Assessment		Bridget Crompton	BSc (Social), BSc (Psychology, Mathematical Statistics, Geography).