

Table S1: Major Australian hydrogen production locations from CSIRO HyResource.

S/No.	Project name	Proponents	State/Region	Status	Operations	Production method	Hydrogen production capacity	Capacity unit	Electrolyser type	Electrolyser capacity(MW)	Power capacity (MW)	
	Hydrogen Park Adelaide	Australian Gas Infrastructure Group (AGIG)	SA/Adelaide	Under development	2028	Electrolysis	14.7	tpd	Alkaline	60		
	ABEL Energy Bell Bay Powerfuels Project	ABEL Energy	TAS/Bell Bay	Under development - FEED	2029	Electrolysis	105	tpd		260	700 MW new build wind-based power	
	ABEL Energy Townsville Powerfuels Project	ABEL Energy	QLD/Townsville	Under development	2030	Electrolysis	105	tpd		260		
	East Kimberley Clean Hydrogen Project	Aboriginal Clean Energy Partnership (Balanaqarra Ventures Limited, MG Co)	WA/East Kimberley	Under development	2028-29	Electrolysis	40,000-50,000	tpa			900-1,000 (solar)20 (hydroelectric)	
	Allied Green Ammonia	Allied Green Ammonia	NT/Gove	Under development	2029	Electrolysis	486	tpd		3,000	9,500 GWh per annum (full project)	
	SunHQ Hydrogen Hub	Ark Energy Corporation Pty Ltd	QLD/Townsville	Under construction	2024	Electrolysis	140	tpa	PEM	1	121	
	Clean Energy Innovation Hub (CEIH)	ATCO Australia Pty Ltd	WA/Perth	Operating	2019	Electrolysis	23	tpa	PEM	0.26	0.3	
	ATCO Hydrogen Blending Project	ATCO Gas Australia Pty Ltd	WA/Perth	Operating	2022	Electrolysis - using Clean Er	600	kgpd	Project will use the CEIH electrolyser			
	Hydrogen Park Wagga Wagga	Australian Gas Infrastructure Group (AGIG)	NSW/Wagga Wagga	Under development	2027	Electrolysis	2.6	tpd	Alkaline	10		
	Hydrogen Park South Australia	Australian Gas Networks (AGN), part of Australian Gas Infrastructure Group	SA/Adelaide	Operating	2021	Electrolysis	175	tpa	PEM	1.25		
	Hydrogen Park Gladstone	Australian Gas Networks (AGN), part of Australian Gas Infrastructure Group	QLD/Gladstone	Under construction	2024	Electrolysis	65	kgpd	PEM	0.175		
	Hydrogen Microgrid and Mobility Project	Blue Economy CRC	TAS/Hobart	Under construction	2024	Electrolysis	262	kgpd	PEM	0.7		
	Illawarra Hydrogen Technology Hub	BOC Limited	NSW/Woolongong	Under development - FEED	2022-2023	2026	Electrolysis	4	tpd	10		
	Renewable Hydrogen Production and Refuelling Project	BOC Limited	QLD/Brisbane	Operating		2026	Electrolysis	2,400	kgpd	0.22	0.1	
	Australian Renewable Energy Hub	BP (Operator), Intercontinental Energy, CWP Global	WA/Pilbara	Under development		2026	Electrolysis	1,600,000	tpa		26,000	
	Geraldton Export-Scale Renewables Investment	bp Australia Pty Ltd	WA/Geraldton/Oakajee	Under development		2026	Electrolysis	4,000 - Demonstration scale and ~200,000 - Commercial scale	tpa	Alkaline/PEM combination	35.4 - Demonstration scale1,370 - Cc 2,000 - solar capacity2,000 - wind capacity(Commercial scale)	
	HZKwinana	BP Australia, Macquarie Capital	WA/Kwinana	Under development - FEED	2026	Electrolysis	44 (Base scenario 1), 143 (Base scenario 2) and 429 (Growth scenario)	tpd		101-111 (Base scenario 1)380-418 (Base scenario 2)1,030-1,133 (Growth scenario)		
	Green Springs Project	Climate Impact Capital Limited (CIC)	NT/Western Davenport	Under development - FEED (hydrogen module)		2026	Electrolysis	500,000	tpa		10,000 (power supply to mid/downstream project components)	
	Melbourne Hydrogen Hub	Countrywide Hydrogen Pty Ltd	VIC/Melbourne	Under development		2026	Electrolysis	4.5	tpd	10		
	Hydrogen Brighton Project	Countrywide Hydrogen Pty Ltd	TAS/Brighton	Under development - FEED	2026	Electrolysis	2.1	tpd	PEM	5		
	Hydrogen Devonport Project	Countrywide Hydrogen Pty Ltd	TAS/Davenport	Under development - FEED	2026	Electrolysis	2.1	tpd	PEM	5		
	Hydrogen Portland Project	Countrywide Hydrogen Pty Ltd, DGA Energy Solutions Australia	VIC/Portland	Under development		2026	Electrolysis	1,600	tpa	10 - Stage 1		
	Hydrogen Western Junction Project	Countrywide Hydrogen Pty Ltd, Launceston Airport, Western Junction	TAS/Western Junction	Under development - FEED	2027	Electrolysis	2.1	tpd	PEM	5		
	Kogan Creek Renewable Hydrogen Demonstration Plant	CS Energy	QLD/Chinchilla	Under construction	2025	Electrolysis	75,000	kgpd	PEM	1	2	
	Renewable Hydrogen Production and Refuelling Project	Swinburne University of Technology Victorian Hydrogen Hub - CSIRO Hydrogen Refuelling Station	VIC/Melbourne	Operating	2023	Electrolysis	20	kgpd	PEM	0.6		
	Edify Green Hydrogen Project	Edify Energy	QLD/Townsville	Under development	2027	Electrolysis	800 - Stage 1 and 150,000 - Full scale	tpa	PEM - Stage 1	17.6 - Stage 11,000 - Full scale	21 - Stage 1	
	Liquefied Hydrogen Supply Chain Commercial Demonstration Project	Electric Power Development Co. (E-POWER), Sumitomo Corporation, Kawasaki	VIC/Gippsland	Under development		2026	Fossil fuel conversion with C	30,000-40,000	tpa	Not Applicable (brown coal gasification / gas refining)		
	Emerald Coaches Green Hydrogen Mobility Project	Emerald Coaches	QLD/Emerald	Under development - FEED	2026	Electrolysis	40	kgpd	PEM	111		
	Gladstone MCH Project	ENEOS	QLD/Gladstone	Under development		2025	Electrolysis	40,000 - hydrogen equivalent	tpa (consumption)			
	Tallawarra B Dual Fuel Capable Gas/Hydrogen Power Plant	EnergyAustralia	NSW/Yallah	Under construction (hydrogen use component)	2025	Electrolysis	200	tpa				
	entX and Kimberley-Clark - Millicent Mill Green Hydrogen Project	entX Limited, Kimberley-Clark Australia	SA/Millicent	Under development	2026	Electrolysis	4.5 - Stage 126 - Stage 2 (full scale)	tpd		10 - Stage 165 - Stage 2 (full scale)		
	Gladstone PEM50 Project	Fortescue	QLD/Gladstone	Under construction	2025	Electrolysis	8,000 - Full scale	tpa	PEM	30 -202550 - full scale (2028 targeted)		
	Christmas Creek Renewable Hydrogen and Ammonia Project	Fortescue, Inotec Pivot Ltd	WA/Pilbara	Operating	2024	Electrolysis	530	kgpd	PEM	1.4 (2 X 0.7)	Includes 60 MW solar PV facility	
	Gibson Island Green Hydrogen and Ammonia Project	Fortescue, Inotec Pivot Ltd	QLD/Brisbane	Under development - FEED	2026	Electrolysis	70,000	tpa		550		
	Goondiwindi Hydrogen	Goondiwindi Regional Council, The Hydrogen Collective	QLD/Goondiwindi	Under construction	2025	Electrolysis	300 - Stage 1 and 8,000 - Potential	tpa	Alkaline	2 - Stage 150 - Potential	2.5 - Stage 1	
	Sir Samuel Griffith Centre	Griffith University	QLD/Brisbane	Project completed (2024)	2013	Electrolysis	2.7	kgpd	Alkaline	0.16	0.376	
	Portland Renewable Fuels	HAMR Energy	VIC/Portland	Under development	2029	Hybrid electrolysis / biomass	30,000	tpa		220		
	Hazer Commercial Demonstration Plant	Hazer Group Ltd	WA/Perth	Operating	2024	Biomass and waste	100	tpa	Not Applicable (biomethanar)	Not Applicable		
	Good Earth Green Hydrogen and Ammonia Project	Hirings Energy (Operator), Sundown Pastoral Company	NSW/Moree	Under development - FEED		2024	Electrolysis	4,500	tpa	15	9 - Stage 1 (Plus)27 - New build	
	Denham Hydrogen Demonstration Plant	Horizon Power	WA/Denham	Operating	2024	Electrolysis	13	tpa	PEM	0.348	0.704 MWp DC/0.06 MWP AC	
	Hyundai Integrated Hydrogen Production and Refuelling System	Hyundai Motor Company Australia	NSW/Sydney	Under construction	2024	Electrolysis	20	kgpd	PEM	0.6		
	Arrowsmith Hydrogen Project - Stage 1	Infinite Green Energy Ltd	WA/Dongara	Under development - FEED	2027	Electrolysis	23 - Stage 142 - Stage 2	tpd	Alkaline	100 - Stage 2	65-108 MW Solar Farm130-216 MW Wind Turbines	
	Early Production System: MEG-HP1	Infinite Green Energy Ltd, Samsung C&T, Doral Group	WA/Norham	Under development - FEED	2026	Electrolysis	4	tpd		10	11-19 (Onsite solar only)	
	Western Green Energy Hub	InterContinental Energy, CWP Global, Miring Green Energy Limited	WA/Dundas shire	Under development	Early 2030s	Electrolysis	330,000 - Stage 1 and 3,500,000 - Full scale	tpa			6,000 - Stage 150,000 - full scale	
	Western Sydney Green Gas Project	Jemena	NSW/Sydney	Operating	2021	Electrolysis	88	tpa	PEM	0.5		
	Hydrogen Energy Supply Chain - Pilot Project	Kawasaki Heavy Industries, Electric Power Development Co. (E-POWER), Iwata	VIC/Latrobe Valley/Hastings	Project completed (2022)	2021	Fossil fuel conversion with c	1 to 3	tpa	Not Applicable (brown coal)	Not Applicable		
	Darwin Green Liquid Hydrogen (LH2) Export Project	LH2 Energy Pty Ltd	NT/Darwin	Under development	2031	Electrolysis	42,000	tpa				
	George Town Project	LINE Hydrogen	TAS/George Town	Under development		2027	Electrolysis	1,241	tpa	7.6	8.5 (co-located solar)	
	Port of Brisbane Hydrogen Hub and Refueller	Lion Energy	QLD/Brisbane	Under development - FEED		2027	Electrolysis	850	kgpd	Alkaline	2	
	Green Hydrogen and Battery Energy Storage System	Marubeni Corporation	SA/Adelaide	Under construction	2024	Electrolysis	40	kgpd	PEM	0.16		
	Canberra Hydrogen Refuelling Facility	Pacific Energy	ACT/Canberra	Operating	2021	Electrolysis	21	kgpd	PEM	0.075		
	Mid West Clean Energy Project	Pilot Energy	WA/Mid-west WA	Under development	2028	CO2 connective reforming	220,000	tpa				
	Tiwi H2	Provaris Energy Ltd	NT/Tiwi Islands	Under development	2028	Electrolysis	50,000 - Stage 1 and 90,000 - Full scale	tpa	PEM	To be advised - Stage 11,400 - Full sc 2,600 - Full scale		
	HyEnergy Project	Province Resources Ltd	WA/Gascoyne	Under development		2029	Electrolysis	600,000 - Full scale	tpa		12,000 - Full scale	
	Central Queensland Hydrogen (CQ-H2) Project	Stanwell Corporation, Iwatani Corporation, Marubeni Corporation, Kansai EI	QLD/Gladstone	Under development - FEED		2029	Electrolysis	200 - Stage 1800 - Full scale	tpd	720 - Stage 12,240 - Full Scale	7,000	
	Sumitomo Gladstone Green Hydrogen Project	Sumitomo Corporation	QLD/Gladstone	Under development		2025	Electrolysis	200,000	tpa			
	Sumitomo Green Hydrogen Production and Rio Tinto Decarbonisation Production Pilot Project	Sumitomo Corporation	QLD/Gladstone	Under construction		2025	Electrolysis	250-300	tpa	PEM	2.5	
	Darwin H2 Hub	TE H2	NT/Darwin	Under development		2027	Electrolysis	80,000	tpa	1000	More than 2,000	
	Eyre Peninsula Gateway Project - Demonstrator Stage	The Hydrogen Utility (H2U)	SA/Eyre Peninsula	Under development - FEED		2021	Electrolysis	10,000	tpa	75		
	Toyota Ecopark Hydrogen Demonstration (Toyota Hydrogen Centre)	Toyota Motor Corporation Australia	VIC/Melbourne	Operating		2021	Electrolysis	80	kgpd	PEM	0.25	0.587
	Euroa Hydrogen Project	Vena Energy	QLD/Gladstone	Under development - FEED	2027	Electrolysis	6,000 - Stage 1 and 50,000 - Stage 2 (incremental to Stage 1)	tpa		50 - Stage 1400 - Stage 2 (incremental to Stage 1)		
	Geelong New Energies Service Station Project	Viva Energy Australia	VIC/Geelong	Under construction	2025	Electrolysis	1	tpd	PEM	2.5		
	Warrnambool Hydrogen Mobility Project	Warrnambool Bus Lines	VIC/Warrnambool	Under development		2025	Electrolysis	180	tpa	PEM	1.25	
	Hydrogen Refueller @H2Perth	Woodside Energy	WA/Perth	Under development - FEED	2025	Electrolysis	0.2 - Stage 11.0 - Full scale	tpd				
	Renewable Hydrogen Hydro-Gen 1	Yarra Valley Water	VIC/Melbourne	Under development		2025	Electrolysis	700 - Full scale	tpa			
	Yuri Renewable Hydrogen to Ammonia Project	Yuri SPV (ENGIE Lead Proponent), Mitsui	WA/Pilbara	Under construction	2025	Electrolysis	640	tpa	Alkaline	10	18	