

Future Energy Exports (FEnEx) CRC

MILESTONE SUMMARY TABLE

Research Program	Output	Milestone Number	Milestone Description	Milestone Start Date (Grant Agreement)	Milestone End Date (Grant Agreement)
Research Program 1: Efficient LNG Value Chains					
RP1 Efficient LNG Value Chains	Significant contribution to the objectives of RP1 Efficient LNG Value Chains	1.0	Generally aligned with the goal of making LNG Value Chains more efficient but not specifically aligned with any of the other RP1 Milestones	1/7/2020	30/6/2030
RP1 Efficient LNG Value Chains	Novel and efficient processes for recovery of helium and other high value commodity gaseous by-products of LNG production	1.1.1	Full audit of helium recovery potential from Australian and global LNG production and overview of current technology limitations	1/7/2020	30/6/2021
RP1 Efficient LNG Value Chains	Novel and efficient processes for recovery of helium and other high value commodity gaseous by-products of LNG production	1.1.2	Commissioning of helium recovery unit operation July 1 2021 June 30 2026	1/7/2024	30/6/2026
RP1 Efficient LNG Value Chains	Novel acid gas removal solutions, coupled with carbon capture and storage, for required CO2 removal during LNG production	1.2.1	Methane leak audit of LNG plants and gas distribution networks coupled with review of available detection technology & recommendations for minimisation	1/7/2021	30/6/2022
RP1 Efficient LNG Value Chains	Novel acid gas removal solutions, coupled with carbon capture and storage, for required CO2 removal during LNG production	1.2.2	Pilot scale demonstration with planned extrapolation to full scale LNG plants of both improved maintenance strategies and acid gas removal techniques so as to reduce LNG carbon footprint	1/7/2024	30/6/2027
RP1 Efficient LNG Value Chains	Novel holistic technical solutions to guard against potential adverse events during LNG production	1.3.1	Software based model of boil-off gas production with predictions of when it becomes unstable	1/7/2022	30/6/2023
RP1 Efficient LNG Value Chains	Novel holistic technical solutions to guard against potential adverse events during LNG production	1.3.2	Demonstration of sensor able to provide early detection of freeze-out events July 1 2023 June 30 2025	1/7/2023	30/6/2025
RP1 Efficient LNG Value Chains	New and improved LNG plant technologies, such as real-time quality control of scrub column production, low temperature gas dehydration, and tailored mixed refrigerants for liquefaction.	1.4.1	Optimised operation and sensing requirements for scrub columns featuring product purity control July 1 2020 June 30 2024	1/7/2022	30/6/2024

RP1 Efficient LNG Value Chains	New and improved LNG plant technologies, such as real-time quality control of scrub column production, low temperature gas dehydration, and tailored mixed refrigerants for liquefaction.	1.4.2	Construction and commissioning of a low temperature gas dehydration unit operation	1/7/2026	30/6/2028
RP1 Efficient LNG Value Chains	Written design and operational standards for best practice by LNG Design, EPC and operator industries as well as various regulatory bodies	1.5.1	Report as to best practice regards LNG storage and transportation so as to minimise boil-off July 1 2020 June 30 2028	1/7/2024	30/6/2026
RP1 Efficient LNG Value Chains	Written design and operational standards for best practice by LNG Design, EPC and operator industries as well as various regulatory bodies	1.5.2	Report on success of foaming prevention strategies based on better sensing and improved process understanding/foam modelling	1/7/2027	30/6/2029