

**Future Energy Exports (FEnEx) CRC
MILESTONE SUMMARY TABLE**

Research Program 1: LNG Efficient 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 Jul 2020	30 Jun 2030
1.1.1	Full audit of helium recovery potential from Australian and global LNG production and overview of current technology limitations	1 Dec 2020	30 Jun 2021
1.1.2	Commissioning of helium recovery unit operation	1 Jul 2024	30 Jun 2026
1.2.1	Methane leak audit of LNG plants and gas distribution networks coupled with review of available detection technology & recommendations for minimisation	1 Jul 2021	30 Jun 2023
1.2.2	Pilot scale demonstration with extrapolation to full scale LNG plants of both improved maintenance strategies and acid gas removal techniques so as to reduce LNG carbon footprint	1 Jul 2024	30 Jun 2027
1.3.1	Software based model of boil-off gas production with predictions of when it becomes unstable	1 Jul 2022	30 Jun 2022
1.3.2	Demonstration of sensor able to provide early detection of freeze-out events	1 Jul 2023	30 Jun 2025
1.4.1	Optimised operation and sensing requirements for scrub columns featuring product purity control	1 Jul 2022	30 Jun 2024
1.4.2	Construction and commissioning of a low temperature gas dehydration unit operation	1 Jul 2026	30 Jun 2028
1.5.1	Report as to best practice regards LNG storage and transportation so as to minimise boil-off	1 Jul 2024	30 Jun 2026
1.5.2	Report on success of foaming prevention strategies based on better sensing and improved process understanding/foam modelling	1 Jul 2027	30 Jun 2029
1.6.1	15 PhDs completed in RP1	1 Jul 2020	30 Jun 2030