CLEAN AMMONIA IN THE U.S.

- Clean hydrogen/ammonia: critically important component of energy transition
- Revenue Streams (US): 45Q or 45V production tax credits
- Revenue streams: Carbon pricing in the EU, subsidies in Japan and South Korea on the demand side add to returns
- Total Carbon price tantamount to close to $200 through stacking
- Currently, there is no domestic demand; all projects are for export markets
- Potential EPA power plant rule would serve as a demand driver in the US

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CLEAN AMMONIA IN THE U.S.

Drivers for project economics

- Abundant and cheap natural gas
- Suitable geology for CCS
- Pipeline infrastructure
- Export infrastructure
- Export demand
- Policy support and conviction

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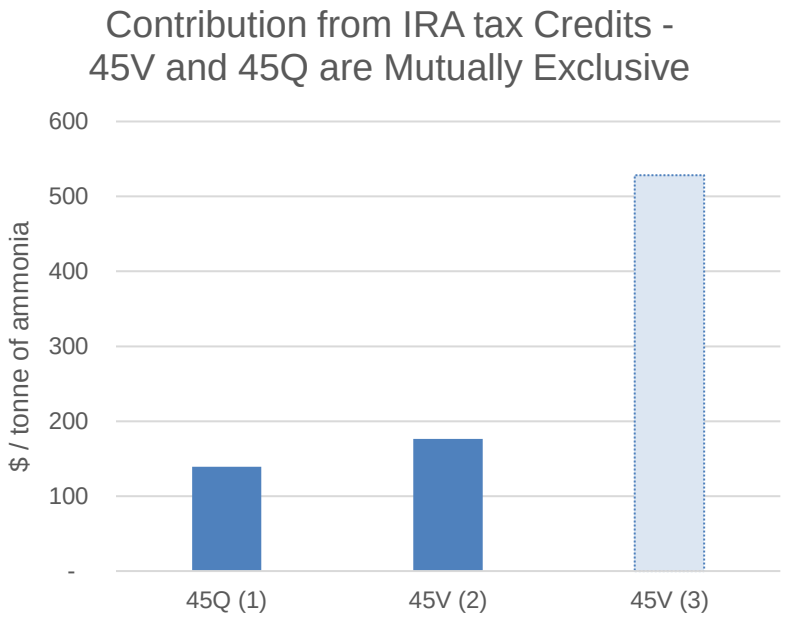
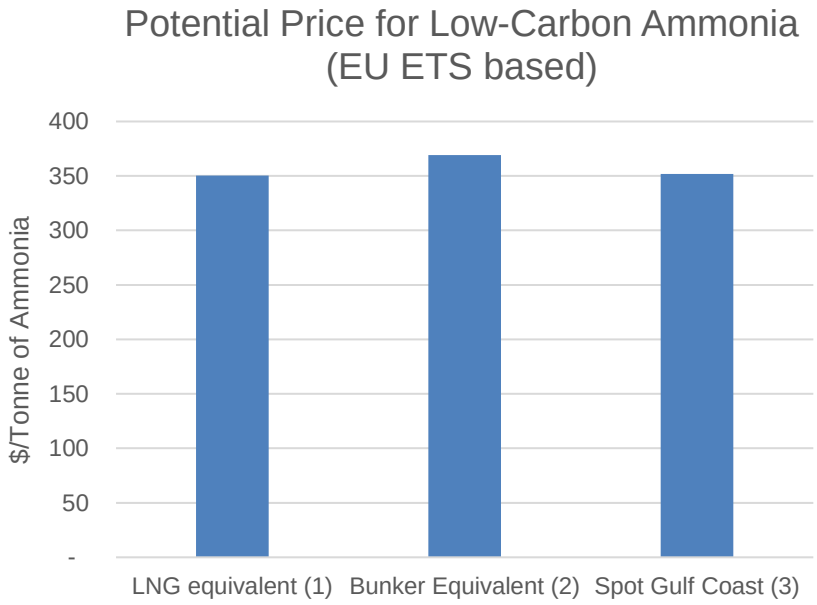
CLEAN AMMONIA IN THE U.S.

Revenue Streams





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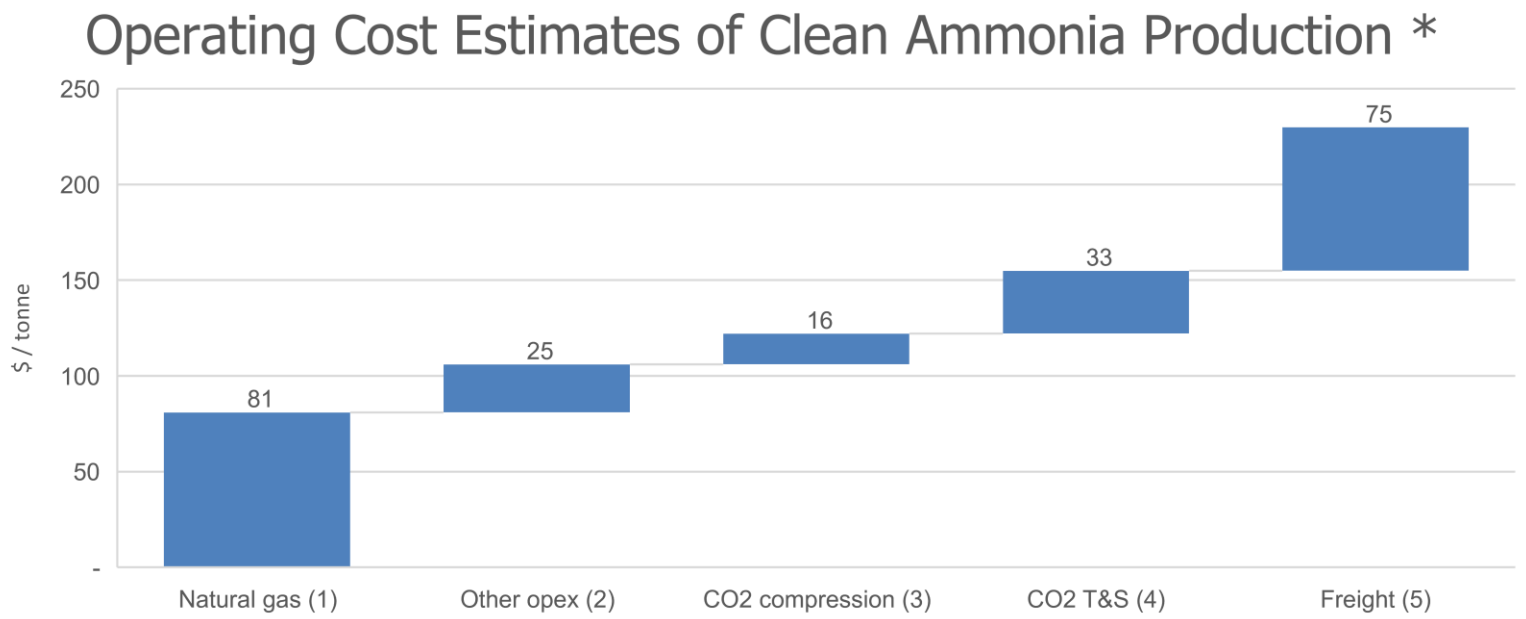
CLEAN AMMONIA IN THE U.S.



* GCCSI Estimates

- Capital expenditure range : $1,400 to $2,100 per tonne
- IRR : Based to 10-year 45V - 10.2% to 17.4%

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CLEAN AMMONIA IN THE U.S.

Announced projects - capital costs range from $1,400 to $2,100 per tonne of NH_3*

Project:	Product	Location	Capacity **	Completion	Target Market
CF/Lotte/Mitsui	Ammonia	Blue Point LA	1.2	2030	Korea
CF/Exxon	Ammonia	Ascension Parish LA	1.2	2028	Export
CF/POSCO	Ammonia	Blue Point LA	1.2	2028	Export
LSB/Impex/AirLiquide	Ammonia	Houston Ship Channel	1.2	2027	Export
Linde/OCI	Ammonia	Baumont TX	1.1	2027	Europe
Yara/Enbridge	Ammonia	Corpus Christi TX	1.4	2027	Europe
CHW/MOL/Hafnia/Den	Ammonia	Ascension Parish LA	7.2	2027	Europe
Mitsubishi/Lotte/RWE	Ammonia/Hydrogen	Corpus Christi, TX	10.0	2030	Asia/Europe
CRC/Brookfield	Ammonia	Northern CA	0.2	2027	California
Air Products	Hydrogen/Ammonia	Ascension Parish LA	1.4	NA	Export
Exxon / SK Materials	Hydrogen/Ammonia	Corpus Christi TX	6.0	NA	Asia
Copenhagen IP/SFG	Ammonia	St. Charles Parish	5.0	2027	Europe
Total			~ 37		
GCCSI Analysis					
** Million NH_3 Tonnes					

* According to public announcements

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