

Standard Carbon converts hydrocarbon utilities into clean power providers, increasing energy investment and build-out while securing power reliability and pricing.

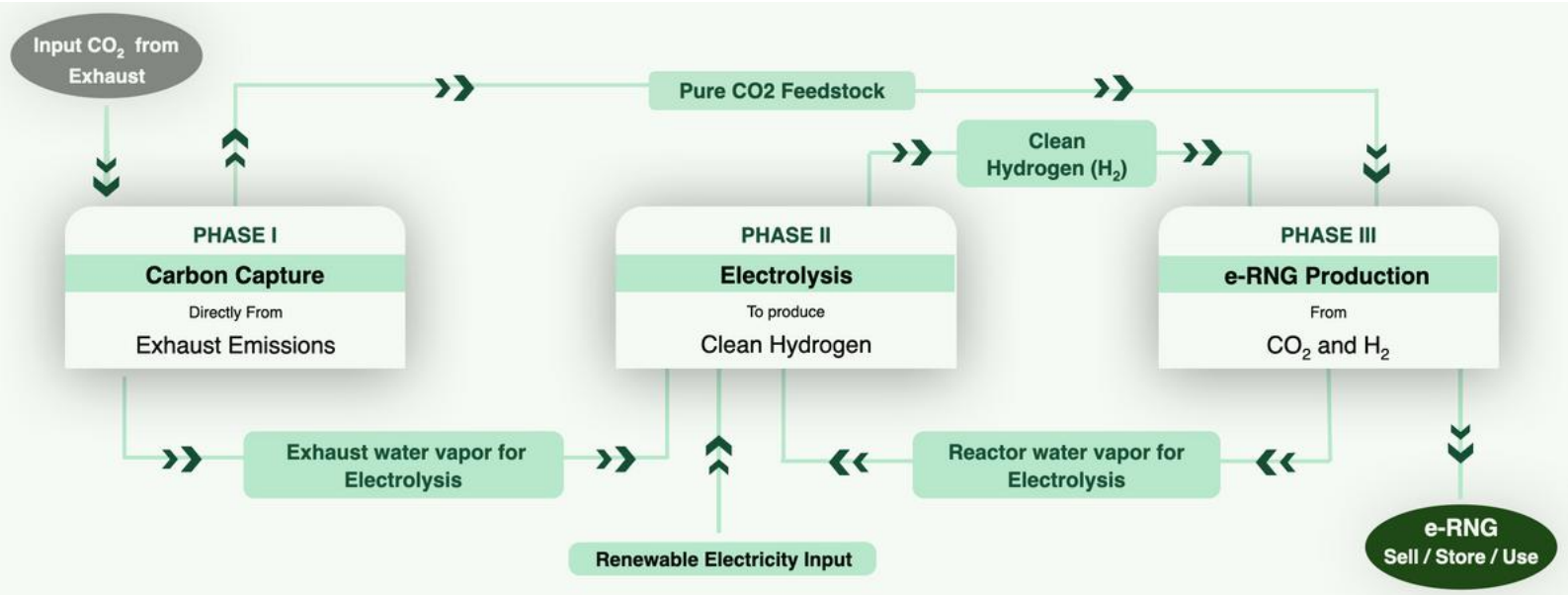
Achievements

Clean Fuel Supply: The **Carbon Bridge** consumes intermittent renewable electricity, creating renewable natural gas (e-RNG) as the off-take product.

Decarbonization: Capturing and converting CO2 emissions into carbon-neutral pipeline-grade natural gas (e-RNG) is a cost-efficient alternative to CO2 sequestration.

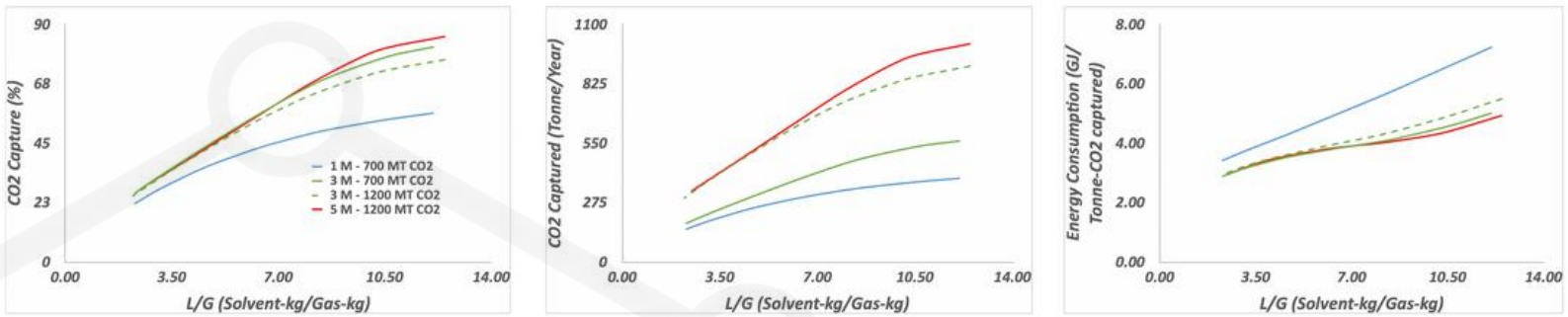
Standard Carbon's 3-phase process - Carbon Capture, Electrolysis, and e-RNG Reactor - is customizable with a Standard or Large CO2 Absorption pack depending on the project demands.

Height of CO2 Absorption Pack:		1 Meter	3 Meters	
Combustion Exhaust Gas Input	Temperature Range [C]	0 - 1,000		
	Uptime [Hrs/Day]	24		
	Carbon Dioxide Content [%mass]	7		
	Flow Capacity [kg/hr]	700	700	1200
Power Consumption	Minimum Carbon Capture [%]	50 - 75	50 - 95	50 - 75
	Peripherals [V Ph A]	480 3 450		
	Electrolyzer Daily Operating Hours	5 - 12	6 - 12	12 - 24
	Electrolyzer [MW]	1.2		
Value Stream	Electrolyzer [V Ph A]	480 3 2500		
	Electrolyzer Efficiency [%]	70 - 75		
	Carbon Capture [Tonnes/yr]	300 - 550	350 - 650	550 - 1100
	Natural Gas Production [MMBtu/Yr]	5900 - 10,800	6,850 - 12,750	10,800 - 21,600
Efficiency	Natural Gas Output Purity [%mass - CH4]	95		
	Thermal [LHV of CH4-output / Electricity-input]	60%		
	Methanation [CH4-output / CO2-input] (moles)	95%		
Dimensions	Shell	Standard 40 Foot Shipping Container		
	Length [m]	12.03		
	Width [m]	2.35		
	Height [m]	2.39		
Water Consumption	pH Range	5 to 10		
	Max Conductivity [mS/cm]	23		
	Max Total Dissolved Solids [ppm]	15,000		
	Flow Rate [cum/day]	2 (CC 400 Tonne/yr)	2.5 (CC 500 Tonne/yr)	
Noise Rating	Indoor/Outdoor [dBA]	45 / 75		



COMPLETE PROCESS FLOW DIAGRAM

Operational Data for 1, 3 and 5 meter Absorption Pack and CO₂ Regeneration Temperature of 100° C



Operational Data for 1, 3 and 5 meter Absorption Pack and CO₂ Regeneration Temperature of 110° C

