

AIRPHX VS DIRECT AIR CAPTURE AND SEQUESTRATION TECHNOLOGIES

	AIRPHX	Direct Air Capture
Greenhouse Gases Addressed	CO ₂ , NO ₂ and other greenhouse gases ¹	CO ₂ only
Scalability	Scalable/Unlimited	Variable
CO₂ Reduction Method	Break down CO ₂ into elemental carbon and oxygen using only electricity (i.e. no catalyst, no chemicals, no consumables)	Variable, but primarily direct air capture using chemicals, catalysts and/or other consumables
Residue/Byproduct	None	CO ₂ that must be sequestered
Transportation and Byproduct Storage	N/A	Variable depending on technology, including pipelines, other transportation and/or underground storage
Energy Consumption	Energy costs are minimal Variable sources, including renewable energy sources	Energy costs are significant Variable sources, including renewable energy sources
Environmental Impact of Operations	Minimal, with modest carbon footprint easily addressed by CO ₂ and other greenhouse gas reductions	Extensive, including energy usage, transportation issues and storage risks
Capital Costs	Low given simplicity of the system	Very expensive to build, given complexity of the technology
Operating Costs	Periodic maintenance only; minimal monitoring required	Significant operating costs, including consumables, labor, transportation and storage
Current and Projected Cost Goals²	\$300 per ton year one, including capital costs Less than \$50 per ton each year thereafter	Variable, but the largest plant opened recently in Iceland cites costs closer to \$1,000 a ton than \$100 a ton currently

¹ AIRPHX technology has proven effective on all greenhouse gases tested, and AIRPHX anticipates it will work on all greenhouse gases.

² AIRPHX assumptions are based on a single, current IDU 250k unit. AIRPHX technology scaled to address climate change will result in significant reductions in cost per ton of CO₂ broken down.

- Each AIRPHX IDU 250k is able to break down more than 20 tons of CO₂ per year.
- Each AIRPHX IDU 250k has an MSRP of \$6,000.
- Annual operating cost comprised of minimal labor, periodic maintenance and energy usage totals less than \$1,000 per year.