



# **Guidelines for Prepurchase pricing**

Guidelines for how to think about the offered price for a Frontier prepurchase

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### **Overview of Frontier's approach**

The 'slope' and 'endpoint' of a company's cost curve is more important than the starting point.

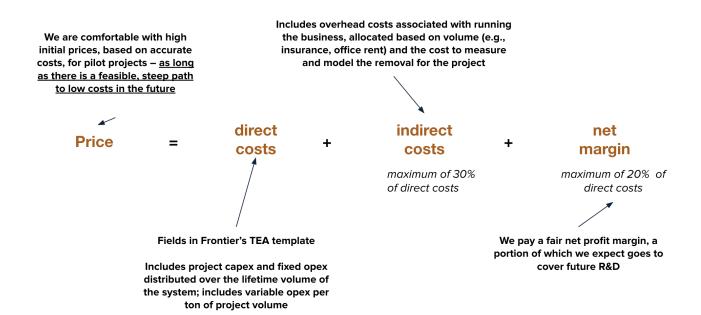
- We care most about cost *trajectory* and the believability that a company has a path to being affordable at scale
- This is critical if we are to have sufficient government and private market demand to support CDR at gigaton-scale – reaching the IPCC 2030 target of 3 Gt/year implies a \$300B market at \$100/ton

We are comfortable with high initial prices for pilot projects if grounded in accurate costs.

- We recognize it's expensive to build first-of-a-kind pilot systems and are comfortable paying higher prices for first tons as long as they are grounded in accurate cost estimates
- These first project prices in our public contracts are an anchor point that help us—and the field—understand how sharply costs are declining over time

We use a 'cost plus' model to determine pricing and expect to see prices that include:

- <u>Direct project costs</u> based on the TEA, plus
- A margin that covers <u>indirect costs</u>, plus
- A gross <u>net margin</u> based on early industrial benchmarks



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# **₊**‡ Frontier



The goal is to work toward standardized pricing, but it won't be perfect for prepurchases given the wide range of costs for pre-commercial projects.

• Our intent here is primarily to standardize what is included in Frontier prices to ensure we are paying projects fairly and consistently across approaches

## Which costs to include in pricing

### Core direct project capex and opex expenses:

Within a first project price per ton, we expect to pay for direct project costs:

- <u>Capex:</u> Capital expenses (equipment, onsite infrastructure, MRV instrumentation, construction/installation labor, financing, EPC/eng service support, owners' costs/feasibility studies/ permitting) for the project distributed over the **lifetime** volume of the system.
- <u>Fixed Opex:</u> Costs that are not dependent on the rate of CO2 removal (operating labor, maintenance labor, financing, general administrative expenses, etc.) distributed over the lifetime volume of the system.
- <u>Variable Opex:</u> Costs that are a function of delivering this specific volume of CO2 removal. Includes energy, water, financing, feedstock, and storage and transport costs.

#### <u>Indirect project costs</u>, including MRV and overhead:

Within a first project price per ton, we expect to pay for indirect project expenses:

- <u>General and administrative:</u> Overhead costs associated with running the business, allocated based on volume. May include insurance, personnel, office rent, etc.
- MRV: Costs associated with measuring and modeling the removal for the project proposed, including (1) quantification of net removal (field sampling, ongoing monitoring for durability, baseline modeling, etc.) and (2) any uncertainty discount on volume (increasing price) to account for any system leakage.

We expect companies' indirect costs to be a **maximum** of 30%<sup>1</sup> of direct costs. However, this figure will vary widely by company. Please justify any indirect costs included.

#### A net margin<sup>2</sup>, which could cover (within reason) future R&D fees:

- Roughly, we expect companies to include a **max** net margin (as a % of the total direct costs included in the TEA) of 10-20% which could be allocated to some R&D.
- <u>Verification and registry fees:</u> We do not require third party verification or registry listing for prepurchases. The focus of this program is on accelerating early projects, not tons.
  Frontier reviews each prepurchase delivery internally. However, if it does make sense for your business to issue tons with a third party, we expect any associated fees (reviewing project data, registry listing fees, etc.) to be included within your net margin.
- Note: R&D for future facility or system design or additional scientific research activities to improve measurement and modeling that are *not* specific to this project (beyond the design iteration and learning involved in the deployment of the specific proposed project) should **not** be included in the direct and indirect costs of this project.

<sup>&</sup>lt;sup>1</sup>Benchmarked based on S&P Global LargeMidCap Index, which sees average net margins of 10 - 20% (excl. Financials/Real Estate).

<sup>&</sup>lt;sup>2</sup>Frontier does not require a third party registry for prepurchase tons. It is at a supplier's discretion if they would like to allocate a portion of their net margin for this expense.