

Strategic Partnerships for Start-ups

Working with Praxair

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- *Fortune 300* company, 26,000 employees
- Largest industrial gases company in North and South America, and 3rd largest worldwide
- 30 countries, over 1 million customers
- 2012 sales of \$12 billion, \$34 billion market cap.
- Sterling reputation – safety, environmental stewardship, sustainability, corporate governance, value creation
- Products
 - Atmospheric gases (oxygen, nitrogen and argon).
 - Process gases (hydrogen, carbon dioxide, helium, carbon monoxide)
 - Semiconductor gases and materials
 - Specialty and welding gases
 - High-performance surface coatings
- Named to Forbes 50 Most Innovative Companies List (2011)

Learn more at www.praxair.com

Profitability – Technology that reduces the cost of making, storing and delivering our products

- Improvements to production and supply chain components
- Better methods of control, optimization and risk analysis
- New methods for producing industrial gases
- IP to exclude practice by competitors – no issues with others practicing outside of our field

Growth – New applications for our products

- New uses for gases in existing markets
- New markets for gases
- Equipment that enables use of gases
- Service opportunities that involve gases
- IP to allow for access to the market

How Do We Source Technology?

- Technology needs lists
- Focused technology scouting program
- Network with companies, universities, national labs and other organizations with relevant programs
- Participate in new technology forums (ARPA-E, SBIR Innovation Summit, etc.)
- Mine new patent applications that cite use of gases
- Solicit proposals through corporate website
- Selective engagement with start-ups

Start-up/Praxair Relationship

Start-up

- Agile
- Focused
- Deep understanding of opportunity

Praxair

- Resources
- Discipline
- Channel to market and synergies



Be at TRL 3 (Proof of Concept) or beyond

- Closed energy and material balances
- Representative data that demonstrates technical feasibility
- Conceptual cost estimate
- Assumptions and risks clearly identified

Show how your technology fits with Praxair

- Define the opportunity and value proposition
- Describe what you see as the impact on Praxair's business
- How do you make money? / How do we make money?

Demonstrate that you are unique

- What are the alternatives? / Why are you better?
- Provisional patent applications filed
- Secured rights to critical IP

Next steps: What do you want from Praxair?

- Validation, investment, in-kind support, technology license, JDA