Harnessing Nature for Carbon Capture

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Forward Looking Statements

All statements in this presentation that are other than statements of historical facts are forward-looking statements which contain our current expectations about our future results. Forward-looking statements involve numerous risks and uncertainties. We have attempted to identify any forward-looking statements by using words such as “anticipates”, “believes”, “could”, “expects”, “intends”, “may”, “should” and other similar expressions.

Although we believe that the expectations reflected in all of our forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. A number of factors may affect our future results and may cause those results to differ materially from those indicated in any forward-looking statements made by us or on our behalf. Such factors include our early stage of technology development; our need for capital to finance necessary research and product development; our ability to attract and retain key employees and strategic partners; our ability to achieve and maintain profitability; fluctuations in the trading price and volume of our stock; competition from other providers of similar products and services; and other unanticipated future events and conditions. For further information concerning risks and uncertainties that may affect our future results, please review the disclosures as may be contained from time to time in our filings with SEDAR. Other than as required by applicable securities laws, we undertake no obligation to publicly update or revise any of our forward-looking statements, whether as a result of changed circumstances, new information, future events, or for any other reason occurring after the date of this presentation. *This presentation does not constitute an offer to sell or solicitation of an offer to buy securities in any jurisdiction.*

Climate Change and Disruption

"Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia…"

– IPCC Fifth Assessment Report- *Climate Change 2013*

HAPPENING NOW:

Heat waves

Cold vortices

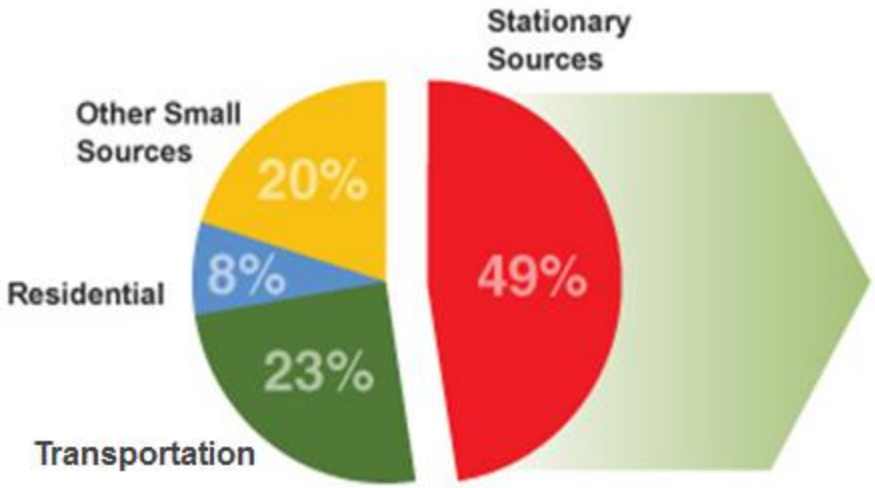
Droughts crop failures

Catastrophic floods

- Anthropogenic carbon emissions must be reduced

Large Sources of CO_2 are Major Factor

Distribution of Global Anthropogenic Carbon Emissions



Stationary Sources of CO_2 with Emissions > 100,000 Tons/Year

Sector	Number of Sites	CO_2 Emissions (Mil Tons)
Power Generation	5,148	11,612
Cement	1,256	1,049
Oil & Gas Industry	768	873
Metals Production	469	699
Other	588	432
Total	8,229	14,665

- Significant opportunity for efficient carbon capture technology

Sources: International Energy Agency (IEA) GHG Program, 2011

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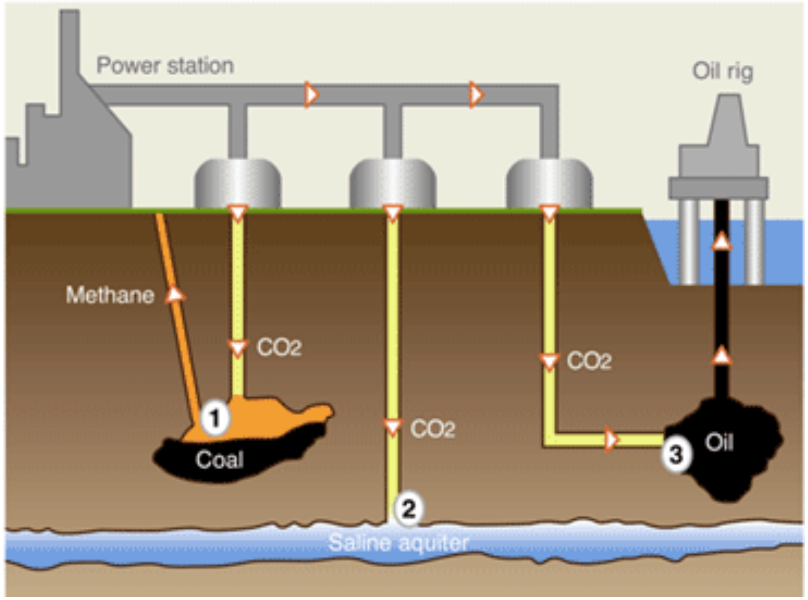
CO_2 Capture, Sequestration and Utilization

Enhanced Oil Recovery and Geologic Sequestration



Carbonation

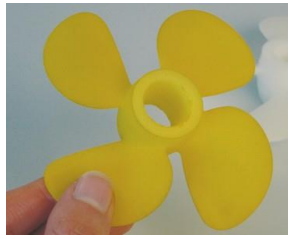
Pulp and Paper

Greenhouses

Mineralization

Fuels

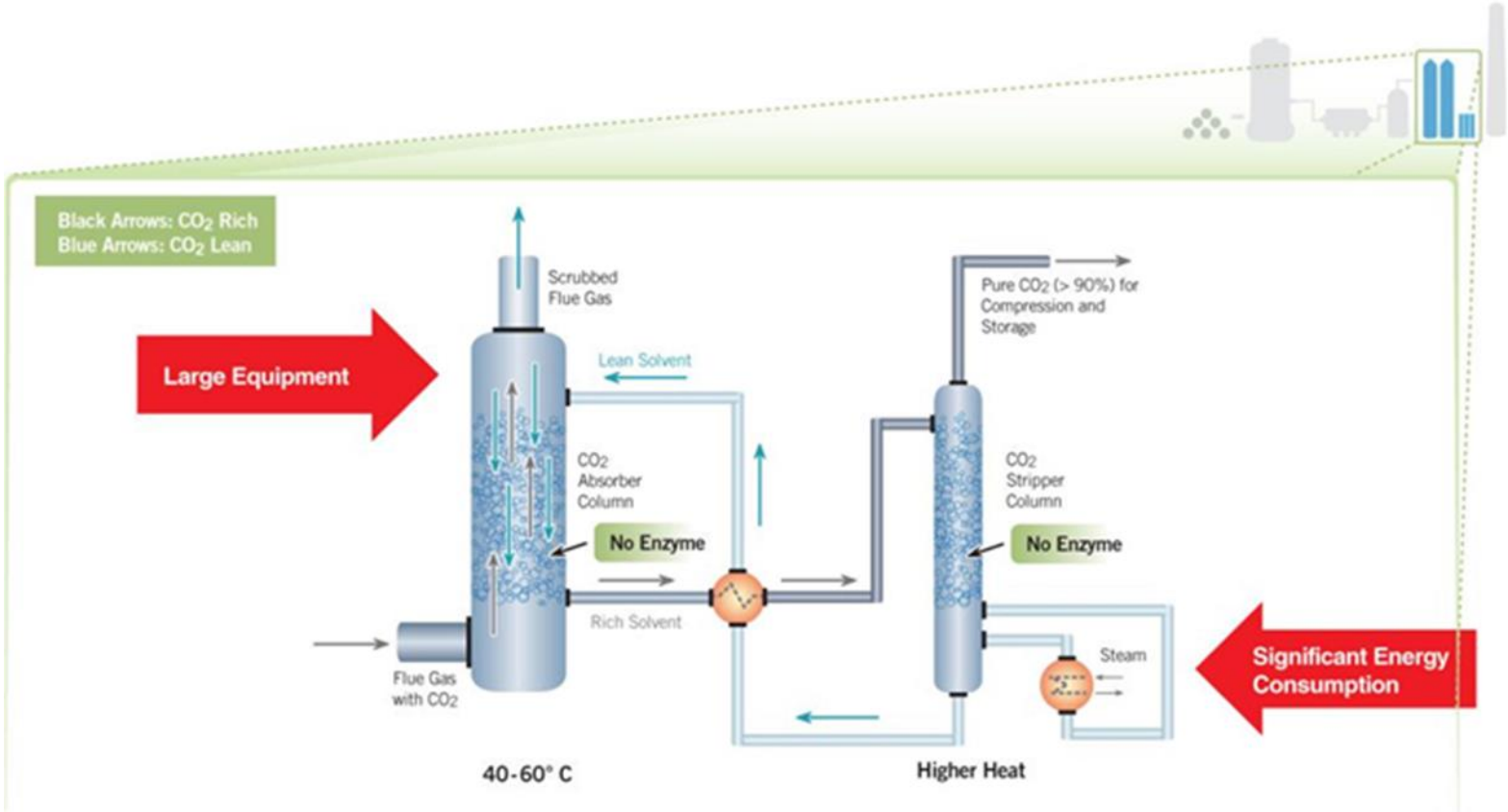
Polymers



- $400M+ existing market for CO_2 as industrial input/commodity[(1)]
- $32B additional market pending $50/t carbon price[(2)]

Sources: (1) Esprit Associates, 2014; (2) CO2 Solutions estimate based on IEA GHG Program emissions data

Conventional CO_2 Capture is Costly



- Conventional amine solvents bind strongly to CO_2; requires high-temperature, valuable steam
- \$112/tonne-CO_2 captured for oil sands SAGD / EOR application(1)

Sources: (1) CO_2 Capture Project, April 2014

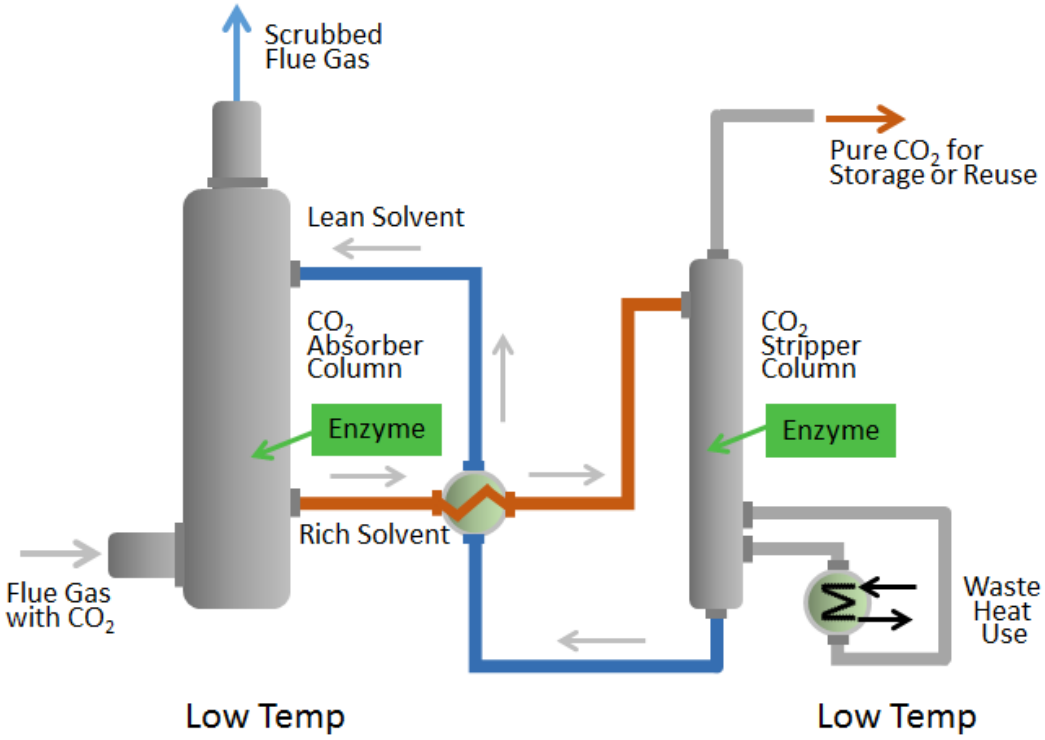
…and Operationally Challenging

- High solvent cost and losses
- Carcinogenic aerosol emissions
- Degradation and stability issues; requires extensive flue gas pre-treatment
- Corrosivity

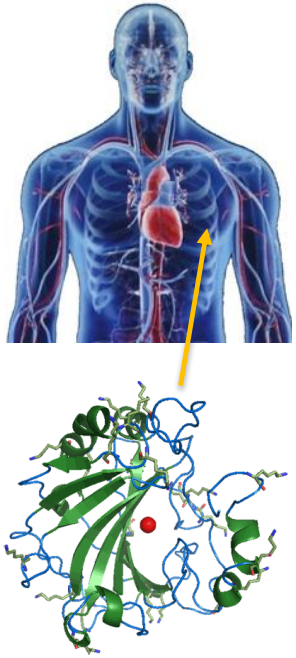
CO_2 Solutions Snapshot

- Based in Quebec City, Canada
- Efficient management of CO_2 through biotechnology
- Experienced management team
- World class partners
- $40 million invested
- 23 employees incl. 17 technical
- Publicly traded on TSX Venture Exchange (Symbol: CST)

Our Solution



Reduced Costs



Industrially Engineered Carbonic Anhydrase Enzyme

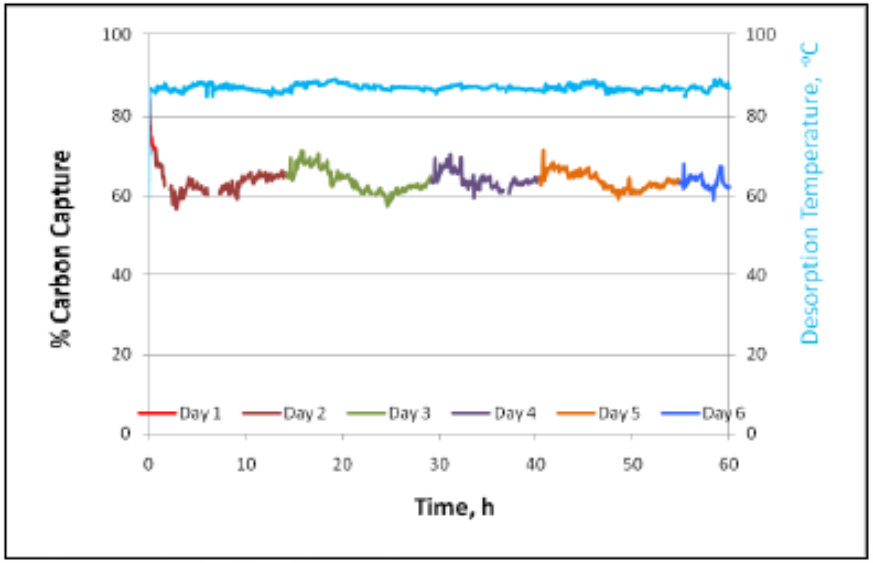
- 'Industrial Lung' using nature's solution to CO_2 management
- Replace chemical amines with benign and operationally superior carbonate salts

Process Advantages

	Conventional	CO2 SOLUTIONS
Energy and OPEX	High	Low
CAPEX	Moderate	Lower
Solvent Cost	Moderate to high	Low
Heat Degradation	Rapid degradation	No issues
Toxicity and Aerosols	Toxic nitrosamines	None
Corrosion	Moderate to high	Much less
Stability	Significant issues	No issues

Industrial Carbonic Anhydrase (CA)

- Natural CA is unsuitable in CO_2 capture solvents at higher temp. and pH
- Engineered CAs have 10-million fold stability improvement
- Stable for commercial deployment, including to contaminants
- Cost effective at industrial scale; very small concentrations required, typically 10^{-5} mol/l



Engineered CA is Stable to Coal-Fired Flue Gases in 4.2M MDEA with Desorption T~85°C

L. Nguyen, Codexis, Inc., 2012

Sources: (1) ReportsnReports.com

Enzymes Today

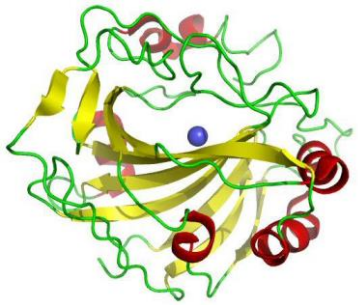
- Enzymes are nano-sized protein structures with an active site(s) which catalyzes / accelerates a specific biochemical reaction

- Used to optimize dozens of existing processes
  - Biofuels production
  - Detergents
  - Food production
  - Pharmaceuticals production
  - Beer making
  - And many others!

- Enzymes save energy, chemicals, raw materials and reduce waste

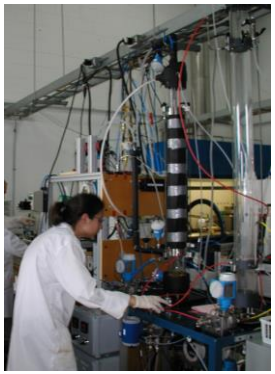
- Safe and environmentally benign

- A $3.5 billion market in 2011[(1)]



Sources: (1) ReportsnReports.com

Commercialization



2013:
- ✓ Lab

Q1 2014:
- ✓ Large-Bench 0.5 tonne-CO_2/day scale

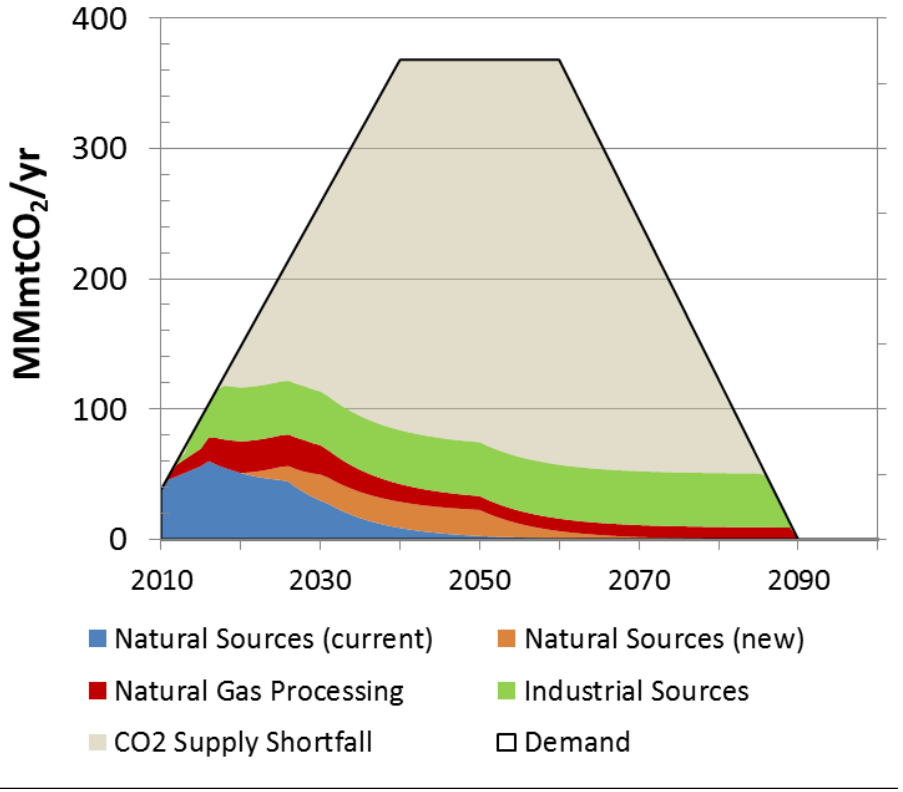
Q1-Q3 2015:
- Pilot 15 tonne-CO_2/day scale with Husky Energy

- $7.5M optimization and pilot testing for heavy oil / oil sands application
- Exceeded technical performance milestones to date: >30% cost savings vs. conventional and robust/economical enzyme
- Commercial launch 2015

Deployment – Enhanced Oil Recovery (EOR)

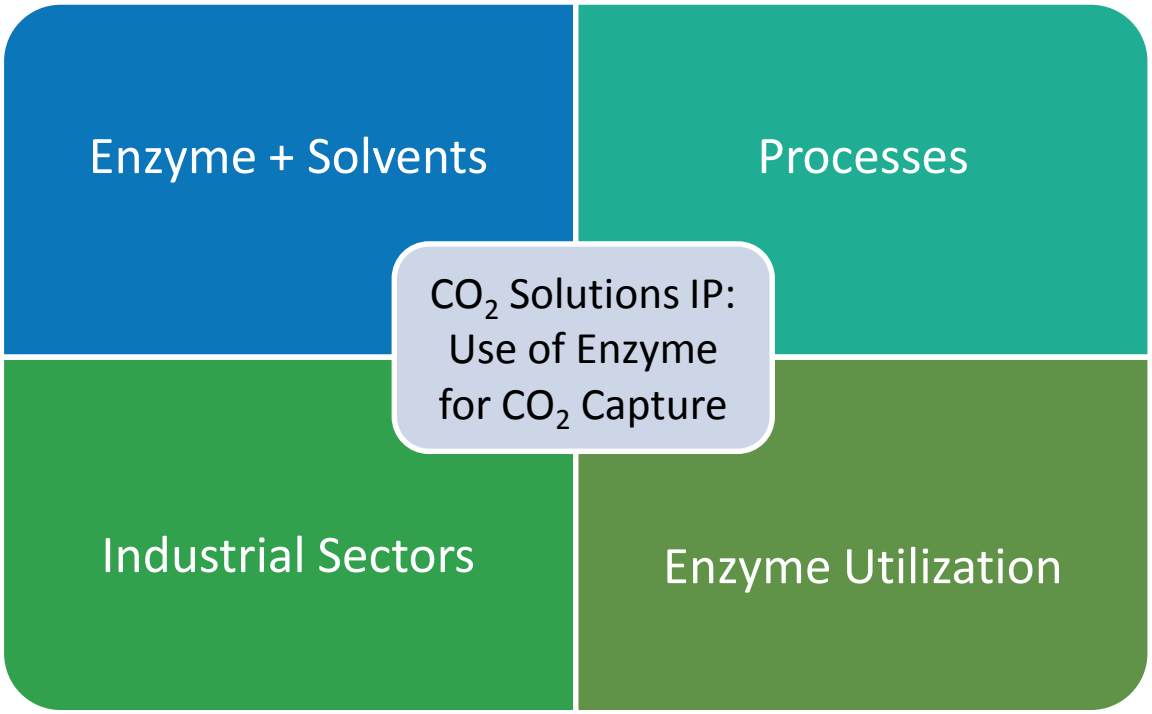
- 1 tonne CO_2 injected produces 2-4 barrels oil[(1)]
- EOR economic at ~$30-50/t-$CO_2$
- Natural (cheap) CO_2 sources being depleted
  - Requires inexpensive industrial (flue gas) CO_2 to compensate
- Est. $2.5B opportunity by 2020

Forecast U.S. CO_2 Needs for Next Generation EOR[(1)]



Sources: (1) U.S. National Energy Technology Laboratory (NETL), Feb. 2014

Patent Portfolio



- Extensive patent barrier for use of any carbonic anhydrase and analogues thereof for carbon capture
- 42 issued and 49 pending in most industrial nations

Summary

- Carbon capture is critical technology to reducing large-source emissions
- CO_2 Solutions has breakthrough biomimetic process for efficient carbon capture and delivery of pure CO_2 for industrial utilization
- Development milestones exceeded to date
- Commercial availability 2015 for large existing industrial CO_2 market

Thank you

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