ENTROPY INC.

Global Leader in Modular Carbon Capture and Storage Solutions
July 2022

ENTROPY: COMMERCIAL CARBON CAPTURE AND STORAGE, TODAY

Clean Tech Pure Play

- Dedicated, full-service industrial CCS company
- Proprietary, innovative technology and commercial structure

Technology

- Exclusive ownership of world-leading solvent
- Innovative process enhancement technologies
- Decades of storage experience

Expertise

- Valuable and unique technical backgrounds
- Deep talent pool of experts focused on economic scaling of CCS technology and project execution

Capital

- Deploying Entropy capital to advance projects
- Creating exposure to rising carbon prices
- Willingness to invest alongside emitters

BROOKFIELD + ENTROPY STRATEGIC INVESTMENT

Brookfield

Transition Strategy

- 21,000 MW Renewable Power Portfolio
- Expanded global reach
- Accelerated decarbonization
- Development & operating expertise

$300 Million Strategic Investment

ENTROPY

Entropy Funded for Scale

- $300 million to fund near-term projects including Glacier
- Significant potential for follow-on capital
- Reinforces value of proprietary tech
- Enhanced project pipeline

To make an impact on global carbon emissions, we will focus on scale and efficiency

GENERATING RETURN ON INVESTMENT

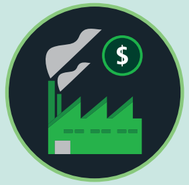
1. Entropy commits capital to build the CCS facility in exchange for most environmental attributes (including carbon credits, clean fuel regulation credits, refundable incentive tax credits, etc.)
   - Entropy's feedstock is the "waste product" of the emitting facility

Feedstock

Large emitters commit exhaust gas under long-term contracts with associated make-whole payments in the event of feedstock interruptions

Carbon Marketing

Environmental attributes, incl. Carbon Credits, Clean Fuel Regulation Credits, and CCUS Refundable Incentive Tax Credits, are generated and monetized



Carbon Credits

Tax Credits

CFR Credits

2. Benefits to the host facility include the following:
   1. Helps achieve decarbonization commitments without deploying requisite capital
   2. Underlying production can be marketed as carbon neutral (potentially fetching premium pricing)
   3. Small revenue share is available as carbon prices rise, helping offset carbon tax exposure

Entropy generates compliance-based carbon credits and sells them in well-established carbon markets

ENTROPY BUSINESS MODELS – DEVELOP, OWN, OPERATE OR LICENCE

- Comprehensive CCS solution with highly competitive costs driven by Entropy23™ and process optimization

  - Entropy provides end-to-end, fully integrated and comprehensive CCS solutions
  - Initial focus has been “develop own operate” model to maintain and control pace of growth
  - Entropy now offering “license and support” model (capital light, where emitters choose to finance their CCS project independently) which provides incremental growth without the need for external financing
  - Joint capital funding and other arrangements available, depending on counterparty preference

A Project Selection

Identifying and evaluating prospective projects, partnerships and opportunities

B Development

Initial investment to design and build capture, transport and sequestration equipment

C Operation

Full-cycle operations of capturing the CO_2, including the supply of the solvent

D Marketing

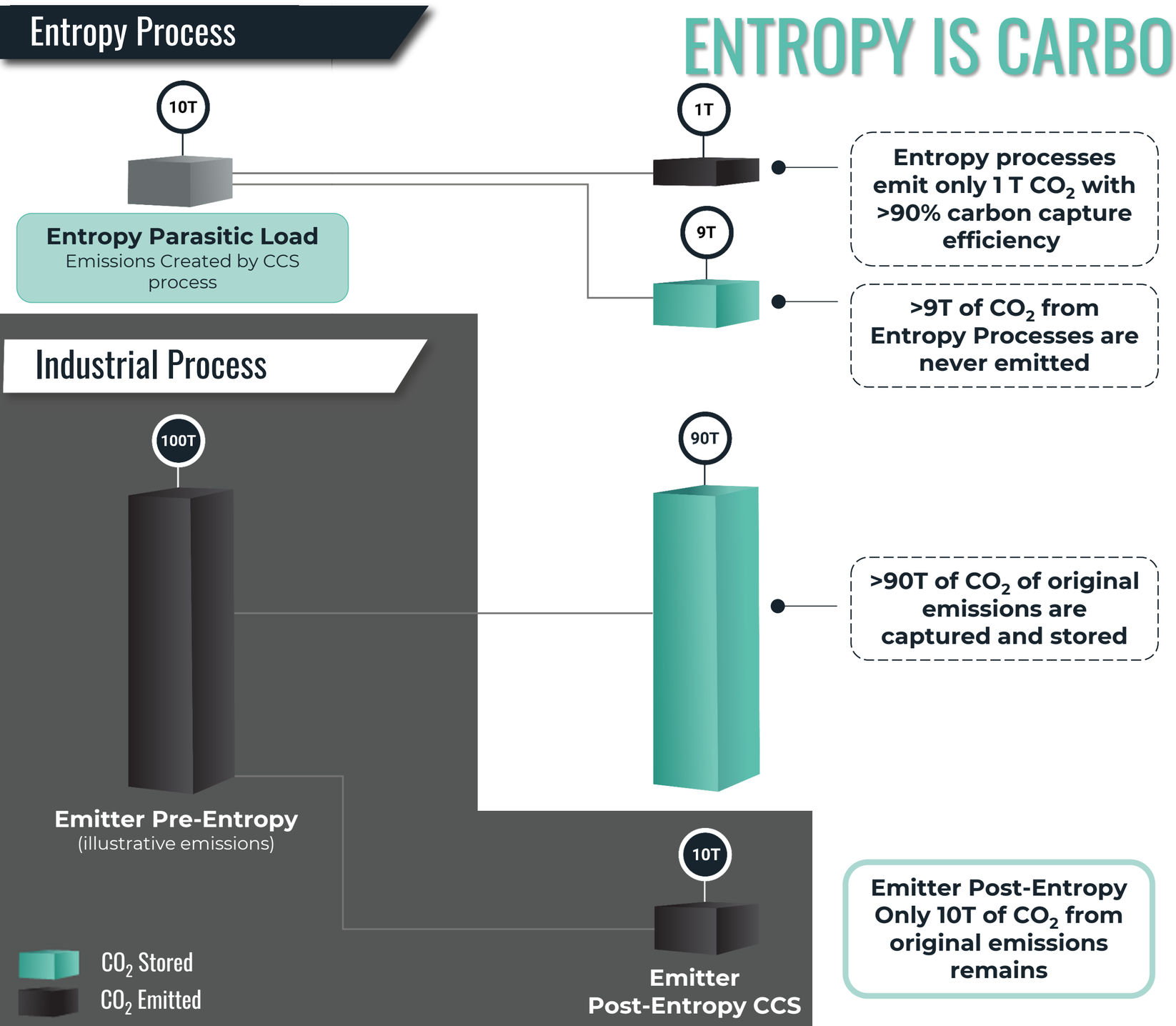
Maximize value of environmental attributes

Business Model	Partnerships / Commercial Structure	Location / Scoping / Geology	Sign MOU	System Design and Engineering	Project Management and Construction	CO_2 Capture	CO_2 Transport	CO_2 Sequestration and Measurement, Monitoring & Verification (“MMV”)	Carbon Credit Monetization
Entropy Develop, Own, Operate	✓	✓		✓	✓	✓	✓	✓	✓
Entropy License and Support	✓	✓		✓	✓	*At option of project sponsor*			

✓ - Entropy to provide full range of service

Comprehensive business model represents a compelling solution for any emitter to achieve emissions reduction targets

ENTROPY IS CARBON NEGATIVE, FULL SCOPE



Got smoke?

Entropy captures >90% of both industrial emissions and its own carbon capture facility emissions.

The result?

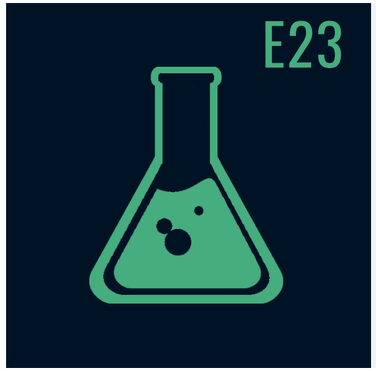
The addition of Entropy is entirely net negative; Entropy enables >89% overall reduction of original emissions produced, including energy required by the carbon capture process.

Industrial Emissions	100
Entropy Parasitic Emissions	10
Gross Emissions Captured	>99
Net Negative Emissions (Credits)	>89

MODULAR CARBON CAPTURE AND STORAGE (MCCS) TECHNOLOGY

Energy-efficient integration of multiple technologies to provide full-cycle solution from carbon capture to permanent sequestration

- Flexible modular format allows for scalable projects (8,000 tpa to over 1 Mtpa CO_2)
- Applicable to most point-source industrial emission generators, including hard-to-abate low CO_2 concentration industries such as power generation, blue hydrogen, LNG, gas processing, and production of cement and steel
- Significant reduction in total installed cost



High Performance Solvent: Entropy 23™

Solvent Technology · Reduced Costs · University of Regina

- Capture process enhanced by Entropy23™ solvent
- Developed patent-pending processes and superior chemistry for commercial deployment, including:
  - Lower heat duty reducing energy input costs and operating costs
  - Greater absorption rate and cyclic capacity reducing the height and diameter of columns required

Modular Carbon Capture™ (MCC™)

Scalable · Versatile · Retrofit

- Culmination of decades of experience with modular design and industrial facilities optimization
- Scalable implementation enabling retrofit carbon capture technology for emitters as low as 8,000 tpa
- Less than 2 years from final investment decision to on-stream

Entropy Heat Capture™

Energy Efficient · Reduced Costs

- Entropy is a leader in industrial waste heat recovery (“WHR”), with several projects completed by partners to date
- Revenue streams for WHR include reduced fuel costs, reduced process costs and eliminated carbon costs
- Economics for Entropy WHR projects have been demonstrated to be short payout and low risk

Integrated Carbon Capture and Storage™ (iCCS™)

Built-In · Patent Pending

- Entropy and an OEM partner have designed a fully integrated CCS prototype
- By integrating with new equipment, technology is on-track to deliver 25% capital cost savings vs CCS retrofit
- Prototype unit to be installed and tested at the Glacier Gas Plant by Q2 2023

Reverse Entropy Storage™ (RES™)

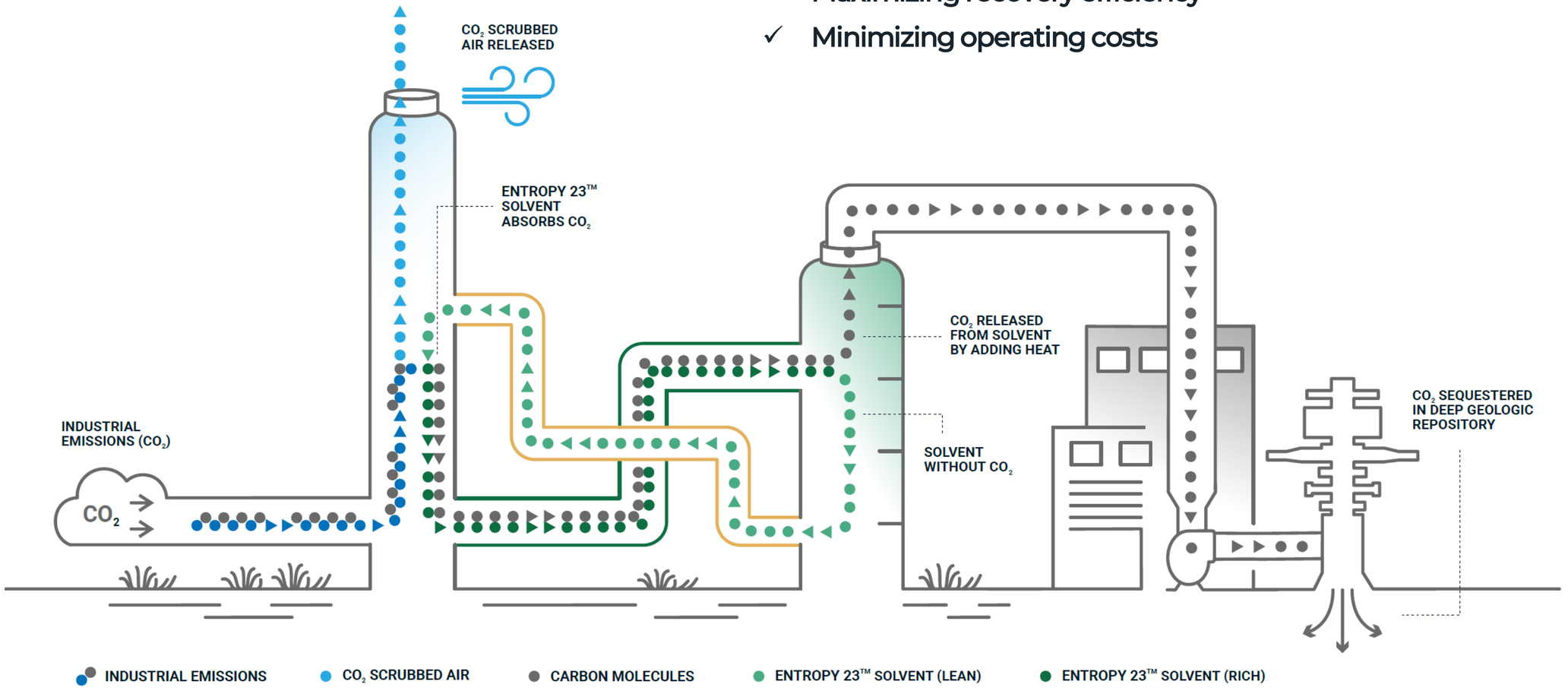
Operational Excellence · Subsurface · Permanent Storage

- Decades of experience with acid-gas / CO_2 sequestration and thorough understanding of geology
- Generated ~500,000 tonnes of CO_2e offsets and ~90,000 tonnes of Emission Performance Credits associated with operations at Advantage’s Glacier Gas Plant
- “Right of access” to an existing sequestration facility allowing Entropy to complete first full-scale commercial CCS project

KEY TECHNOLOGY: REVERSE ENTROPY CARBON CAPTURE™ (RECC™)

- RECC™ technology is an accumulation of expertise from decades of experience with amine processes
- Through extensive laboratory research, development, testing and piloting; Entropy Research and Development has developed novel processes and chemistry required for commercial deployment:

✓ **Equipment cost reduction**
✓ **Maximizing recovery efficiency**
✓ **Minimizing operating costs**



ENTROPY R&D AT CETRI: LEADERS IN POST-COMBUSTION CCUS FOR 30 YEARS

Nobel Peace Prize: CETRI founder Dr Malcolm Wilson was recognized for contributions to CCS in concert with the UN IPCC (2007)

- Entropy has unique access to world-leading R&D facility and researchers for Entropy solvent and process development
  - One of the few in the world with the full capability of developing and testing carbon capture solvent technology

Professors

- Co-founder of CETRI, advisor to Entropy
- Work has been cited over 12,500 times
- Focused on carbon capture since 1991

Dr. Paitoon Tontiwachwuthikul ("PT")

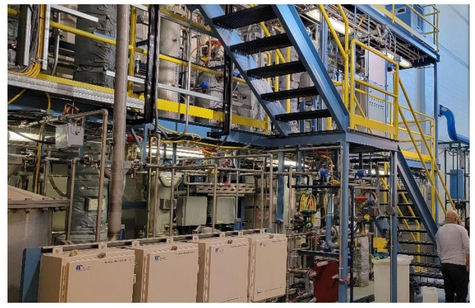
- Founding director of CETRI, advisor to Entropy
- SaskPower Clean Energy Research Chair
- Research has been captured in over 200 publications

Dr. Raphael Idem

Key Awards and Recognitions

fairforce	2020 Top Researchers in Carbon Capture, Usage and Storage Technologies
ELSEVIER	One of Top Ten Cited Articles in 2018-2019 in "International Greenhouse Gas Control"
INNOVATION PLACE — Helping grow Saskatchewan's tech sector.	2008 Award for Innovation – Carbon Capture Research
NSERC CRSNG	2006 Synergy Award for Innovation

Greenhouse Gas Technology Centre



Solvent Testing Facility

Select Prior CCS Project Sponsors and Clients

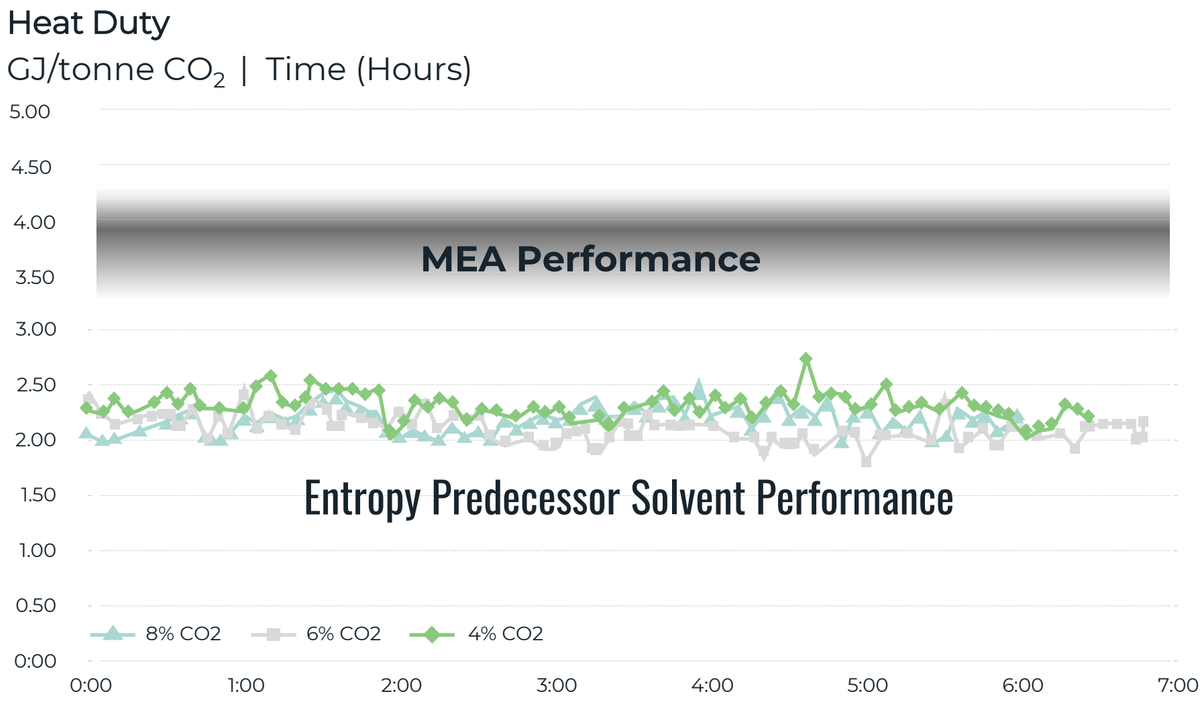
Partner	Country	Date	Description
Sinopec	China	2019	CCUS comprehensive technical training
Qatar National Research Fund	Qatar	2015-2019	Development of advanced CO_2 separation technology for natural gas processing
ptt	Thailand	2012-2015	Development of separation technologies for improving biogas separation process
DOOSAN	U.K.	2010-2011	Testing and evaluation of Boundary Dam pilot plant for carbon capture processes
Exxon	U.S.	2010-2011	Testing and evaluation of novel solvents for carbon capture technologies
Shell	Netherlands	2009-2010	Pilot testing and process optimization of gas turbines for carbon capture
equinor	Norway	2007-2008	Feasibility study and staff training of carbon capture demonstration project

CETRI BACKGROUND: 2 GJ/TONNE ACHIEVED IN TWO PILOTS

Entropy Technology Built on Unique Experience

- At the U of R Boundary Dam Pilot Plant, CETRI achieved a heat duty of **2 GJ/tonne of CO_2** on gas turbine exhaust. This compares to ~3.5 to 4 GJ/tonne for MEA
- At the U of R GHG Technology Centre, CETRI replicated similar results of **2 GJ/tonne of CO_2** using the in-house pilot plant with special process integration and predecessor novel solvent blend

Heat Duty Performance: MEA and Predecessor Solvent



ENTROPY'S NEW GENERATION OF CARBON CAPTURE SOLVENTS

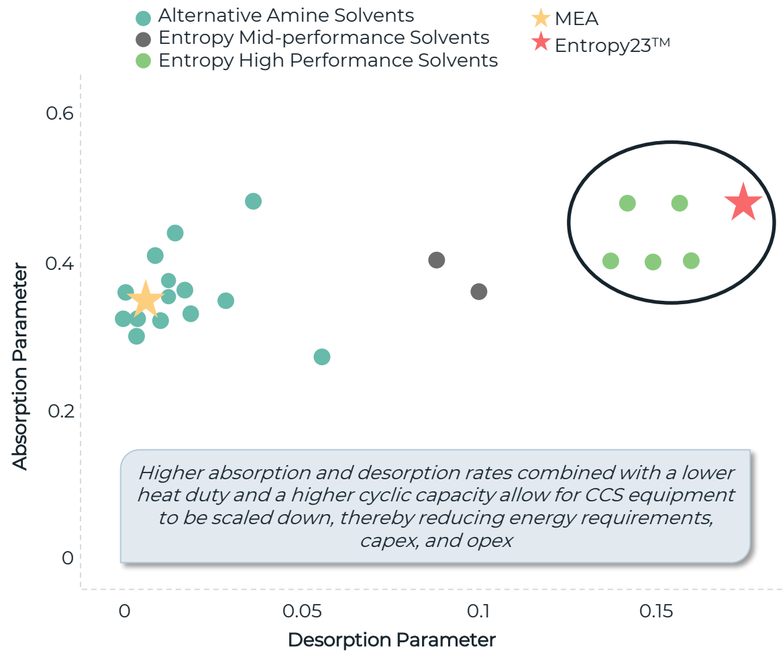
- Traditional amines, such as monoethanolamine ("MEA"), can absorb CO_2 but have significant heat and volume input requirements that make projects uneconomic at prevailing carbon prices
  - ***MEA is used as industry standard for solvent benchmarking***
- **In development since 2016, Entropy23™ can substantially reduce energy consumption, operating costs and capital costs**

Entropy23™ vs. MEA

~3.85x lower heat duty	Energy inputs costs, operating costs
66% higher absorption rate	Equipment size and cost
~3.85x higher desorption rate	Equipment size and cost
85% higher cyclic capacity	Volume of solvent, equipment size and cost
~0 lean loading at 110°C	Energy requirements
Significantly lower NH_3 emission rates (high stability and lower solvent degradation)	Operating costs

Based on progress report from the U of R's CETRI dated July 2021

Carbon Capture Solvent Performance



ENTROPY

cetri Clean Energy Technologies Research Institute

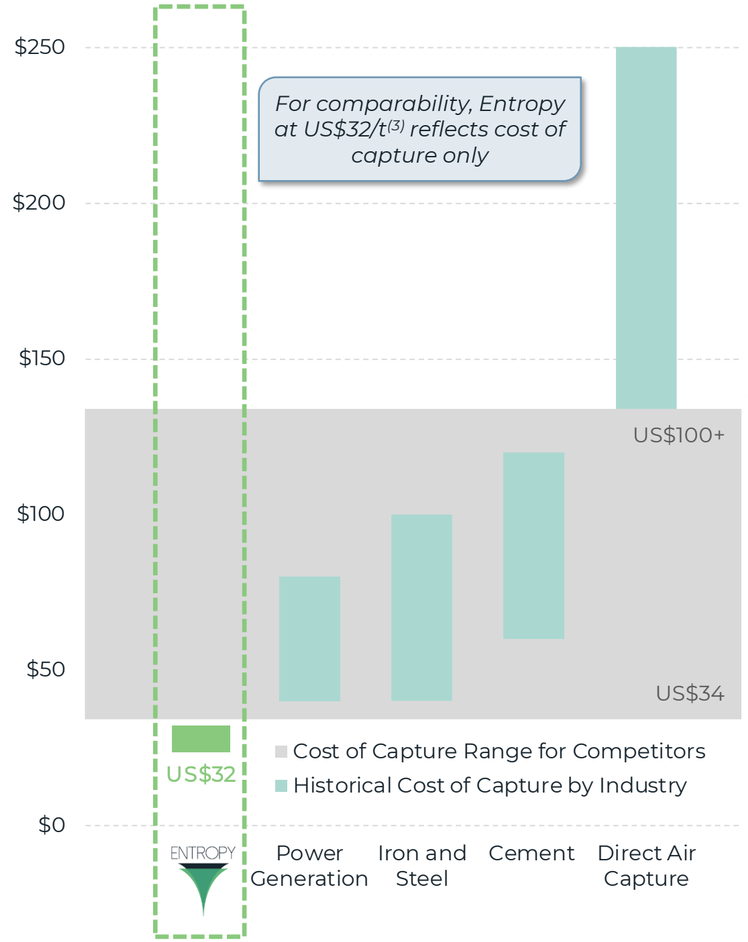
University of Regina

COST OF CARBON CAPTURE - MARKET LEADING, AT ANY SCALE

Profitable at current carbon prices with exposure to increased carbon pricing upside

Cost of Carbon Capture Only

US$/t



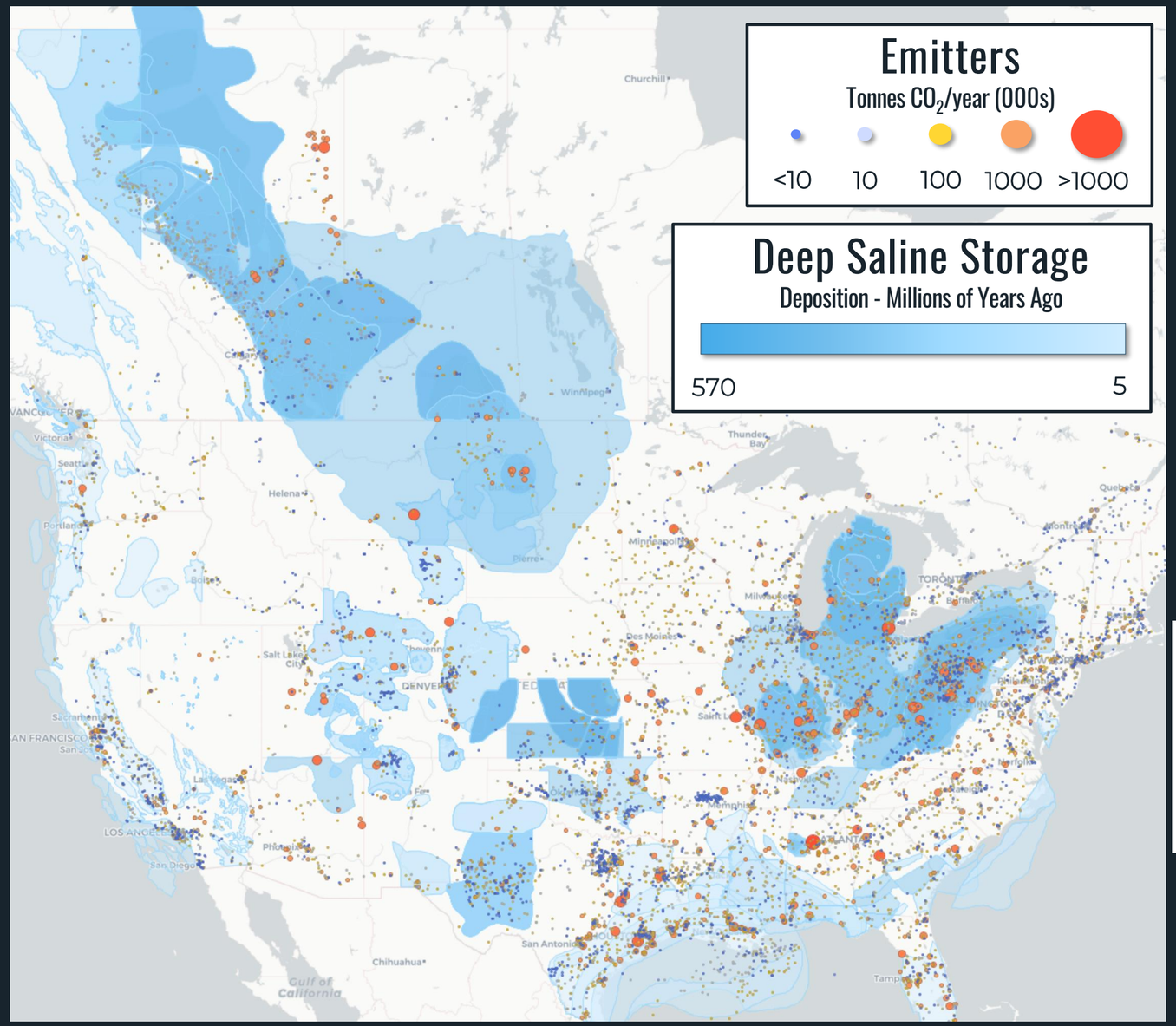
Peer capture cost estimates are **aspirational** and rely on significant unspecified improvements

Entropy costs are **real,** based on several engineered projects

CCS Industry Players	Business Model	Capture Technology	CO_2 Source	Capture Cost[1][2]
				US$/t
Peer A	Licensing	Direct Air Capture	Air	>$100
Peer B	EPC, Licensing, Fee for Service	Amine	Waste-to-energy	$72
Peer C	EPC, Licensing	Amine	NGCC	$57
Peer D	OEM, Licensing, Build & Own	Solid Adsorbent	Cement	$50
Peer E	EPC, Licensing	Amine	Coal	$45
Peer F	OEM, Licensing, Build & Own	Amine	Coal	$40
Peer G	Licensing	Amine	Coal	$37
Peer H	Licensing	Cryogenic Process	Coal	$35
Peer I	Licensing	Fuel Cell	Coal	$34
Entropy	Build & Own, Licensing	Entropy23™	NG	$32 [3]
Operating Projects				
Boundary Dam		Cansolv	Coal	>$100
Shell Quest (pre-combustion)		ADIP-X	SMR	$75[4]
Petra Nova (currently shut-in)		KS-1 (MHI)	Coal	$72

Note: No perfect comparable exist in the public domain; FX rate of USD/CAD 0.80; EUR/USD 1.20
Source: Global CCS Institute, IEA, U.S. DOE/NETL, Alberta Department of Energy, International CCS Knowledge Centre, NRCan, company reports
(1) Competitor capture costs may not be directly comparable due to limited disclosure of inputs and calculation methodology
(2) Disclosed capture costs exclude transport, storage and monitoring with the exception of Shell Quest (included) and Peer H (not specified)
(3) Entropy reflects cost of capture only (including 9% before-tax return); project cost expected to vary for each application based on exhaust composition, storage availability, onsite power, and waste heat availability
(4) Cost of capture estimated over 25-year term including capital cost, operating cost inflated at 2% p.a. and 10% discount rate (on operating cost & CO_2 volumes)

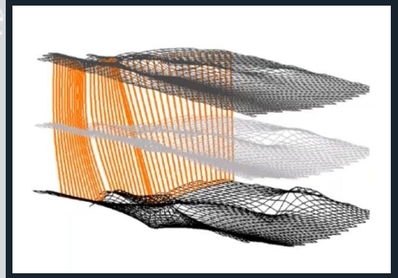
RES™ USING DEEP AQUIFERS – THE LOCAL SOLUTION IS OFTEN BEST

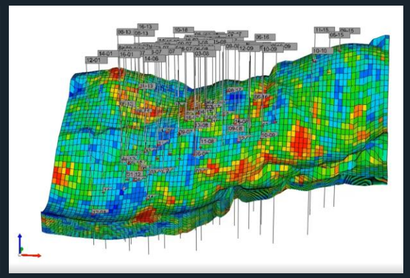


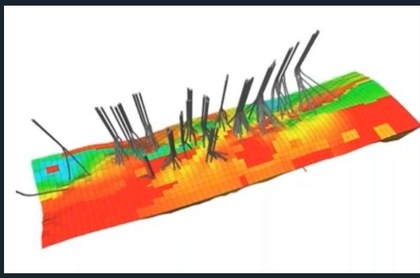
Much of North America has suitable deep saline geological storage potential for permanent sequestration

In-House Subsurface Expertise

- Disposal well operations
- Injectivity testing
- Reservoir modeling
- Seismic interpretation and rock physics analysis
- Dynamic injectivity modeling
- Established relationships with regulatory bodies





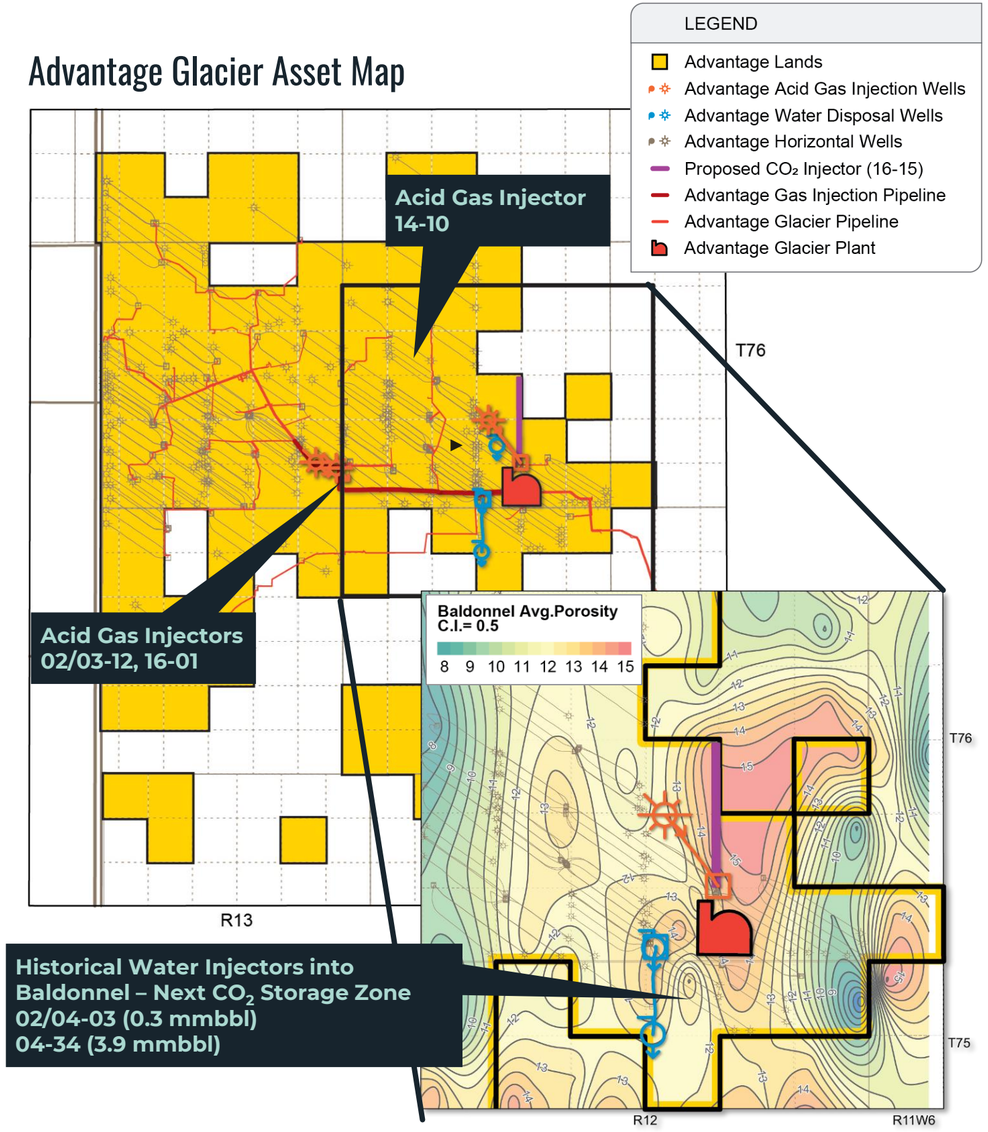


Images from Computer Modeling Group Ltd. (CMG) software

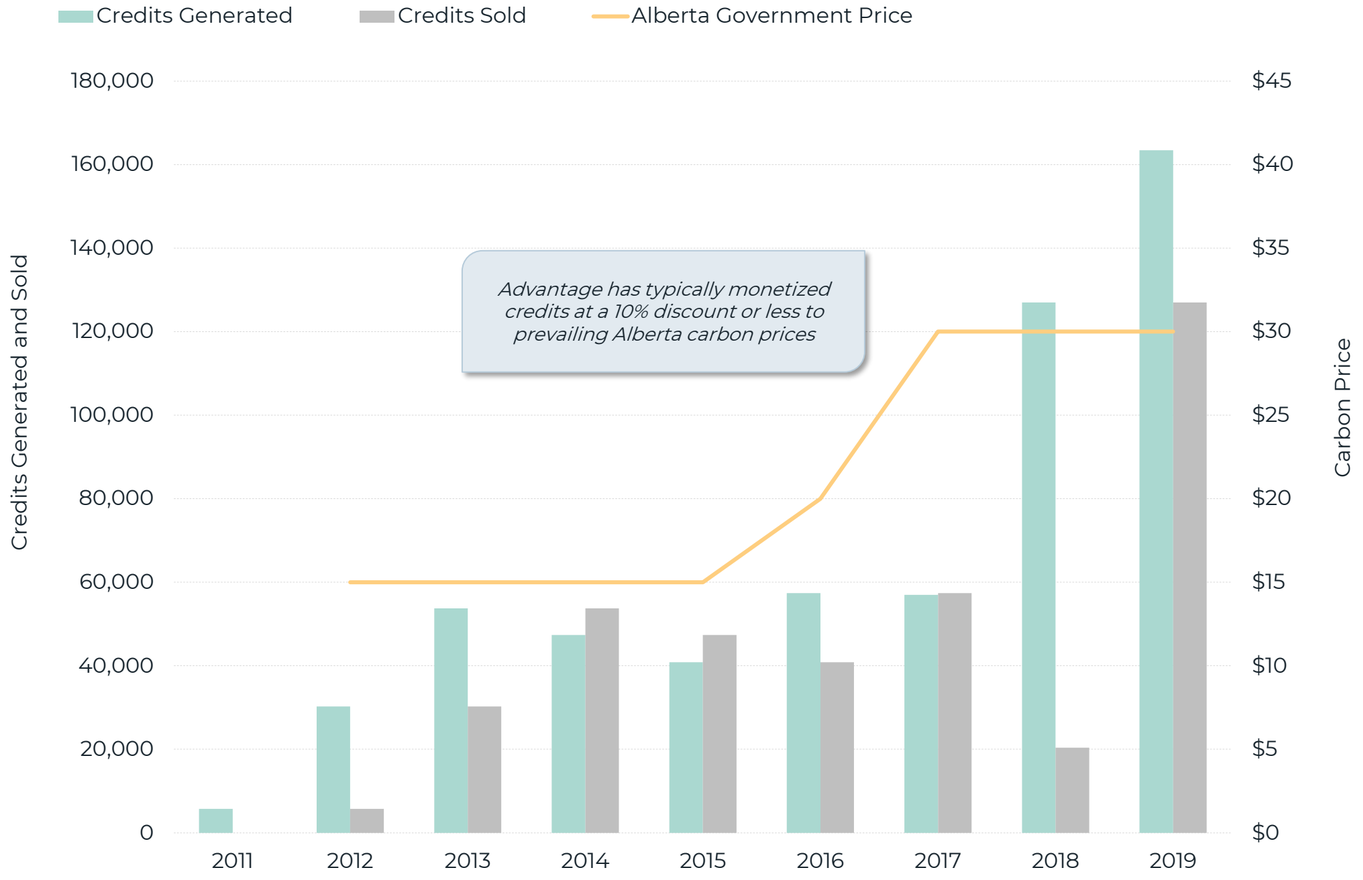
Notes:
(1) Emissions Data from Environment and Climate Change Canada's Greenhouse Gas Reporting Program (2019)
(2) Saline Aquifer Data from https://edx.netl.doe.gov/geocube/#natcarbviewer

PROVEN TRACK RECORD OF SEQUESTERING CO_2 – GLACIER PROJECT

Advantage Glacier Asset Map



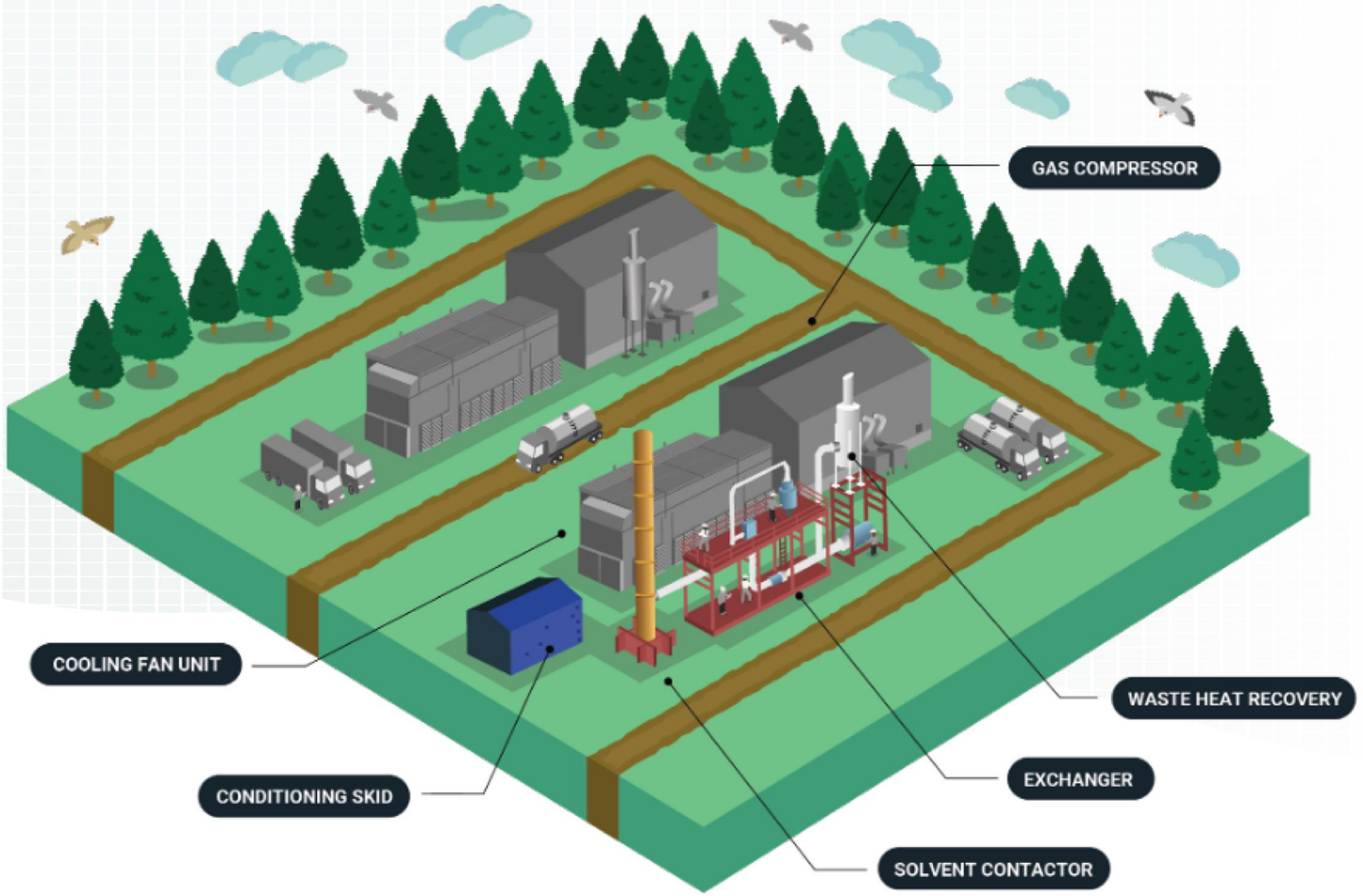
Credits Generated and Sold and Carbon Price (t, CAN$/t)



(1) Price set under Specified Gas Emitters Regulation ("SGER"), Carbon Competitiveness Incentive Regulation (CCIR), and Technology Innovation and Emissions Reduction (TIER)
(2) Excludes ~37,000 credits used internally by Advantage; utilized to offset ~C$30/t worth of obligation under SGER

MODULAR CCS AT GLACIER, ALBERTA – PHASE 1 ONSTREAM IN Q2 2022

- Capturing combustion flue gas from 12 gas-drive compressor engines and 4 generators (~200,000 tpa)
- Phase 1: first demonstration of modular CCS (MCCS™) – Q3 2022
- Phase 1b: first demonstration of integrated CCS (iCCS™) – Q2 2023
- Phase 2: captures emissions from remainder of ~50,000 horsepower – H2 2023
- >90% capture efficiency from exhaust gas (1)
- Waste-heat integration for improved process efficiency
- Sequestration to use 3 existing wells plus 1 additional well in deep saline aquifer at rates of ~10 mmcf/d (>99% CO_2)
- CO_2 revenue via Emission Performance Credits under Alberta's TIER program



Notes:
(1) Management estimate.

FIRST COMMERCIAL PROJECT UNDERWAY: ADVANTAGE GLACIER GAS PLANT

400 mmcf/d of Natural Gas Processing Capacity

Enroute to Blue Natural Gas

Glacier Combined Phases	
Tonnes CO_2e/Year	**200,000**
Capital	**$88 MM** (6)
Annual Net Operating Income ($50/T)	**$6.9 MM**
BECP ($/T) (3)	**$49**
NPV10 (2)	**$137 MM**

PHASE 1 - COMMISSIONING (1)

TONNES CO_2E/YEAR: **47,000**

CAPITAL: **$31MM** FULLY FUNDED

ANNUAL NET OPERATING INCOME (AT $50/TONNE): **$3.5MM** (4)

BECP: **$36/T** (3)

NPV10: **$34.5MM** (2)

PHASE 1B - INTEGRATED CARBON CAPTURE - TARGET Q2 2023 (1)

TONNES CO_2E/YEAR: **16,000**

CAPITAL: **$8MM**

ANNUAL NET OPERATING INCOME (AT $50/TONNE): **$0.5MM**

BECP: **$52/T** (3)

NPV10: **$10.9MM** (2)

PHASE 2 - ONSTREAM H2 2023 (1)

TONNES CO_2E/YEAR: **136,000**

CAPITAL: **$49MM** (6)

ANNUAL NET OPERATING INCOME (AT $50/TONNE): **$2.9MM**

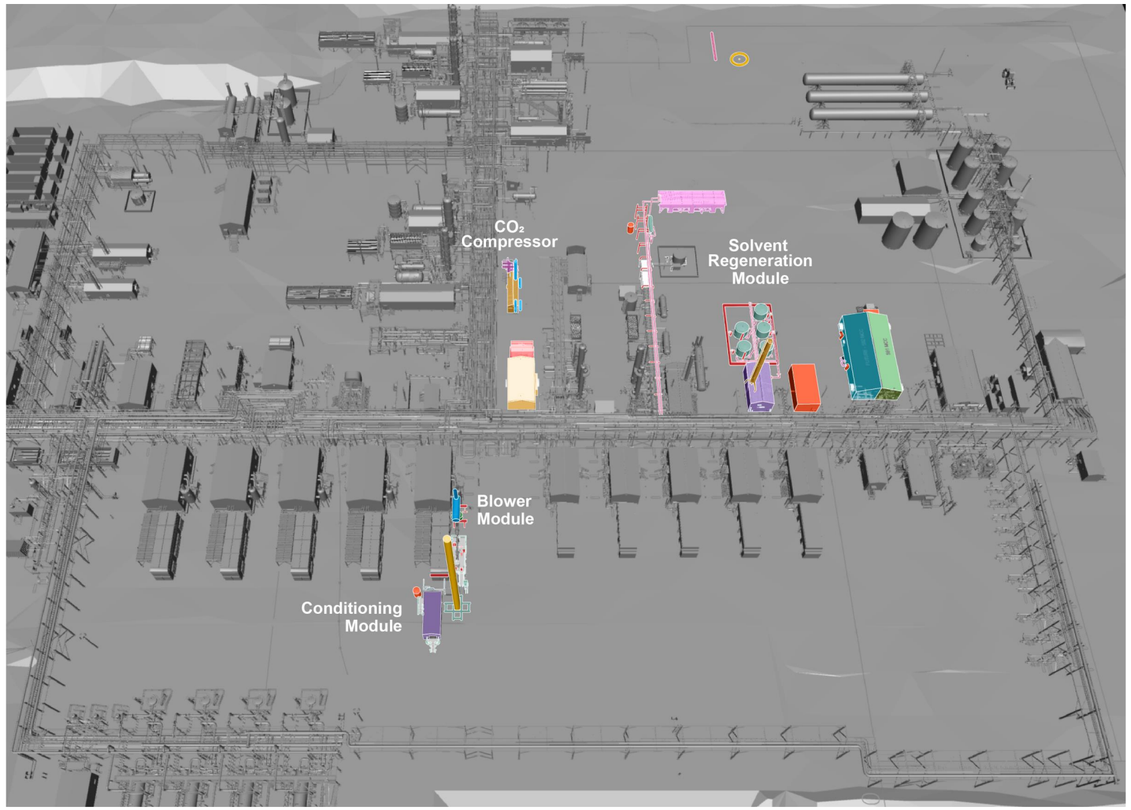
BECP: **$51/T** (3)

NPV10: **$91.7MM** (2)

Entropy has line of sight to positive EBITDA by 2023 (1)

(1) Forward-looking information. Refer to Advisory for material assumptions and risk factors.
(2) NPV_{10} calculated at Canadian Federal Government planned carbon credit pricing benchmark
(3) Break-even carbon price ("BECP") assuming an unlevered, before-tax 10% IRR; includes cost of carbon capture, transport and storage
(4) Phase 1 includes both Reverse Entropy Carbon Capture™ and additional net operating income generated from Entropy Heat Capture™ (waste heat recovery) of ~$1.4MM
(5) Includes refundable Investment Tax Credits of up to 50% of capital
(6) Capital for Phase 2 represents an initial estimate to be updated for inflation upon Financial Investment Decision

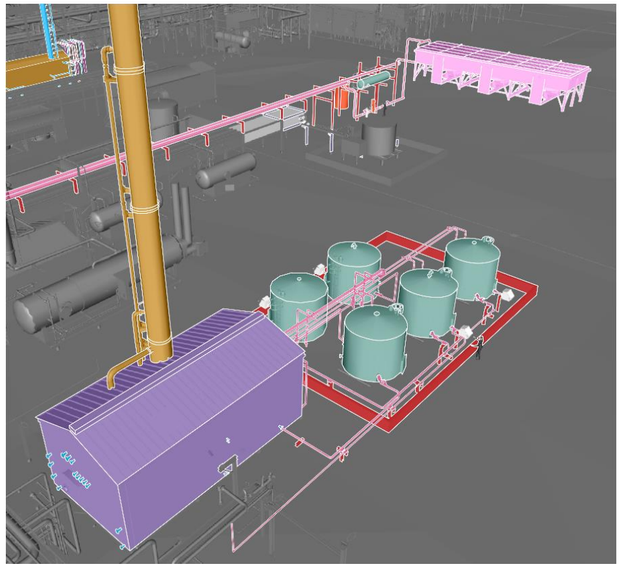
GLACIER PHASE 1 – FROM CONCEPT TO REALITY



GLACIER PHASE 1 – FROM CONCEPT TO REALITY

Absorber Tower

Regeneration Module

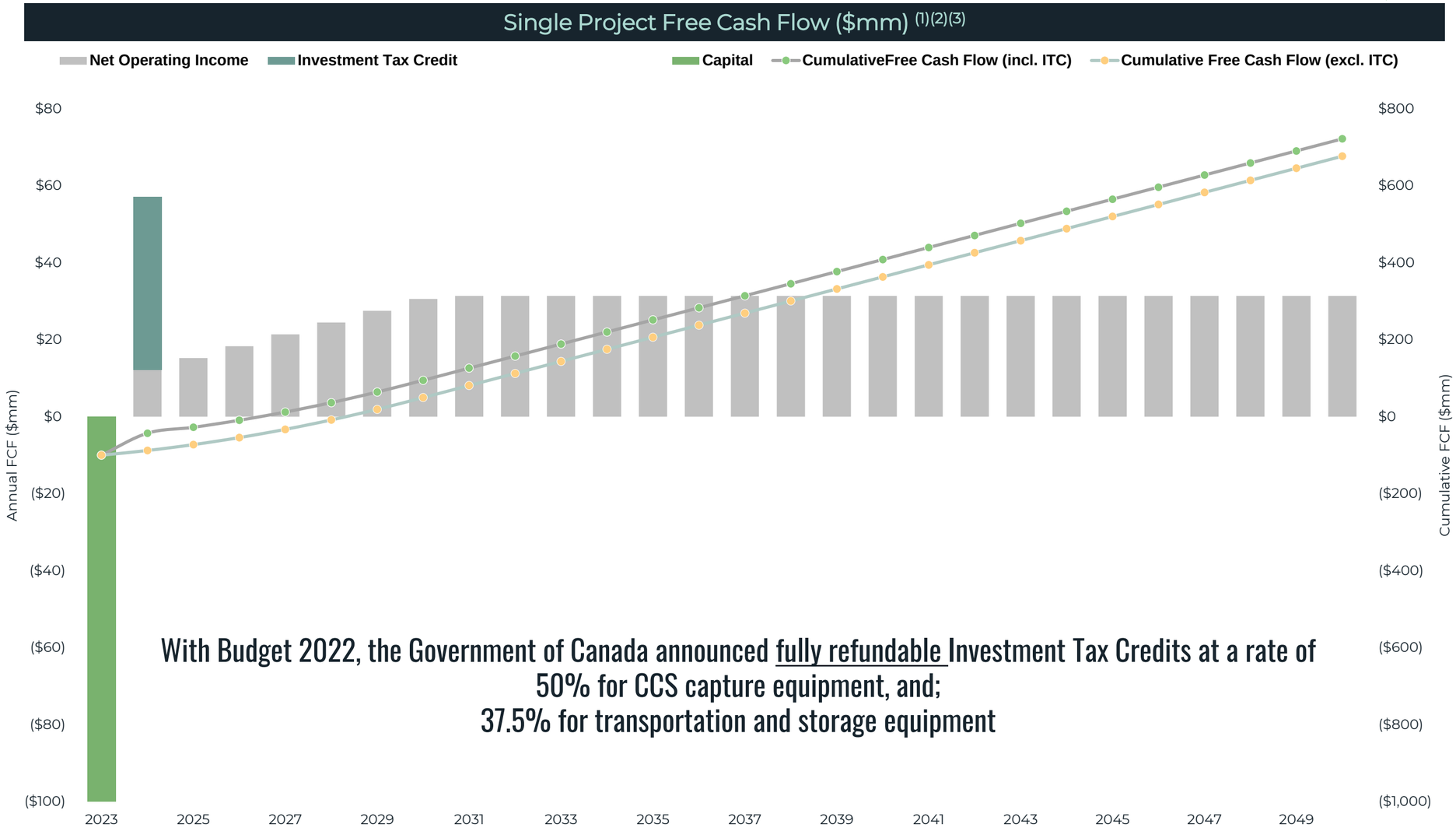


ILLUSTRATIVE SINGLE PROJECT ECONOMICS

ILLUSTRATIVE PROJECT DETAILS(1)(2)(3)

CAPITAL: $100MM
CAPACITY: 225,000 TPA
PROJECT LIFE: 30 YEARS
CAPITAL COST: $440/TPA
OPERATING COST: $15/T

	Excluding ITC	Including ITC
NPV_{10} ($mm)	$130	$169
IRR (4)	22%	31%
Payback (Years)	6.3	4.4

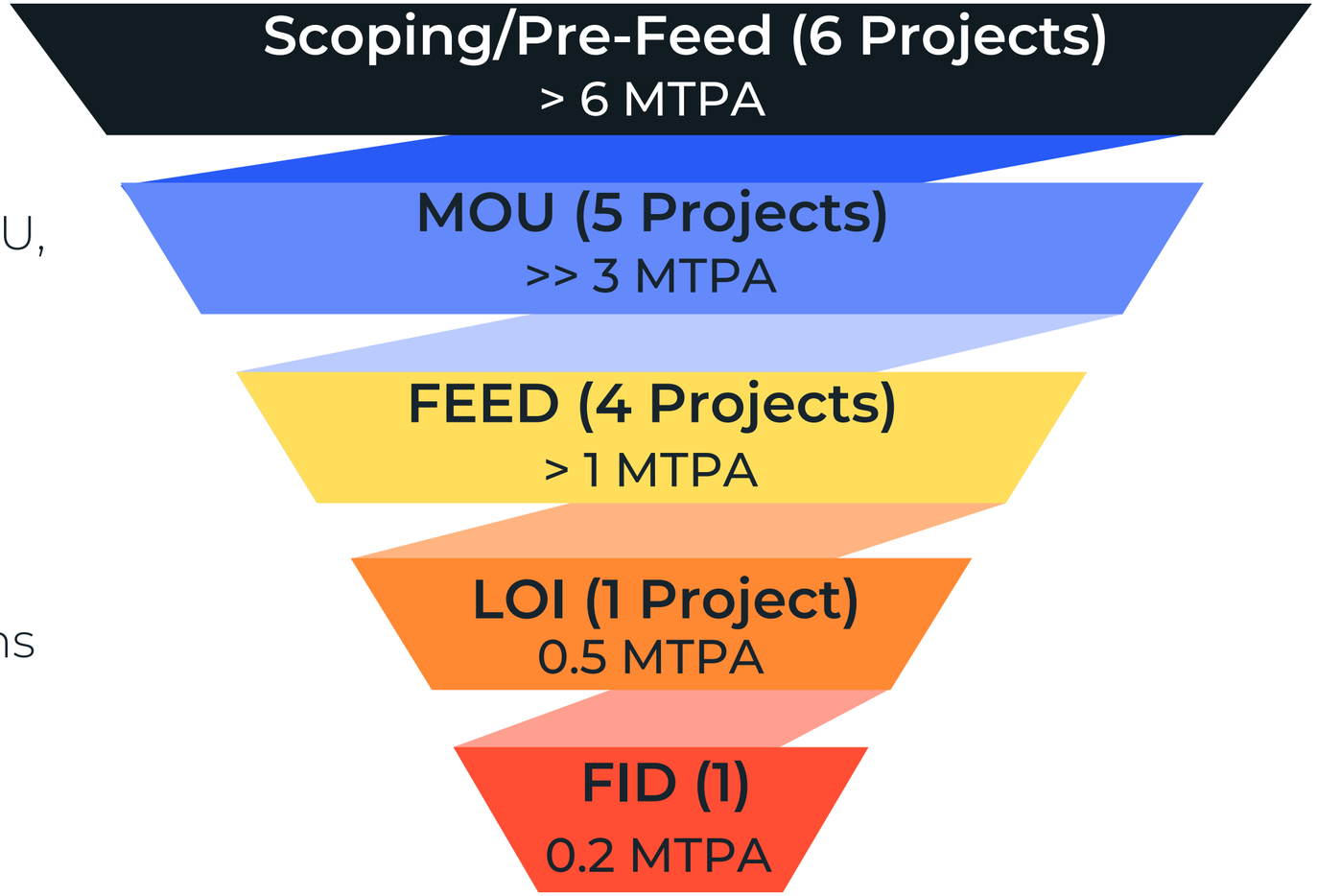


With Budget 2022, the Government of Canada announced fully refundable Investment Tax Credits at a rate of
50% for CCS capture equipment, and;
37.5% for transportation and storage equipment

(1) Assumes $500/tpa capital efficiency, 10% discount to Canadian Federal Government planned carbon credit pricing benchmark, and $20/t operating costs; assumes no escalation of costs; excludes corporate costs relating to G&A, taxes, working capital adjustments, and asset retirement obligations
(2) Assumes Canadian Federal Government planned carbon credit pricing benchmark with no escalation beyond Government pricing of $170/t by 2030, Clean Fuel Regulation credit stacking, government grants, etc.
(3) Project costs and economics expected to vary for each application based on exhaust composition, storage availability, onsite power, and waste heat availability
(4) Individual project IRRs increase with escalating carbon prices and project execution timing
(5) Source: Environmental Protection Agency, Canadian Council of Forest Ministers, Source for Sustainable Systems (University of Michigan) attributable to rising carbon prices and project execution timing
(6) Assumes 80% of the project cost carries a 50% ITC and 20% of the project carries a 37.5% ITC.

ENTROPY'S PATHWAY TO RAPID GROWTH IN GLOBAL DECARBONIZATION

- Project in various stages including MOU, FEED, LOI, FID
- Projects are across various types of applications and industries
- We continue to advance on project inventory and align with parties across industries, applications and jurisdictions



Project Progression

Scoping | MOU – Memorandum of Understanding | FEED – Front-End Engineering & Design | LOI – Letter of Intent | FID – Final Investment Decision

APPENDIX

The Opportunity of Carbon Capture

ENTROPY

WHO ARE WE?

A built-for-purpose team, aggregated from three leading organizations:

ADVANTAGE ENERGY LTD.	• 50,000 boe/d energy producer, enterprise value ~$2.1B • Track record of lowest operating costs in industry • 10+ years experience capturing, sequestering and monetizing credits from inlet CO_2 • In-house earth sciences professionals with experience in identifying and qualifying reservoirs for CO_2 storage
ALLARDYCE BOWERABC CONSULTING INC.	• Leading Western Canadian engineering firm • Exclusive engineering services provider • Innovative experts in process design, modularization and project management • $1.5B of projects executed in the last decade delivered on time and 4% under budget
University of Regina | cetri	• Advisors to Entropy - Engineering professors Dr. Raphael Idem (SaskPower Clean Energy Research Chair), and Dr. Paitoon Tontiwachwuthikul • Global leaders in CCUS and liquid solvents, 30-year research history spawned from Weyburn Enhanced Oil Recovery Project • CETRI – one of only a few facilities in the world capable of developing and testing solvent technology • With Entropy, discovered and developed the next generation, high-performance Entropy solvents

ENTROPY LEADERSHIP TEAM

Entropy has a strong team backed by world class advisors and partners

Management Team Member	Experience
 **Mike Belenkie** *Board Chairman, President & Chief Executive Officer*	• President and CEO of Advantage • Over 20 years of diverse experience in the energy industry, including roles at Modern Resources, Painted Pony Energy, and Talisman Energy • BSc in Mechanical Engineering from the University of Calgary; P.Eng
 **Craig Blackwood** *Chief Financial Officer*	• CFO of Advantage; joined in November of 2004 • Over 25 years experience in the energy industry, including roles with Calpine Canada Natural Gas Company and Calpine Power Income Fund • BCom degree from Memorial University of Newfoundland; CPA CA
 **Rick Bower** *Chief Technology Officer*	• Principal and co-founder of ABC; P.Eng • Co-founder of Bower Damberger Rolseth Engineering (“BDR Engineering”), where he was responsible for the design and installation of over 4,000 facilities and projects over the 22 years he was involved in the corporation
 **Jason Chadwick** *Vice President, Business Development*	• Over 25 years of experience in Western Canada’s upstream energy industry • Previously served as Senior Vice President, Commercial for Modern Resources • BCom degree from the University of Calgary
 **James Martin** *Vice President, Engineering*	• Director of Operations for Advantage • Over 20 years of experience in the energy industry • Graduate of Mechanical Engineering from Queen’s University; P.Eng
 **Darren Tisdale** *Chief Geoscientist*	• Vice President, Geosciences for Advantage • Over 20 years experience as a geologist, including roles at Painted Pony Energy and Modern Resources where he was most recently Vice President Geosciences and founding member • BSc in Geology from the University of Saskatchewan; P.Geol

Board Member	Experience
Brent Allardyce *Board Member*	• Principal and co-founder of ABC; P.Eng • Previously Chief Engineer and General Manager of Startec Refrigeration for 16 years; has also held roles at Petro-Canada; founded Thermocarb Engineering Ltd
Jill Angevine *Board Member*	• Corporate Director with over 25 years of professional experience in investment management • Board member of Advantage and Tourmaline Oil Corp. • BCom degree from the University of Calgary; CPA, CFA, ICD.D
Craig Frenette *Board Member*	• Over 15 years experience in the energy industry in investment management and technical roles • Vice President at Brookfield Asset Management • BSc in Chemical Engineering from the University of Calgary, P.Eng, CFA

HOW DID WE GET HERE?

- Several key factors have contributed to Entropy's current position of strength

1 Advantage is a CCS leader

- Set out to meet the challenge of reducing internal carbon emissions
- Determined that CCS requires skills and technology: gas processing, project management, geology and regulatory management
- Ten-year track record of pre-combustion CCS at the Glacier Gas Plant demonstrates skillset for carbon capture
- Ownership of C$800mm[1] plant allows for control and optimization of first commercial project and ongoing R&D

2 ABC built on 40+ years of engineering innovation with a focus on gas processing and modularization

- Unmatched capability in process design, modularization and project management
- C$1.5B of projects executed in the last decade delivered on time and 4% under budget

3 U of Regina's CETRI has been a global leader in post-combustion CCUS for 30 years

- Experience includes extensive development, testing and global partnerships to advance understanding of carbon capture
- Co-founder's work has been cited over 12,500 times, and founding director's research has been captured in over 200 publications

4 Canadian carbon markets are established with visible long-term pricing

- Entropy incentivized by Canada's transparent and escalating carbon price
- Liquid market for credits well-established
- Proposed stackable incentives are forthcoming including Clean Fuel Regulation ("CFR", in-force 2022) and refundable Investment Tax Credits ("ITC") for Carbon Capture, Utilization and Storage ("CCUS") projects (starting in 2022)

(1) Based on Advantage selling 12.5% working interest for $100mm in July 2020

CCS TECH WORKS, GOVT POLICY IS HELPING ATTRACT CAPITAL AND DERISK INVESTMENT

ENTROPY

Technology is Unproven/Expensive/Has Failed

- Been operating for decades, costs are falling & economics now converging with carbon taxes, most projects are successful

Diverts from Other Clean Tech Investments

- CCS investments account for <1% of clean energy investments, vital to decarbonize steel and cement

Prolongs Fossil Fuel Usage

- Can be deployed today, is essential to reduce carbon from existing assets, reduces emissions for renewables construction

Stored CO2 at Risk of Leaking During Earthquakes

- Several sites have experienced earthquakes and did not leak, injection locations avoid known faults

CCS Chemicals Increase Air Pollution

- Emissions carefully managed and does not result in significant air pollution due to design

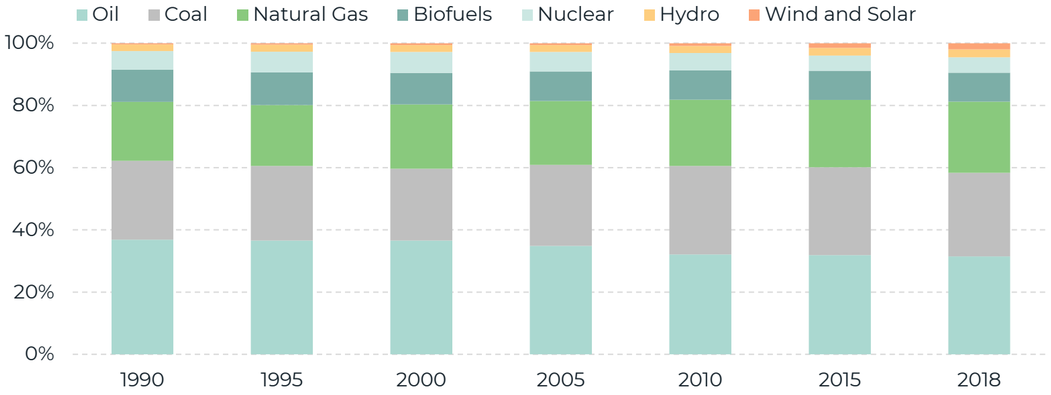
Source: Global CCS Institute

GLOBAL CCS EFFORT REQUIRED TO ACHIEVE EMISSIONS REDUCTION GOALS

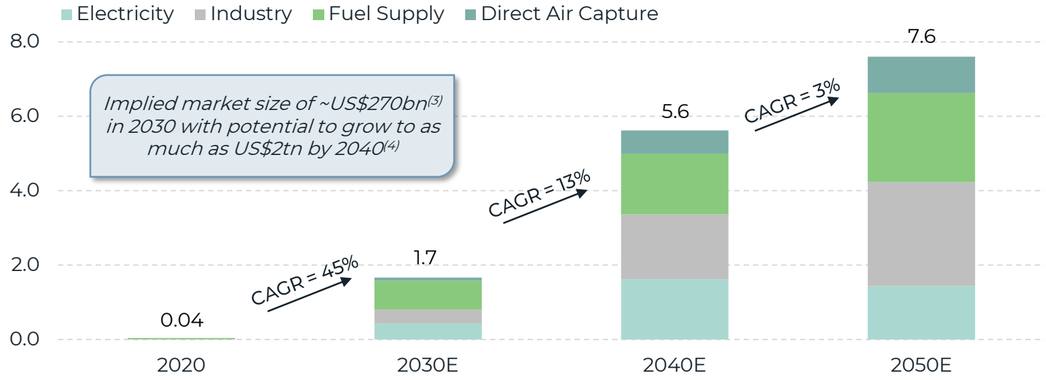
CCS essential to achieve global decarbonization goals given limitations of renewables

- Paris Agreement decarbonization goals require CCS in addition to renewables, efficiency gains, energy storage, and other means
- CCS is effectively the only solution for hard-to-abate emissions like power, cement, steel, chemicals, and other high-emitting industrial processes
- Projected 45%+ CAGR from 2020 to 2030 (19% to 2050) in CCS market with significant growth beyond

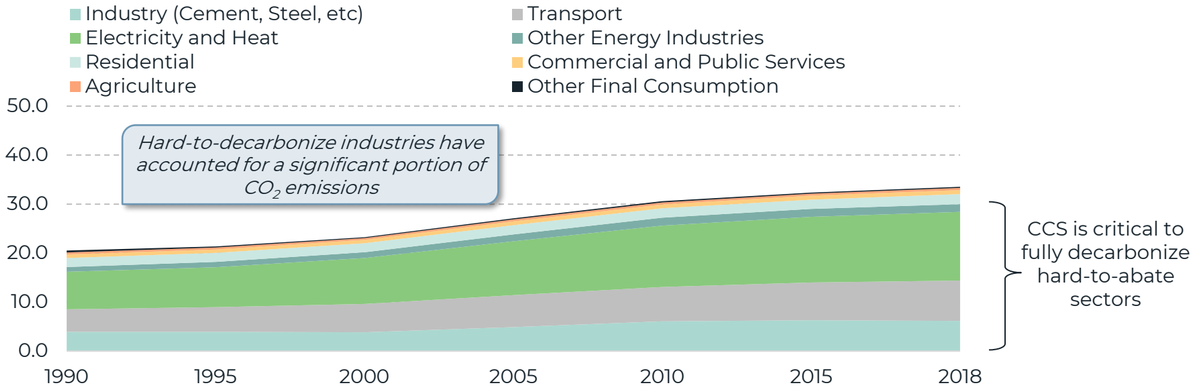
Global Energy Consumption by Source (%)(1)



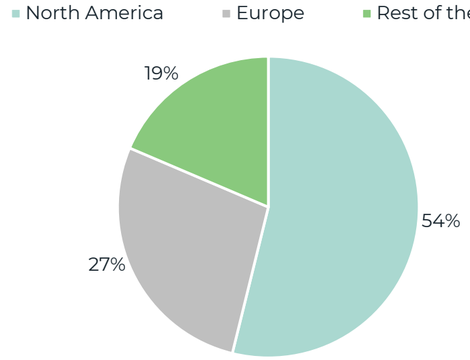
Global Annual Captured CO_2 (Gt CO_2)(2)



Global CO_2 Emissions by Sector (Gt CO_2)(1)



Carbon Capture Capacity by Region (% by 2030)(5)



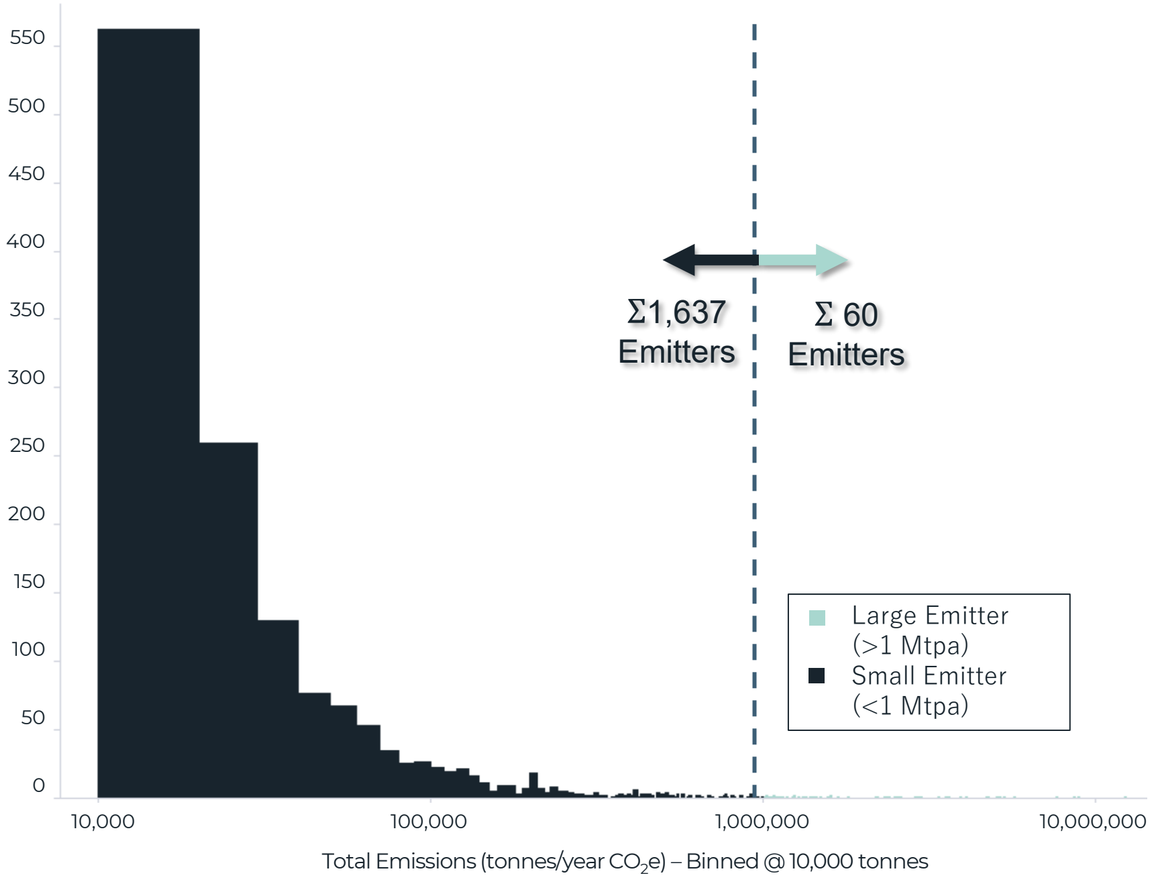
North America is estimated to be the region with the largest carbon capture capacity, underscoring it as a target market for Entropy

(1) Source: IEA Data Browser
(2) Source: IEA Net Zero by 2050 Report; Electricity includes Bioenergy, Gas, Coal; Industry includes Industry Combustion, Industry Processes; Fuel Supply includes Hydrogen Production, Biofuels Production, Other
(3) Reflects IEA data at US$160/t (level carbon prices need to reach by 2030 to limit global warming to within 1.5°C as per Wood Mackenzie)
(4) Reflects Exxon's 2021 Investor Day CCUS total addressable market estimate
(5) Source: HSBC Global Research

MASSIVE MARKET OPPORTUNITY ACROSS MULTIPLE INDUSTRIES

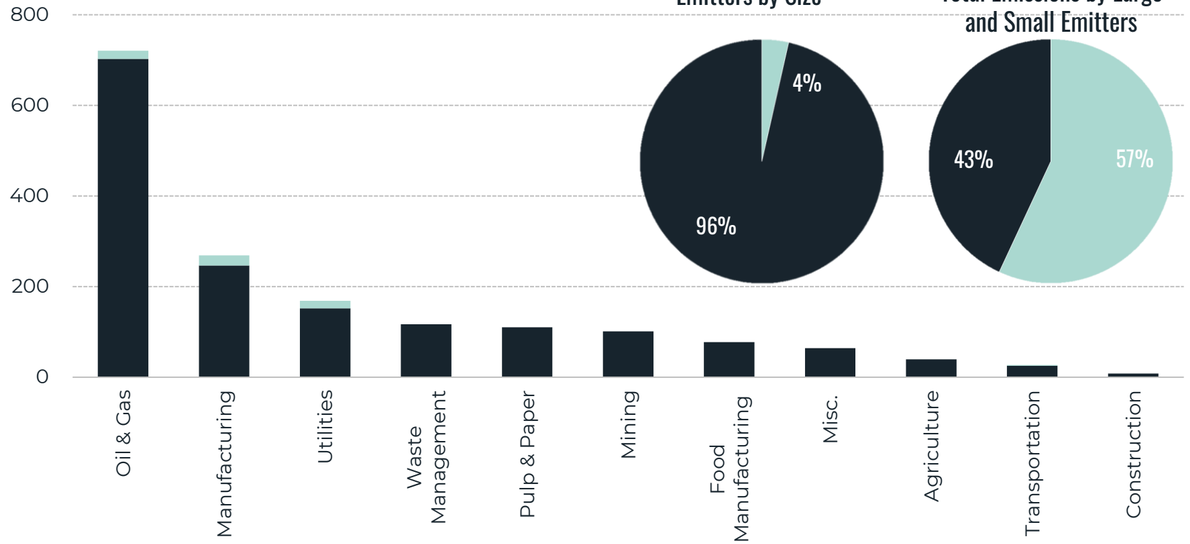
Canadian Facility CO_2 GHG Reporting (2019)

Number of Facilities | Total Emissions (tonnes/year CO_2e)



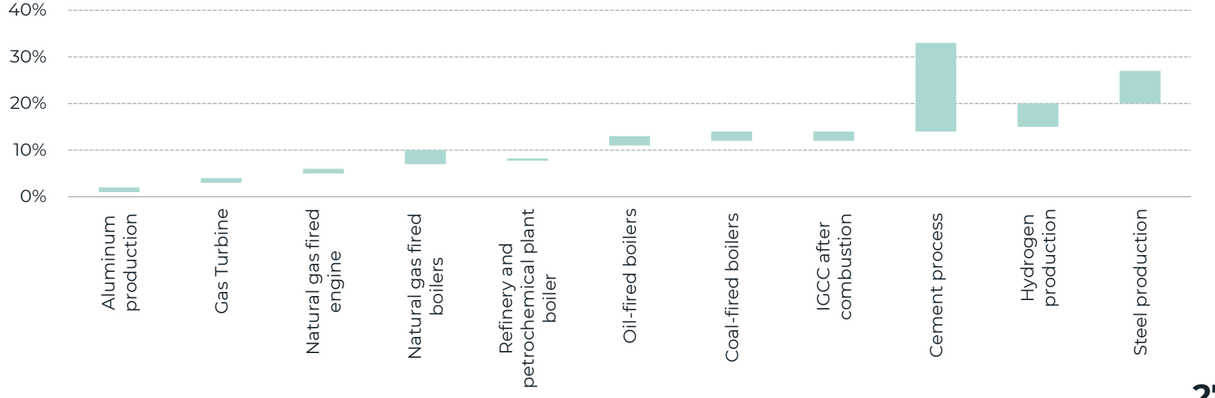
Capturing the Carbon Market Across All Sectors[1]

Number of Facilities



Flue Gas Composition[2]

(%)

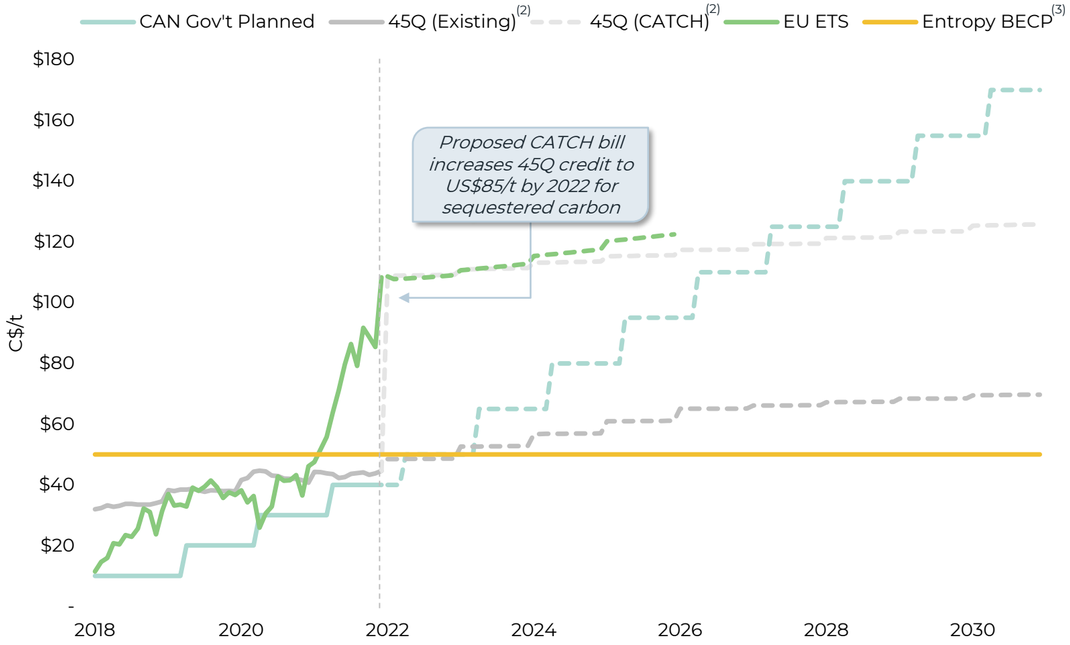


(1) Data from Environment and Climate Change Canada's Greenhouse Gas Reporting Program (2019)
(2) Wang X and Song C (2020) Carbon Capture From Flue Gas and the Atmosphere: A Perspective. Front. Energy Res. 8:560849. doi: 10.3389/fenrg.2020.560849

INCREASING GLOBAL CARBON PRICING

Rising global carbon pricing provides significant upside for Entropy

Global Carbon Price Benchmarks (C$/t)



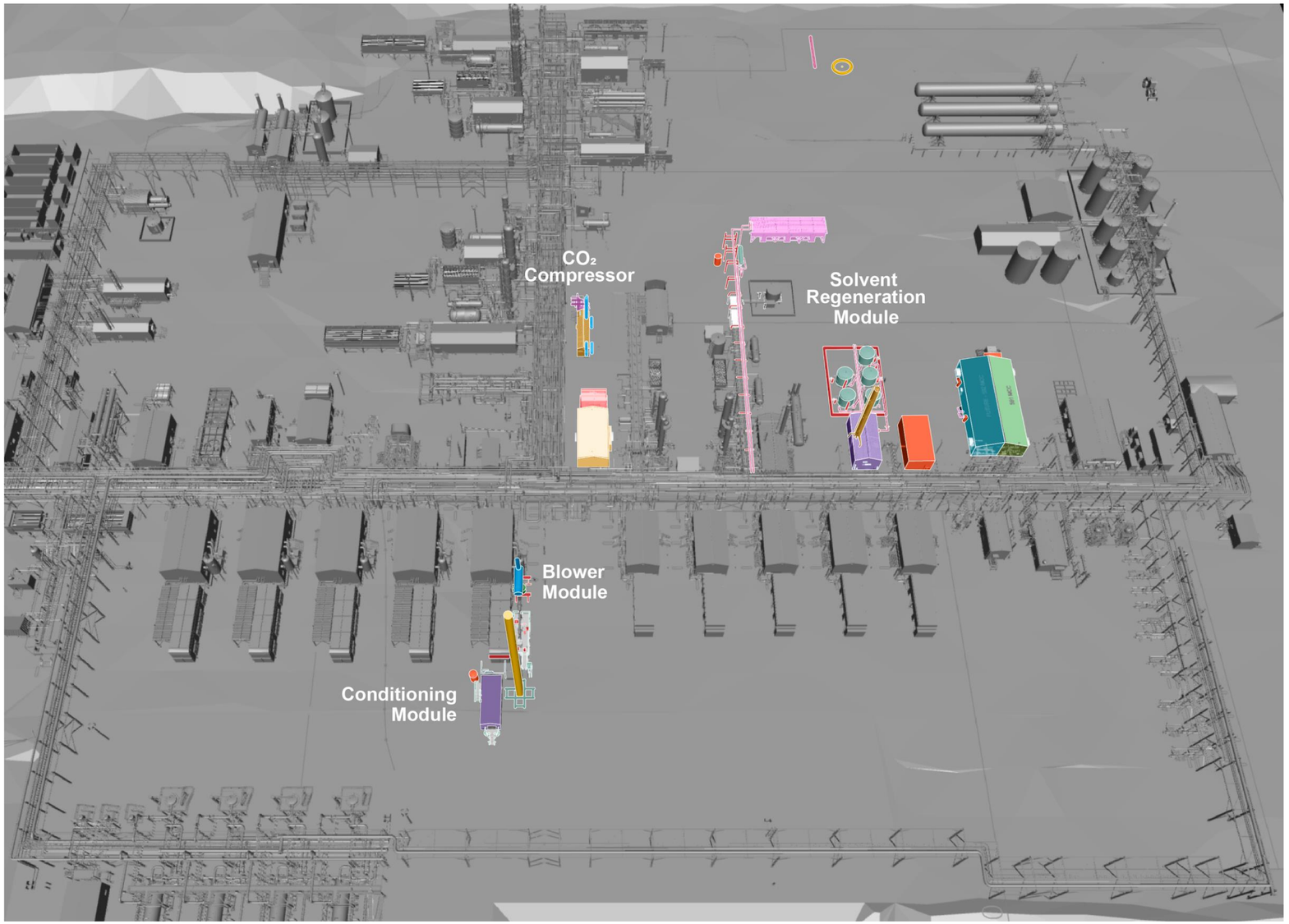
- Recent increases in carbon prices in North America and Europe have been dramatic and are expected to continue over the next decade
- Entropy's business model of generating and monetizing carbon credits uniquely positions it to realize significant upside in Canada:
  - Carbon pricing at C$50/t in 2022 and legislated to rise to C$170/t by 2030
  - Potential "stacking" of Clean Fuel Regulation Credits (upside not shown in the adjacent chart)
  - CCUS refundable investment tax credit ("ITC")
- 45Q tax credits in the U.S. offer US$50/t (~C$65/t) by 2026 under existing legislation
  - Proposed CATCH legislation(1) would increase the 45Q tax credit to ~US$85/t (~C$109/t) once passed(2)
- European Union Emissions Trading System ("EU ETS") pricing has risen from ~C$40/t in late 2020 to current levels >C$100/t
  - EU ETS forward strip rises to >C$120/t in the next few years

		2018A	2019A	2020A	2021E	2022E	2023E	2024E	2025E	2026E	2027E	2028E	2029E	2030E
Carbon Pricing (Local$)														
CAN Gov't Planned	*[C$/t]*	$10.00	$17.50	$27.50	$37.50	$47.50	$61.25	$76.25	$91.25	$106.25	$121.25	$136.25	$151.25	$166.25
45Q (Existing) (2)	*[US$/t]*	$25.70	$28.74	$31.77	$34.81	$37.85	$40.89	$43.92	$46.96	$50.00	$50.75	$51.51	$52.28	$53.07
45Q (CATCH) (2)	*[US$/t]*	$25.70	$28.74	$31.77	$34.81	$85.00	$86.28	$87.57	$88.88	$90.22	$91.57	$92.94	$94.34	$95.75
EU ETS (4)	*[EUR$/t]*	$14.91	$24.89	$24.46	$51.32	$74.30	$75.22	$76.79	$78.41	n/a	n/a	n/a	n/a	n/a

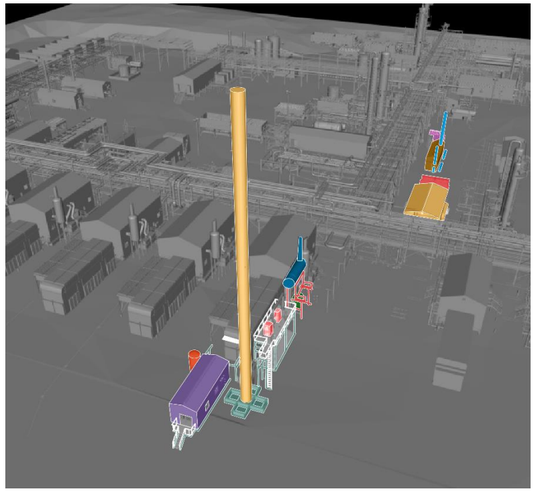
Source: Bloomberg as at December 24, 2021
(1) Coordinated Action to Capture Harmful Emissions Act
(2) Based on CO_2 captured and sequestered in secure geological storage with no other use; assumes an annual inflation adjustment factor of 1.5% starting on January 1, 2027 (existing legislation) and January 1, 2023 (CATCH)
(3) Entropy break-even carbon price ("BECP") assuming an unlevered, before-tax 10% IRR; includes cost of carbon capture, transport and storage; project cost expected to vary for each application based on exhaust composition, storage availability, onsite power, and waste heat availability
(4) Forecasted price based on futures pricing per Bloomberg

GLACIER GAS PLANT – ENTROPY PHASE 1 CCS ADDITIONS

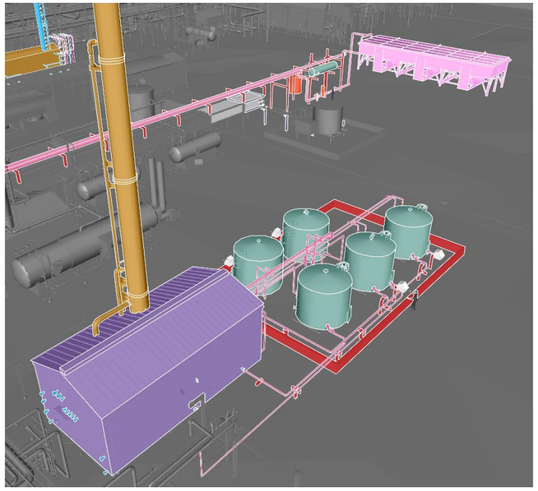
Glacier Gas Plant Overview



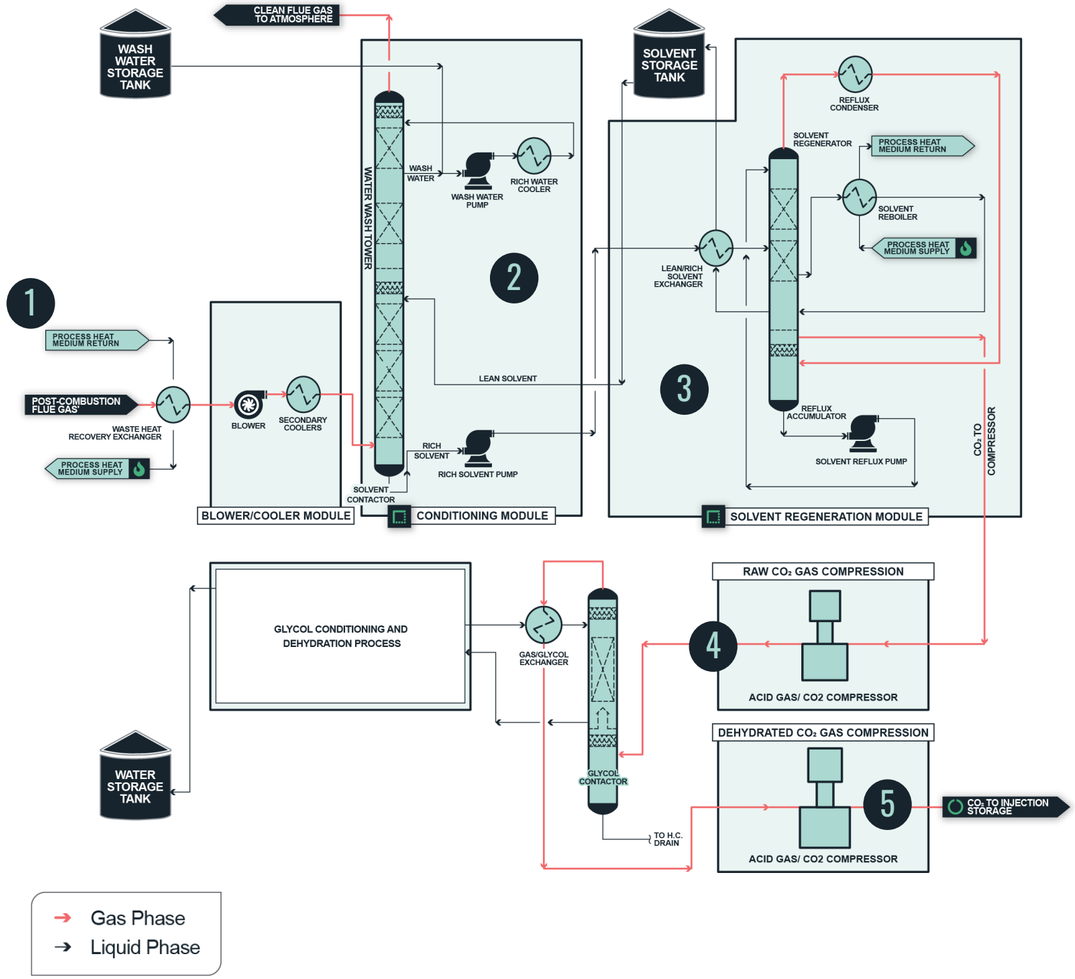
Absorber Tower



Regeneration Module

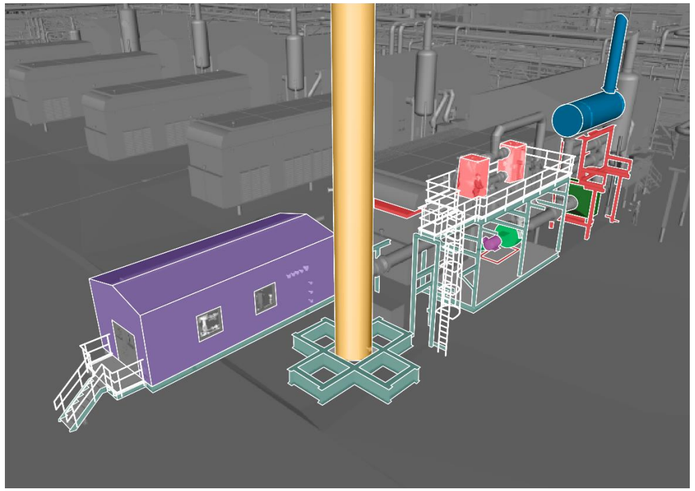


PROCESS FLOW - OPTIMIZATION BY EXCLUSIVE OWNERSHIP OF ENTROPY23™

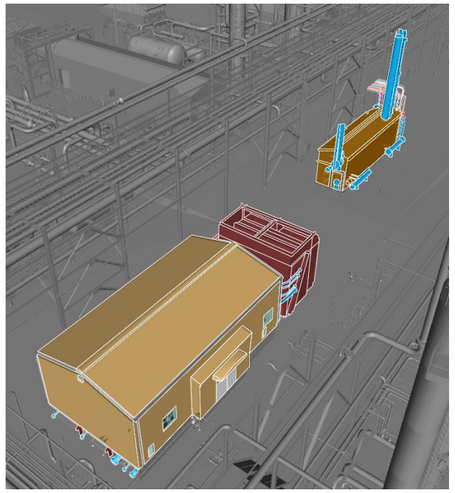


1. Exhaust or process flue gas enters the MCCS process
2. CO_2-rich gas enters the absorber module where the Entropy23™ solvent is cycled to cleanse the gas stream; clean flue gas is released to atmosphere and the CO_2-rich Entropy23™ solvent is pumped to the regeneration module
3. Using waste process heat as an energy source, Entropy23™ is regenerated and the lean solvent stream is pumped back into the absorber process; a wet CO_2-rich gas stream exits the process
4. The wet CO_2 gas stream is compressed into the glycol contactor where it is dehydrated; clean water is stored and glycol is conditioned and re-enters the contactor tower; a clean dry CO_2 gas exits the process
5. The clean CO_2 gas is compressed to line pressure and transported to the pre-selected sequestration location

Conditioning Module



Disposal



ILLUSTRATIVE COMMERCIAL TERMS WITH EMITTING PARTNERS

- Business model initially focused on development, ownership and operation[1] of CCS projects in exchange for carbon price exposure
  - Entropy responsible for capital and operating costs associated with projects, and retains ownership of all environmental attributes of CO_2 sequestered
  - Commercial arrangement with counterparties contemplates sharing of credit revenue at carbon pricing above an agreed threshold

Indicative Commercial Terms

Project Type	Build and Own
Commitment	Take-or-Pay; emitter to deliver agreed upon daily CO_2 volume during the Term
Term	>10 years
Throughput Guarantee	For each tonne of CO_2 the emitter fails to deliver, Entropy will receive a negotiated shortfall payment
Flue Gas Composition	Emitter will provide flue gas stream with defined specifications (including CO_2 concentration by volume)
Costs	Capital and operating costs to be borne by Entropy
Efficiency	Entropy to evaluate existing operations and implement energy efficiency initiatives
Utilities	Emitter to provide fuel gas or power (if required); cost based on prevailing market prices
Revenue Sharing	Emitter will receive a negotiated share of carbon price above a price floor
Other	Emitter entitled to market and retain any premium available by virtue of marketing its product as “net zero” sourced or “low carbon”

(1) Operation involves control of equipment only (i.e. Entropy manpower will be provided by the facility owner)

ADVISORY

All dollars and currency references in this presentation are in Canadian dollars, unless otherwise indicated.

Forward Looking Information and Statements

The information in this presentation contains certain forward-looking information and forward-looking statements (collectively, "forward-looking statements") within the meaning of applicable securities laws relating to Entropy Inc.'s ("Entropy" or the "Corporation") plans and other aspects of its anticipated future operations, management focus, strategies, financial, operating results and business opportunities. These statements relate to future events or our future intentions or performance. All statements other than statements of historical fact may be forward-looking statements. These statements have been prepared by Management to provide an outlook of the Corporation's potential activities and results and may not be appropriate for other purposes. Forward-looking statements are often, but not always, identified by the use of words such as "seek", "anticipate", "plan", "continue", "estimate", "guidance", "demonstrate", "expect", "may", "can", "will", "project", "predict", "potential", "target", "objectives", "intend", "could", "might", "should", "believe", "would" and similar expressions and include statements relating to, among other things: Entropy's position, strategy, development, and future plans and the benefits to be derived therefrom; the Corporation's expectations generally and with respect to its project development; the opportunities provided by the deployment of CCS technology; the anticipated benefits provided by Entropy's CCS technology to its host facilities; the anticipated benefits to be derived from Entropy's strategic collaboration with Brookfield and their ability to make an impact on global carbon emissions; that Entropy's iCCS™ technology will deliver costs savings compared to CCS retrofit; the anticipated timing of Entropy's prototype iCCS™ unit's installation and testing; that Entropy's RECC™ technology will reduce equipment costs, minimize operating costs and maximize recovery efficiency; the anticipated benefits to be provided by the Corporation's Entropy23™ technology, including that it will reduce energy costs, operating costs and equipment capital requirements; Entropy's expectations that it will be a global CCS leader; the Entropy process details disclosed on slide 9 to this presentation, including the anticipated emissions, carbon capture efficiency and overall reduction of original emissions provided by a single project; the anticipated benefits to be derived from the Glacier Gas Plant Phase 1, Phase 1b, and Phase 2 project, including the effect of the CCS and WHR technology on emissions; anticipated capital cost for the Glacier Gas Plant Phase 1, Phase 1b, and Phase 2 project, including the expected sources of funding; anticipated timing of completion and onstream dates for the Glacier Gas Plant Phase 1, Phase 1b, and Phase 2 project; expected carbon capture and reduced emissions, cost of energy input and operating costs, reduction in fuel costs and process costs, NPVs and internal rates of return from the Glacier Gas Plant Phase 1, Phase 1b, and Phase 2 project; that projects to be developed by Entropy will be profitable at current carbon prices; anticipated growth in the CCS market and that growth projects will be available to Entropy; Entropy's expectations of the cash flows to be derived from an illustrative single project; Entropy's expectations of the amount of CO_2 that will be removed from the atmosphere by an illustrative single project; Entropy's expectations that its business development initiatives will lead to new commercial projects and the expected commercial terms of such projects; anticipated CAGR growth in global annual captured CO_2; anticipated global carbon price benchmarks; Entropy's expectations that carbon tax prices will increase and that Entropy is positioned to realize upside on increases in carbon prices; that Entropy has line of sight to positive EBITDA by 2023; government initiatives, targets and policies; the potential to stack credits pursuant to the Clean Fuel Regulation and the benefits to be derived therefrom; and anticipated global annual captured CO_2 and carbon capture capacity by region. Entropy's actual decisions, activities, results, performance or achievement could differ materially from those expressed in, or implied by, such forward-looking statements and accordingly, no assurances can be given that any of the events anticipated by the forward-looking statements will transpire or occur or, if any of them do, what benefits that Entropy will derive from them.

With respect to the forward-looking statements contained in this presentation, Entropy has made a number of material assumptions regarding, but not limited to: conditions in general economic and financial markets; effects of regulation by governmental agencies; receipt of partner, regulatory and community approvals; current or, where applicable, assumed industry conditions, laws and regulations will continue in effect or as anticipated; current and future carbon prices and royalty regimes; the price of and market for carbon credits and offsets; availability of government initiatives to Entropy; future exchange rates; future interest rates; future inflation rates; future operating costs; availability of skilled labor; availability of equipment; the impact of increasing competition; the impact of improving technologies; that Entropy's focus on scale and capital efficiency will allow it to make an impact on global carbon emissions; the performance of our proprietary novel carbon capture solvent, Entropy23™; the performance of Entropy's modular carbon capture and sequestration and heat capture technologies; the capital efficiency for projects; the anticipated amount of carbon dioxide captured, stored and offset; the commercial terms to be negotiated for projects; that Entropy will have the ability to develop projects in the manner currently contemplated; the timing and amount of capital cost; that the estimates of Entropy's cost structure and the assumptions related thereto are accurate; that Entropy's conduct and results of operations will be consistent with its expectations; the impact of increasing competition; the price of and market for carbon credits and offsets; that Entropy will have sufficient cash flow, working capital, debt or equity sources or other financial resources required, at a cost of capital as contemplated, to fund its capital and operating expenditures and requirements as needed; that Entropy's conduct and results of operations will be consistent with its expectations; that Entropy will have the ability to develop projects in the manner currently contemplated; current or, where applicable, assumed industry conditions, laws and regulations will continue in effect or as anticipated; the impact of improving technologies; that Entropy will continue to have a right of access to an existing sequestration facility for the Glacier Gas Plant project; and that the estimates of Entropy's cost structure and the assumptions related thereto are accurate in all material respects.

ADVISORY (continued)

Forward Looking Information and Statements (continued)

These statements involve substantial known and unknown risks and uncertainties, certain of which are beyond Entropy's control, including, but not limited to: conditions in general economic and financial markets; effects of regulation by governmental agencies; the price of and market for carbon credits and offsets; current and future carbon prices and royalty regimes; future interest rates; future exchange rates; future inflation rates; future operating costs; current or, where applicable, proposed assumed industry conditions, laws and regulations will continue in effect or as anticipated; Entropy's expectations generally and with respect to its project development and future plans are different than anticipated; that Entropy will have the ability to develop and deploy the projects in the manner currently contemplated; that Entropy will have sufficient cash flow, working capital, debt or equity sources or other financial resources required to fund its capital and operating expenditures and requirements as needed; that Entropy will not receive anticipated partner, regulatory and community approval; availability of skilled labor; availability of equipment; the impact of increasing competition; timing and amount of capital cost; the impact of improving technologies; that the anticipated growth in the CCS market does not occur; that growth projects are not available to Entropy; that Entropy will not make an impact on global carbon emissions; the performance of Entropy's proprietary novel carbon capture solvent, modular carbon capture and sequestration and heat capture technologies, iCCS™ technologies and RECC™ technologies are different than anticipated; Entropy is unable to obtain patents for its patent pending and other technology; the Glacier Gas Plant projects will not be completed when expected and for the capital cost as estimated; that Entropy's projects will not lead to new commercial projects; the risk that each project's emissions, carbon capture efficiency and overall reduction of original emissions are different than anticipated; the estimates of Entropy's cost structure and the assumptions related thereto are accurate in all material respects; the anticipated amount of carbon dioxide captured, stored and offset is consistent with expectations; that Entropy will not be positioned to realize upside on future increases in carbon prices; Entropy's first commercial project will not be profitable on the timing anticipated or at all; the demand for CCS projects will not increase; and the commercial terms to be negotiated for projects are different than anticipated.

Management has included the summary of assumptions and risks related to forward-looking information in order to provide shareholders with a more complete perspective on Entropy's future operations and such information may not be appropriate for other purposes. Entropy's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking statements and, accordingly, no assurance can be given that any of the events anticipated by the forward-looking statements will transpire or occur, or if any of them do so, what benefits that Entropy will derive therefrom. Readers are cautioned that the foregoing lists of factors are not exhaustive. The Corporation and Management believe that the statements have been prepared on a reasonable basis, reflecting Management's best estimates and judgments. However, because this information is highly subjective and subject to numerous risks including the risks discussed above, it should not be relied on as necessarily indicative of future results. These forward-looking statements are made as of the date of this presentation and Entropy disclaims any intent or obligation to update publicly any forward-looking statements, whether as a result of new information, future events or results or otherwise, other than as required by applicable securities laws.

Market, Independent Third Party and Industry Data

Certain market, independent third party and industry data contained in this presentation is based upon information from government or other independent industry publications and reports or based on estimates derived from such publications and reports. Government and industry publications and reports generally indicate that they have obtained their information from sources believed to be reliable, but none of Entropy or its affiliates have conducted their own independent verification of such information. This presentation also includes certain data derived from independent third parties, including, but not limited to, the anticipated government planned carbon pricing framework and competitor CCS projects and the details thereof. While Entropy believes this data to be reliable, market and industry data is subject to variations and cannot be verified with complete certainty due to limits on the availability and reliability of raw data, the voluntary nature of the data gathering process and other limitations and uncertainties inherent in any statistical survey. None of Entropy or its affiliates have independently verified any of the data from independent third-party sources referred to in this presentation or ascertained the underlying assumptions relied upon by such sources.

Information Regarding Public Issuer Counterparties

Certain information contained in this presentation relating to the Corporation's public issuer counterparties and the nature of their respective businesses is taken from and based solely upon information published by such issuers. None of Entropy or its affiliates have independently verified the accuracy or completeness of any such information.

No Implied Obligation or Warranty

Entropy makes no representation or warranty of any kind, express or implied, in respect of the information contained in this presentation, including correctness, accuracy, completeness or suitability for any particular purpose, and the information provided in this presentation is provided strictly on an "as is" basis. Except as required by applicable securities laws, Entropy undertakes no obligation to update such information. The information provided in this presentation was made as of the date of this presentation and was provided for the purpose of providing further information about the Corporation's anticipated future business operations. Readers are cautioned that the information contained in this presentation should not be used for purposes other than for which it is disclosed herein.

ADVISORY (continued)

Specified Financial Measures

Entropy discloses several financial and performance measures that do not have any standardized meaning prescribed under International Financial Reporting Standards ("IFRS" or "GAAP"). These specified financial measures should not be considered to be alternatives to, or more meaningful than measures determined in accordance with GAAP including net income, comprehensive income, cash provided by operating activities, or cash used in investing activities. Management believes that these measures provide an indication of the potential results that could be generated by the Corporation's principal business activities and provides useful supplemental information for analysis of the Corporation's potential operating performance and liquidity. Entropy's method of calculating these measures may differ from other companies, and accordingly, they may not be comparable to similar measures used by other companies.

Non-GAAP Financial Measures

Annual net operating income is calculated as revenues less operating costs and royalties. Annual net operating income is presented for the Advantage Glacier Gas Plant project and provides users with a measure of project returns that enables the comparison of different projects, operations and similar businesses prior to corporate items such as general and administrative costs and financing expenses.

EBITDA is calculated as net income before interest, taxes, depreciation and amortization. Management believes that this measure provides an indication of the results generated by Entropy's principal business activities and provides useful supplemental information for analysis of Entropy's operating performance and liquidity before considering how the business is capitalized or financed.

Capital includes expenditures to construct carbon capture and storage facilities, intangible assets and includes cash receipts on government grants. Management considers this measure reflective of actual capital activity as it excludes changes in working capital related to other periods.

Free cash flow is calculated as annual net operating income less capital. Free cash flow is presented for the Illustrative Single Project economics and provides users with a measure of project returns that enables the comparison of different projects, operations and similar businesses prior to corporate items such as general and administrative costs and financing expenses. The Corporation also discloses, cumulative free cash flow, which is free cash flow generated over a multiple year period.

Non-GAAP Ratios

Payback is the period of time, typical expressed in years, whereby the annual net operating income recovers or pays back the initial capital cost of a particular project. Payback is considered by management to be a useful performance measure as a common metric used to evaluate capital allocation decisions.

Supplementary Financial Measures

Entropy discloses a number of supplementary financial measures, including "net present value (NPV10)", "internal rate of return (IRR)“ and "break even carbon price (BECP)", which do not have standardized meanings or standard methods of calculation and therefore such measures may not be comparable to similar measures used by other companies and should not be used to make comparisons. Such metrics have been included to provide users with additional measures to evaluate the Corporation’s performance; however, such measures are not reliable indicators of the future performance of the Corporation and future performance may not compare to the performance in previous periods and therefore such metrics should not be unduly relied upon. NPV10 is the difference between the present value of cash inflows and the present value of cash outflows over a period of time at a 10% discount rate. Internal rate of return is a metric used in financial analysis to estimate the profitability of potential investments whereby the internal rate of return is a discount rate that makes the net present value equal to zero in a discounted cash flow analysis. Break even carbon price denotes the carbon price of a project that is equal to the net present value of capital and operating costs divided by the total CO_2 captured over a 30-year period, with both the numerator and denominator discounted at 10%. Management uses these finance metrics for its own performance measurements and to provide users with measures to compare Entropy’s economic returns and operations over time. Readers are cautioned that the information provided by these metrics, or that can be derived from the metrics, as presented in this presentation, should not be relied upon for investment or other purposes.