JEV JERICHO ENERGY VENTURES

ADVANCING THE ENERGY TRANSITION

TSXV: JEV | OTC: JROOF | FRA:JLM

APRIL 2024

FORWARD LOOKING STATEMENT

FORWARD LOOKING INFORMATION AND STATEMENTS

- Presentation and Reader Advisory

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ENTRY POINT - POWERING THE NET-ZERO ECONOMY

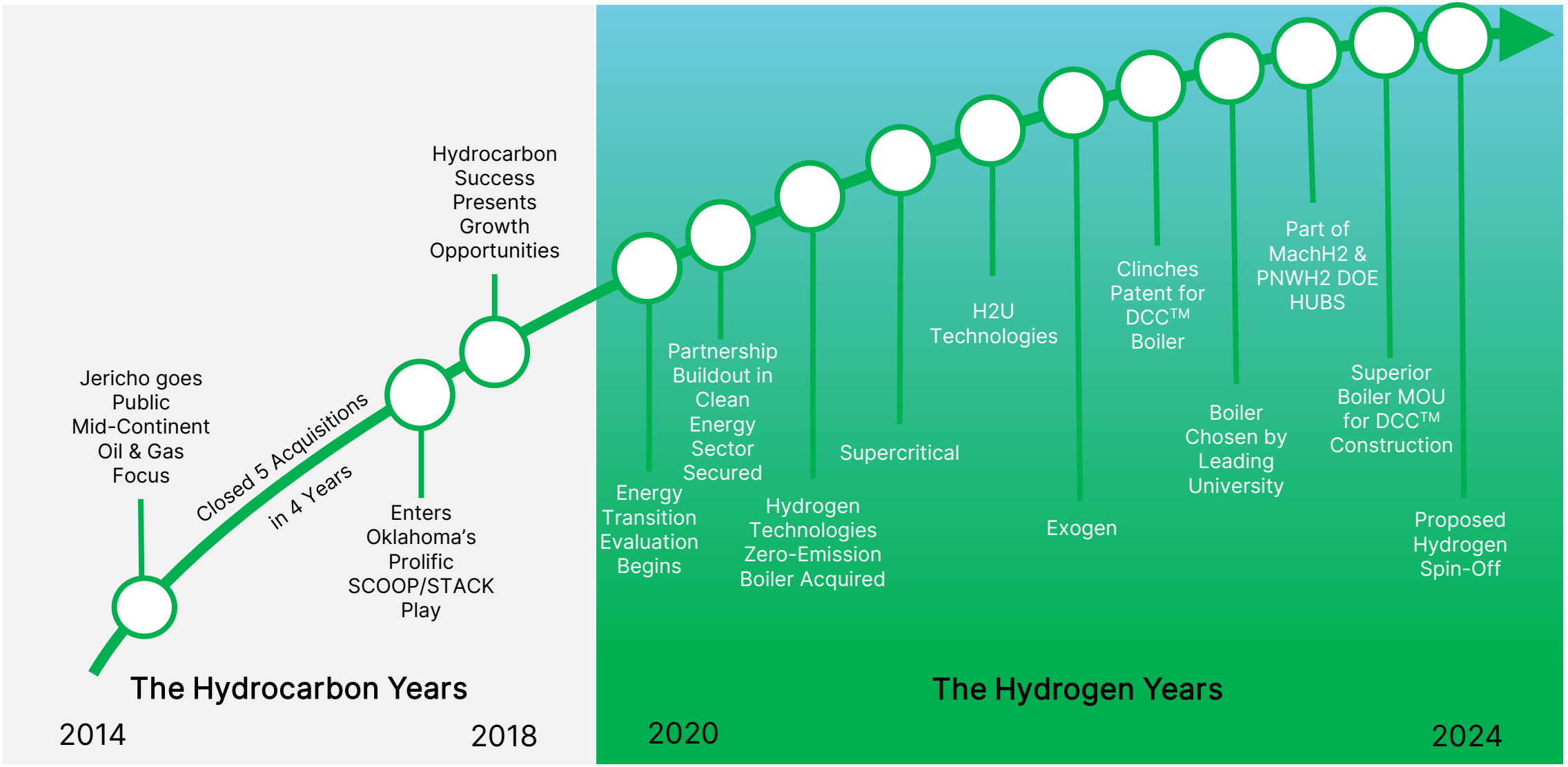
High-quality North American hydrocarbon assets enable investments in new hydrogen growth opportunities driving the energy transition

JEV owns key patents and operates hydrogen technology businesses in all three verticals: commercial, industrial and the built environment

Leveraging deep domain expertise from traditional energy businesses for new frontiers in hydrogen and renewable energy technologies

OUR MISSION IS TO DELIVER FUNDAMENTAL TECHNOLOGIES ENABLING A NET-ZERO FUTURE. WE LEVERAGE DEEP ENERGY-SYSTEM DOMAIN EXPERTISE FOR INVESTING IN NEW HYDROGEN GROWTH OPPORTUNITIES. WE OFFER INVESTORS ACCESS TO KEY TECHNOLOGIES IN A FLOURISHING GREEN ECOSYSTEM.

EVOLVING GROWTH IN THE ENERGY TRANSITION



THE ENERGY TRANSITION TAILWINDS

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GOVERNMENT AND PUBLIC POLICY

197 Countries that have adopted the Paris Climate Accord

5 Largest Global Economies have announced Net Zero Carbon Emissions targets (U.S., China, Japan, EU, India)

1.5 Degree Limit on Global Temperature Increase (vs. pre-industrial)

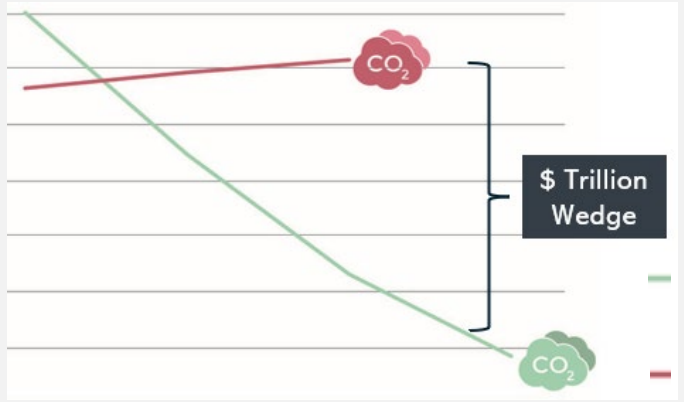
INVESTOR & SOCIETAL DEMANDS[1]

- 30 global institutional investors representing >$5trn assets formed the Net-Zero Asset Owner Alliance, aligning portfolios with the Paris Agreement
- Blackrock, the largest asset manager, and other funds holding $18trn in assets have announced reallocating capital towards sustainable & purposeful investments
- In the past several years, global assets invested in ESG ETFs have increased over 1000% going from $22bn in 2018 to nearly **$248bn** as of April 2023

CORPORATE INVESTMENT WITH AMBITIOUS NET-ZERO CARBON PLEDGES

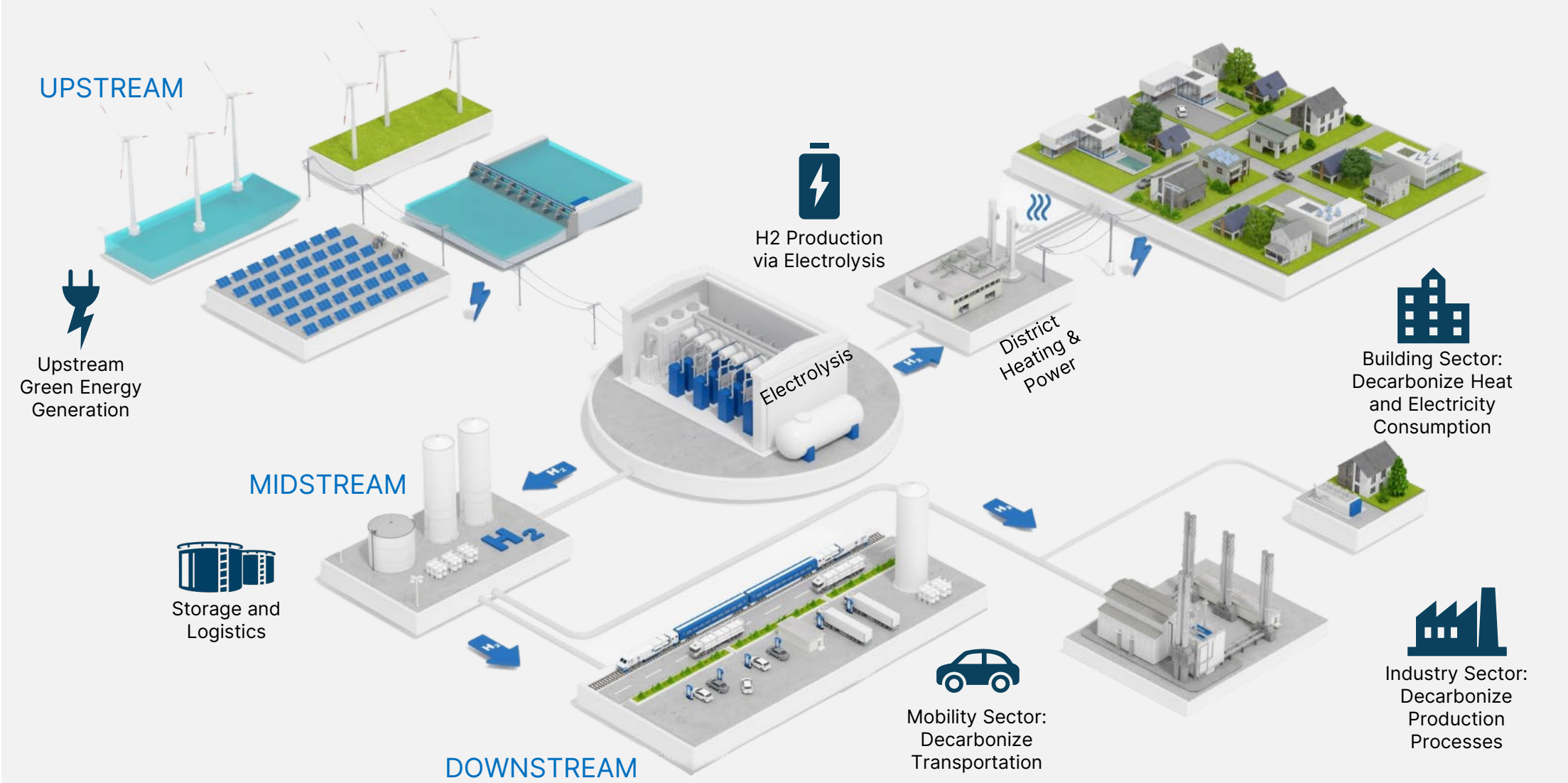
GM, DuPont, J.P.Morgan, bp, Dow, Johnson & Johnson, jetBlue, Walmart, Microsoft, Shell, Union Pacific

NET-ZERO GOALS THROUGH 2050 CREATE A ONCE IN A GENERATION INVESTMENT WEDGE



[1]Source: Wall Street Equity Research; Raymond James (2020), BAML (2020); all figures in USD.

BOOMING HYDROGEN ECOSYSTEM



WE OFFER LEADING TECHNOLOGIES ACROSS H2 PRODUCTION, STORAGE, AND APPLICATIONS

THE ENERGY TRANSITION STRATEGY

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OUR LOW-CARBON TECHNOLOGY OBJECTIVES

Identify pre or early-revenue growth companies with game-changing H2 technology based on our deep domain expertise

Prioritize the surge in interest from corporate clients. As a business operator we understand fundamental technology drivers and see global demand early

Rigorous product market fit analysis through our own operations and verified by corporate partners, informed by their pain points to adoption

MACRO BACKDROP HAS MULTIPLE TAILWINDS

COP26 in Glasgow, Scotland created a watershed event for hydrogen setting ambitious 2030 targets

The U.S. Reconciliation Bill outlines a $3 / kg Production Tax Credit, lining up the most consequential piece of hydrogen legislation

The U.S. recently passed (Nov'21) the Build Back Better Infrastructure Plan with $9.5 billion in funding for hydrogen

Green hydrogen is the only clean molecule recognized in the Net Zero plans adopted to date by the EU

CURRENT ENERGY TRANSITION GROWTH DRIVERS

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OUR ENERGY TRANSITION PORTFOLIO

Hydrogen-Based Application Technologies

HYDROGEN TECHNOLOGIES

Zero Emissions Hydrogen Boiler

Owned by JEV

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Patented method for combining H2 and O2 in a vacuum to create high-temp heat and steam

Hydrogen Generation & Enabling Technologies

H2U Technologies

Low-Cost Electrolyser

Co-Led Minority Investment Stake

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Novel and disruptive Proton Exchange Membrane (PEM) design with upgradeable catalysts

H2U Technologies

AI-Driven Electro-Catalyst Discovery

Co-Led Minority Investment Stake

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Ultrahigh throughput AI and data-driven process which prepares, characterizes, and quantifies the catalytic activity of millions of compositions per month (fuel cell and electrolyser)

SUPERCRITICAL

Membrane-less, high pressure Electrolyser

Lead Minority Investment Stake

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Eliminates the need for membranes and stages of gaseous compression in an ultra-efficient, high-pressure output electrolyser (200bar+) for use in H2 applications

PORTFOLIO GROWTH DRIVER AND CATALYST

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HYDROGEN TECHNOLOGIES

Hydrogen-Based Application Technologies

CHEMICAL REACTION SOULTION

+US$19BN
Annually[1]

- 37% of fossil fuels burned for Industrial Utilization in the US is to produce steam
- Global heating and steam markets account for >15% of all CO2 emissions
- Macro-tailwinds driven by rising carbon pricing and policy decisions to eliminate sales of new fossil-based boilers and will increase adoption

5-7%
Annual CAGR[1]

INDUSTRIES THAT CONSUME THE HIGHEST % OF FOSSIL FUEL TO GENERATE STEAM:

		% of Total Fossil Fuel Usage for Steam Generation
Pulp and Paper	• Steam is the key component in refining and treating wood chips before they are pulpified • High fossil fuel emissions from steam generation	81%
Food and Beverage	• Steam heat used for sterilization, disinfecting, cooking, curing, and drying • Hot water and steam for boiling and pasteurization	57%
Chemical / Petrochemical	• Steam is utilized to heat and cool reactors that operate in a cyclical fashion • Steam is used to produce various by-products (jet fuel, ammonia, chlorine, etc.)	42%
Oil refineries and Production	• High-pressure condensate return system's conserve energy by pumping hot water directly into steam boilers • Utilize steam as a key component in enhanced recovery operations (i.e. SAGD)	30%
Commercial Properties	• Commercial properties typically use a boiler as part of a district energy system • Utilize steam as the major input for space heating and hot water	28%

[1] Sources: MarketsandMarkets, "Industrial Boilers Market by Fuel, Boiler, Function, Boiler Horsepower, End-Use Industry And Region - Global Forecast to 2030," March 10, 2023 & Fortune Business Insights, "Commercial Boiler Market, 2021-2028," Feb. 11, 2022.

PORTFOLIO GROWTH DRIVER AND CATALYST - HT

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HYDROGEN TECHNOLOGIES

Hydrogen-Based Application Technologies

WITH A PATENTED **DYNAMIC COMBUSTION CHAMBER (DCC™)** TECHNOLOGY, HYDROGEN TECHNOLOGIES MANUFACTURES AND SELLS ITS BREAKTHROUGH, INNOVATIVE, HYDROGEN-BASED BOILERS FOR COMMERCIAL AND INDUSTRIAL SCALE

CHEMICAL REACTION SOLUTION

- CleanH2steam DCC™ boiler is HT's proprietary hydrogen-based boiler
- The scalable process is based on combining pure hydrogen and pure oxygen to form water molecules – this reaction releases 61,000 BTUs (heat index) per pound of hydrogen
- Pure hydrogen and pure oxygen combine (in the presence of a spark) which exothermically converts back to water (think: steam) in a high-temperature reaction, creating a mild vacuum owing to the condensing characteristic of the chemical reaction
- Critically, hydrogen burns in the ultraviolet (with little to no radiant heat) compared to typical fossil-based combustion processes where radiant heat (energy) is released and lost
- The chemical reaction fully captures the total heat of steam, allowing for the greatest amount of heat retained in the combustion reaction of hydrogen and oxygen
- The boiler system was designed based on the chemical reaction to function as a closed-loop system, eliminating all need for typical combustion exhaust

JEV IS CURRENTLY DEPLOYING / INSTALLING DCC™ BOILERS AROUND THE WORLD

PORTFOLIO GROWTH DRIVER AND CATALYST – H2U

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Hydrogen Generation & Enabling Technologies

H2U IS THE LEADING DEVELOPER OF ABUNDANT, LOW COST, EFFICIENT, AND DURABLE CATALYSTS AND SYSTEMS FOR HYDROGEN GENERATION AND FUEL CELLS.

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Caltech spin-out startup using AI-driven chemistry to catalyze the Hydrogen Economy

- Caltech scientists awarded $122mm from DOE - IP licensed exclusively to H2U

H2U has developed a proprietary electrocatalyst platform focused on the discovery of non-rare earth catalysts for generation of clean hydrogen – accomplished one million times faster than any other method

Initial Catalyst Discovery has found cheap, earth abundant Oxygen Evolution Reaction and Hydrogen Evolution Reaction catalysts

- Relationship with De Nora (Top 5 MEA manufacturer) to screen and license a new chlorine catalyst in addition to MEA testing of H2U's family of non-rare earth catalysts for electrolysis

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Proprietary low-cost PEM electrolyser, utilizing in-house earth abundant catalysts

Commercial Pilot to verify non-rare earth catalyst PEM design with SoCalGas, the largest gas distributor in the United States

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- Series A Preferred Shares
- Total Round: US$7.0mm
  - JEV Investment: US$1.5mm (PF Ownership: 6.5%)
  - Co-Investors: Hess Oil Corp, Dolby Family Ventures, Motus Ventures
    - Use of Funds: Setup HTE catalyst discovery system and technology pilot EL with SoCalGas

PORTFOLIO GROWTH DRIVER AND CATALYST - SUPERCRITICAL

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SUPERCRITICAL

Hydrogen Generation & Enabling Technologies

SUPERCRITICAL ELIMINATES THE NEED FOR MEMBRANES AND STAGES OF GASEOUS COMPRESSION IN AN ULTRA-EFFICIENT, HIGH-PRESSURE OUTPUT ELECTROLYSER (200BAR+) FOR USE IN H2 APPLICATIONS

ULTRA-EFFICIENT, HIGH-PRESSURE, MEMBRANE-LESS ELECTROLYSER

Pain Point: Nearly all H2 today is utilized in high pressure applications - However, current electrolysers output low-pressure H2 (membranes cannot tolerate heat and pressure), thus, requiring costly compression (US$1.00-1.50/ kg) for nearly every current H2 application

Solution: Membraneless electrolyser architecture that can output H2 at pressure required by end-users

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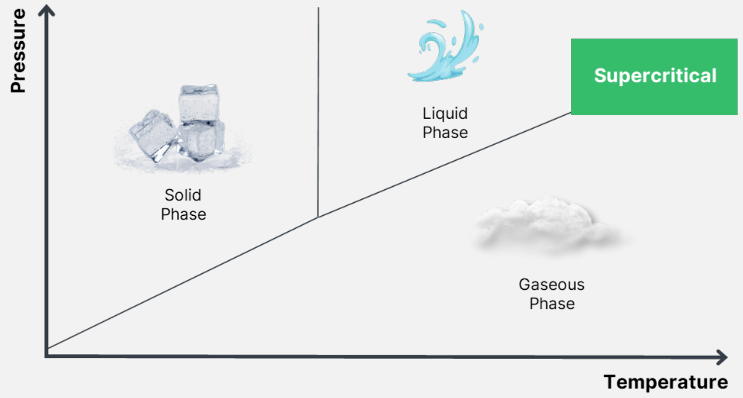
- High-pressure electrolysis is performed by removing the membrane and applying heat and pressure to the WATER before the electrolysis process which reduces the thermodynamic barriers and increases kinetics, allowing for lower overpotential (i.e., increased efficiency)
  - SC's design exploits the benefits of electrolysis of water under thermodynamic supercritical conditions
  - The result is >200bar output of H2 and O2 gases

Why is this important?

- Eliminating the need for expensive multi-stage compression (US$1.00-1.50/kg)
- 55% of all H2 today is used for Ammonia, which requires the same pressure that Supercritical produces H2, allowing for clear go-to-market strategy

KEY DEAL TERMS

- Co-investors / Commercialization Partners: Lowercarbon Capital, Anglo American, New Energy Technology, Deep Science Ventures
- Seed Preferred Shares
- Total Round: US$3.45mm
  - JEV Lead Investment: US$1.78mm (PF Ownership: 10.3%)
  - Use of funds: Technology Pilot



PORTFOLIO GROWTH DRIVER AND CATALYST – EAGLE ROAD OIL

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TOTAL ASSETS

01 Average 12 Month Prod: 305 BOPD, 1,959 MCFD

02 Well Status: 61 Active PDP Cases

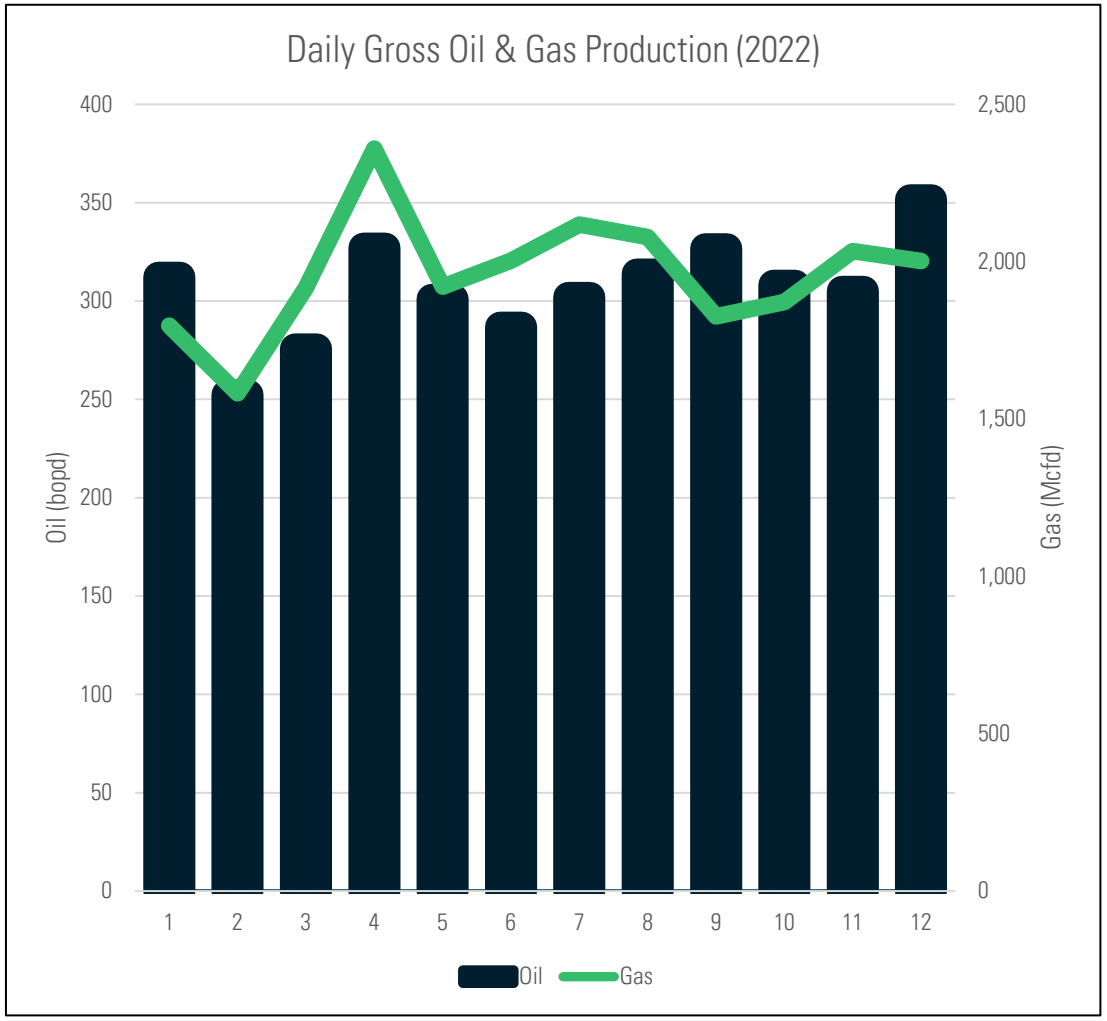
03 Average NRI: 80%+

04 Acreage: 41,000

05 Total Proved PV10: ~$43.7mm ($54.3mm-SEC 2022 Price Deck)*

06 Total Proved Reserves: 1,630 Mbo, 2,533 Mmcf, 325 Mbbls NGL

*PV10 is from 51-101 Report and incorporated into 2022 YE audited financials for JEV's interest in oil and gas properties in Oklahoma. SEC Pricing is not audited and represents the YE 2022 SEC Price Deck. Jericho holds a varying ownership percentage in its oil and gas joint ventures. Please refer to pg.4 of JEV's FY 2022 MD&A for more



EXPERIENCED SENIOR MANAGEMENT

BRIAN WILLIAMSON
CEO, Director

- Spent 20+ years at various financial institutions and family offices in investment leaderships roles (Arthur Anderson, The Harbor Group)
- Collectively managed $1bn+ in assets focused on oil and gas and energy investments
- JD & CPA by education

BEN HOLMAN
CFO, Director

- Experienced financial leader with 18 years in financial management and accounting
- Held senior-level positions at Apco Oil & Gas, former subsidiary of The Williams Companies and WPX Energy

RYAN BREEN
Head of Corporate Strategy

- Drives company-wide strategy focused on due diligence, deal structuring and execution for new investments
- Prior experience within J.P. Morgan's investment banking group advising Fortune 500 clients focused on Multi-Industrial, Aerospace & Defense and Transportation opportunities

DEAN MORETTON
Chief Commercial Officer

- 30+ Year Energy Industry Executive
- Led Larsen & Toubro Global Digital Solutions Group Sales & Partnership efforts
- President of Arc IT
- Product Director at Alstom
- Electrical Engineer by Education

ADAM RABINER
Director of Investor Relations

- 20 years' experience in investor relations and marketing communications.
- Managing Director of Sequoia Partners Inc
- Award winning journalist

JANET REISER
President, Hydrogen Technologies

- Policy maker and senior executive over the last 35 years, previously headed up the governmental Alaska Energy Authority
- Chemical Engineer by education

TONY BLANCATO
Director of Business Development & Marketing

- Spearheads new shareholder opportunities & maintain relations with current shareholders, the investment community, and other constituencies
- Oversees online & social media presence to maximize share price and create a positive image

JOURDAN URBACH
Senior Technical Advisor

- Most recently worked at McKinsey & Co., where he helped build their internal venture capital group, serving as Product Manager or interim CTO of a portfolio of over 20 internal startups, called McKinsey Solutions
- Co-founded Mass Lab, Director of R&D at Mimedia, Neurogenomics researcher specializing in bioinformatics, Harvard & MIT

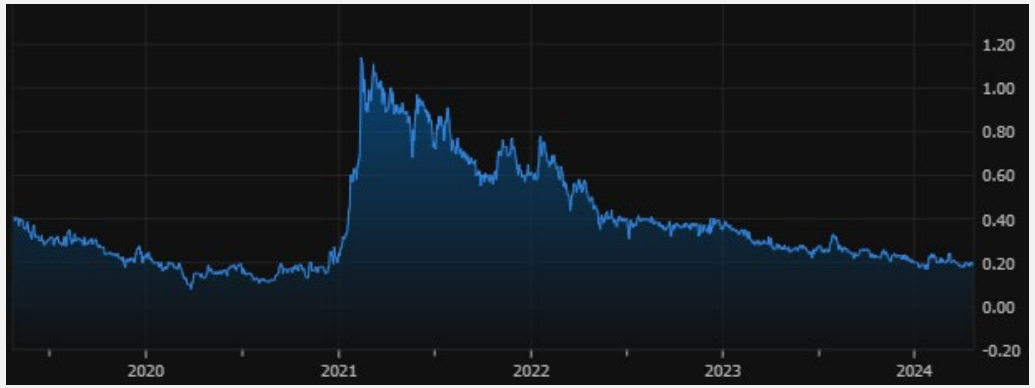
ROMI KADRI
Senior Technical Advisor

- 25+ granted patents, $100mm+ venture investing experience
- Led innovation at $1bn+ public company
- Serves on the board of several tech companies and advises fusion energy company TAE & MIT's Martin Trust Center for Entrepreneurship

MARKET AND ADDITIONAL INFORMATION

JEV BY THE NUMBERS

- TSX.V: JEV
- OTC: JROOF
- FRA: JLM
- Shares Issued & Outstanding: 259.3m
- Options: 16.8m
- Warrants: 28.1m
- Market Cap (CDN): $47m
- Share Price (CDN): $0.18- As of April 1st, 2024



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LOCATION OF OPERATION