



Ardmore Shipping Corporation



Investor Call: Element 1 Transaction
March 16, 2021

Disclaimer

Completion of the transactions described in this presentation, including those contemplated by the non-binding Letter of Intent (“LOI”) described in this presentation, remains subject to the negotiation and execution of definitive agreements and the satisfaction of related closing conditions. There can be no assurance that definitive agreements will be entered into or that the transactions will be consummated as contemplated.

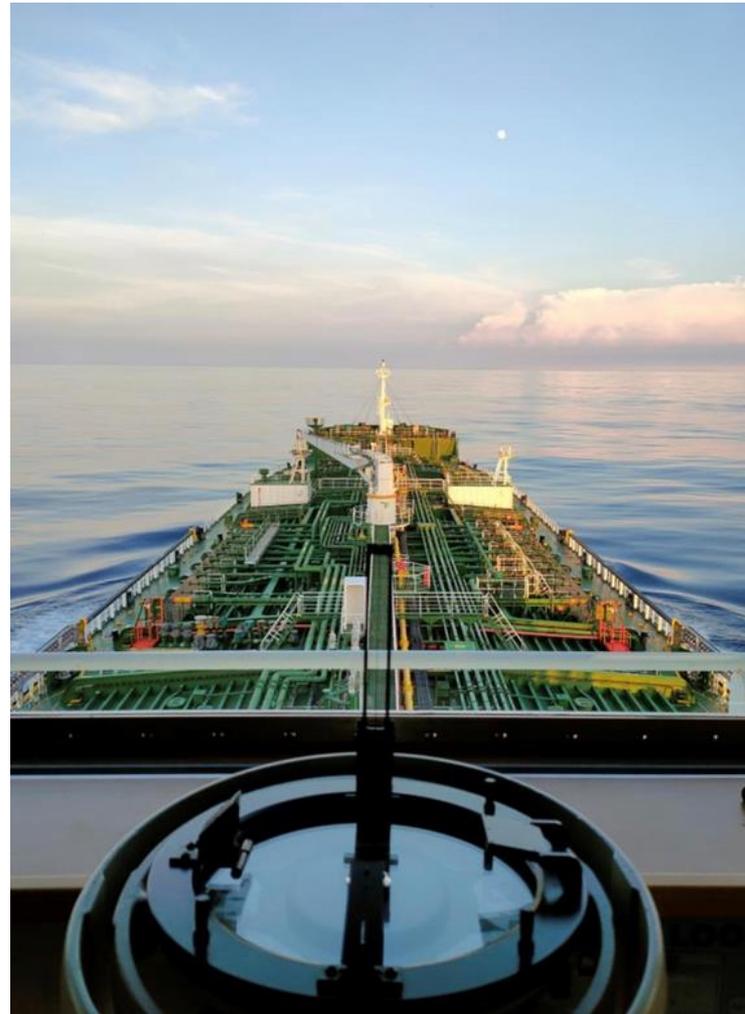
This presentation contains certain statements that may be deemed to be “forward-looking statements” within the meaning of applicable U.S. federal securities laws. All statements, other than statements of historical facts, that address activities, events or developments that Ardmore Shipping Corporation (“Ardmore” or the “Company”) expects, projects, believes or anticipates will, or may occur in the future, are among these forward-looking statements including, without limitation, statements about: the proposed joint venture with Element 1 Corp. (“E1”) and Maritime Partners LLC (“MP”), the proposed equity investment by Ardmore in E1, the proposed preferred equity investment by MP in Ardmore; the terms and timing of the proposed transactions and expected related results and benefits, including, among others, strengthening Ardmore financially and facilitating growth; E1’s hydrogen generation technology and systems and related performance and benefits; E1’s business, prospects and growth potential; the ability of the joint venture to build up e1 Marine and to successfully enter its proposed market; changes and trends in the global energy markets, and the effects of the global energy transition; Ardmore’s energy transition plan and Ardmore’s role in the global energy transition; trends in the mix of Ardmore’s cargoes, including an increase in “non-fossil fuel” cargoes; and future investments that Ardmore may make as part of Ardmore Ventures. There can be no assurance that expectations, beliefs or projections included in the forward-looking statements will be achieved or accomplished. The forward-looking statements are no guarantee of the Company’s future performance, and actual results and future developments may vary materially from those indicated or projected in the forward-looking statements.

Factors that could cause actual results to differ materially from those discussed in the forward-looking statements include, among others: the non-binding nature of the letter of intent relating to the proposed transactions and the need to negotiate and execute definitive agreements for such transactions and to satisfy related closing conditions; actual performance of E1’s technology and systems, particularly in the marine environment; the level and timing of adoption of the technology generally and by participants in the marine industry; risks relating to E1’s potential growth; Ardmore’s ability to execute its energy transition plan; trends in global energy markets and related regulations, including how they may affect the timing and extent of the global energy transition; and the risk factors described in the Company’s filings with the Securities and Exchange Commission (the “SEC”), including the Company’s Annual Report on Form 20-F for the year ended December 31, 2020. The Company expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the Company’s expectations with respect thereto or any change in events, conditions or circumstances on which any statement is based.



Overview

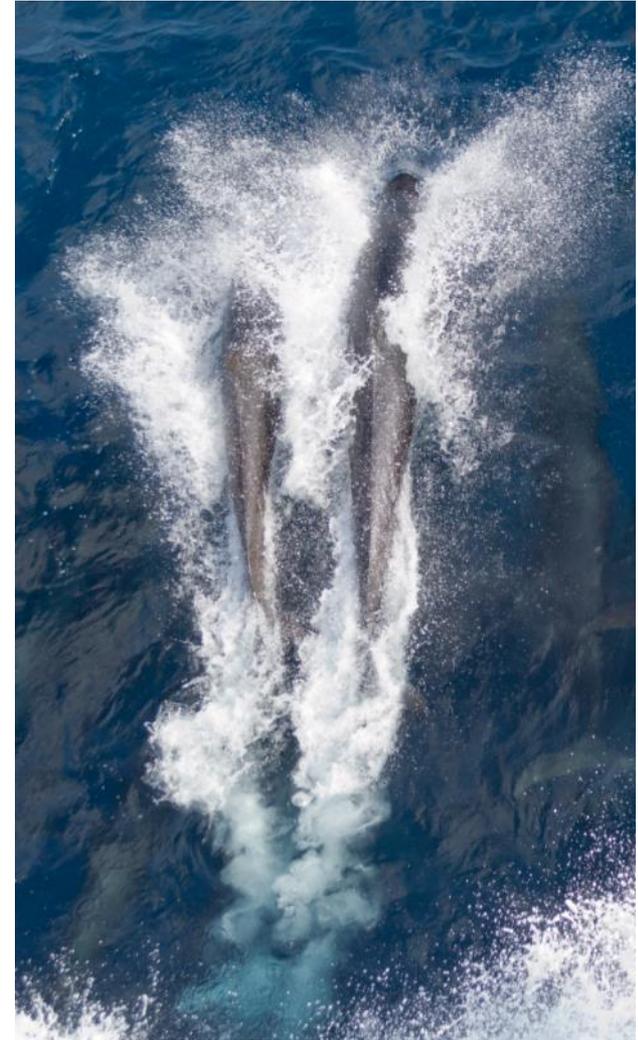
- We are pleased to announce that we have entered into a non-binding LOI for the following set of transactions:
 - Formation of **e1 Marine**, a joint venture among Ardmore, Element 1 Corp. (“E1”) and Maritime Partners, LLC (“MP”); **e1 Marine** will have a worldwide mandate for the marketing, development, licensing and sale of E1’s unique hydrogen generation technology for application to the marine sector
 - MP to invest \$40 million (consisting of \$25 million and \$15 million subject to final approval) in Ardmore in the form of perpetual preferred shares having a dividend rate of 8.5% per annum⁽¹⁾
 - Ardmore to purchase a 10% equity stake in E1 in exchange for \$4 million cash and 950,000 ASC common shares
- The transactions are subject to definitive documentation and expected to close simultaneously early in second quarter 2021
- We are very excited about the potential of the **e1 Marine** technology; it further demonstrates our commitment to supporting the decarbonization of the marine sector, consistent with our recently announced Energy Transition Plan
- The proposed transactions are a culmination of significant market research, consultation with industry experts and a focus on identifying valuable carbon-reduction technologies, investment opportunities, and commercial alliances
- We are also pleased with the investment in perpetual preferred shares by Maritime Partners which we anticipate will enhance our financial strength and support continued selective growth



1. Dividend rate is subject to potential increases upon the occurrence of customary events

Background

- We are in the business of owning and operating product & chemical tankers in worldwide trade; as part of this the Ardmore team has an intensive focus on fuel efficiency, innovation, carbon reduction, and operating performance
- The energy world is changing rapidly; this is more evolution than revolution and will unfold over years, but the pace of change is accelerating
- At Ardmore, we view the energy transition as an opportunity rather than a threat or a regulatory “check box” exercise:
 - Throughout 2020, we developed our own approach, which we recently announced as our Energy Transition Plan (“ETP”), focused on **transition technologies**, **transition projects** and **sustainable cargos**
 - **Transition technologies** relate to fuel efficiency and future fuels; both to improve our fleet performance over time, and to partner with others to facilitate deployment of technologies industry-wide
- E1 came as an early opportunity, representing an exciting application of a proven technology to solve a big problem the marine sector faces: getting hydrogen onboard safely and efficiently
 - Our aspirations for e1 Marine include potentially significant financial returns when considering scope of market
 - E1’s products have broad application beyond the marine sector; hence we are optimistic for our direct investment in E1
- As part of the ETP, we are forming “Ardmore Ventures” to hold the JV interest in e1 Marine and shares of E1 as well as other similar future potential investments



The Challenge: *Getting Hydrogen to Work*

- Hydrogen has evolved as one of the key zero-carbon fuels for the future, but it has practical challenges:
 - Very low volumetric density; requires a large tank to transport a small amount of even highly compressed hydrogen
 - Liquefied hydrogen is even more challenging than LNG and half the energy density, thus making it questionable as a marine propulsion fuel
 - Transporting and storing hydrogen is thus expensive on a per KG basis
- Options for transporting and storing hydrogen:
 - Compressed hydrogen: 350 to 700 bar containment system
 - Liquefied hydrogen: -253°C to maintain liquid state
 - Use of “carrier”: methanol and ammonia two most discussed
- PEM⁽¹⁾ fuel cells an excellent power solution for decarbonization:
 - Much more energy efficient than internal combustion engine (“ICE”)
 - When combined with renewable hydrogen (from whatever source) it is zero carbon / carbon negative
- The challenge is that low-temperature PEM fuel cells require high purity hydrogen
- E1 technology offers a competitive solution:
 - ISO grade hydrogen reformed from methanol on site
 - Delivered hydrogen is cheaper and safer than many alternatives

40 ft trailer, 31 MT gross weight, 0.7 MT compressed H₂



Large tanks needed for LH₂ (LNG tanks shown)



1. Proton-exchange Membrane (“PEM”). PEM fuel cells are the standard fuel cells currently produced by leading fuel cell manufacturers

Element 1 Hydrogen Generation Technology



Introduction to Element 1 Corp.

- Element 1 Corp (“E1”) is a leading developer of clean energy technologies, including advanced hydrogen generation systems supporting the fuel cell industry
 - Founded by Dr. Dave Edlund and Robert Schluter in 2010 and based in Bend, Oregon. Dr. Edlund is a renowned expert with over 30 years experience in hydrogen generation technology
 - E1 team has developed a unique patented technology for generating high purity hydrogen for use in low temperature PEM fuel cells
- E1 currently has three product lines to service hydrogen demand in the various markets:
 - “S” series (1kw - 10kw) / “L” series (land-based above 10kw) / “M” series (mobility)⁽¹⁾
 - Broad application including marine, road transport, land-based hydrogen filling stations, rail, power back up, industrial machinery
- Technology is unique and proven:
 - Technology involves methanol-to-hydrogen reforming and purification to ISO grade (required for low temperature PEM fuel cells) on a commercial scale
 - Currently ~250 E1 hydrogen generation systems in operation; longest operating period of a system is over 5,000 hours across a two – three-year period⁽²⁾
 - M series has completed over 5,000 km on a demonstration truck with no issues⁽²⁾
- We believe E1 is poised for significant growth; we understand there are several strategic transactions under consideration across different sector applications

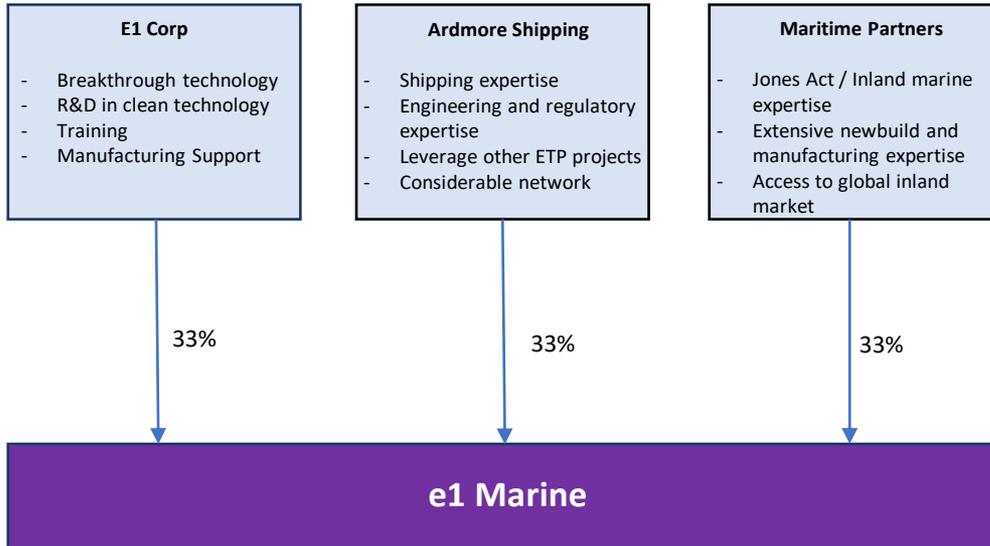


Element 1
Powering Innovation

1. “M” Series product line is now ready for commercialization and scaled-up manufacturing
2. Source: Element 1 Corp



Joint Venture: Ardmore, E1 and MP



Delivering E1 Technology to Marine Sector

- Worldwide mandate to develop, market and sell E1's products and services to the marine sector, including:
 - Deep sea shipping and inland / riverine
 - Offshore vessels and renewable energy facilities
 - Power for refrigerated intermodal containers
 - Passenger vessels / ferries, cruise ships, yachts
 - Naval and other governmental vessels
 - Fishing and other vessels
 - Port infrastructure
- Business model will primarily involve licensing and royalties with some small-scale manufacturing; not expected to be labor or capital intensive
- Will have its own organization and team across management, engineering and regulatory expertise, marketing and administration
- Managing Director has been identified and expected to be announced in the coming weeks

Advantages of E1 Technology

- E1 hydrogen generation system provides a safe and efficient solution for delivering hydrogen to PEM fuel cells as alternative to internal combustion engines:
 - ✓ Consumes approx. 35% less energy than diesel-generators, and thus more cost-effective option, even before considering new regulations or carbon tax⁽¹⁾
 - ✓ With standard methanol, hydrogen generator / fuel cell set produces zero particulates, **zero NOX, zero SOX emissions, and approx. 30-50% less CO2** than a diesel generator ⁽¹⁾
 - ✓ Ready to meet anticipated future regulatory requirements by switching to renewable methanol; system can be potentially configured for efficient carbon capture and thus carbon negative, and can be modified to run on ammonia if desired
 - ✓ Simple design and construction with high reliability and very few “moving parts” thus low maintenance and repair costs as compared to internal combustion engines
 - ✓ Potential further operational efficiency gains vs. diesel engines when matched with a battery bank to provide surge power and manage low loads
- Onboard hydrogen generation is a much more cost-effective solution than off-site production, transportation, and onboard storage:
 - ✓ Cost of producing, transporting and then storing compressed hydrogen makes it very expensive on a delivered basis
 - ✓ Compressed H2 at high pressure (350 bar) requires about 400% more space to store the same amount of energy as the methanol water mix used by E1’s system ⁽¹⁾⁽²⁾
- Methanol is a highly efficient source of hydrogen; high hydrogen content, easy to handle and store and readily available in all markets

E1: L-Series Hydrogen Generator



Marine
Getting hydrogen to work

1. Estimate based on Ardmore and E1 internal analysis of a 500kw system compared to diesel generator
2. Source: Webber Research & Advisory March 2021
3. Hydrogen at 700 bar ~40kg/m3 requires 253% more space / Liquid Hydrogen at -253 degrees Celsius requires ~34% more space



e1 Marine: Large Marine Market

Commentary

- E1 Marine has a broad mandate; all vessels and offshore support plus port infrastructure
- Potential applications include:
 - Main propulsion on small vessels
 - Auxiliary power generation
 - Land-based hydrogen refilling stations
 - Power back-up systems
- Initial research indicates a total market for 500kw unit equivalent power systems⁽¹⁾ is in a range of approx. 200,000 units (*excluding port infrastructure and offshore renewables*)⁽²⁾
- Energy transition expected to result in significant portion of all vessels installing alternative power source through fleet renewal and selective retrofit
- Even a small hypothetical market share of 5-10% developed over time would likely translate into significant revenues and value for e1 Marine

Deep Sea, Inland and Coastal



Reefer Containers⁽³⁾, Port Infrastructure, Offshore Support



Cruise Ships, Ferries, Yachts and Fishing Vessels



1. Management estimate: each E1 "M13" generator produces 100kw; generators are modular so each 500kw system would require five M13 hydrogen generators. Development underway to build 200kw+ generators
2. Management estimate based on number of vessels, auxiliary units per vessel, refrigerated containers based on Clarksons Shipping Intelligence Network in March 2021. Estimates do not include port infrastructure and offshore renewables power support
3. Modular power units for reefer containers on-board or ashore

Investment in E1 and Preferred Issuance to Maritime Partners



Ardmore: Strategic Investment in E1⁽¹⁾

- E1's technology has a very broad application with large addressable markets in several sectors (road transport, raid, land-based refilling stations, industrial machinery)
- E1 is at a pivotal stage of its development; R&D is complete, S-series is already deployed and working, and M-series products are ready for commercialization and scaled-up manufacturing
- We are pleased to have the opportunity to invest at this stage:
 - Ardmore to purchase a 10% equity stake in E1 in exchange for \$4 million cash plus 950,000 ASC common shares, representing a total investment of \$11 million assuming ASC shares at NAV of \$7.37 / share⁽²⁾
 - Warrants to be issued to Ardmore for further investment
 - Ardmore to take a seat on the E1 board of directors
- E1 business model is primarily licensing and royalties with focus on R&D and further product development:
 - Potential for significant value creation as the company scales up and additional products are developed
- In addition, and in connection with the joint venture transaction, Maritime Partners will be entitled to participate in 20% of the profits received by Ardmore from its investment in E1
- We look forward to working with E1 on the next stage of its development and contributing in a meaningful way to the next chapter in its success



Element 1
Powering Innovation

1. Completion of the transactions described in this presentation remain subject to the negotiation and execution of definitive agreements and the satisfaction of related closing conditions
2. Management estimate based on broker values for Ardmore fleet and Ardmore balance sheet as of December 31, 2020



Ardmore: Perpetual Preferred Shares⁽¹⁾

- We are pleased to commence a relationship with Maritime Partners through the JV partnership as well as its investment in Ardmore:
 - Issuance: Series A perpetual preferred shares
 - Amount: \$40 million; \$25 million with further \$15 million subject to final approval from Maritime Partners
 - Dividend Rate: 8.5% paid quarterly with option for payment-in-kind up to four quarters in any three-year period. Dividend rate may escalate subject to certain customary events
 - Issuer Redemption Option: from end of year three
- Maritime Partners is a high-quality institutional investor with expertise in asset finance and structured financing products; very focused on relationships and customer service
- The investment provides significant financial flexibility for Ardmore; further strengthens balance sheet and provides additional capital for selective growth



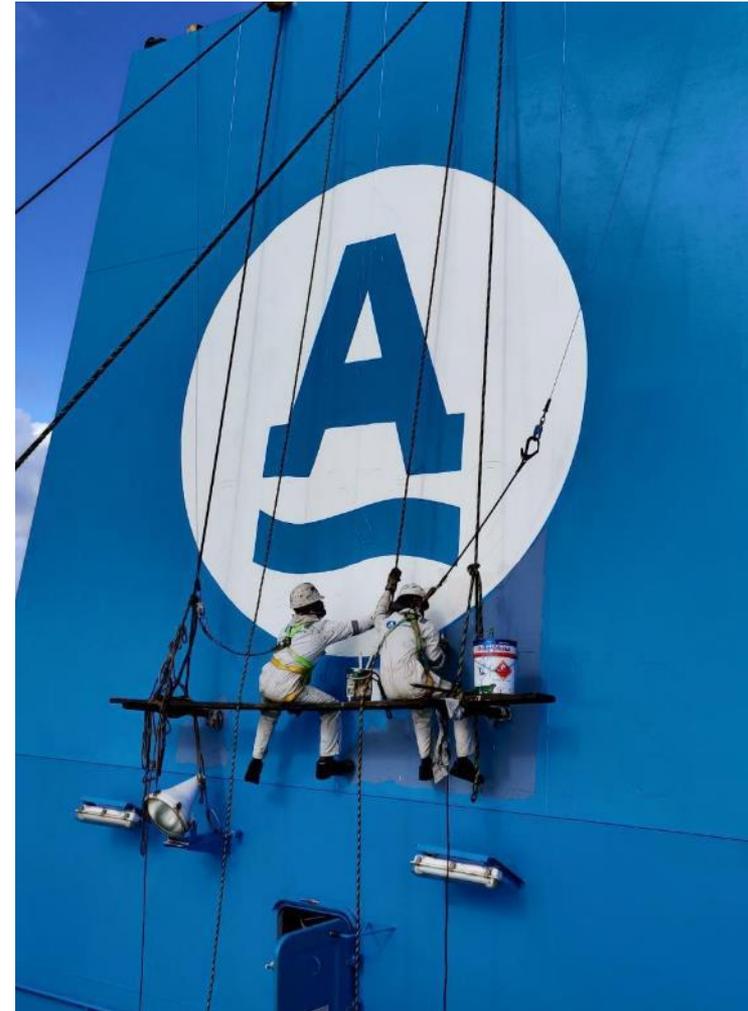
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Conclusion



Conclusion

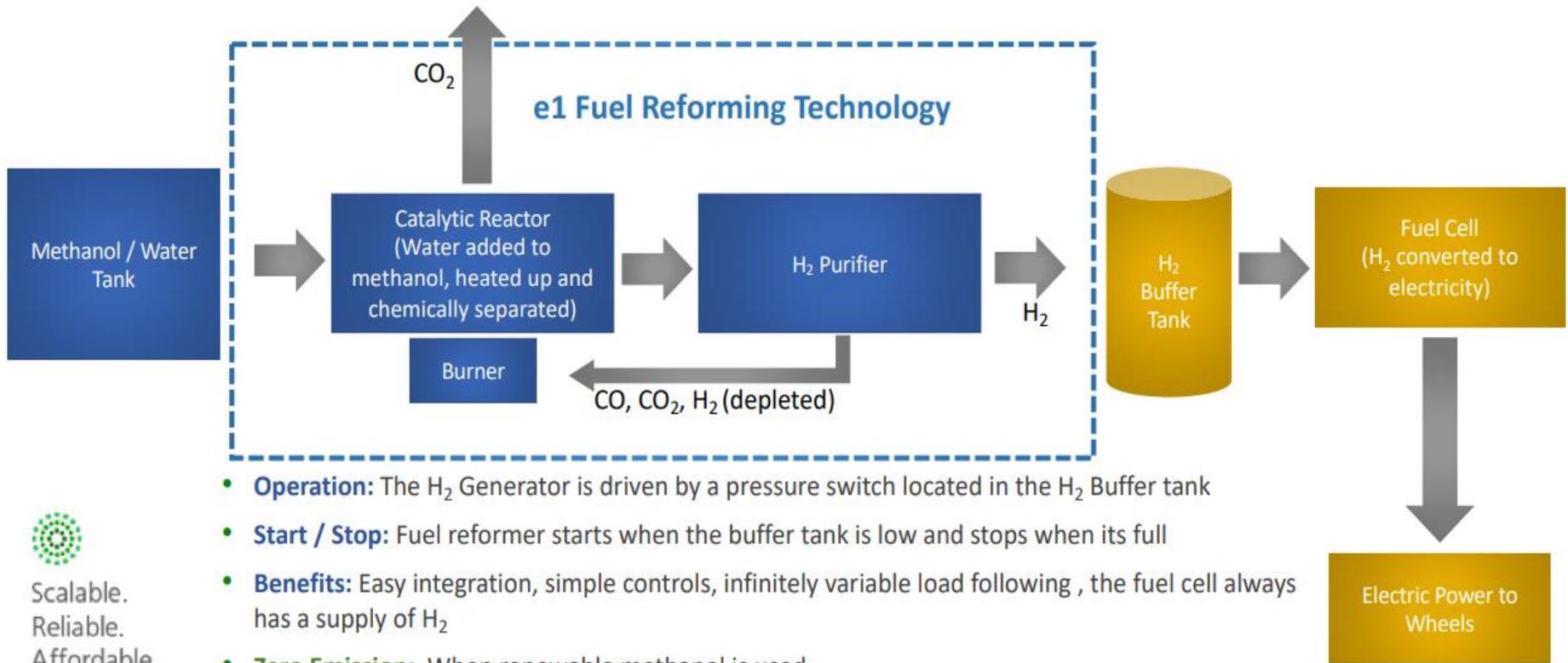
- Ardmore intends to play a pivotal role in the energy transition by leading the way toward true sustainability as a tanker company and accelerating the path to market for valuable transition technologies
- The E1 hydrogen generation system is a proven technology ready for use with a large addressable market across many industrial sectors
- We are very excited about e1 Marine:
 - The E1 system is well suited for marine application given the current challenges with transporting hydrogen in other forms
 - Hydrogen can be delivered to the fuel cell more safely, more cost effectively and in greater quantities than compressed or liquid hydrogen
 - The E1 system runs on standard or renewable methanol, can be configured for carbon capture, and can be built or retrofitted to run on ammonia
- Transactions contemplated fit neatly within Ardmore's ETP and in particular our focus on transition technologies where Ardmore can play a valuable role, leveraging our engineering expertise and sector knowledge
- We are also very pleased with the proposed \$40 million preferred share investment by Maritime Partners and look forward to developing a close ongoing working relationship
- Above all, we look forward to working with our partners in e1 Marine with a clear mission: *getting hydrogen to work*





E1 Hydrogen Generator and Fuel Cell Schematic

CO₂ output with standard methanol is 30-50% less than diesel ICE, with renewable methanol carbon neutral, can be configured for carbon capture



Source: Element 1 Corp.

Ardmore Energy Transition Plan and Ardmore Ventures

Energy Transition Technologies

- Work with technical and commercial partners to develop solutions addressing the energy transition: onboard energy efficiency and future fuels (zero carbon or carbon-neutral)
- Retrofits and newbuilding features to improve hydrodynamic efficiency, electrical load reduction and substitute power sources, main engine and power transmission efficiency, operational efficiency improvements
- Dual-fuel engine technologies, generator substitutes, fuel cell and ancillary technology applications

Energy Transition Projects

- Assist customers in addressing their own energy transition priorities by partnering in the research and development, construction, financing, and operating of vessels for long-term time charter
- Application of devices and systems developed under Energy Transition Technologies to newbuildings. Newbuilding construction supervision and other advisory services
- Arranging green financing and subsidies available to capitalize Transition Projects

Sustainable (non-fossil fuel) Cargoes

- Ardmore has a long history operating chemical tankers and cross-trading MRs into chemical tanker trades
- Presently 25% of our cargoes are “non-fossil fuel” i.e., other than gasoline, diesel, jet, and fuel oil which will decline
- These cargoes include organic and inorganic chemicals, vegetable oils, and bio-fuels which we believe are “sustainable” in the sense that demand will grow through the energy transition and they will themselves be sustainably produced

Ardmore Ventures

- Ardmore's newly incorporated holding company for investments, joint ventures and other commercial alliances related to the energy transition in keeping with the Ardmore ETP
- Leverages expertise in financing and investment, shipping operations, marine engineering and technology innovation, alternative fuels and cargoes, and carbon measurement and reduction
- Purpose is to make selective investments in proven technologies in order to accelerate their path to market

