



# ADVENT

**NEXT GENERATION  
FUEL CELL TECHNOLOGY**



Investor Presentation  
October 2020

[www.advent.energy](http://www.advent.energy)

**AMCI**  
Acquisition Corp.

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In connection with the proposed business combination between AMCI and Advent and related transactions, AMCI will file preliminary and definitive proxy statements and a registration statement on Form S-4 with respect to the proposed business combination and related matters with the SEC, and will mail a definitive proxy statement and other relevant documents to its stockholders. Investors and security holders of AMCI are advised to read, when available, the preliminary proxy statement and registration statement, and amendments thereto, and the definitive proxy statement in connection with AMCI’s solicitation of proxies for its stockholders’ meeting to be held to approve the proposed business combination and related matters and the related registration statement because the proxy statements and registration statement will contain important information about the proposed business combination and related transactions and the parties to such arrangements. The definitive proxy statement will be mailed to stockholders of AMCI as of a record date to be established for voting on the proposed business combination and related matters. Stockholders will also be able to obtain copies of the proxy statement, without charge, once available, at the SEC’s website at [www.sec.gov](http://www.sec.gov) or by directing a request to: Investor Relations, AMCI Acquisition Corp., 975 Georges Station Road, Suite 900, Greensburg, PA 15601.

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# Transaction Summary

## Advent Technologies, Inc.



**Vasilis Gregoriou**  
Founder & CEO



**Emory De Castro**  
CTO



**Nick Stamp**  
CFO

## AMCI Acquisition Corp.



**Bill Hunter**  
CEO & President

## AMCI & Advent Technologies - An ideal combination to unlock the Hydrogen Economy

### Transaction Structure

- AMCI Acquisition Corp. (“AMCI”) has proposed to enter into a business combination with Advent Technologies, Inc. (“Advent”), an innovation driven fuel cell technology company that is unlocking the Hydrogen Economy
- AMCI (NASDAQ:AMCI) is a publicly listed special purpose acquisition company with ~\$153 million of cash held in trust
- Advent and AMCI are combining to advance the development and manufacturing of Advent’s platform technology that is based on high-temperature proton exchange membranes (HT-PEM)
- The transaction will fully fund the next phase of Advent’s expansion efforts to respond to significant and immediate market opportunities
- Advent’s existing shareholders are rolling 100% of their equity
- It is anticipated that the post-closing company will retain the Advent name and be listed on Nasdaq
- The transaction is expected to close in Q4 2020

### Valuation

- Transaction implies pro forma enterprise value of \$358 million<sup>(1)</sup>
- 2.9x 2024E Revenue projection of \$122.8 million, compared to peer average of 18.4x<sup>(2,3)</sup>
- 15.0x 2024E EBITDA projection of \$23.8 million, compared to peer average of 97.8x<sup>(2,3)</sup>
- Existing Advent shareholders will receive 52% of the pro forma equity<sup>(4)</sup>
- Pro forma, Advent will have ~\$122 million of cash to help realize production ramp up



(1) TEV based on equity value assuming \$10/share, and \$1.3mm of cash as of 6/30/2020, \$121 million of new cash post-close and no debt. (2) Refer to page 36 for peer analysis. (3) Utilizes 2023E multiple for peers when 2024E is not available. (4) Refer to page 35 for additional assumptions.

# Investment Highlights

Advent is the missing puzzle piece to unlocking the Hydrogen Economy with low-cost energy solutions



Low cost, fuel-flexible and resilient fuel cell technology - solving the need for expensive hydrogen infrastructure



Developing and manufacturing the critical components for high-growth new energy markets, including transportation, off-grid, aviation and the Hydrogen Economy



Solving the range and recharge mobility problems with Li-ion batteries given greater energy storage capability



Proven, scalable business model that delivers consistent and recurring revenue, with a ~\$100m revenue opportunity per 1GW of demand



Platform technology provides critical performance benefits for a wide range of end markets, with a total estimated market size of more than 850GW by 2040



Experienced management team delivering breakthrough technology in partnership with world class research centers



# 1. Company Overview



# We Are Advent

Pioneering, critical technology for the Hydrogen Economy



## Next Generation Fuel Cell Technology

- Backed by 50+ international technology and process patents
- Fuel-flexible, lower cost, longer life - works anywhere
- Supported by industry leading partners



## Proven Product Ready for Market Adoption

- Advent's MEA products are already being used and tested for use by a number of top tier customers
- Heavy truck users beginning adoption of hydrogen fuel cells to extend EV range
- Roll-to-roll manufacturing process provides for scalable, high margin business



## Timing is Now

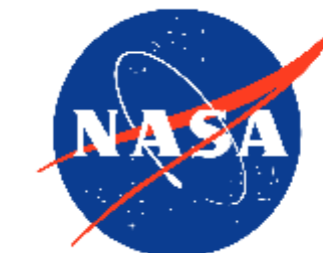
- Ramping up of EV automotive sector is inflection point for demand of fuel cells
- Success of Tesla and others provides high visibility for clean tech
- Advent's team is highly skilled in production ramp-up and ready to execute on the growth plan of the company

### Our Markets

- ⚡ Fuel cells for EV automotive, aviation and stationary / off-grid applications
- ⚡ Energy Storage
- ⚡ IoT Sensors
- ⚡ Hydrogen Production



### Our Partners



Office of ENERGY EFFICIENCY & RENEWABLE ENERGY



# Advent Fuel Cell is Flexible

## Broad market, low infrastructure cost

Advent's fuel-flexible capabilities solve the hydrogen infrastructure problem opening an immediate market opportunity

### Hydrogen

CFRP Tanks for transport, storage  
\$1.5m+ for stations

### Competition

**LT-PEM**

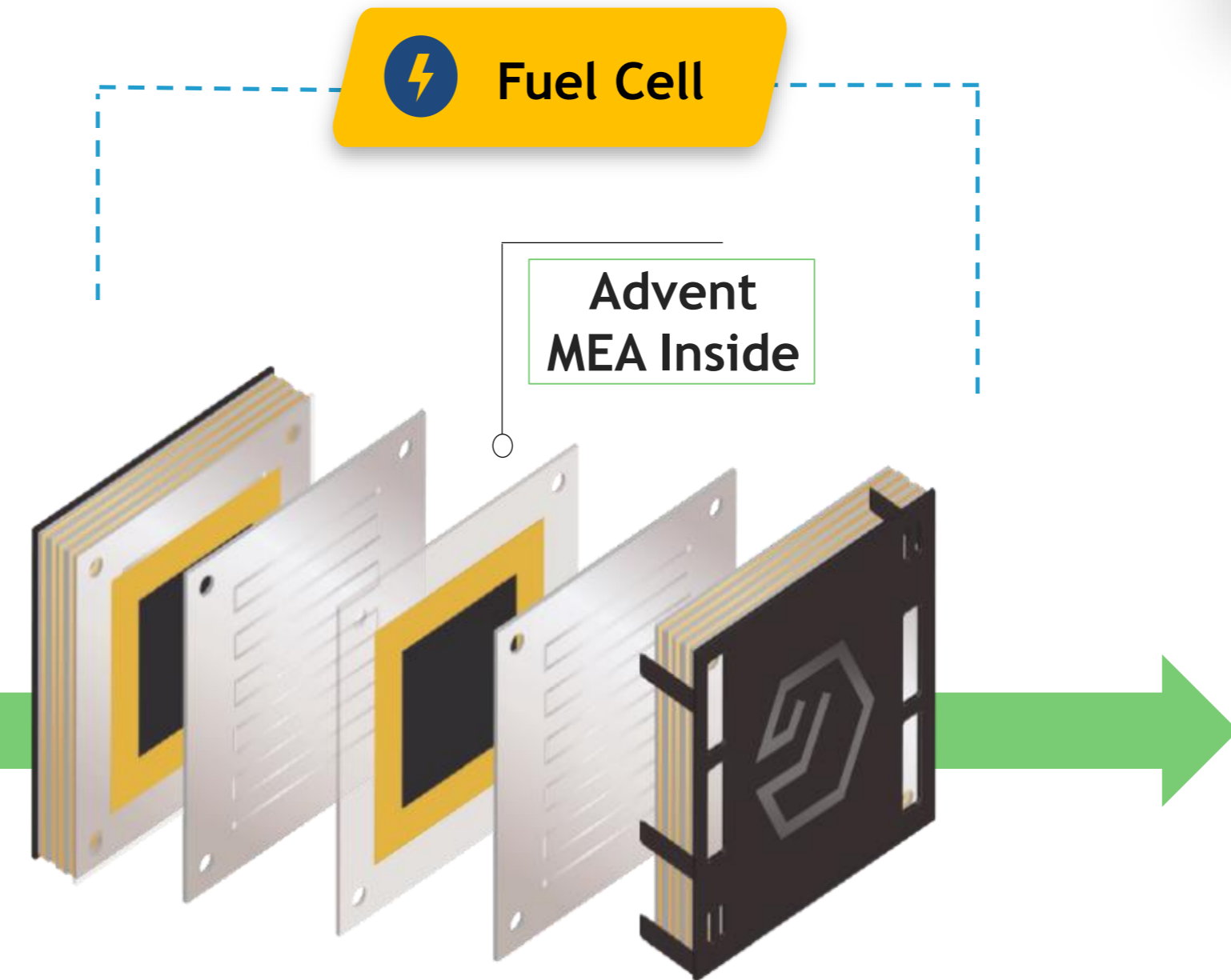
- Requires 99.99% pure hydrogen
- Infrastructure Cost 100x higher

Now: Multi-fuel Infrastructure available now; can deploy Immediately

Future: eFuels zero-emissions hydrogen based liquid fuels

## Advent

Hydrogen, (green) methanol, natural gas, biofuels, ammonia



#### Electric Vehicles

#### Off-Grid Power

#### Aviation: Drones, eVTOLs

#### Marine

Compressed Hydrogen is problematic for aviation, marine, and off-grid





# MEA Application in Transportation

## Advent Solves the Range and Recharge Problems

Advent provides consumers with the same convenience as a conventional vehicle without the pollution

### Fuel Reformer

On-board reforming of any fuel to low-quality hydrogen

### Fuel Tank

Renewable fuels, biofuels, natural gas, methanol, DME, or hydrogen

MEAs Manufactured by Advent



### 01 Advent HT-PEM & MEAs

Operate at high-temperatures, (160-200°C)  
Membrane & Electrode Assembly is the heart of the fuel cell  
It defines performance, weight, lifetime, operating cost

Licensed by Advent



### 02 HT-PEM Advent Fuel Cell

MEAs are placed between bipolar plates to create fuel cells  
30-200kW fuel cell depending on vehicle size and battery/fuel cell desired configuration

### 03 Li-ion BATTERY

50-60% smaller Li-ion battery required  
Still an electric truck

Licensed by Advent



### 04 Complete System

Overall system has simpler design, smaller radiator  
Any fuel, anywhere  
Fuel cell charges Li-ion battery as needed



# Solving the Hydrogen Infrastructure Problem

Advent's fuel-flexible capabilities allow for significantly reduced infrastructure requirements and provides energy solutions for billions of people in the developing-world

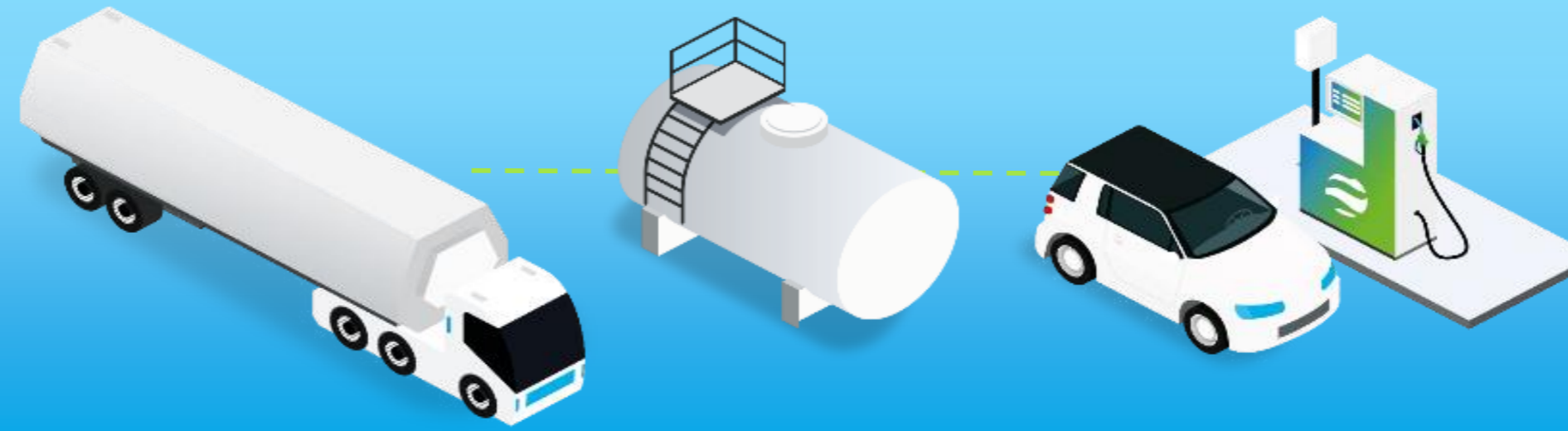
## DISTRIBUTION: WHOLESALE TO END-USERS

## GLOBAL: INFRASTRUCTURE COSTS<sup>(1)</sup>



### RENEWABLE & LOW-CARBON FUELS

Retrofit trucks, tanks and pumps

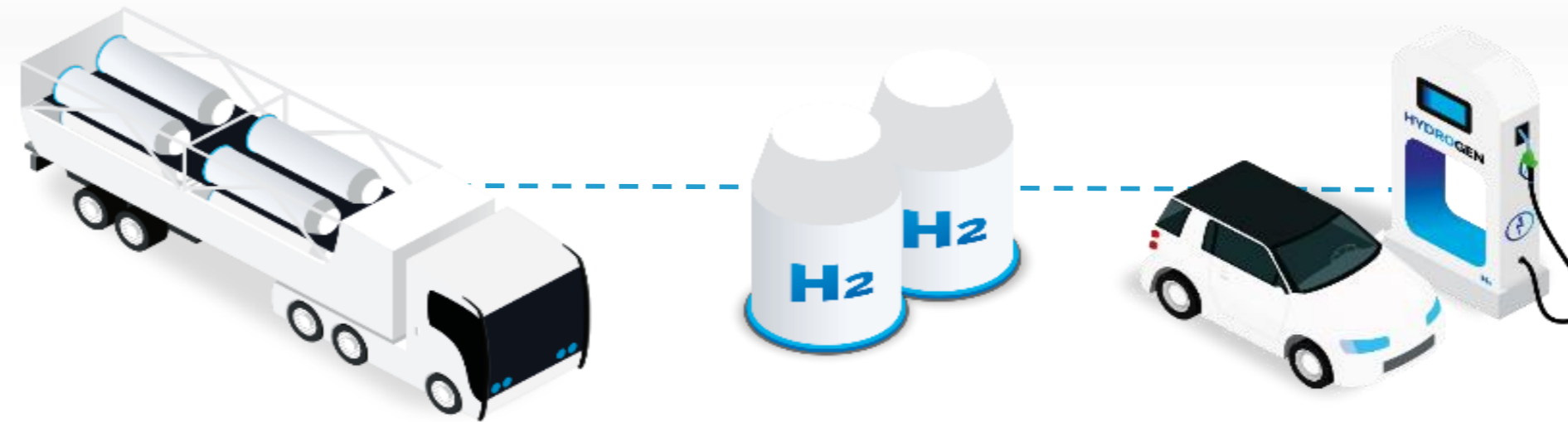


~\$50 billion



### Hydrogen

CFRP Tanks for transport, storage

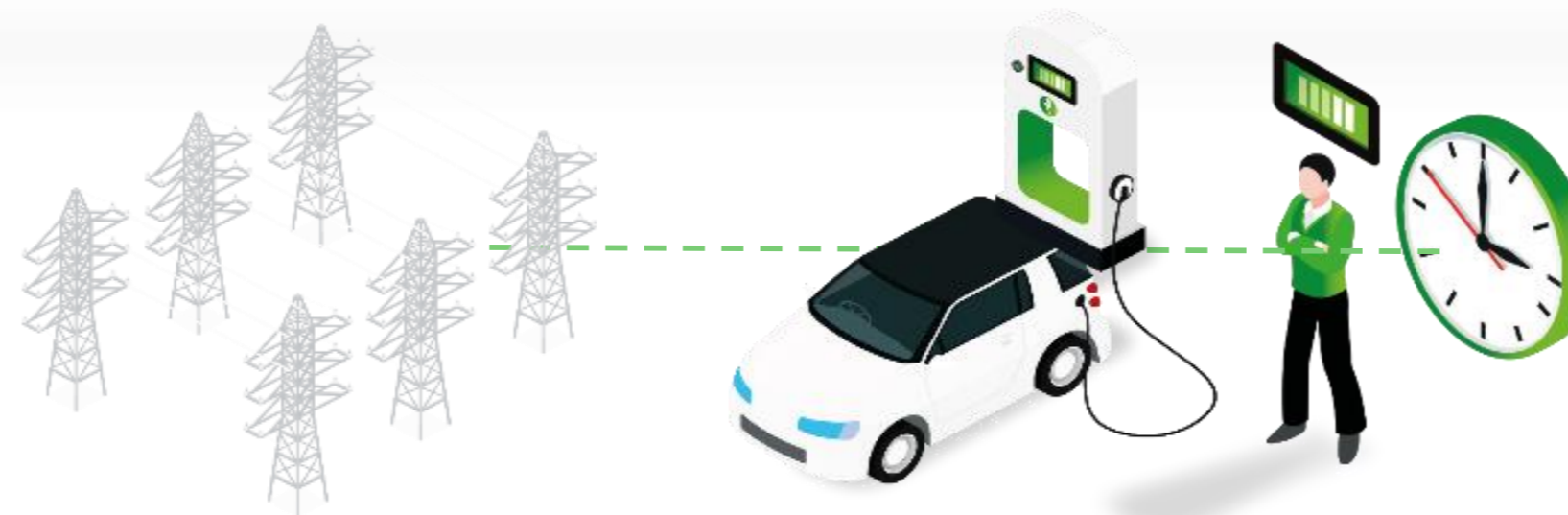


~\$15,000 billion



### Battery

Grid upgrades, new charging stations



~\$5,000 Billion

 Advent Fuel Cells' Innovative Capability



Sources: Joule, Management Estimates. (1) Estimated upfront infrastructure costs, assuming 200 cars per 1000 people of each type. Methanol and biofuels can use existing infrastructure (with minor modifications) built for incumbent liquid fuels.

# What We Do

## Our Products

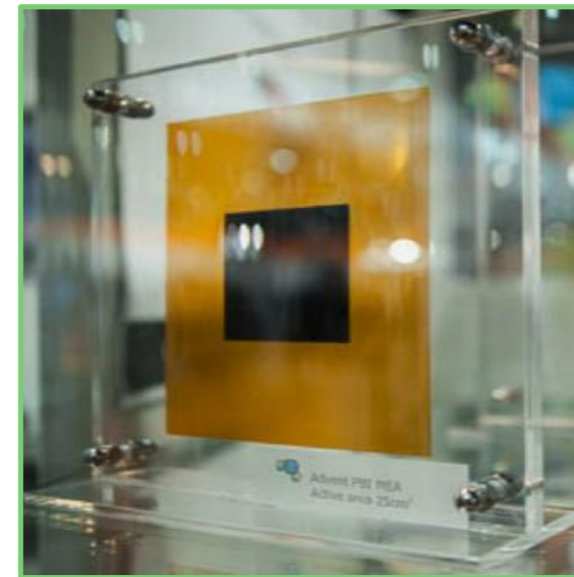
Next Generation fuel cell technology that significantly improves the economics of hydrogen power

### Develop, Manufacture & Sell



#### High-Temp PEM Membranes

- Next generation electricity conducting plastics that can operate at 160+°C
- Significantly enhances capabilities and performance of fuel cells and other clean technology systems

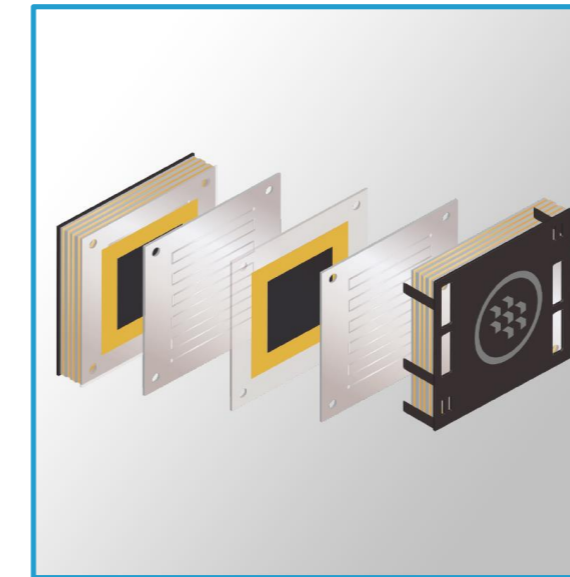


#### Membrane & Electrode Assembly (“MEA”)

- MEA is the “heart of the fuel cell”
- Analogous to Li-ion cell for the battery industry

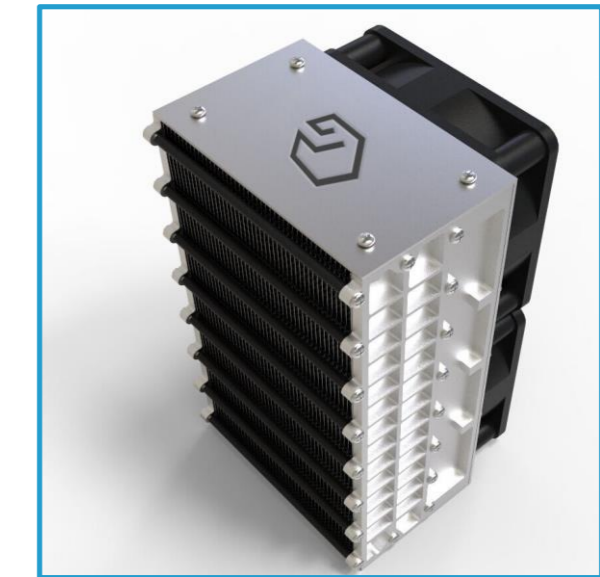
Advent’s technology is fuel-flexible, lightweight and resilient

### Develop & License



#### High-Temp Fuel Cell

- Fuel-flexible fuel cells that significantly reduce need for hydrogen infrastructure
- Enter into joint development programs with partners
- Intend to scale-up production for mobility (auto, aviation) and stationary (off-grid, portable, security, charging station) markets



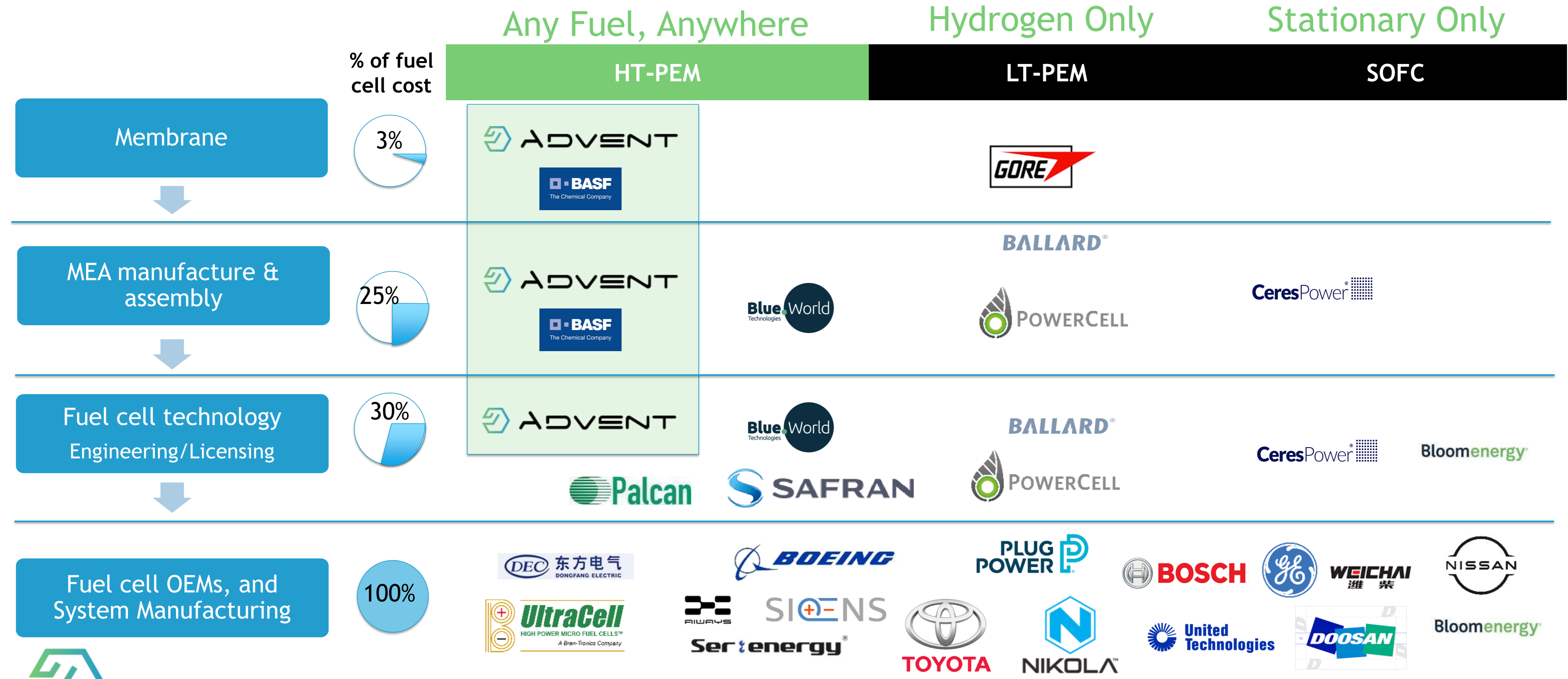
#### Complete Systems

- Leverage MEA technology with a matched fuel cell and license to system integrators, Tier 1s and OEMs
- IP in design, cooling, testing and optimization



# Unique Market Position in the Fuel Cell Value Chain

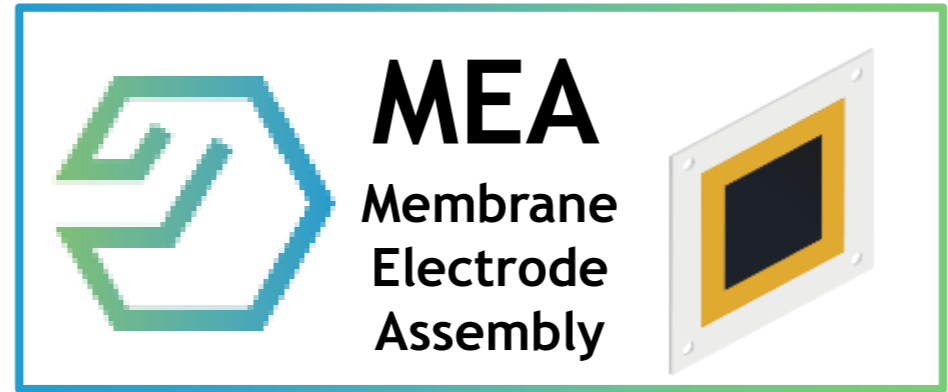
Only vertically-integrated supplier of HT-PEMs to fuel cell OEMs and system manufacturers



# Advent MEA

## Market Changing Technology

Advent's MEAs are the "heart" of the fuel cell & all electrochemistry applications - analogous to Li-ion cell for battery packs



Advent Inside



Market & Size

Applications

### EV Automotive



\$1,200b  
by 2027

- Heavy-duty trucks
- Commercial vehicles
- Passenger EVs
- Range extenders for SUV
- Taxis
- Charging stations

### FUEL CELLS

#### Off-grid Power



\$350b  
by 2040

- Telco, O&G, Mining, CHP power
- APU
- Defense, security, marine

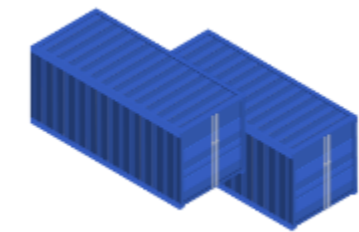
#### Aerospace & Defense



\$27b  
by 2030

- Commercial drone
- Surveillance/Defense
- eVTOLs
- Commercial aviation
- Zero-emissions flight
- Auxiliary power

#### Energy Storage



\$4.5b  
by 2028

- Vanadium and Iron flow battery
- Microgrid, industrial and utility markets
- Used for balancing renewable power demand & supply

### OTHER MARKETS

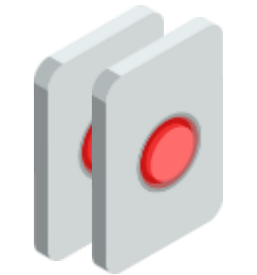
#### Hydrogen Production



\$2.3b  
by 2028

- Hydrogen technology & generation
- Electrolysis
- Power to gas, power to liquid technology providers

#### IoT, Sensors



\$1.3b  
by 2027

- Electrochemical sensor for: pollution monitoring, medical, food, consumer apps



Sources: Grand View Research, IDTechEx, Markets and Markets, Lux Research, Allied Market Research.

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# Evolution & Innovation

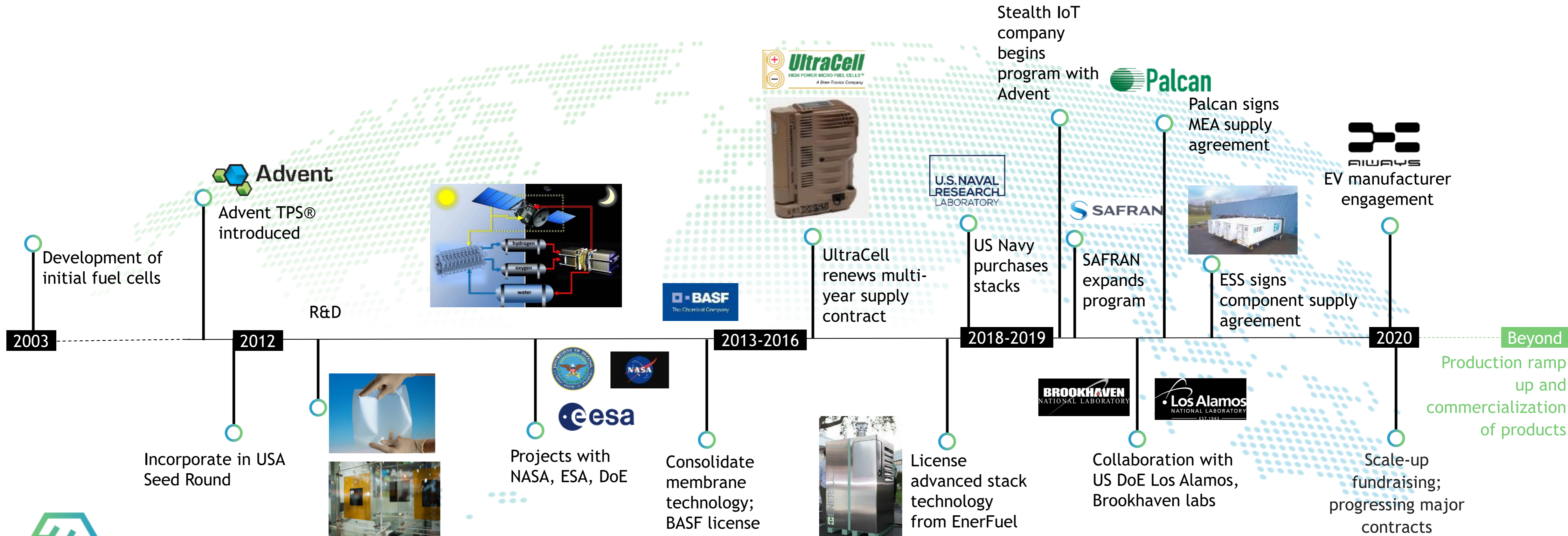
Consolidating 50+ international patents and \$500m+ of technology investments by partners, predecessors and strategic licensing & acquisition agreements

Development / Evolution

Key Partnerships

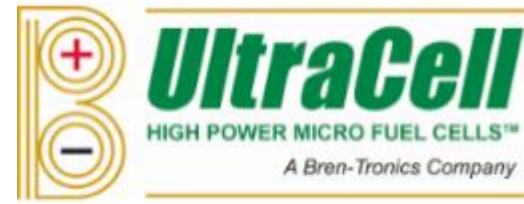
Market Penetration

Mass Adoption



# World-Class Customer Base

Proven technology with products already in market



## Portable Power

- California-based developer of fuel-flexible fuel cells for mobile, portable power solutions
- Supplier to the U.S., U.K. and other armies
- Advent supplies MEAs



## Off-Grid

- Award-winning Munich-based fuel cell manufacturer. Recently secured EU Horizon 2020 funding approval
- Sigen has developed the Ecoport 800 HT-PEM fuel cell for off-grid applications using methanol as the hydrogen carrier
- Advent supplies MEAs



## Energy Storage

- Oregon iron flow battery for off-grid and utility systems
- Backed by established cleantech investors including Breakthrough Energy & BASF Ventures
- Advent supplies component of ESS's iron flow battery



## Aviation

- International high-technology group with 84,000 employees worldwide; operates in aviation, defense and space markets
- Advent supplies MEAs and collaborates on innovation



## Silicon Valley-based IoT Innovator

### Gas Sensors

- Develops specialized sensors
- Multi-year collaboration with significant commercial potential
- Advent supplies core component



## Off-Grid

- Vancouver-based developer of fuel cells for the Chinese market
- Applications in automotive, stationary, off-grid markets
- Advent supplies key component



## Auto

- Japanese multinational automotive manufacturer
- Applications in fuel cell vehicles
- Advent MEAs are tested for next generation vehicles



## Power Generation

- FuelCell Energy, Inc. (NASDAQ: FCEL) is a global leader in delivering clean, efficient, and affordable fuel cell solutions configured for the supply, recovery, and storage of energy
- Advent supplies MEAs for tri-generation systems



# Fuel Cell Market Opportunity

Advent revenue expected to be  
~\$100m per GW

Fuel cells & hydrogen production can be a \$50 billion market by 2030 driven by well-established global policy support



Customer's Power Requirements	1 GW
Advent Target Cost per kW (2025)	\$80/kW
MEA Sales Revenue	\$80M
Licensing Fees <sup>(2)</sup>	\$16M
<b>Total Revenue to Advent Per GW</b>	<b>\$96M</b>



Sources: Global Data, Bloomberg New Energy Finance. (1) Management Estimates. (2) Assumes licensing fees are equal to 5% of customer's fuel cell sales and 30% of MEA cost.



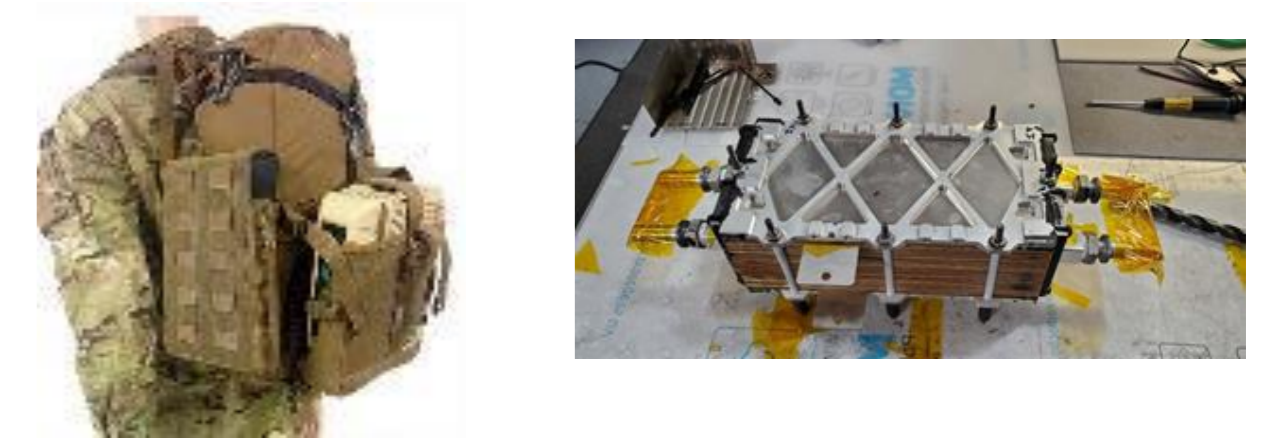
# Industry Leading Access and Technology

Strategic partnerships accelerate product development and reduce customers' launch timeframes

-  **DoE, L'Innovator Program:**  
*Partner with top US-labs for next-gen development*
  - Began partnership with Los Alamos L'Innovator program in 2019



-  **UltraCell:**  
*Licensing agreement since 2016 with leading provider of portable, lightweight fuel cells*

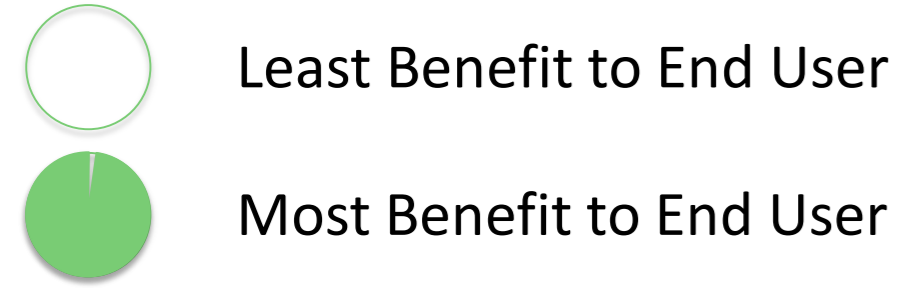


-  **In-house Expertise:**  
*Scale-up expertise - working for and with top chemistry leaders*
  - Working with BASF for 7+ years



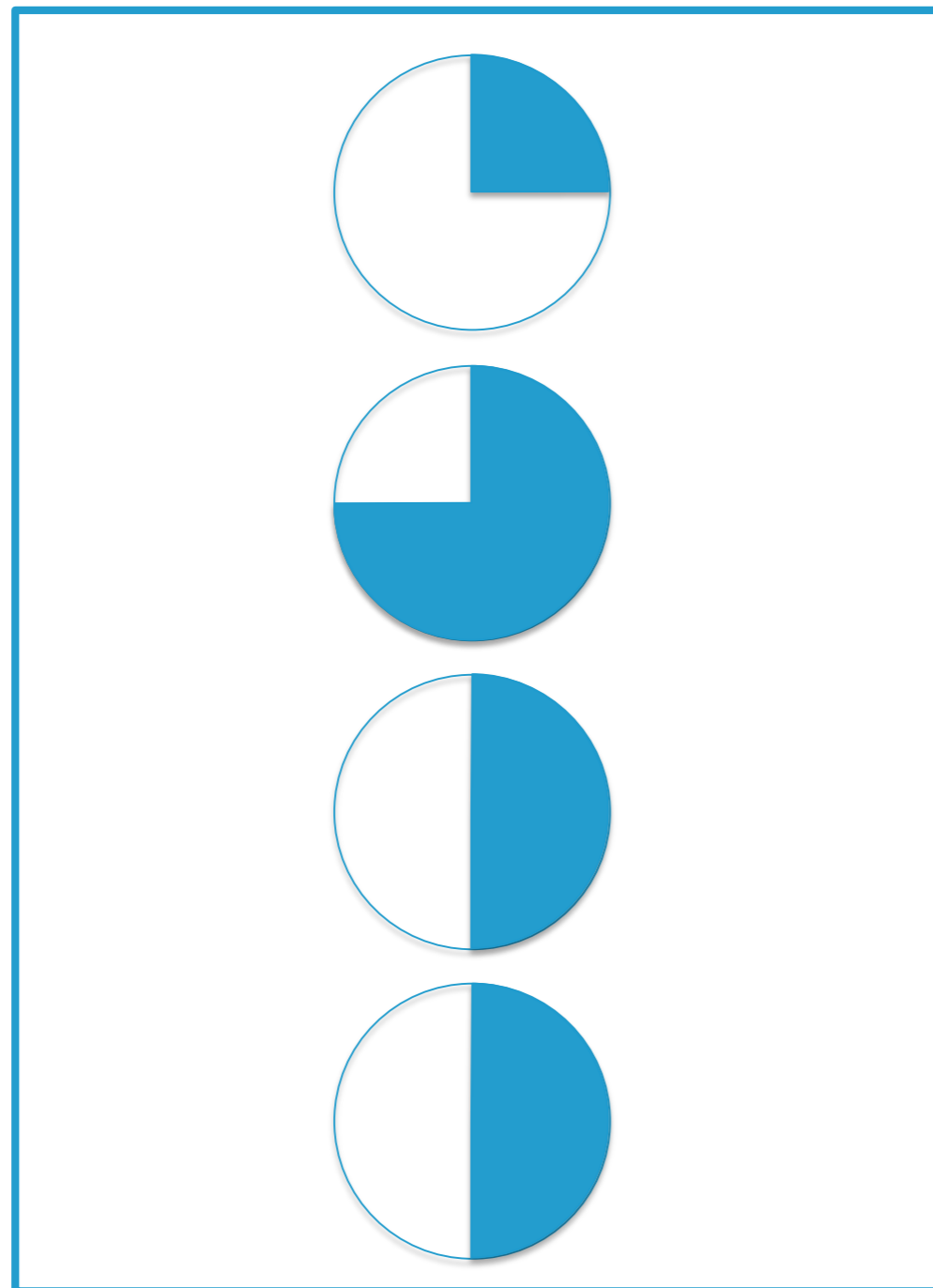
# Fuel Cell Technology Evolution

Advent's technology is the right choice for mobility and affordable power anywhere

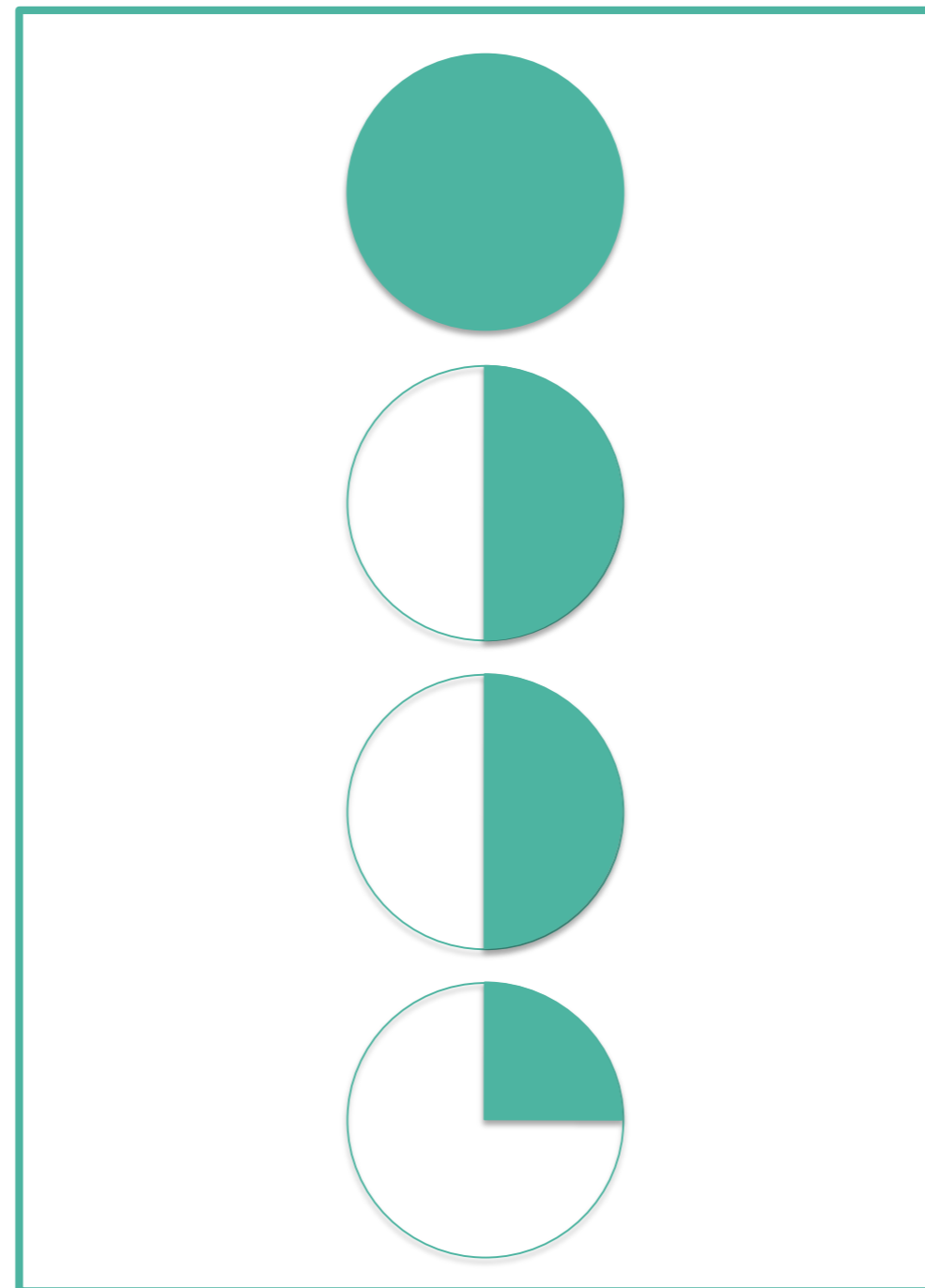


- Fuel-Flexibility**  
(Wide Market Opportunity)
- Fit for Mobility**  
(Power Density, Heat Management, System Simplicity)
- Resilience, Durability, Lifetime**
- Affordability**  
(Total Cost of Ownership)

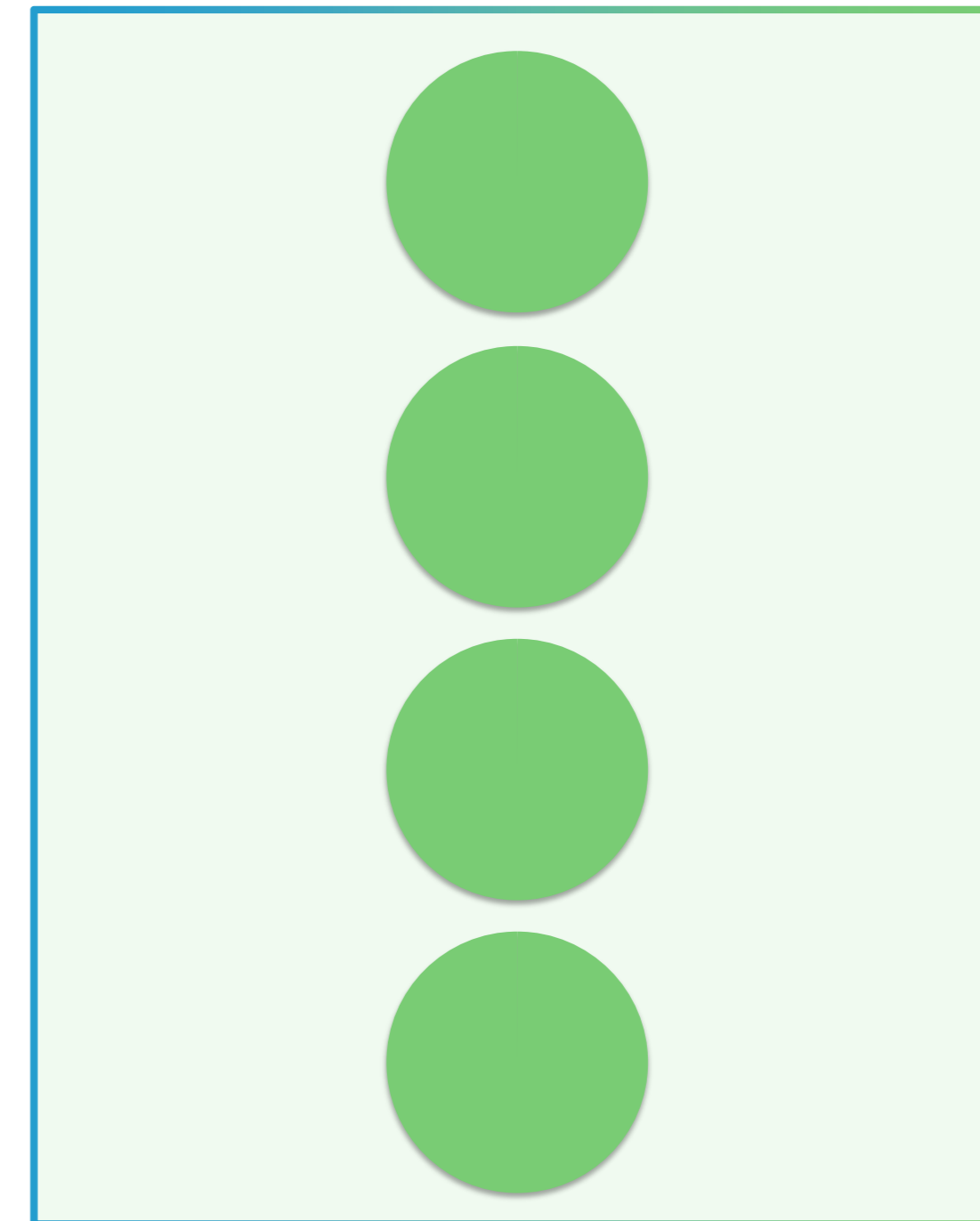
LT-PEM (Competitors)



HT-PEM (Competitors)




Advent HT-PEM



# Leadership & Expertise

Proven track-record of technological development and commercialization



**Bill Hunter**  
CEO, AMCI

- 25+ years of financial services experience, with a focus on the industrial and natural resources sectors
- Long track record in battery metals-related investments, including current Board member of American Battery Technology Corp.
- MBA from DePaul University



**Vasilis Gregoriou**  
Founder & CEO

- 30+ years of operational and strategy experience in the US and Europe
- World-renowned renewable energy expert
- Extensive experience in product development and company management
- Ph.D. Physical Chemistry, Duke
- MBA, Northeastern



**Emory De Castro**  
CTO

- 35+ years of technology commercialization, 25+ years in fuel cells
- Volume manufacturing expert
- DOE Manufacturing Award
- BASF Fuel Cell Inc.
- PEMEAS Inc., and De Nora N.A.
- E-TEK
- Ph.D. Cincinnati
- B.S. Duke



**Nick Stamp**  
CFO

- 20+ years of financial services experience in energy industry and investment banking roles
- Previously Director, EMEA ECM, Macquarie
- Chartered Accountant, Ernst & Young (2004)
- BA (Classics) Oxford University



**Harris Antoniou**  
Advent Board of Directors

- 25+ years in global investment & corporate banking
- CEO in banking and investment management
- In-depth knowledge of energy, commodities & transportation
- Turnaround & scale up expert
- Harvard Business School, Erasmus MBA, Piraeus University MSc



**Jim Coffey**  
General Counsel

- 30+ years experience in corporate and securities law, M&A, VC, corporate finance and IP law



**Nora Gourdoupi**  
GM Europe

- 19+ years experience in fuel cells
- Co-inventor of Advent polymer
- Ph.D. University of Patras



**Chris Kaskavelis**  
CMO

- 20+ years as a C-Suite Officer in Tech/Marketing (founded start up to AIM & Nasdaq IPOs)



**Chara Dendi**  
Operations

- 23+ years experience in operations
- B.B.A. University of Cyprus
- LL.M. in Business Law



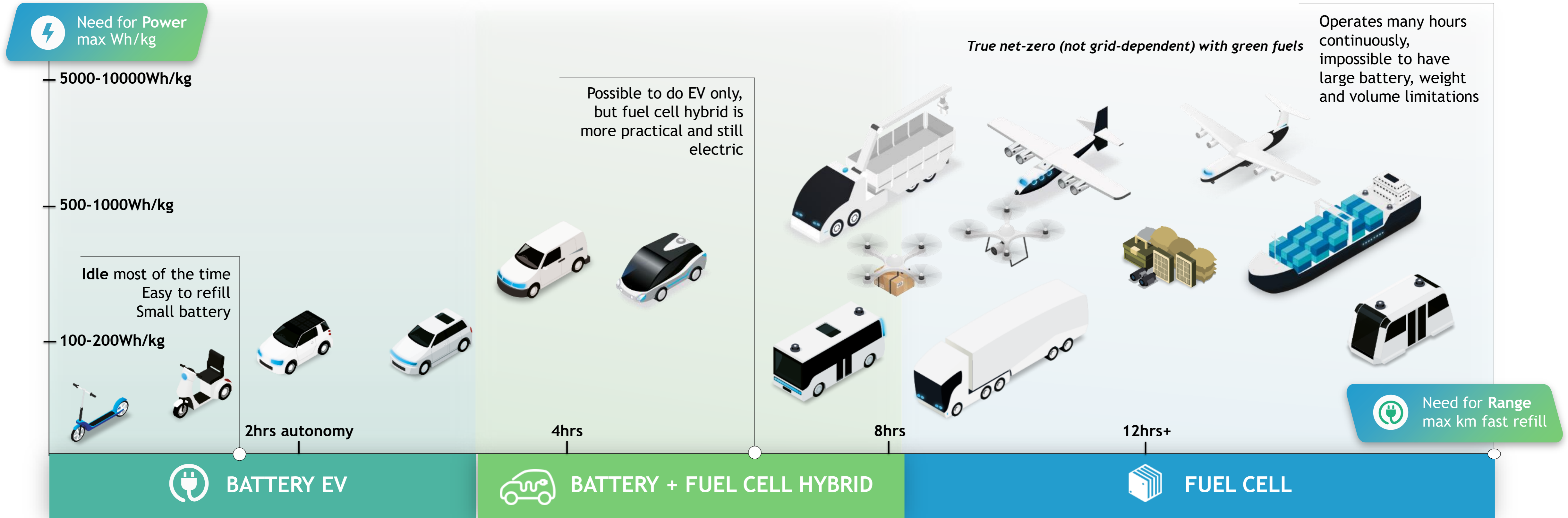
Note: Additional board members will be added prior to close.

## 2. Next Generation Fuel Cell



# Next Generation Technology Accelerates Clean Energy Transition

Fuel cells solve for issues that cannot be solved by batteries alone



# Advent Fuel Cells Outperform Competition

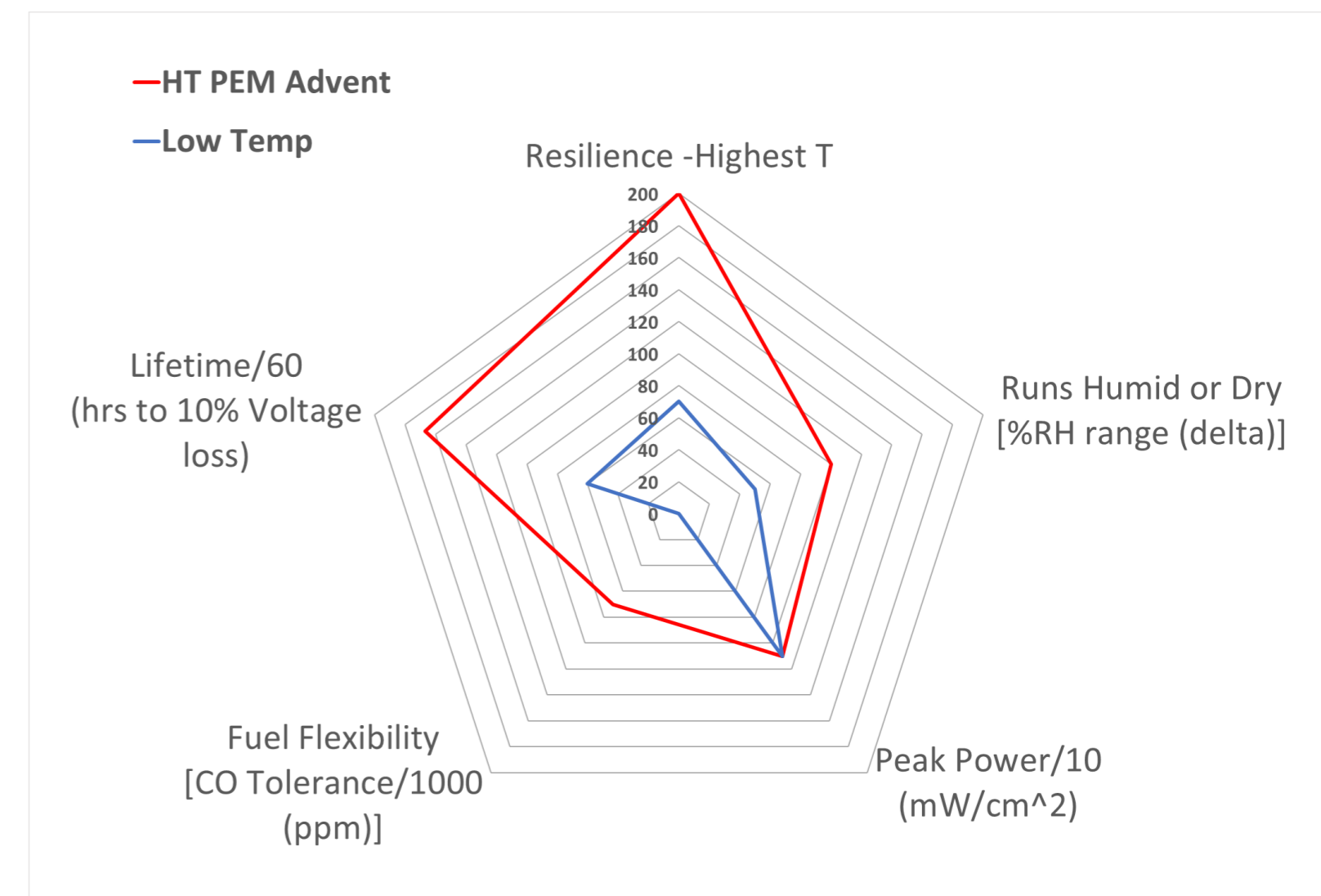
*Any Fuel, Anywhere*

Bringing down cost/kW - Advent's fuel cell technology enables longer-lasting, lower cost, more robust and more powerful fuel cells

Advent technology allows fuel cells to be:

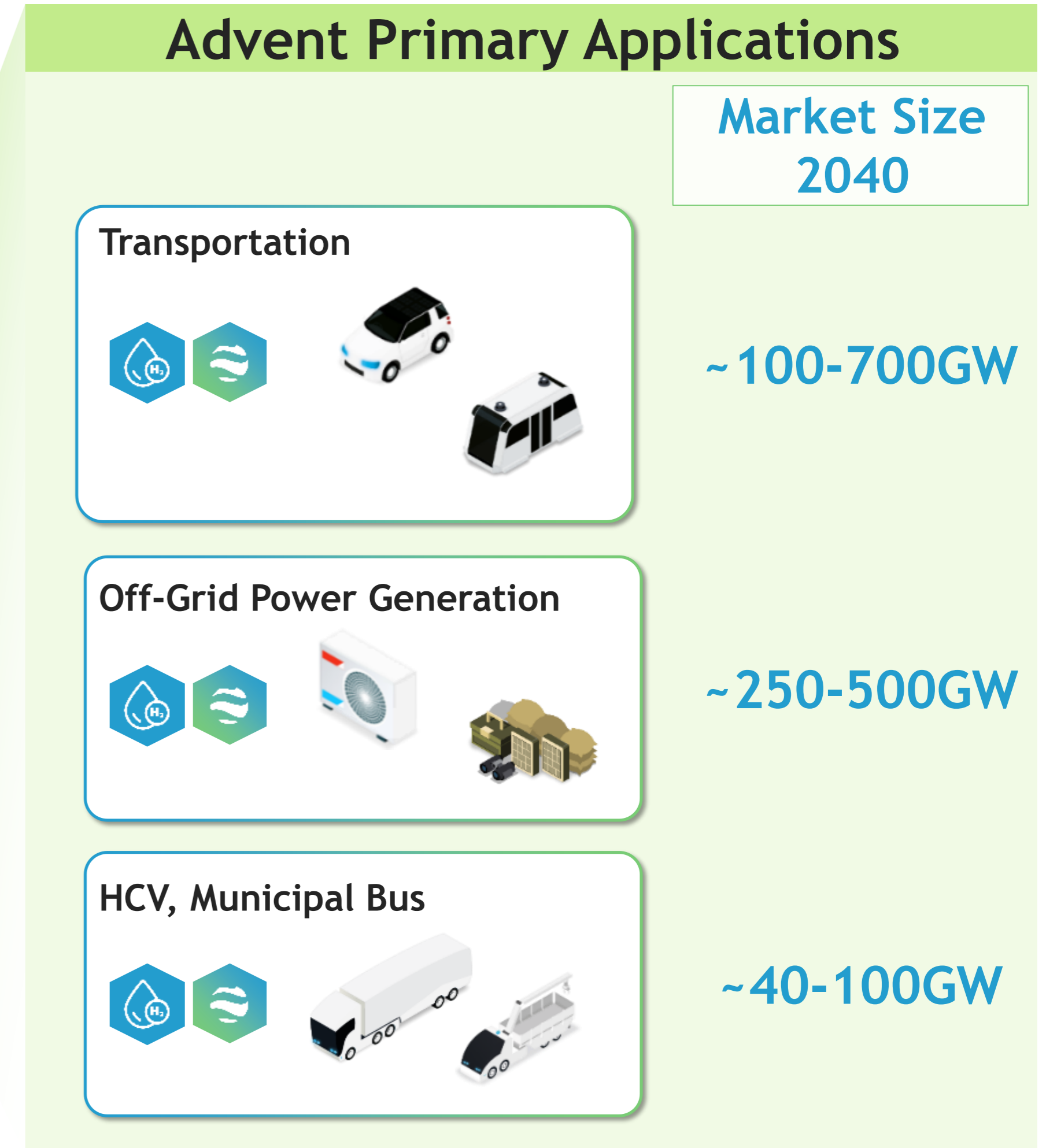
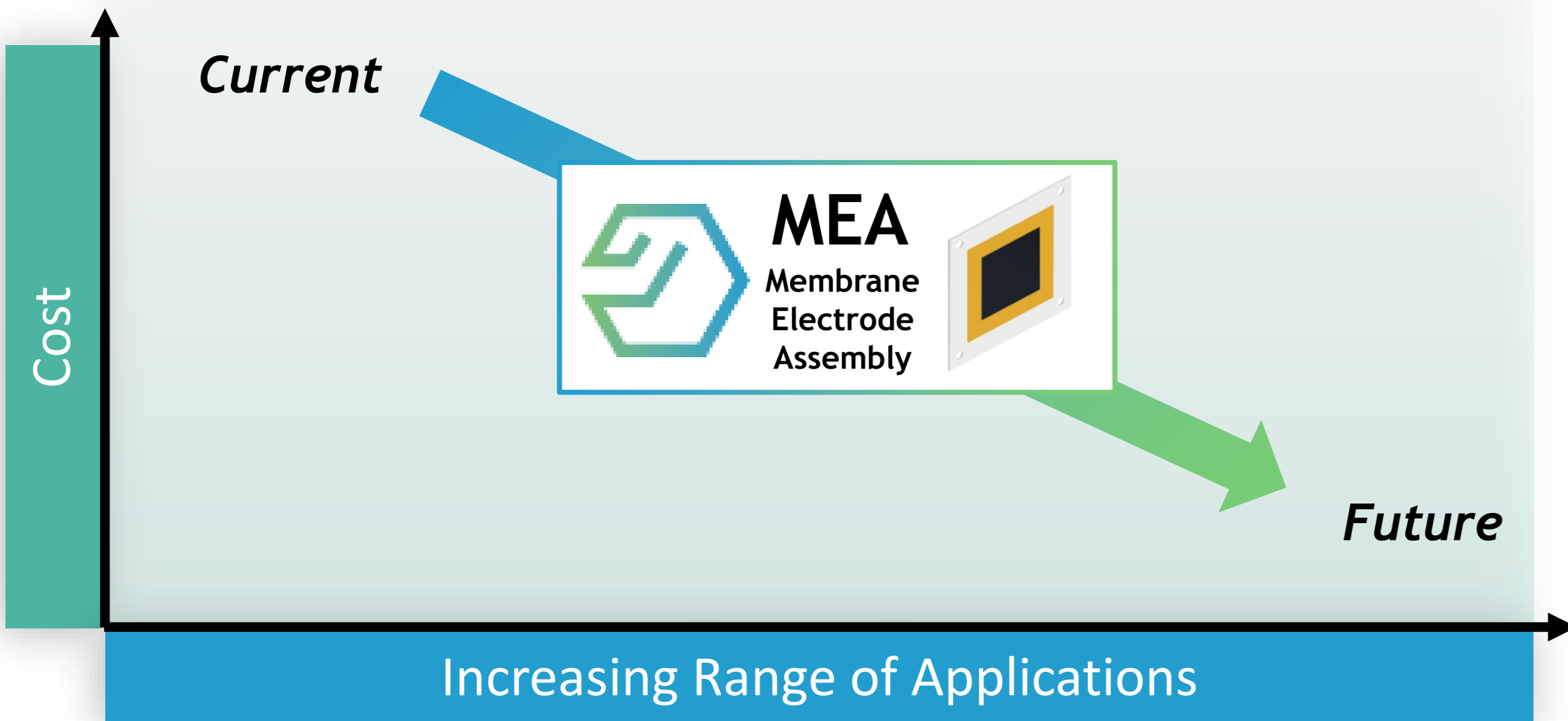
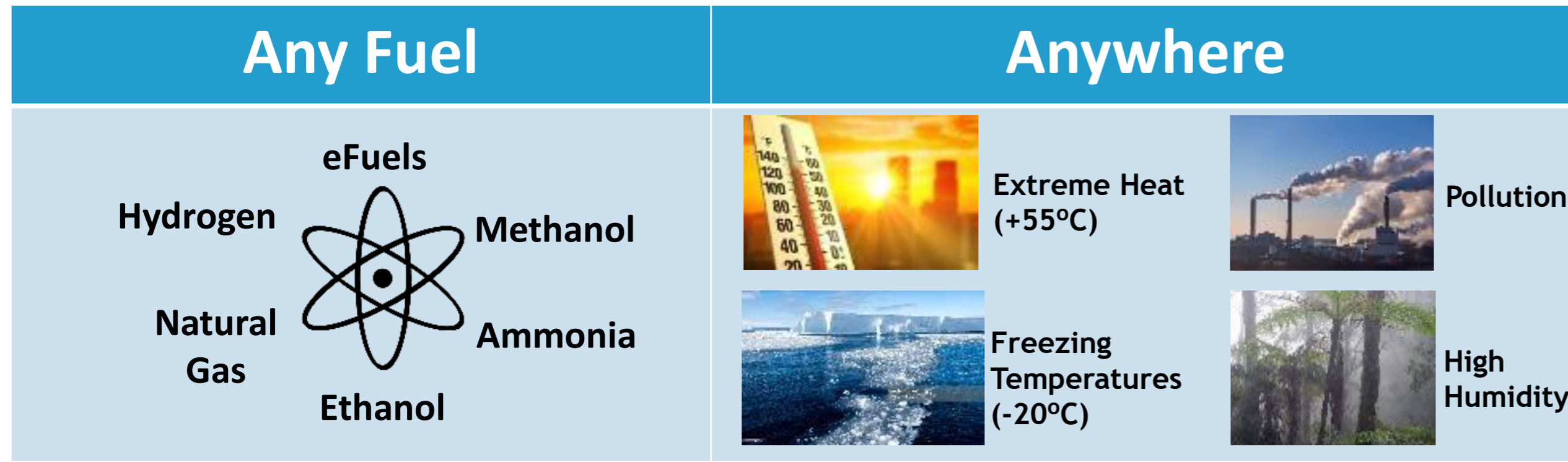
Long lasting	<ul style="list-style-type: none"> <li>Degradation is still a problem for fuel cells</li> <li>Advent can more than triple lifetime (~10,000 hrs to 10% power loss vs 3,500)</li> </ul>
Fuel-Flexible	<ul style="list-style-type: none"> <li>Hydrogen infrastructure can be delivered quickly and efficiently with methanol or other hydrogen sources such as biogas</li> <li>Impurities in regular hydrogen such as 10 ppm CO (carbon monoxide) kill a low temperature fuel cell - our materials withstand &gt; 2 % CO</li> <li>The same holds true for air purity; air pollution decreases power in low temperature fuel cells</li> </ul>
Resilient	<ul style="list-style-type: none"> <li>Reducing humidity and temperature issues increases life and reduces cost, and these units work anywhere in the world</li> <li>Low temperature cannot run hot and dry - no less than 50% Relative Humidity (RH) and not hotter than 70 °C while our technology runs from 0% RH (Nevada) to 100% (Florida in the summer)</li> </ul>
High Power	<ul style="list-style-type: none"> <li>At least as powerful as current tech (1,100 mW/cm<sup>2</sup> peak power) without the extra weight and volume of complex cooling and water management</li> </ul>
Cost Competitive	<ul style="list-style-type: none"> <li>Roll-to-roll processing mated to catalyst technology that reduces platinum 8-10 fold</li> <li>Simpler system design and fuel flexibility drop TCO massively</li> </ul>

Advent vs incumbent LT-PEM technology



# Enabling the Hydrogen Economy

For every GW of market size, Advent has the potential to earn an estimated \$100 million by driving down costs and improving capabilities



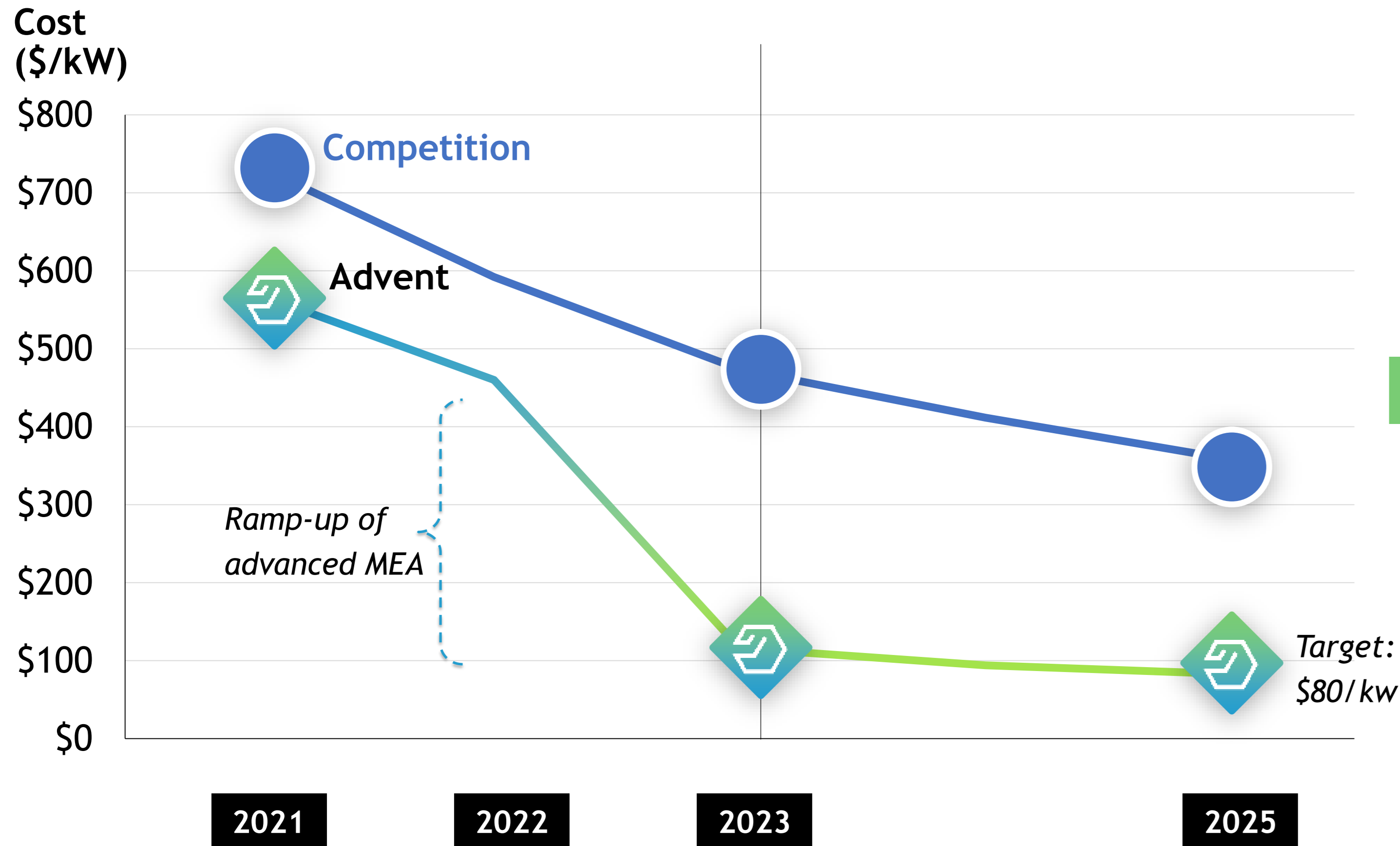
Sources: Bloomberg New Energy Finance, Global Data.

[www.advent.energy](http://www.advent.energy)

# Low Cost Drives Adoption

Advent is winning the race to be the low cost industry provider able to take market share from battery and ICE vehicles

## Advent's Patented Technology Provides for Significant Advantage Relative to Peers



## Cost Reduction through Innovation

- Substantial cost savings due to automation of assembly line and advanced MEA product development projects
- Automation of assembly line provides 3x efficiency improvement in direct labor costs
- Advent's advanced MEA will provide the same power output with ~25% of the raw materials

## Cost Reduction by Scale-up

- Substantial unit cost savings as MEA production builds up due to raw material purchasing efficiency & reduced processing costs
- Procurement, labor and processing costs all highly competitive due to location of manufacturing



Source: Management estimates.



# 3. Beyond Fuel Cells



# Vast Market Opportunities Beyond Fuel Cells

01

Advent MEA

02

Flow Battery



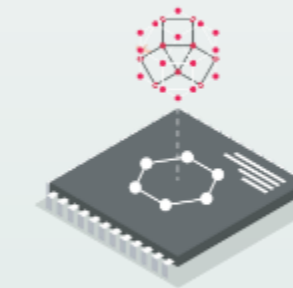
Renewable Power Generation



Advent Membrane



Electrochemical Sensors



03



Energy Storage

Water Electrolysis Plant



Green Hydrogen Production: Electrolysis



IoT Sensors

<p><b>Description</b></p>	<p>Storage solutions for wind or solar energy (utility, commercial &amp; industrial, off-grid)</p>	<p>Green Hydrogen is essential for decarbonization, energy storage, and can be converted to renewable fuel</p>	<p>Miniaturized sensors with applications in pollution detection, health screening and eNoses (phones that can “smell”)</p>
<p><b>Advent Competitive Advantages</b></p>	<ul style="list-style-type: none"> <li>⚡ Lower cost (50% lower) and higher power (5-10%)</li> <li>⚡ Adaptable to numerous RFB chemistries</li> <li>⚡ Already commercial and deployed in the market</li> </ul>	<ul style="list-style-type: none"> <li>⚡ Exceeds DOE goals for H<sub>2</sub> production</li> <li>⚡ Eliminates platinum on the anode</li> <li>⚡ R&amp;D with key partners for directly using salt water for electrolysis and hydrogen production</li> </ul>	<ul style="list-style-type: none"> <li>⚡ High-temp Advent Materials are ideal for this application</li> <li>⚡ Multi-year development and ready for production</li> <li>⚡ Korean and Chinese phone makers poised to implement eNose in 2021</li> </ul>
<p><b>Market Size</b></p>	<p><b>\$4.5 billion</b> by 2028</p>	<p><b>\$2.3 billion</b> by 2028</p>	<p><b>\$1.3 billion</b> by 2027</p>



# 4. Business Plan



# Business Model

## Illustrative Revenue from Single OEM

Advent's business model provides strong customer traction and high revenue visibility



**Advent:**  
Manufacturer of MEAs & developer of fuel cell systems

50+ patents, \$500mm of IP and partnerships with top US-labs provide for competitive advantage



**Prototype Phase:**  
We develop in cooperation with OEM specific prototype fuel cell system for application/market



**Early Production Phase:**  
We manufacture MEAs and earn license fees on fuel cell system



**Mass Production**  
We sell MEAs and earn license fees

MEAs produced by roll-to-roll manufacturing means low-capex, high-margin scalability



**OEM:**  
Fuel cell manufacturer or EV manufacturer

Year 1

\$0.3

Engineering Fees

Year 2

\$2m



OEM focuses on manufacturing & marketing preparation

Year 3:  
30 MW

\$4m

\$1m

\$3m

Licensing fees

MEA sales

Year 4:  
120 MW

\$13m

\$2m

\$11m



Mass market scale-up - to 100k+ units

Year 5:  
450 MW

\$39m

\$7m

\$37m

Licensing fees

MEA sales



Year 6:  
750 MW

\$72m

\$12m

\$60m

Licensing fees

MEA sales

Year 7:  
1 GW

\$96m

\$16m

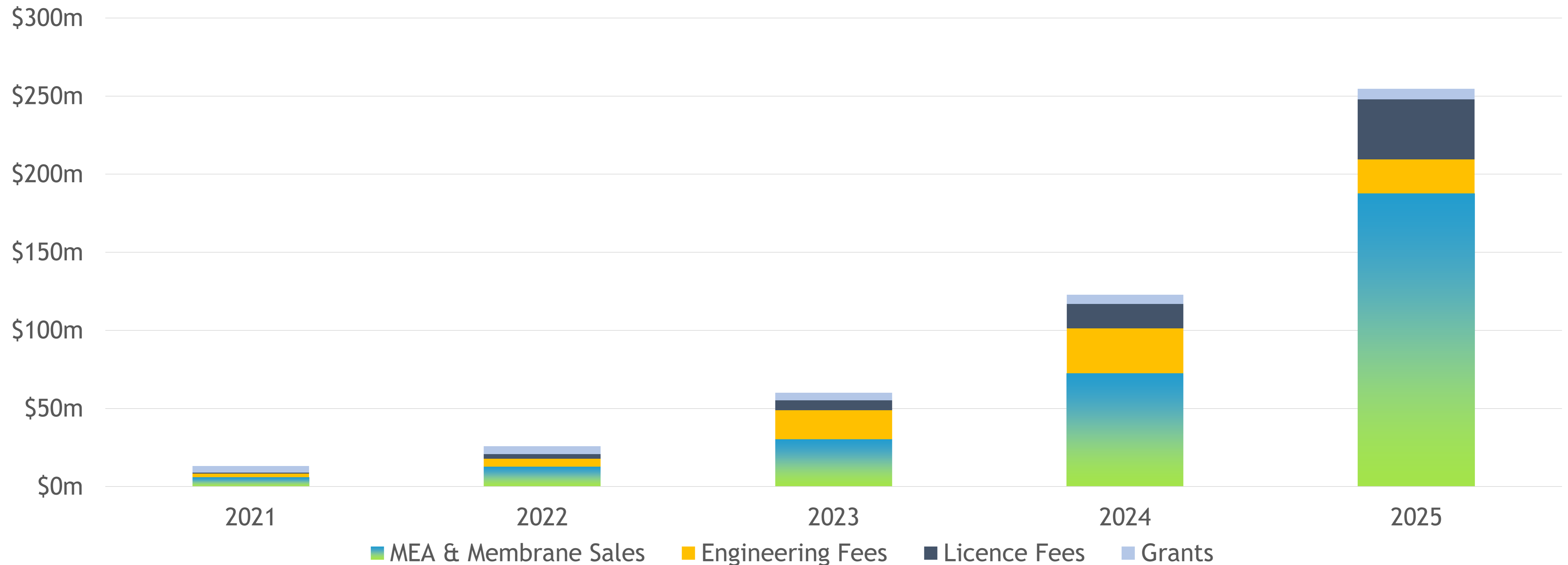
\$80m



# Revenue Growth Plan

Advent's revenue growth is driven by significant power requirements across our target markets

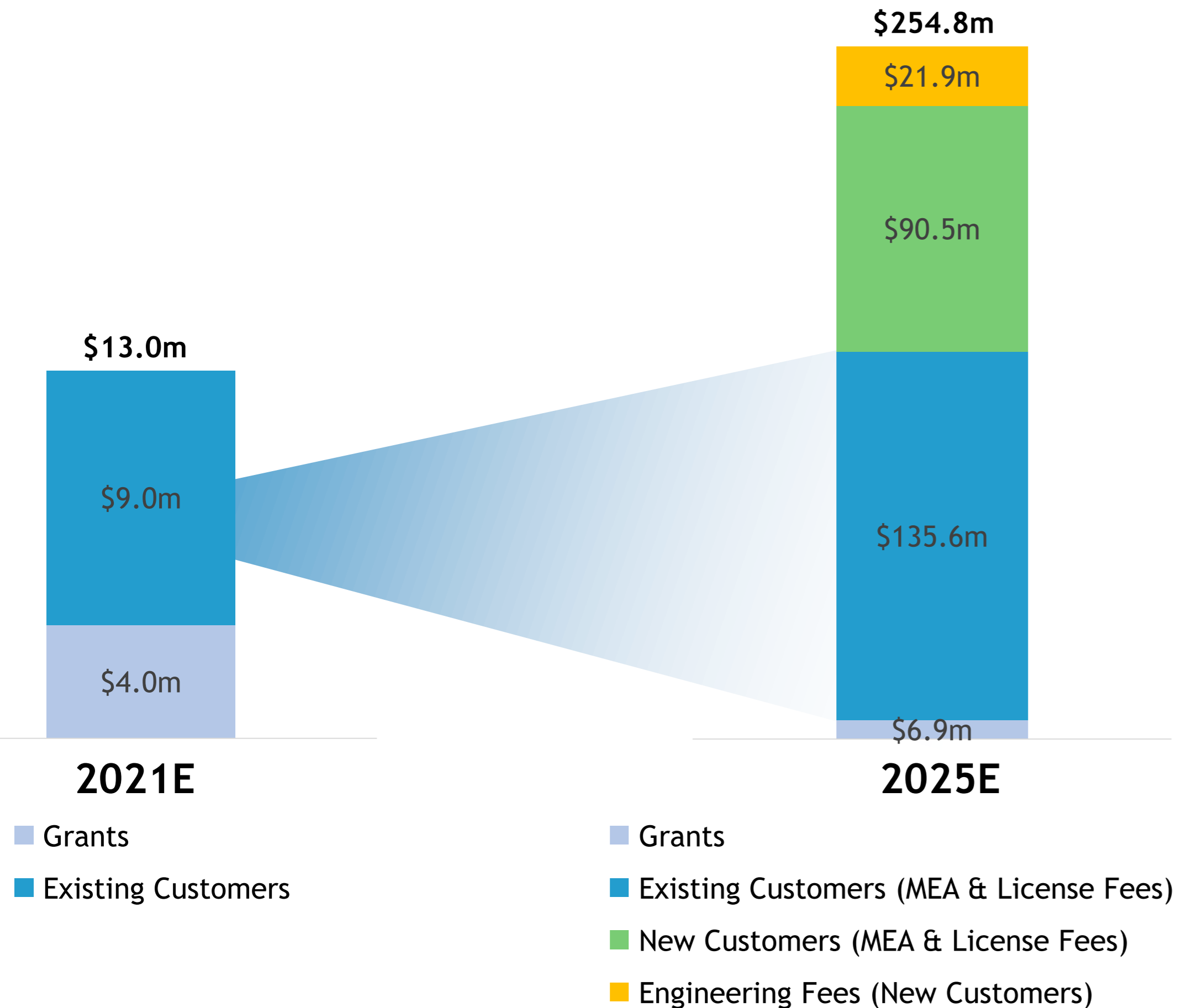
Projected revenue composition by category  
2021-2025 (\$m)




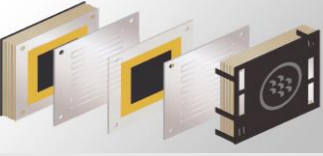



# Highly Attractive Pipeline

>60% of 2025E MEA sales projected to come from existing 2020 customers

## Development of Revenue by Source



## Select Identified Opportunities

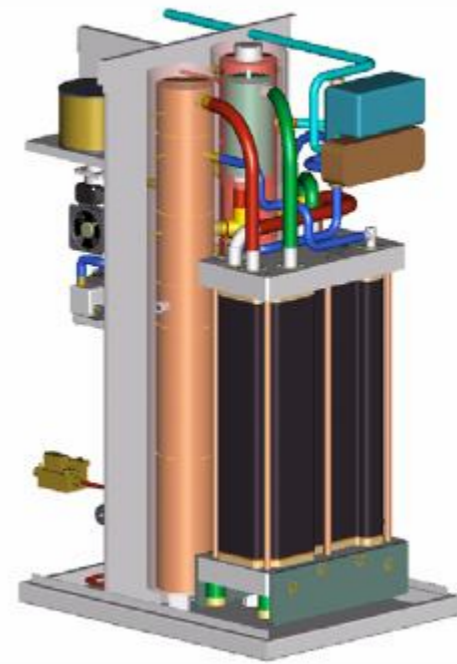
Customer	Advent Product	Details
Multiple OEMs - Fuel Cell EV trucks	HT-PEM fuel cells	<ul style="list-style-type: none"> <li>5,000+ trucks on the road @ 200kW per truck</li> <li>1GW potential opportunity in 2025</li> </ul> 
Asian fuel cell manufacturer	MEA	<ul style="list-style-type: none"> <li>Existing customer</li> <li>MoU in place envisages &gt;5m MEAs in 2023 - 2x forecast MEA production</li> </ul> 
US OEM - portable power	MEA (Durability and Temperature Resilience)	<ul style="list-style-type: none"> <li>OEM currently supplies portable power fuel cell units to 4 military units globally, including in the U.S. and U.K.</li> <li>Existing customer</li> <li>Projected revenue opportunity \$20m in 2025 from single product only</li> </ul> 
Asia - EV charging stations	HT-PEM fuel cells	<ul style="list-style-type: none"> <li>Target 4,500 stations @ 240kW per station = 1.1 GW opportunity</li> </ul> 
US IoT - gas sensor	Membranes for heat resistivity	<ul style="list-style-type: none"> <li>Silicon Valley-based US developer</li> <li>OEMs - two global cellphone manufacturers</li> <li>Cellphone market opportunity alone represents \$25m in 2025</li> </ul> 



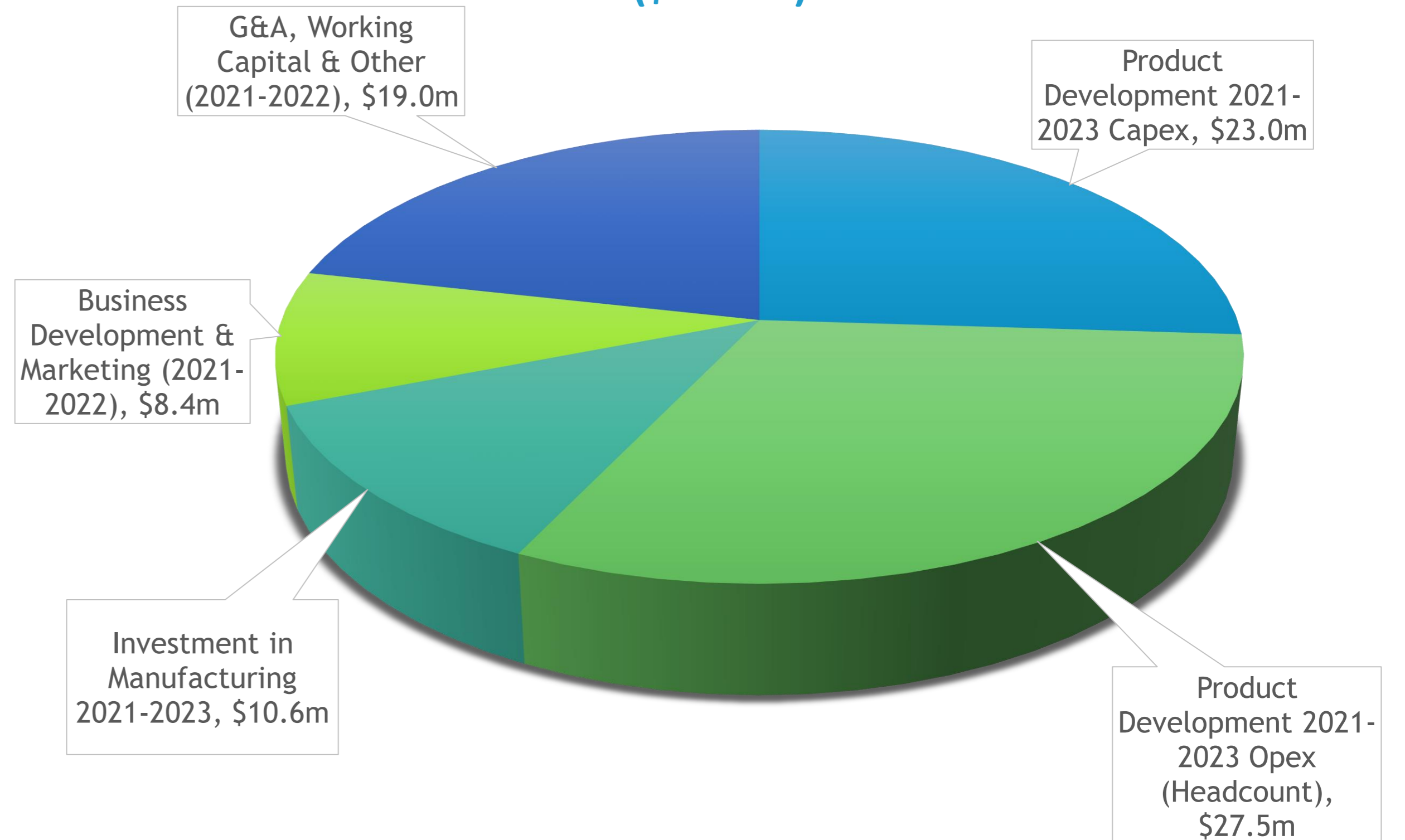
# Detailed Use of Proceeds

## Product Development Plan

Use of proceeds geared towards Advent's development program resulting in top-line growth



### Near-term Funding Requirements (\$88.5m)



Program <sup>(1)</sup>	Total (2021 - 2025)
New Production Equipment & Warehousing	\$52.7m
US facility expansion	\$8.9m
Advanced DOE MEA Cost	\$8.0m
Current MEA	\$0.7m
MEA for flight	\$1.0m
MEA assembly automation	\$12.2
Aeronautical Stacks	\$10.3
Robotic Stack Assembly	\$9.8m
System Assembly Line	\$42.8m
Printable electronics	\$7.0m
<b>Total</b>	<b>\$153.4m</b>

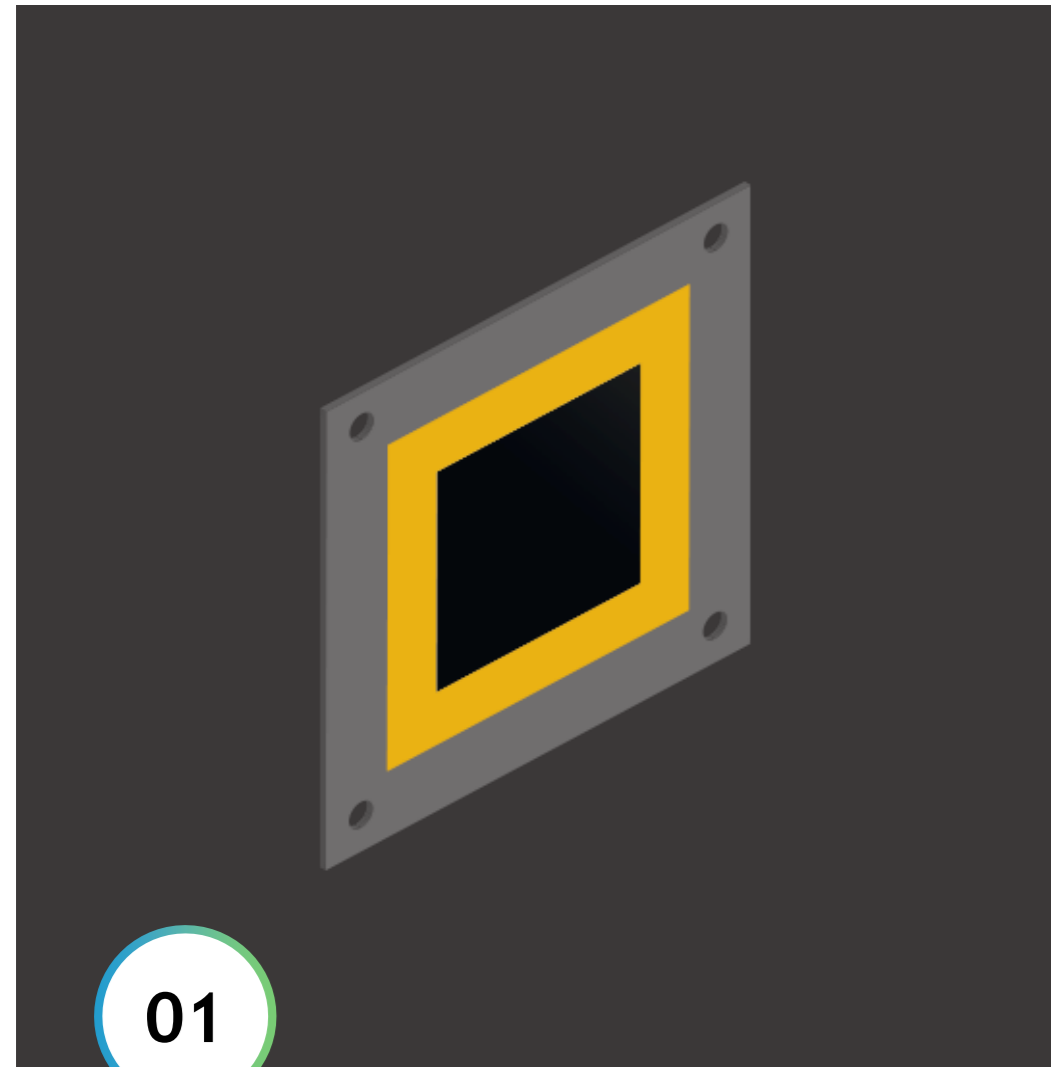


(1) Includes opex for product development plan.

# Long-Term Partnership with UltraCell as a Platform for Growth

Made in USA

Proven innovation with product in market



01

## Advent Inside

- Advent MEAs pass military grade tests
- New Advent materials are game changer for portable power industry

## Battery Charger

3 Gallons of methanol

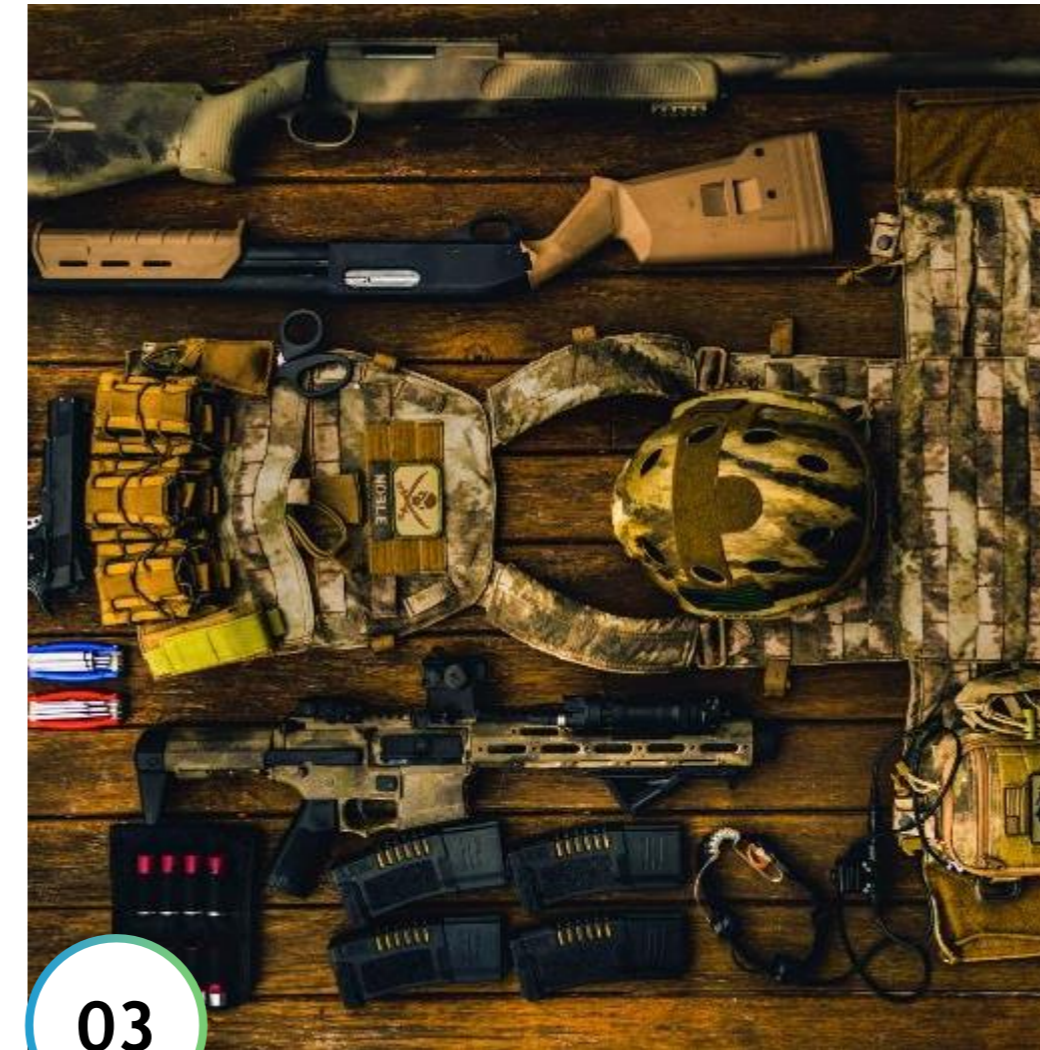
vs. 121 lbs of batteries



02

## Partner Product

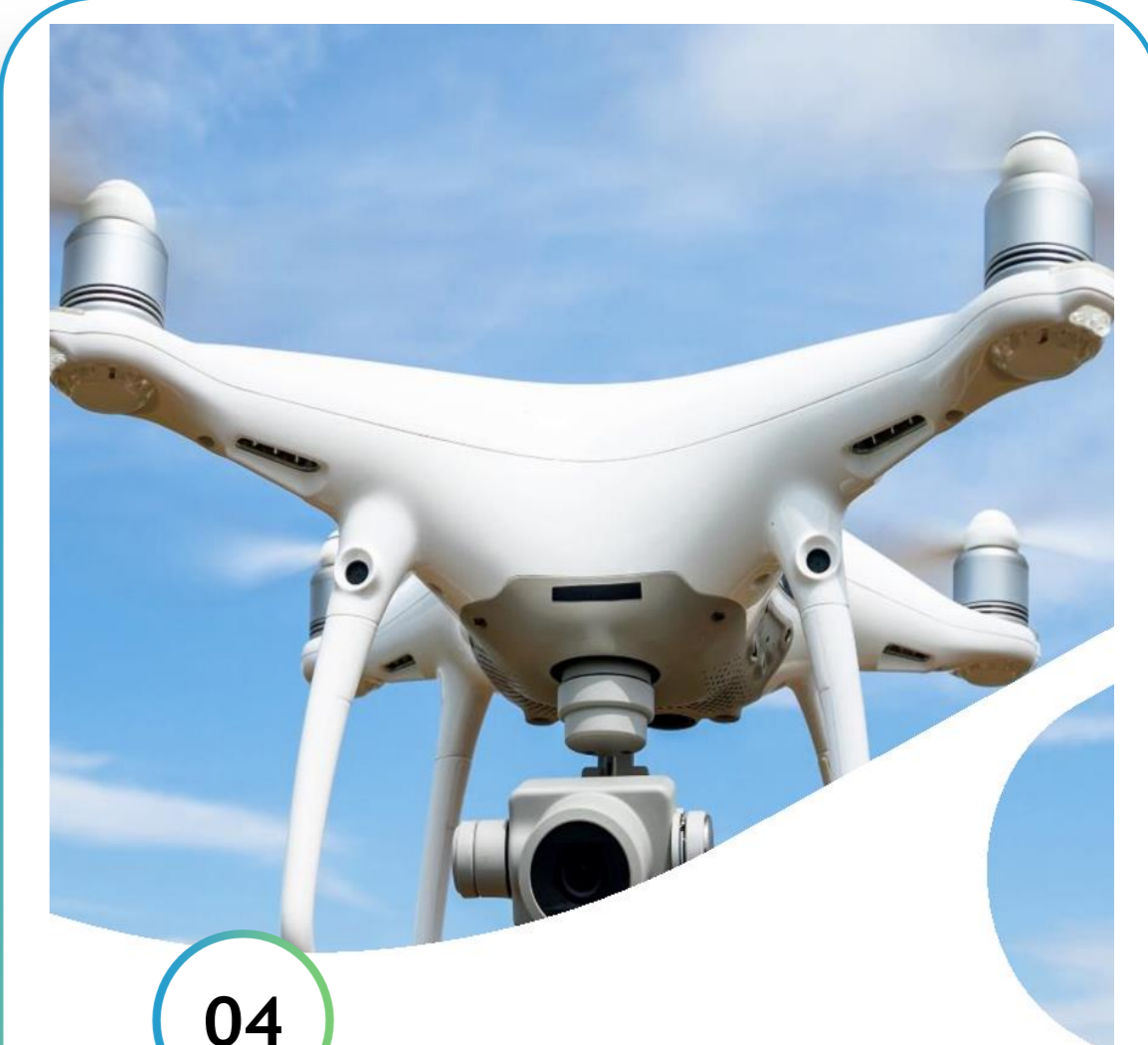
- Portable Power: Military grade, 55W-1kW battery chargers allows long autonomy, 5x weight drop
- Lightweight design and system testing expertise



03

## Business

- Deployed in the US, UK, and two more
- Immediate growth opportunity
- Expand sale/capabilities with Advent capital



04

## Vision

Know-how & new team propels aviation/automotive next-generation product





# 5. Financial Overview

## Path to Profitability



# Summary Financials

High growth model offering stable margins whilst enabling pass-through of efficiencies to our end users

\$m	2020E	2021E	2022E	2023E	2024E	2025E
MEAs sold ('000s)	2	325	788	2,144	6,296	18,354
Capacity (MW)	0.1	11	26	265	779	2,271
<b>Revenue</b>	<b>1.7</b>	<b>13.0</b>	<b>25.6</b>	<b>60.0</b>	<b>122.8</b>	<b>254.8</b>
MEAs	0.8	5.9	12.8	30.3	72.5	187.7
Engineering, License Fees & Grant Income	0.9	7.2	12.8	29.7	50.3	67.1
Cost of Goods Sold	(0.4)	(8.8)	(19.8)	(38.7)	(76.1)	(174.4)
<b>Gross Profit</b>	<b>1.3</b>	<b>4.3</b>	<b>5.8</b>	<b>21.3</b>	<b>46.8</b>	<b>80.4</b>
% Margin	--	33%	23%	36%	38%	32%
SG&A and Other	(2.1)	(18.1)	(20.4)	(22.8)	(23.0)	(29.5)
<b>EBITDA</b>	<b>(0.8)</b>	<b>(13.8)</b>	<b>(14.6)</b>	<b>(1.5)</b>	<b>23.8</b>	<b>51.0</b>
% Margin	--	--	--	--	19%	20%

- 🔗 2.3GW power capacity projected to be sold in 2025
- 🔗 Equates to 10,000 220kW fuel cell EV heavy-duty vehicles
- 🔗 Average MEA cost/kW to customer in 2025 ~ \$80/kW, reducing in line with long-term customer fuel cell cost requirements
- 🔗 10-fold reduction in sales price from 2020-2025 drives market penetration without sacrificing gross margin. This is facilitated by:
  - Unit cost economies of scale
  - Technological advancement
  - Manufacturing automation
- 🔗 Projecting EBITDA positive by 2024



# Pro Forma Sources, Uses & Equity Ownership

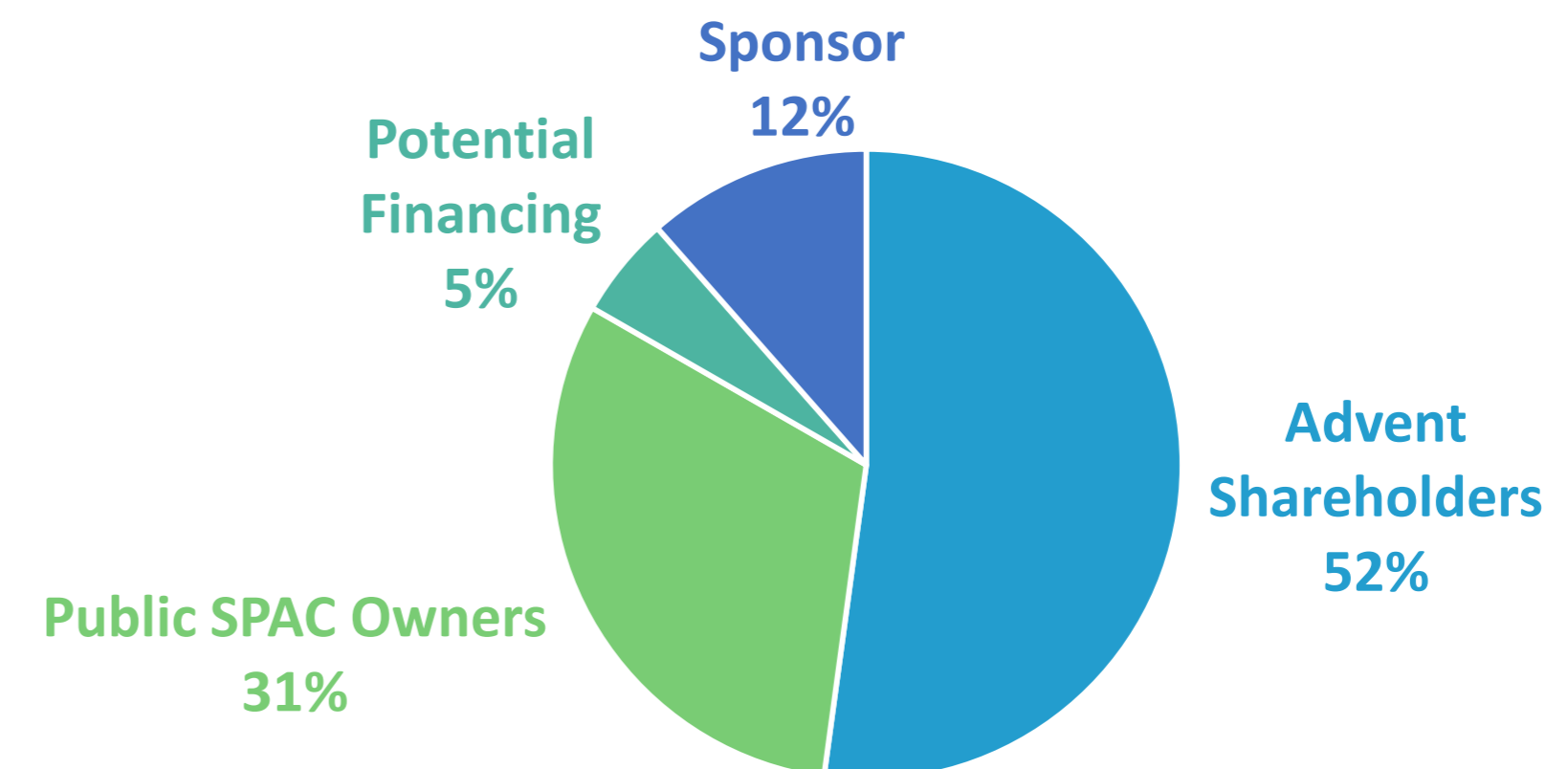
Sources (\$m)	
Shares Issued to Advent Shareholders <sup>(1)</sup>	\$250
Estimated SPAC Cash in Trust <sup>(2)</sup>	\$153
Potential Financing <sup>(3)</sup>	\$25
<b>Total Sources</b>	<b>\$428</b>

Uses (\$m)	
Rolled Advent Equity	\$250
Cash to Balance Sheet to Support Project Development and Working Capital	\$121
Cash Used to Repurchase Warrants <sup>(4)</sup>	\$39
Estimated Fees & Expenses <sup>(5)</sup>	\$18
<b>Total Uses</b>	<b>\$428</b>

## Pro Forma Valuation

Share Price (\$/share)	\$10.00
PF Shares Outstanding (mm shares) <sup>(1,2,3)</sup>	47.9
Equity Value (\$m)	\$479
Less: Cash <sup>(6)</sup> (\$m)	(\$122)
<b>Enterprise Value (\$m)</b>	<b>\$358</b>

## Illustrative Pro Forma Ownership<sup>(1,2,3,4)</sup>



(1) Advent to be issued shares of Class A common stock at \$10.00/share.

(2) Cash in Trust and Pro Forma Ownership assumes no redemptions of Class A common stock. There were 14.9m shares of Class A common stock outstanding and 5.5m shares of Class B common stock outstanding as of September 25, 2020.

(3) AMCI is seeking \$25 million of additional financing as part of the transaction. Pro Forma Ownership assumes that Potential Financing is in the form of Class A common stock issued at \$10.00/share.

(4) Assumes repurchase of all 22.1m of the public warrants and 3.9m of the private placement warrants at \$1.50/warrant. 2.0m of the private placement warrants will be forfeited.

(5) Estimated Fees & Expenses includes deferred underwriting fees and other expenses.

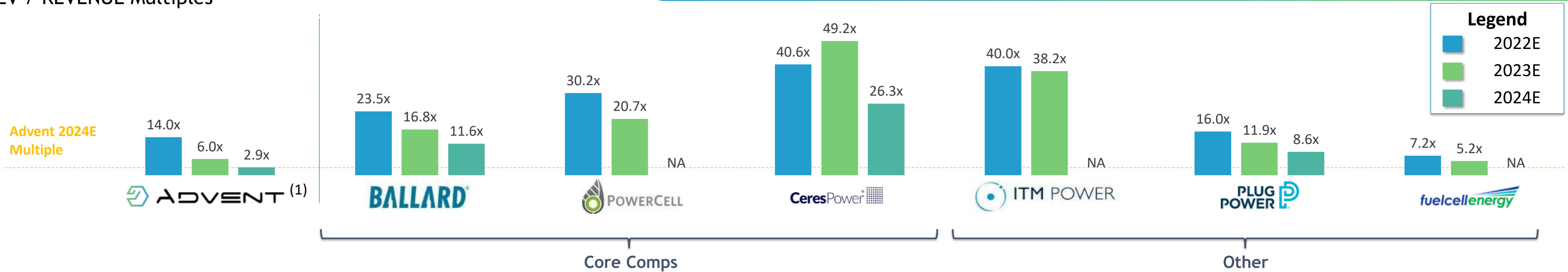
(6) Inclusive of \$1m of Advent net cash as of 6/30/2020 and Cash to Balance Sheet resulting from the transaction.



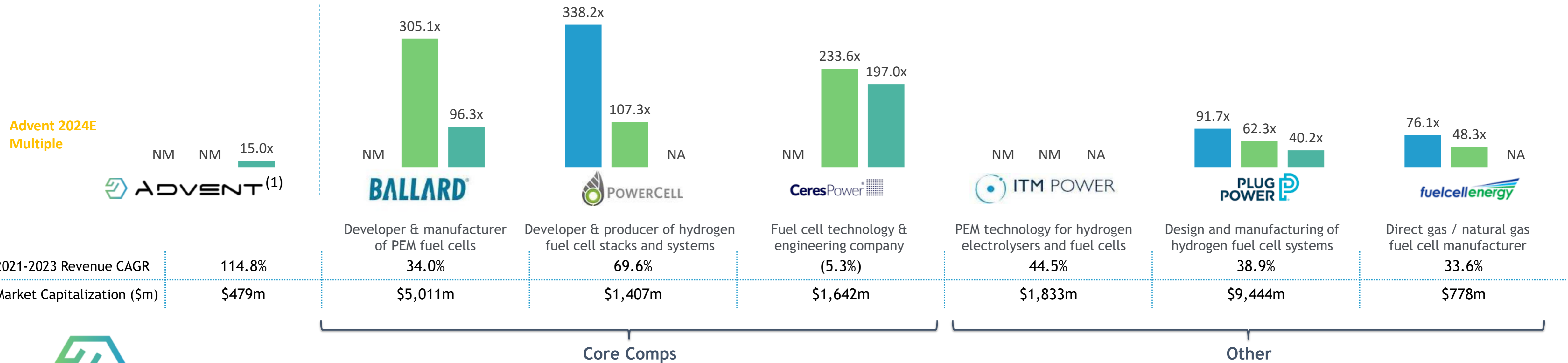
# Valuation & Peer Group

\$358 million valuation facilitates substantial value uplift based on peer group multiples

## EV / REVENUE Multiples



## EV / EBITDA Multiples














Note: Market data as of October 9, 2020. Market capitalization presented on a fully diluted basis using the treasury stock method.

(1) Advent multiples represent implied Transaction Adjusted multiples based on PF Enterprise Value of \$358m.

"NM" indicates the data is not meaningful. "NA" indicates not enough data is available.

# Significant Strategic Interest in Fuel Cell Technology

Recent investments demonstrate strong demand for fuel cell exposure

Acquirer	 <b>BOSCH</b>	 <b>THE LINDE GROUP</b>			 <b>维柴动力</b> <b>WEICHAI POWER</b>	
Announcement Date	January 22, 2020	October 3, 2019	June 28, 2019	March 26, 2019	August 29, 2018	May 16, 2018
Transaction Summary	Bosch increases stake in Ceres Power and forms partnership	Linde acquires 19% stake in ITM Power and forms JV	Cummins completes acquisition of Hydrogenics	MAN Energy Solutions acquires 40% stake in H-TEC Systems	Weichai Power Co. acquires 19.9% stake in Ballard Power Systems and forms JV	Weichai Power Co. acquires 20% stake in Ceres Power and forms JDA
Target						
Target Description	Bosch and Ceres formed a partnership to apply Ceres' fuel cell technology to create small power stations for cities, factories, datacenters and EV charging points	Manufacturer of PEM electrolyzers for the electro-chemical splitting of water into hydrogen and oxygen	Designs, develops, and manufactures hydrogen generation products based on water electrolysis technology and fuel cell products based on proton exchange membrane (PEM) technology	Leading producer of PEM electrolyzers and PEM stacks	Engages in the design, development, manufactures, sale, and service of PEM fuel cell products	Weichai and Ceres announced a strategic investment and joint development agreement (JDA) to develop bus Range Extenders and commercial EVs
Key Details	<ul style="list-style-type: none"> <li>➤ \$140mm invested to date<sup>(1)</sup></li> <li>➤ \$102mm investment to increase stake from 4% to 18%<sup>(1)</sup></li> <li>➤ Spent \$12mm on initial 4% and incremental \$26mm license<sup>(1)</sup></li> </ul>	<ul style="list-style-type: none"> <li>➤ Linde and ITM Power to form a JV to target large-scale industrial users of hydrogen</li> <li>➤ Total investment of \$76 million<sup>(2)</sup></li> </ul>	<ul style="list-style-type: none"> <li>➤ \$290mm TEV</li> <li>➤ TEV / LTM Revenue 8.5x</li> </ul>	<ul style="list-style-type: none"> <li>➤ Undisclosed</li> </ul>	<ul style="list-style-type: none"> <li>➤ \$163mm equity investment</li> <li>➤ \$90mm technology transfer related to JV formation to support China's FCEV market</li> </ul>	<ul style="list-style-type: none"> <li>➤ Investment of \$61m for a 20% interest<sup>(3)</sup></li> <li>➤ License Agreement for \$50m<sup>(3)</sup></li> <li>➤ Joint development of a 30kW range-extender systems</li> <li>➤ Electric bus manufacturing JV</li> </ul>



## 6. Conclusion



# Conclusion

Advent's HT-PEM technologies are an essential component needed to unlock the Hydrogen Economy



**Provides low-cost, fuel-flexible and resilient and fuel cell technology**



**Developing and manufacturing the critical components for high-growth new energy markets**



**Advent's technologies solve range and recharge mobility problems**



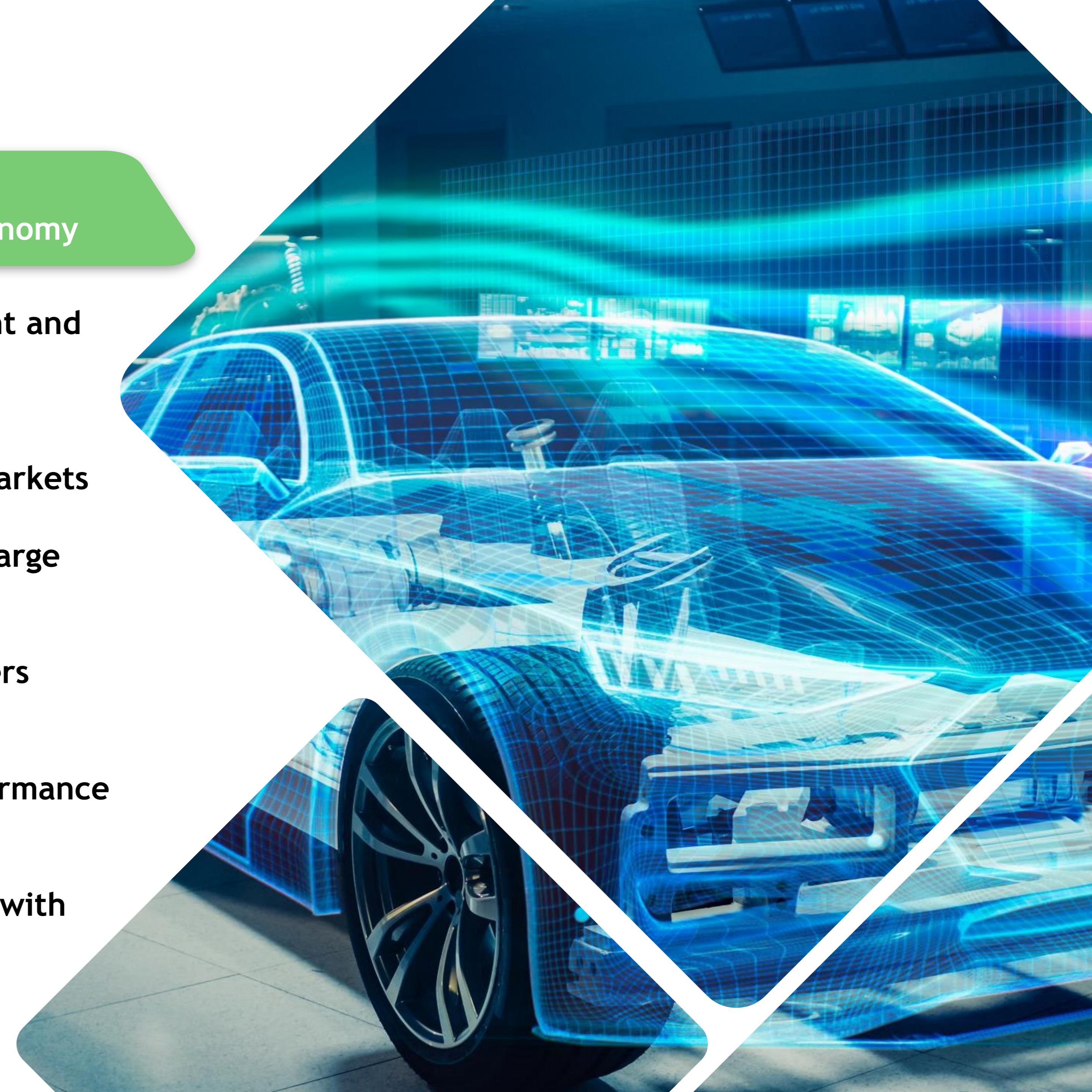
**Proven, scalable business model that delivers consistent and recurring revenue**



**Platform technology provides critical performance benefits for a wide range of end markets**



**Experienced management team partnering with world-class research centers**



# Appendix

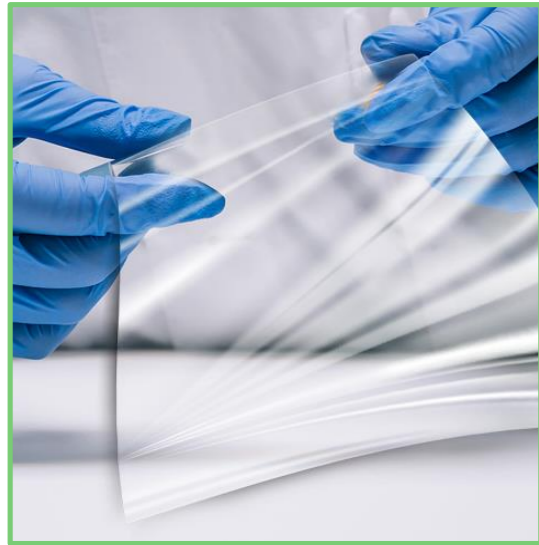




# Product Development Initiatives

## Fuel Cells

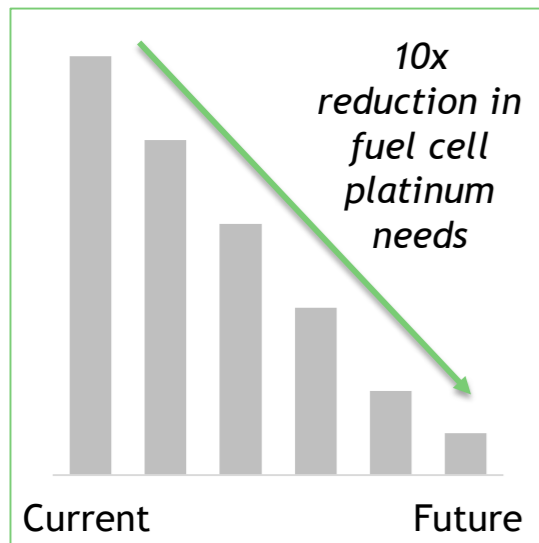
Product development program to reduce cost and increase power output



1

### New MEAs outperform competition

- ⚙️ Achieve power density close to LT-PEM pure hydrogen MEAs
- ⚙️ Works anywhere: extreme temperature, humidity, pollution
- ⚙️ Long lifetime reduces total cost of ownership
- ⚙️ Fuel flexibility wins in niche markets



2

### Minimum Cost Catalyst

- ⚙️ Can reduce the platinum load by 10x compared to current state-of-the-art
- ⚙️ Platinum free catalysts also in R&D stage



3

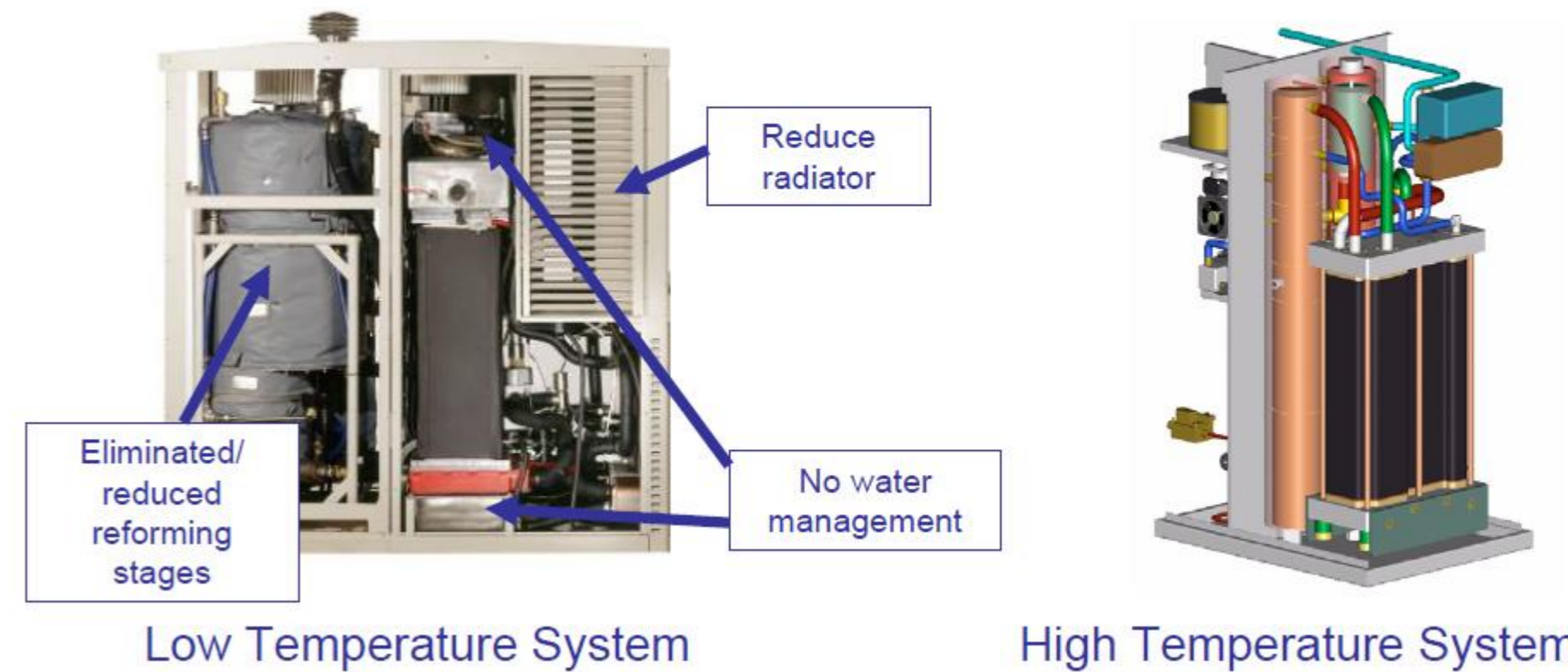
### New Bipolar Plates drop weight for Auto and Aviation markets

- ⚙️ Will reduce the weight by 4x without the use for expensive metal alloys

4

### Simpler Design

#### LOW TEMP vs HIGH TEMP FUEL CELL SYSTEM



5

### Reduce Production Cost

- ⚙️ Specific Initiatives to reduce cost per unit as demand scales up
- ⚙️ Strong expertise in-house



# Well-Established Global Policy Support for Fuel Cells

Favorable global policies are just one of the tailwinds driving the growth of the global Hydrogen Economy

## Long-term Market Trends (Deloitte / Ballard report)

Item	Details
Hydrogen Refueling Stations - 2030 targets	<ul style="list-style-type: none"> <li>• US: 7,100</li> <li>• EU: 3,700</li> <li>• Japan: 900</li> <li>• China: 500 (trebled capacity in 2019)</li> </ul>
Publicly-announced FCEV targets in 2030 by country	<ul style="list-style-type: none"> <li>• US 5.3 million</li> <li>• Japan 0.8 million (passenger vehicles)</li> <li>• Europe 3.7 million FCEVs by 2030 and in addition 0.5m fuel cell LCVs, 45,000 fuel cell trucks &amp; buses</li> </ul>
Selected Targets by Company	<ul style="list-style-type: none"> <li>• Hyundai targeting 500,000 FCEVs on the road in 2030</li> <li>• Toyota targeting 30,000 FCEV sales annually from 2020 onwards</li> </ul>
US State Level - Ambitious Targets	<ul style="list-style-type: none"> <li>• California alone is targeting 1 million FCEVs and 1,000 refueling stations in 2030</li> </ul>
Other Trends	<ul style="list-style-type: none"> <li>• Participants of the Hydrogen Energy Ministerial (global clean energy forum involving all major nations including China, India, USA, Japan, Korea, Germany, France, UK, Brazil, Canada and Australia) signed up to a global target of 10,000,000 FCEVs on the road by 2030</li> <li>• EU target of 32% replacement of natural gas for heating with hydrogen by 2040</li> <li>• Japan is the leader in stationary CHP fuel cells - 20,000 deployed to date; and in FCEV's - Toyota Mirai launched in 2014</li> </ul>



# More Countries are Looking to Phase Out Internal Combustion Engines (“ICE”)

17 countries have taken varying types of action, from soft targets to strong commitments, to phase out ICE vehicles and increase the number of EVs

Country	Action Announced	Date Announced
Austria	No new ICE vehicles sold after 2020	2016
Britain	No new ICE vehicles sold after 2040	2017
California (U.S.)	No new ICE vehicles sold after 2035	2020
China	End production and sales of ICE vehicles by 2040	2017
Denmark	5,000 EVs on the road by 2019, tax incentives in place	Since 2008
France	No new ICE vehicles sold after 2040	2017
Germany	No registration of ICE vehicles by 2030 (passed by legislature)	2016
India	No new ICE vehicles sold after 2030	2017
Ireland	No new ICE vehicles sold after 2030	2017
Israel	No new ICE vehicle imports after 2030	2018
Japan	Incentives program in place for EV sales	Since 1996
Netherlands	No new ICE vehicles sold after 2030	2017
Norway	Incentives program in place for EV sales	Since 1990
Portugal	Official target and incentives in place for EV sales	Since 2010
Scotland	No new ICE vehicles sold after 2032	2017
South Korea	EVs account for 30% of auto sales by 2020	2016
Spain	Official target and incentives in place for EV sales	2017
Taiwan	Phase out of fuel-powered motorcycles by 2035 and fuel-powered vehicles by 2040	2017



Source: The Climate Center.

# Glossary

Abbreviation	Term	Description
<b>BEV</b>	Battery electric vehicle	Vehicle using exclusively battery technology
<b>BOM</b>	Bill of materials	List of raw materials, assemblies and parts and quantities of each to manufacture a finished product
<b>CHP</b>	Combined heat and power	Also known as cogeneration, CHP is primarily used in industrial applications
<b>DoE</b>	U.S. Department of Energy	Primary governmental body responsible for clean energy R&D
<b>FCEV</b>	Fuel cell electric vehicle	Vehicle using fuel cell technology, often in conjunction with batteries
<b>HDV</b>	Heavy-duty vehicle	A vehicle exceeding 26,001 pounds
<b>HT-PEM</b>	High-temperature proton exchange membranes	Operate at 160°C to 200°C
<b>ICE</b>	Internal combustion engine	Standard heat engine used in traditional vehicles
<b>IoT</b>	Internet of Things	System of interrelated computing devices able to transfer data over a network

Abbreviation	Term	Description
<b>Li-ion</b>	Lithium Ion	Common battery used in consumer electronics and EVs
<b>MEA</b>	Membrane electrode assembly	Assembled stack of proton exchange membranes; heart of the fuel cell
<b>MDV</b>	Medium-duty vehicle	A vehicle weighing 10,001 - 26,000 pounds
<b>OEM</b>	Original equipment manufacturer	Company that produces devices from intermediate components
<b>PHEV</b>	Plug-in hybrid electric vehicle	Combines ICE with battery-powered electric vehicles
<b>RFB</b>	Redox flow battery	Industrial scale rechargeable battery that can be used in industrial scale applications
<b>SOFC</b>	Solid oxide fuel cell	Highest temperature fuel cell (800°C to 1,000°C)
--	Electrolysis	Process using direct electric current (DC) to drive chemical reaction
--	eFuels	Synthetic fuels resulting from electrolysis of water with renewable energy and CO <sub>2</sub>





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Thank you

