

Business Development & Growth

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INVESTOR DAY 2022

Business Units

Stationary Power Systems

- ✓ *Replace the Diesel Generator*



Portable Power Systems

- ✓ *Infrastructure, Surveillance, Defense*



Mobility

- ✓ *Trucks*
- ✓ *Aviation*
- ✓ *Marine*



Electrolyzers

- ✓ *Green Hydrogen Production*



Business Unit

Stationary Power Systems

✓ *Replace the Diesel Generator*



Replace the Diesel Generator Now with Lower TCO

- Telecom Backup Power for Off-Grid/Bad-Grid.
- Diesel Genset Replacement
- Combined Heat & Power (H₂-powered buildings)



Advent SereneU Fuel Cell

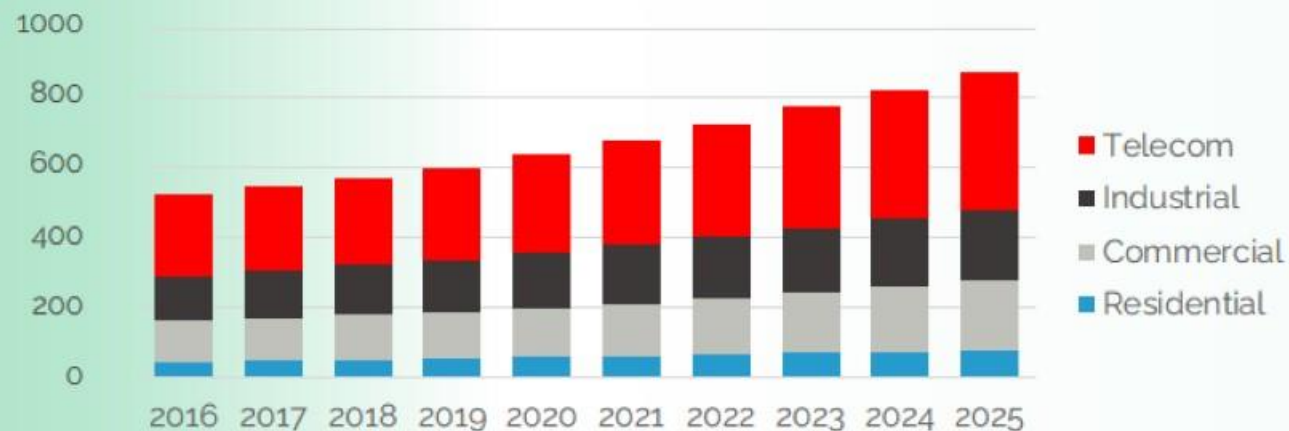


Advent SereneU System runs on green fuel

Diesel Genset Market

\$37 bn/yr 2027*

Annual generator sales for stationary applications
[in 1000 units]



Telecom Tower Backup Power

- 1.18 million towers globally need backup power
- Growth in number and power needs (due to 5G deployments)
- License to Operate: Government mandates & ESG agendas of Telecom companies expected to result in the replacement of diesel generators



Total number of off-grid and bad-grid towers

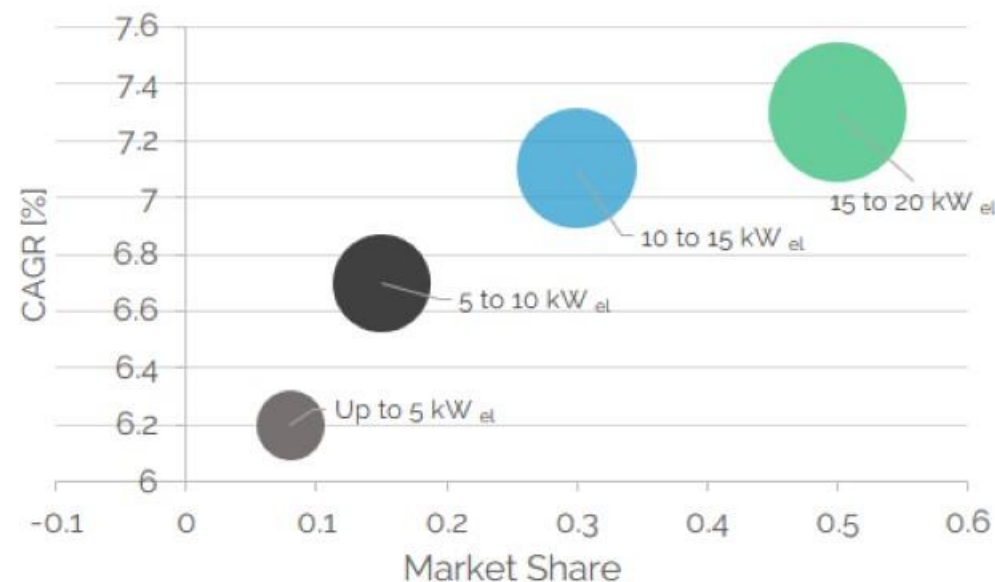
■ Off-grid Towers ■ Bad-grid Towers



2020

$$\times 15\text{kW} = \mathbf{18\text{GW}}$$

Market share and growth by generator size



USP: "Any Fuel. Anywhere."

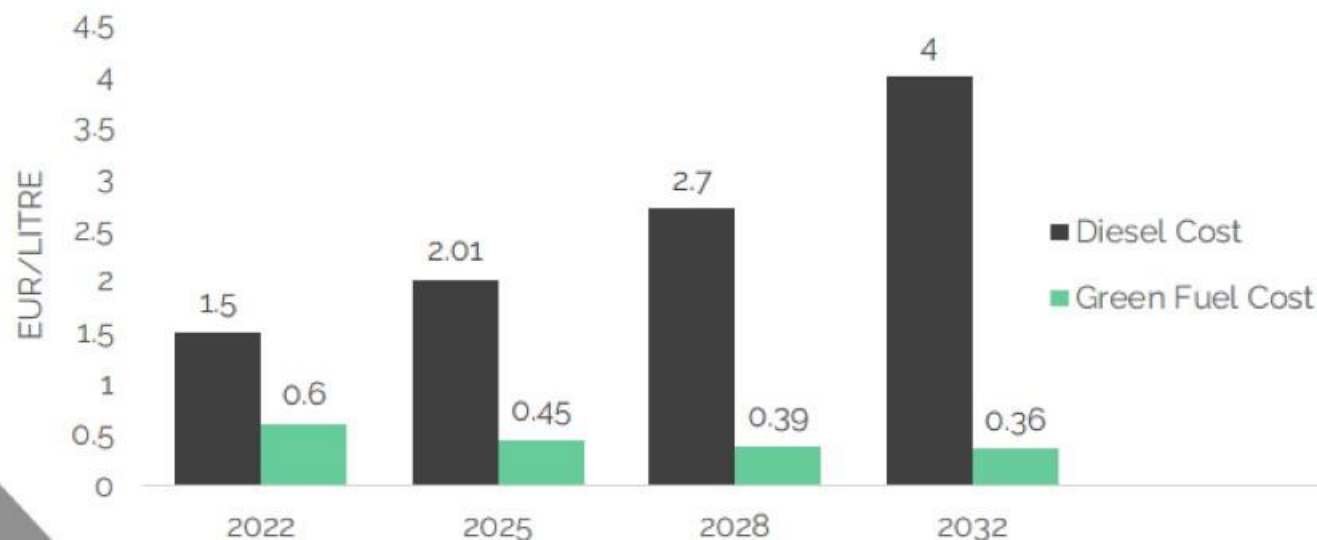
- Logistics: Serene can use biomethanol, e-methanol, biomethane, rNG, ammonia. "The fuels of tomorrow, today"
- Fuel Price: Diesel/eFuel price evolution favors Serene
- Quiet Power for Rooftops



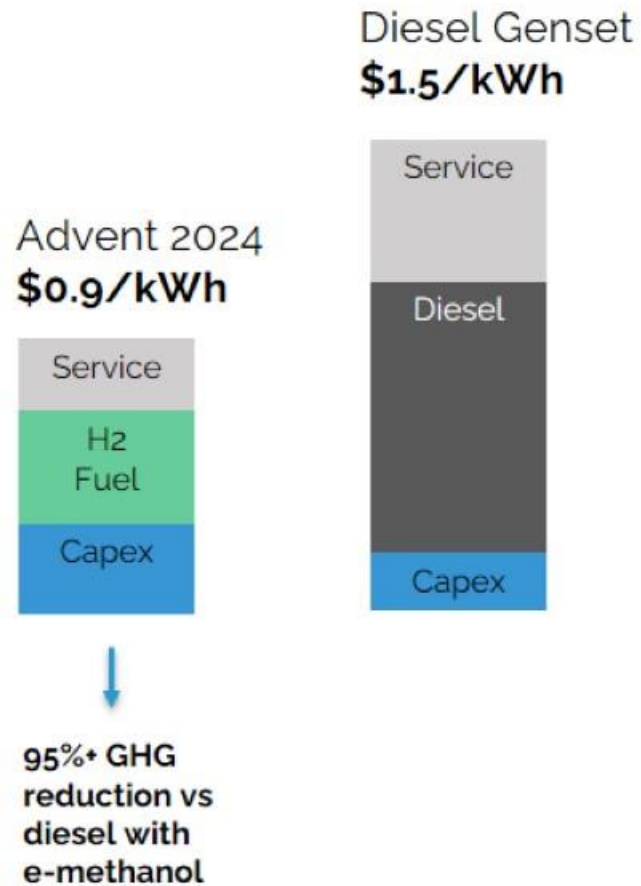
Advent SereneU Fuel Cell



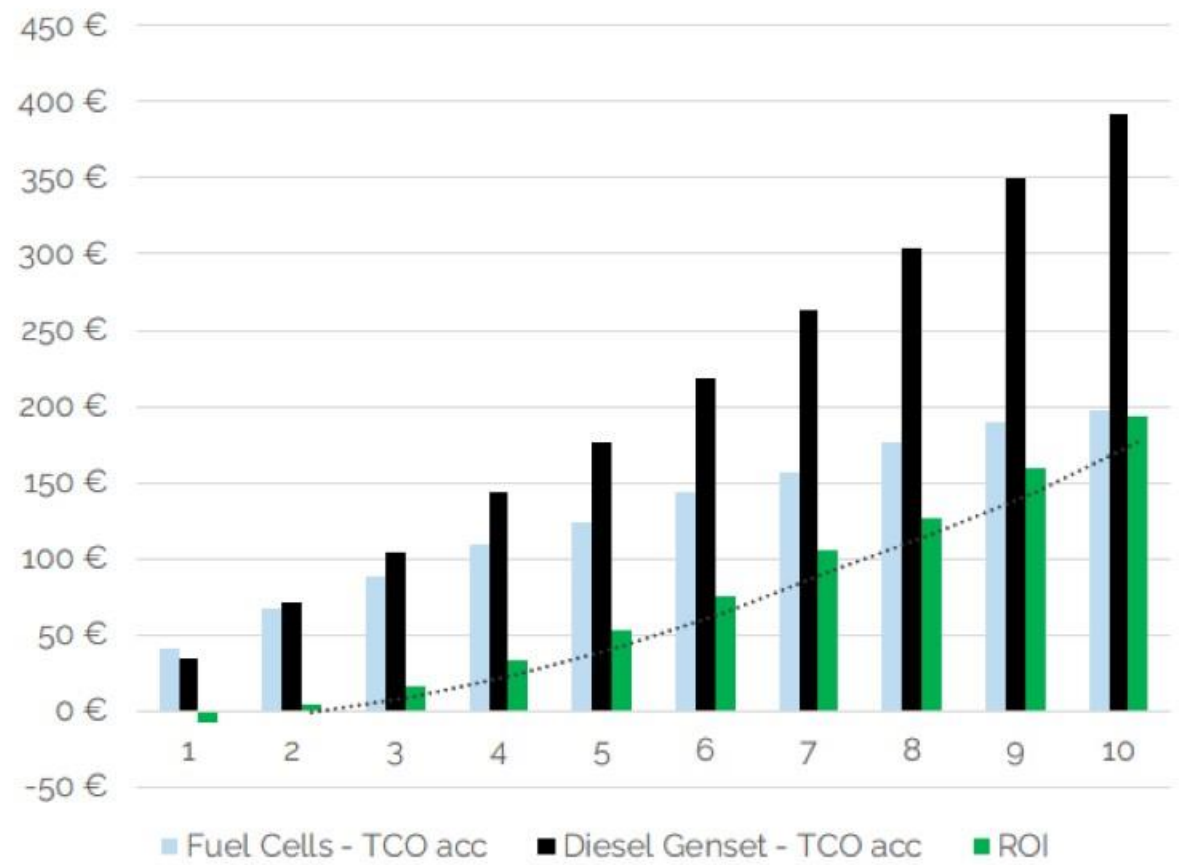
Advent SereneU System runs on green fuel



Total Cost of Ownership: Fuel Cell vs Diesel Genset



Cumulative Cost of Multiyear Deployment:
(cost in 000s, 3.75kW, 10year operation, 24hrs/day)



Philippines Deployment

SERVICE AREAS

Sales POC, TCO

System Installation

Remote Monitoring

Repair & Maintenance

Fuel Supply

Fuel Delivery

Logistics & Warehouse

More than 30 engineers and technicians,
experienced in installations and
maintenance, ready to travel all over Asia.



Moving from Direct Sales & Service to Channel Partners



Germany, Indonesia, Philippines, Malaysia, Taiwan, Thailand, United States, Egypt, South Africa, Latam, Japan, India, China

CURRENT



~1,000
systems deployed

TARGET



2,000
new systems in the
next 18 months

PIPELINE



17,000
towers

Massive Growth Opportunity



Systems



Power

Opportunity

Direct Sales

5,000



20 kW



100MW



Revenue: \$**1,000s/kW**
Gross Margin: lower
CAPEX & OPEX: higher

Channel Partners

50,000



20 kW



1,000MW



Revenue: \$**100s/kW**
Gross Margin: higher
CAPEX & OPEX: lower

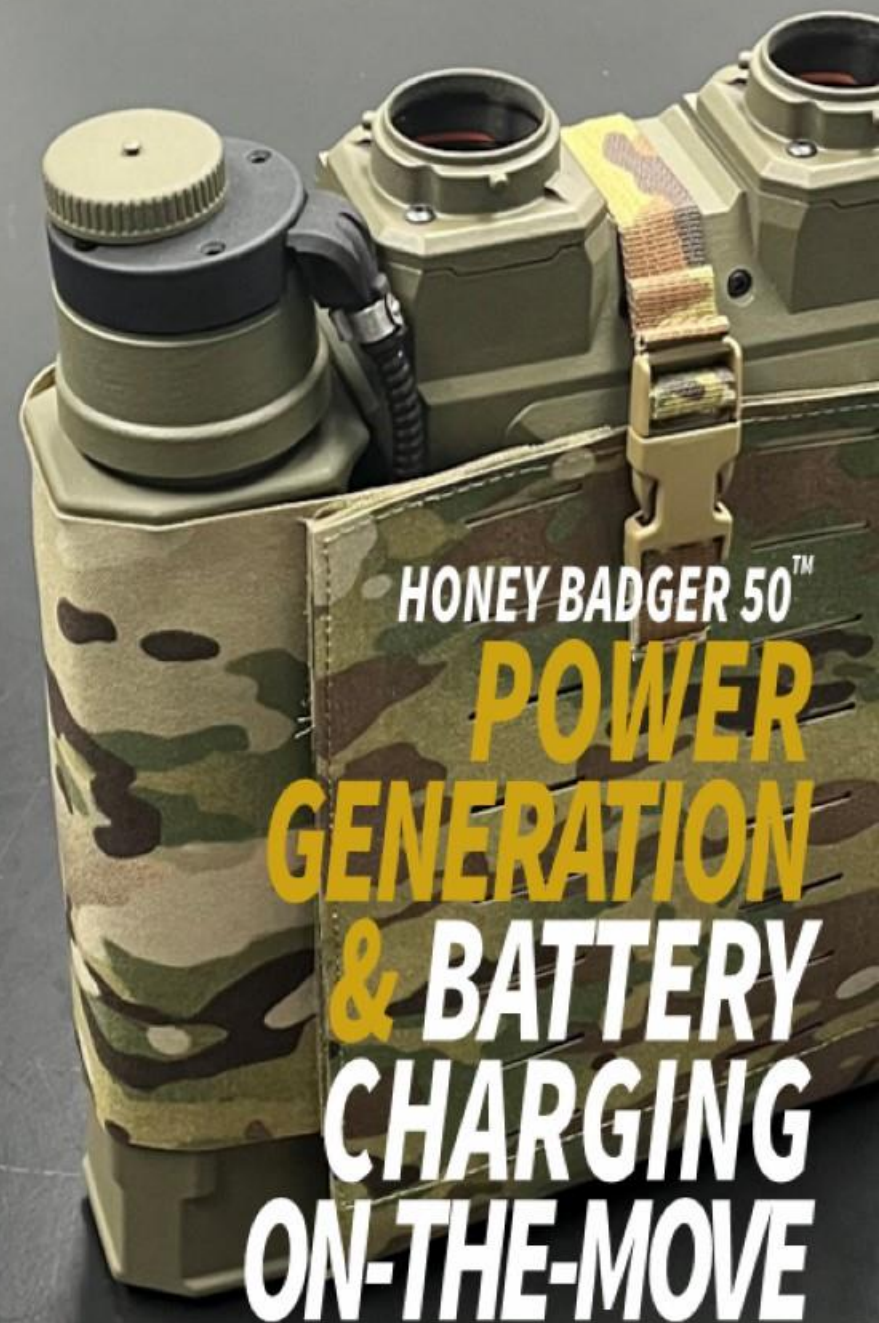
Portable Power Systems

- ✓ *Human-portable, lightweight power for surveillance, critical infrastructure, and defense*



Portable Power for Defense

- In development with US DoD funds with low-rate production starting next year and higher volumes expected in the future
- Has passed numerous military standard tests at Ft. Bragg NC and Ft. Benning GA
- Ability to operate On-the-Move and in extreme environments
- Potential strong demand in line with multibillion IVAS (Augmented Reality AR) US Army Program
- New Contract with PM-IVAS to fund product enhancements to meet evolved requirements
- Reduces weight vs batteries by 3x to 25x on missions.
- Designed for long-duration operations
- Windshield Washer fluid as fuel! = Simple Logistics



Remote Power for Critical Infrastructure

- The first application is focused on the Canadian Oil & Gas Market
- Partnership with Calscan, leader in the market
- System developed according to specs (operation at extreme environments)
- First units are expected to be tested and deployed in 2022 with strong demand expected (driven by regulation) in 2023-2024
- Power for Winter for Control Systems
- **Significant reduction in O&G well site emissions (up to 40 Mt carbon dioxide per year)**
- Fueled by methanol (widely available at wellheads)



From Defense to the Markets of the Future

Innovative Technology is initially supported by Defense budgets



\$10-20 mn

Development Funds
2020-2023

Bring Technology to other massive growth markets

- Drones
- Firefighting
- Agriculture
- Augmented Reality
- Surveillance
- Robotics



High-Margin and Uniquely Differentiated Niche Markets

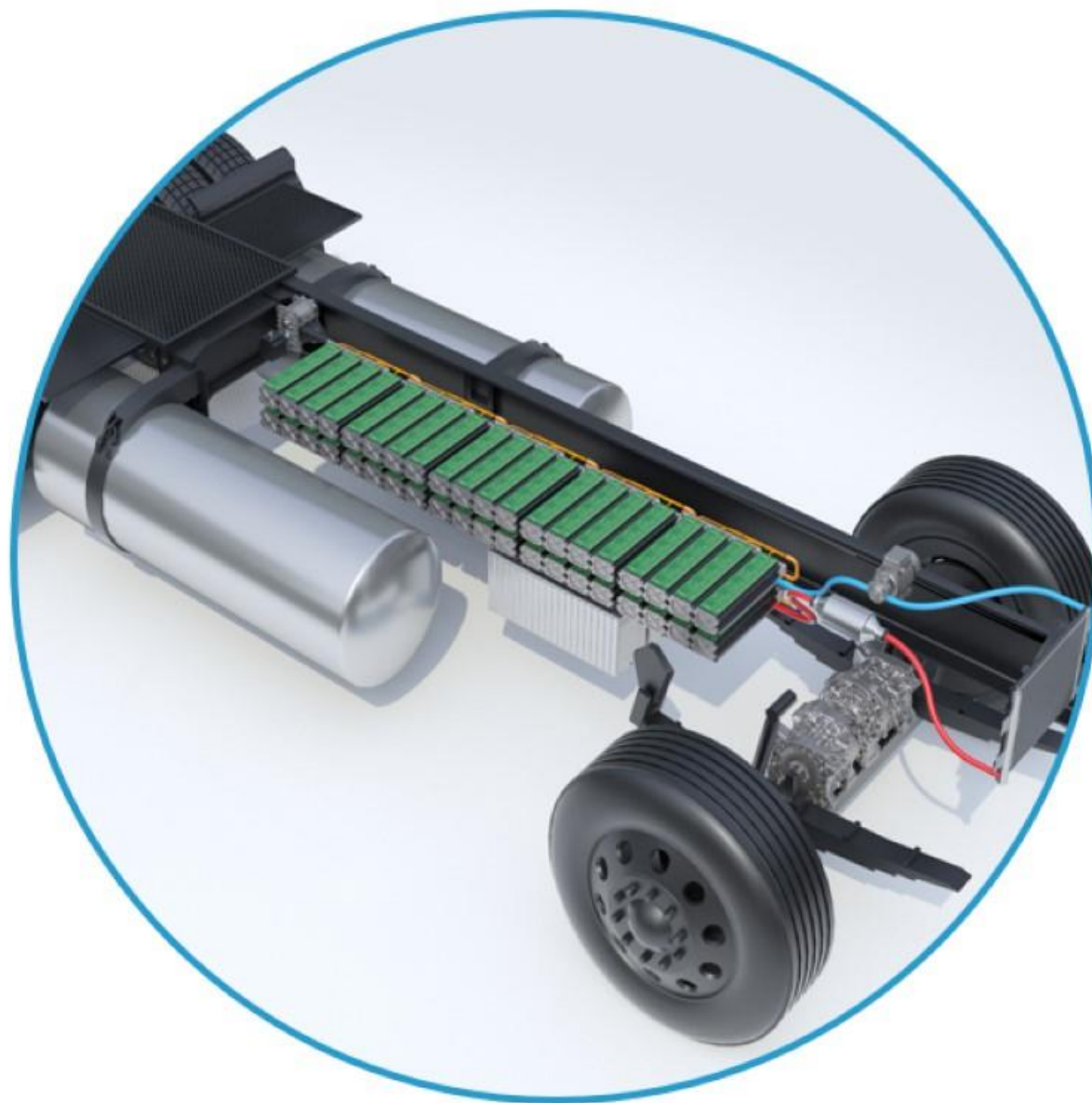
\$2 bn

a year by 2027



Mobility

- ✓ *Next-Generation Fuel Cell Technology for Trucks, Aviation, and Marine*



Mobility: Enabling Tier1s and OEMs

One Technology. Many Applications.

Heavy-Duty
Automotive



Aviation



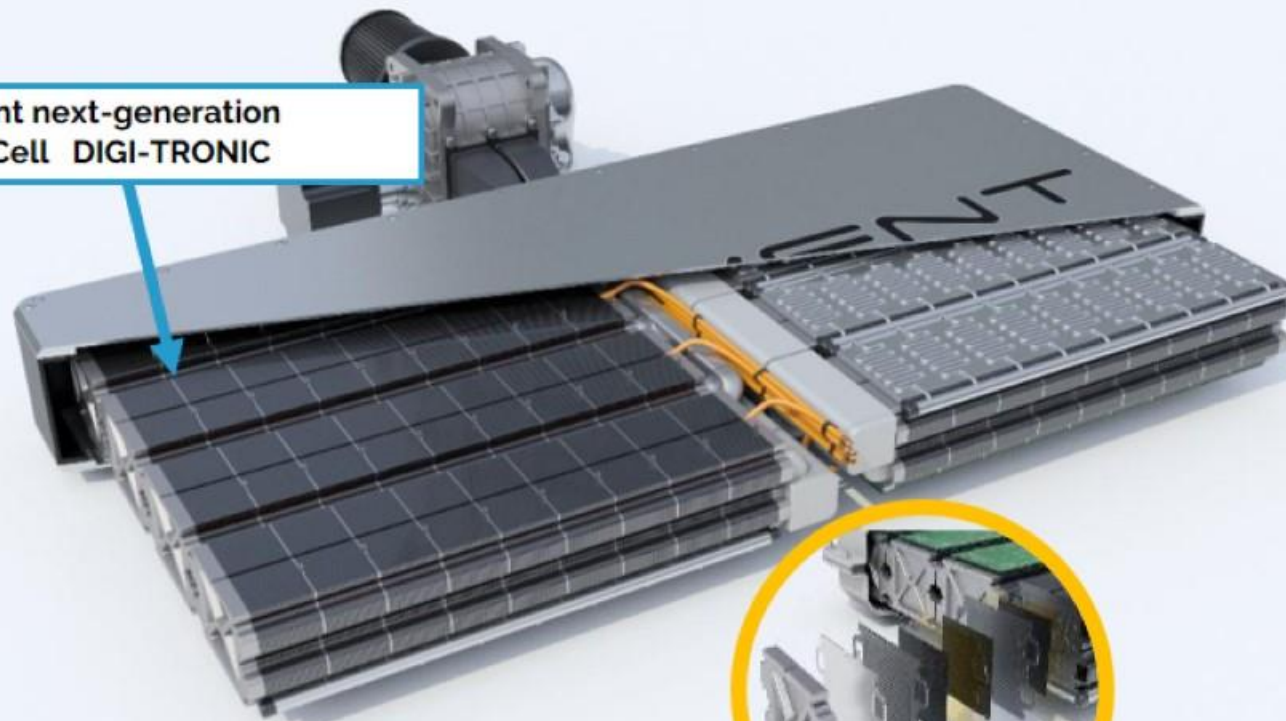
Marine



Train



Advent next-generation
Fuel Cell DIGI-TRONIC



Advent MEA

Market Feedback for HT-PEM

		Power	Heat Rejection= Efficiency	Multifuel	Extreme Environments
Heavy-Duty Mobility 		100s of kW's			
Aviation 		MW's			
Marine 		MW's			
Locomotive 		MW's			

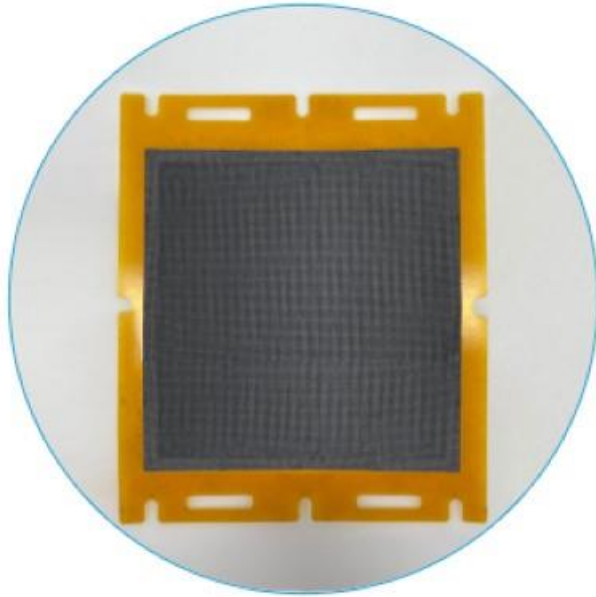
Convert Market Need to Strong Profitable Partnerships with Immediate Revenue for Development of Systems.

Progress to "License + MEA" business model

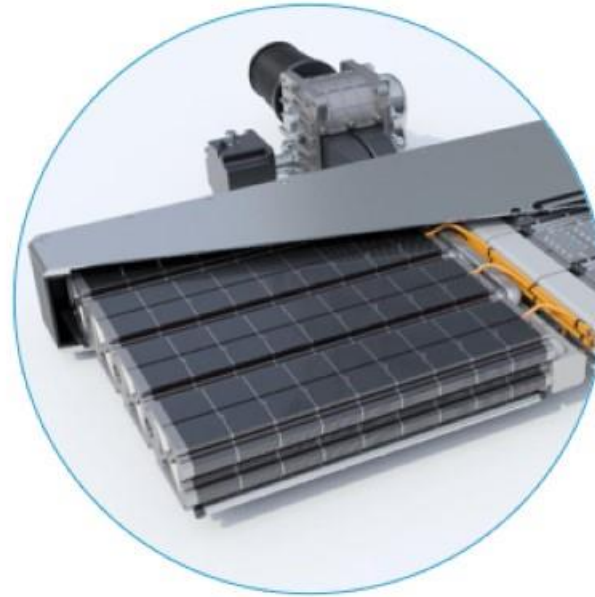
Advent has the Technology. Tier1s and OEMs need a System Ready for Mass Production

Advent develops core technology in-house.

Advent develops application/market-specific system, certified for operation.



MEA



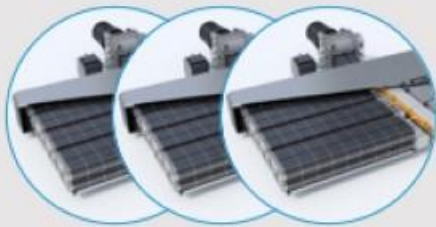
Fuel Cell Technology

Joint Development Agreement - Partnership Direction

Development Phase

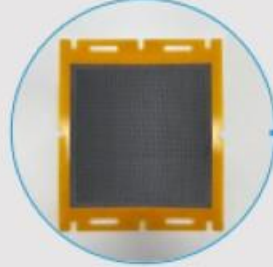


Fuel Cell System Co-Development

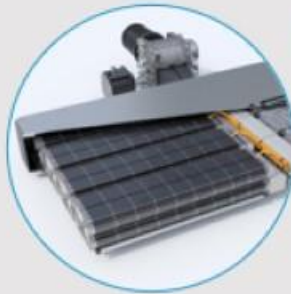


Manufacturing Know-How Transfer

Production Phase



MEA Supplier



License Technology

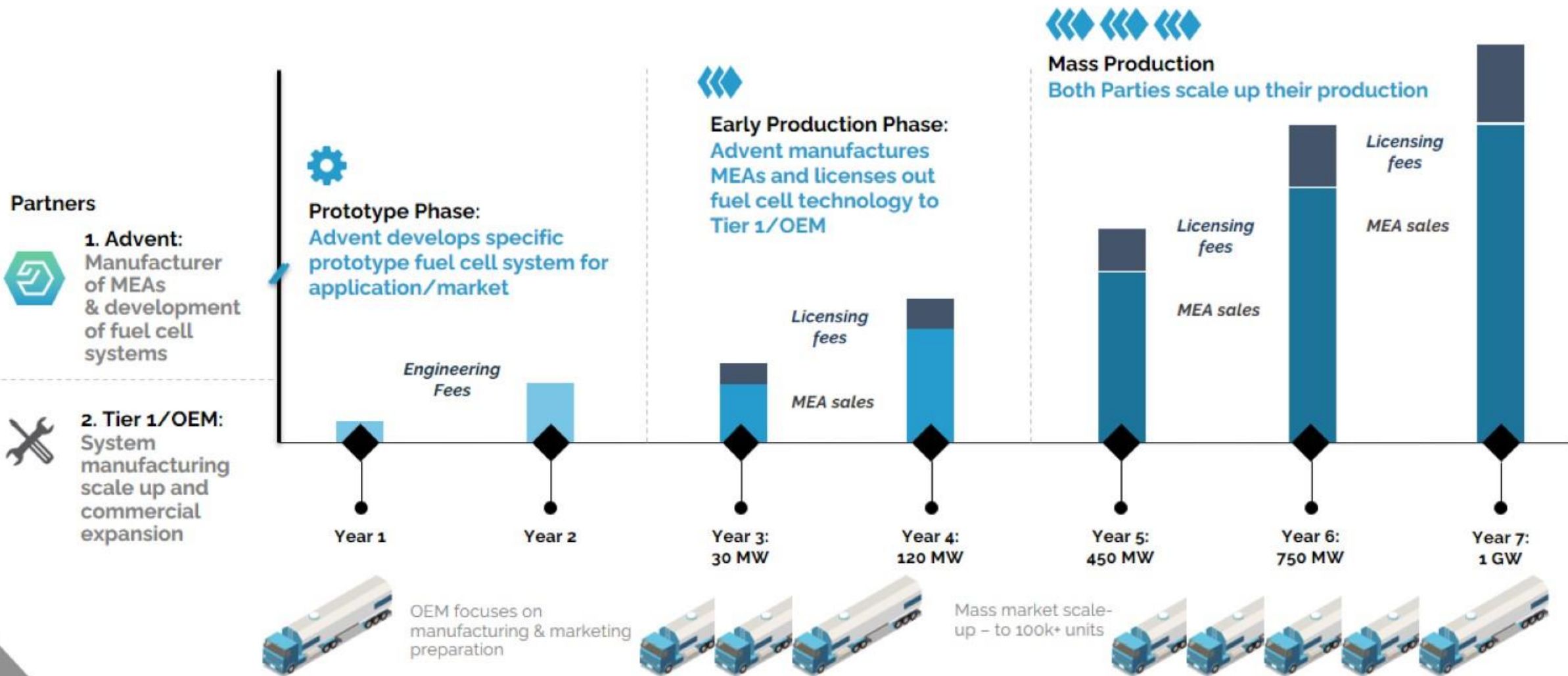
Production Phase

Tier1/OEM

Partner has the right to brand, manufacture locally, price, sell under own brand the system to the specific market / application



Advent Business Model in JDAs



Strategic Partnerships Progress

1. Hyundai Technology Assessment
2. Other Top Automaker Technology Assessment
3. In discussions with many world-leading conglomerates across Automotive, Aviation, and Marine

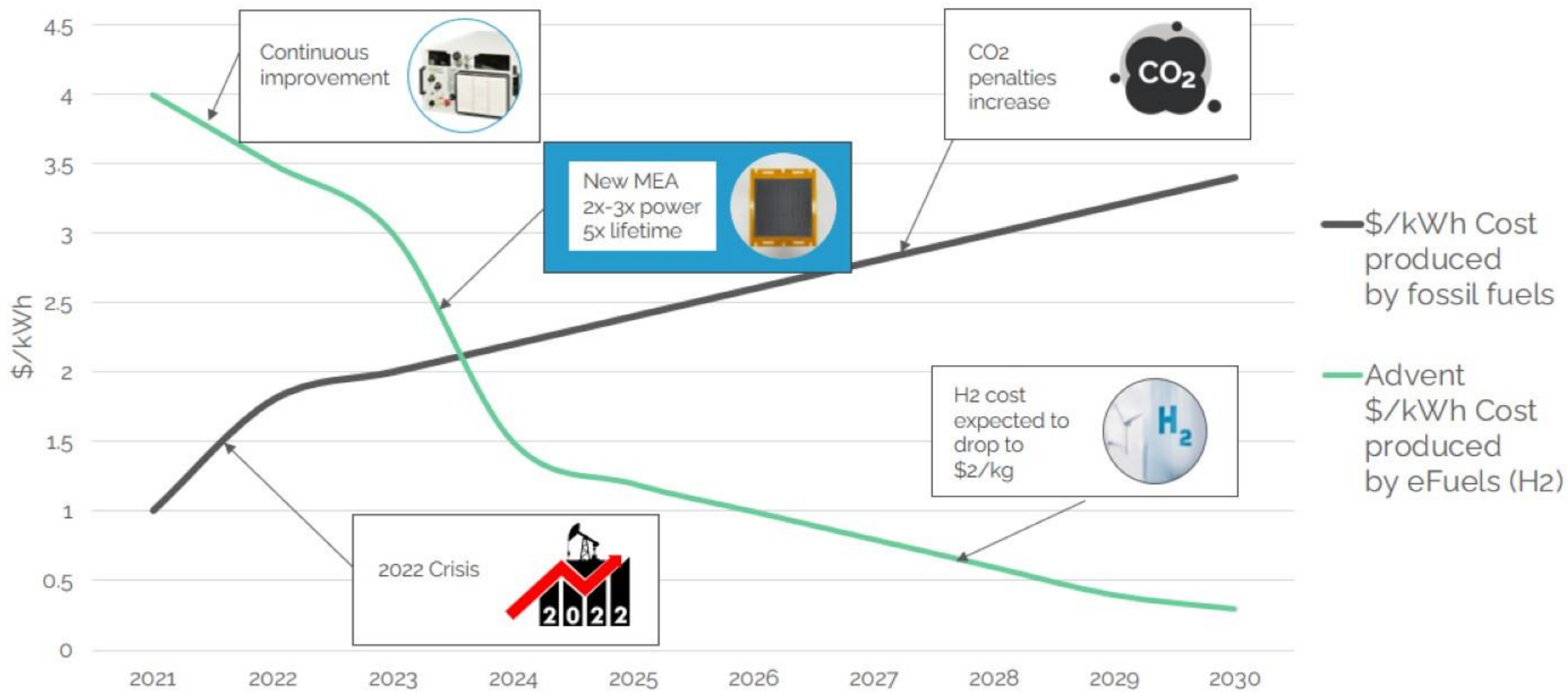


Growth Strategy

Advent is an innovation and enabler company that brings HT-PEM technology to the mass market through strategic partnerships with world leaders in the mobility and power-generation markets.

The company will invest in innovation and manufacturing in the areas of MEAs and Fuel Cell Technology where it can achieve high differentiation and market impact.

Innovation & Investment Drops Cost Demand Follows



\$/kWh are indicative and market/application-specific

[illegible]

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2022 Outlook

- Majority of Sales expected in Q3 and Q4
- Sales will depend on the speed of execution of framework agreements with telecom operators
- Revenue in the form of development fees from joint development agreements
- Expected support from R&D and Government grants, as part of the \$23m revenue and grants target