



## *Company Update*

May 2018

NASDAQ: FCEL [www.fuelcellenergy.com](http://www.fuelcellenergy.com)



This presentation contains forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Reform Act of 1995, including, without limitation, statements with respect to the Company's anticipated financial results and statements regarding the Company's plans and expectations regarding the continuing development, commercialization and financing of its fuel cell technology and business plans. All forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those projected. Factors that could cause such a difference include, without limitation, changes to projected deliveries and order flow, changes to production rate and product costs, general risks associated with product development, manufacturing, changes in the regulatory environment, customer strategies, unanticipated manufacturing issues that impact power plant performance, changes in critical accounting policies, potential volatility of energy prices, rapid technological change, competition, and the Company's ability to achieve its sales plans and cost reduction targets, as well as other risks set forth in the Company's filings with the Securities and Exchange Commission (SEC). The forward-looking statements contained herein speak only as of the date of this presentation. The Company expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any such statement to reflect any change in the Company's expectations or any change in events, conditions or circumstances on which any such statement is based.

The Company may refer to non-GAAP (generally accepted accounting principles) financial measures in this presentation. The Company believes that this information is useful to understanding its operating results and assessing performance and highlighting trends on an overall basis. Please refer to the Company's earnings release for further disclosure and reconciliation of non-GAAP financial measures.

***The information set forth in this presentation is qualified by reference to, and should be read in conjunction with, our Annual Report on Form 10-K for the fiscal year ended October 31, 2017, filed with the SEC on January 11, 2018, our Quarterly Report on Form 10-Q filed with the SEC on March 8, 2018, and our earnings release for the first quarter ended January 31, 2018, filed as an exhibit to our Current Report on Form 8-K filed with the SEC on March 8, 2018.***

## Delivering Clean Innovative Solutions for the Global Supply, Recovery and Storage of Energy

### Global leader in fuel cell technology since 1969

- Danbury, CT - Corporate, R&D
- Torrington, CT – Manufacturing, Service
- Germany – Manufacturing, Service
- South Korea – Manufacturing, Service



### Global Customers



- Serving utilities, industrial and large municipal customers with both utility-scale and on-site power generation
- Fuel cells are extremely efficient, non-combustion technology that emit negligible Nox, Sox and particulate pollutants.
- Advanced Technologies addressing needs in:
  - Carbon capture
  - Local hydrogen production for transportation / industry
  - Long duration energy storage

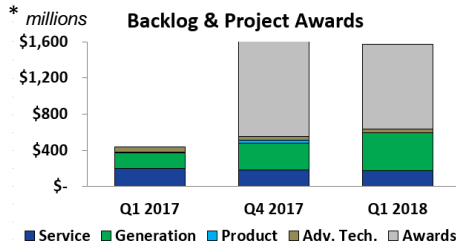
**1** **Execute** on the \$1.6 billion of existing backlog and awards (62.3 MW of new project plant production)

**2** **Grow the Generation Portfolio** – business model delivers recurring and sustainable EBITDA

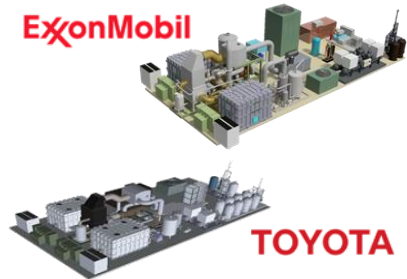
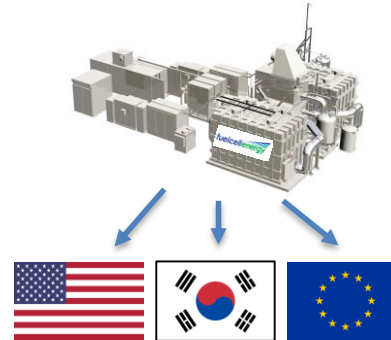
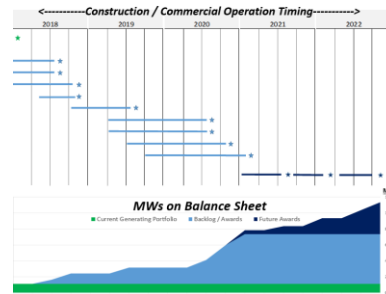
**3** **Compete and win** in the marketplace for new projects

**4** **Commercialize big ideas:**

- Carbon Capture
- Hydrogen
- Long Duration Energy Storage



\* Note: Project awards are projects for which the Company has been selected but has not yet entered into definitive agreements.



- ✓ More than 100 SureSource plants in operation at more than 50 sites
- ✓ More than 350 MW of SureSource modules in operation or on order
- ✓ More than 7,500,000 MWh generated by SureSource power plants

## Grid Support with CHP

- Power sold to grid
- Heat sold to district heating system
- 59 MW on only 5.2 acres
- Only 14 mo. installation
- World's largest fuel cell park



## Resiliency for Pharma

- 5.6 MW with steam for company campus
- Predictable power solving grid quality issues
- Immediate savings vs. grid
- Sustainability



## Grid Support / Urban Redevelopment

- Power sold to grid
- Enhance resiliency
- Brownfield revitalization
- 15 MW on 1 ½ acres
- Only 12 mo. installation



## Fuel Cell / Solar Integration

- Utility-owned, rate-based
- Enhance resiliency
- 2.8 MW fuel cell on ¼ acre - ~23,000 MWh annually
- 2.2 MW solar on ~9 acres - ~3,000 MWh annually







39.8 MW LIPA FUEL CELL PROJECTS



WOODBIDGE UTILITY MICROGRID

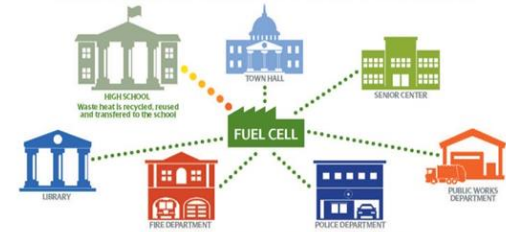
-Power supplied with predictable on-island generation avoiding transmission investments

-Unused industrial land converted to income generating property

-State-of-the-art utility microgrid application supporting critical building loads with independent capabilities

-Replicable model for other customers evaluating similar structures

## Where Renewable Meets Reliable



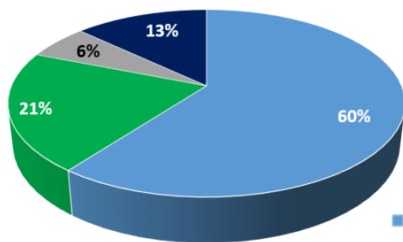
A look at Ul's Woodbridge fuel cell project



- *Making the Power Grid Cleaner and More Resilient*
- *Adding Reliable Microgrid to a Utility Energy Portfolio*

<i>Revenue Classification</i>	<i>Sources of Revenue</i>	<i>Growth Drivers</i>
<b>Product</b>	Plant Sales Project Sales	International and Utility Market Financial Investors upon Completion
<b>Generation</b>	11.2 MW Operation Portfolio 62.3 MW in Backlog / Awarded	PPA and Service Model Project Execution / New Awards
<b>Services &amp; License</b>	Long Term Recurring Revenue Growing Fleet	International and Utility Market Expanding installed base
<b>Advanced Technologies</b>	Expanding Private Contracts Commercialization	Carbon Capture, Hydrogen, and Storage

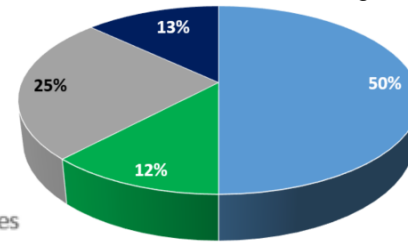
Revenue Mix – LTM Q1-2018



## Revenue Mix to Shift to Strong Margin Recurring Generation

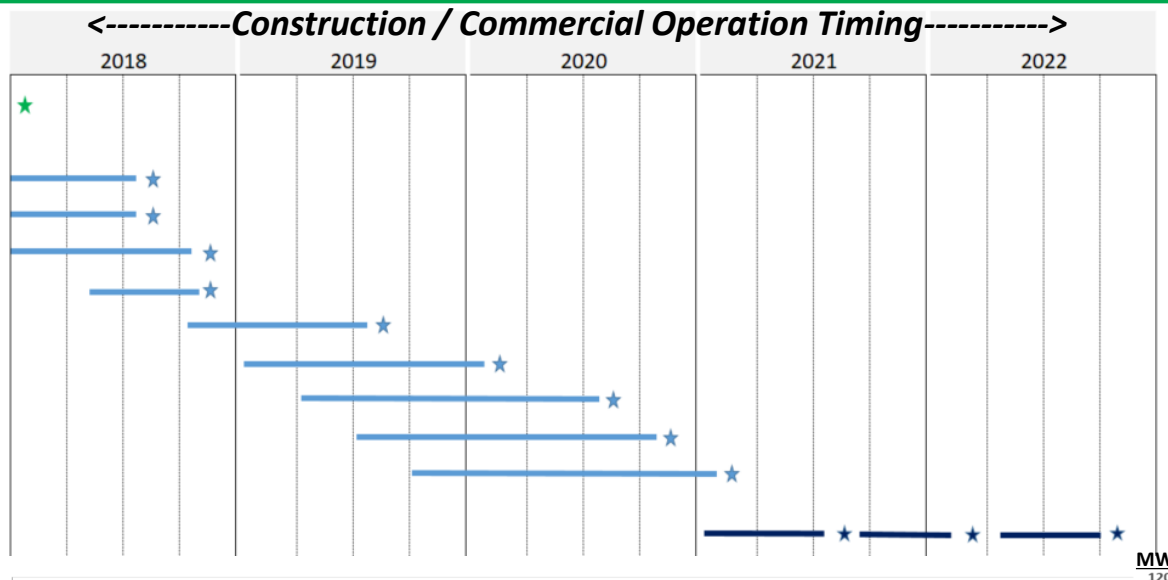
Generation to expand with project execution in 2018 – 2021  
Complemented by product sales in Korea / U.S.

Revenue Mix – Future Target



■ Product ■ Services and Licenses ■ Generation ■ Advanced Technologies

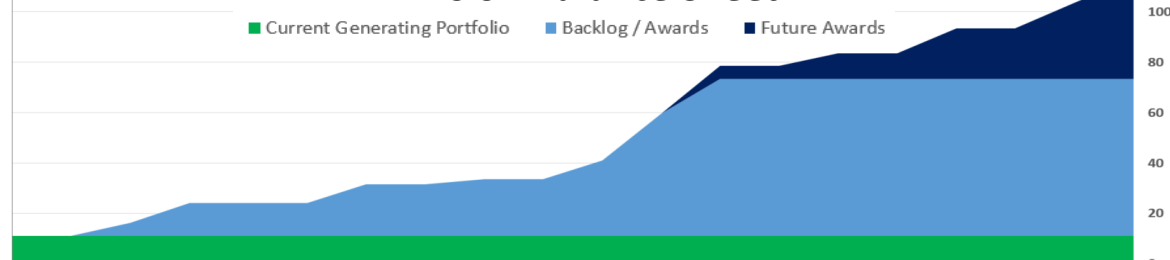
Project Name	Location	Off-Taker	Rated Capacity (MW)
Existing Portfolio	Various	Various	11.2
Under Construction			62.3
Triangle St	Danbury, CT	Eversource (CT Utility)	3.7
Trinity College	Hartford, CT	Eversource (CT Utility)	1.4
Tulare BioMAT	Tulare, CA	PG&E CA (CA Utility)	2.8
Bolthouse Farms	Bakersfield, CA	Bolthouse Farms (Campbell)	5
Groton Sub Base	Groton, CT	CMEEC (CT Municipal Utility)	7.4
Toyota	Los Angeles, CA	SCE; Toyota	2.2
LIPA #1	Long Island, NY	PSEG / LIPA, LI NY (Utility)	7.4
LIPA #2	Long Island, NY	PSEG / LIPA, LI NY (Utility)	18.5
LIPA #3	Long Island, NY	PSEG / LIPA, LI NY (Utility)	13.9
New Projects	CT / CA	Utilities	40



## Building sustainable recurring cash flow

- 11.2 MW existing generation generates ~ \$8 million per year in revenue
- 62.3 MW under construction would contribute ~\$50 - \$60 million per year in additional revenue
- New projects under development are incremental
- Assets to be built with project debt.

## MWs on Balance Sheet





# Energy Trends Driving Demand

1

## Grid resiliency & reliability

- ✓ Predictable on-site generation enhances resiliency and reliability
- ✓ Avoids costs and risks of interruption and transmission siting issues

2

## Emission reductions & De-carbonization

- ✓ Highly efficient electro-chemical process, no burning
- ✓ Scalable & cost effective carbon capture that also generates power

3

## Distributed hydrogen

- ✓ Tri-generation for high-purity hydrogen plus power & heat
- ✓ Affordable and significantly cleaner than steam reforming

4

## Supporting intermittent renewable deployment

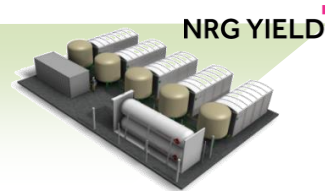
- ✓ Storage supports intermittent power: short duration (<4 hours) & long duration (6+ hours or days)



**ExxonMobil**



**TOYOTA**



**NRG YIELD**

## Global Market

2 GW Equipment Market

\$7 B Equipment Market  
\$11 B Services Market  
\$29 B 20-year fuel sales

16 GW Equipment Market

\$49 B Equipment Market  
\$73 B Services Market  
\$215 B 20-year fuel sales

1 GW Equipment Market

\$4 B Equipment Market  
\$5 B Services Market  
\$8 B 20-year fuel sales

3 GW Equipment Market

\$10 B Equipment Market  
\$15 B Services Market

**\$70 B Equipment Market**

**\$104 B Services Market**

**\$252 B 20-year fuel sales**

## Base Business

1

**Predictable distributed clean power generation**

## Advanced Technologies

2

**Carbon capture for power generation and industry**

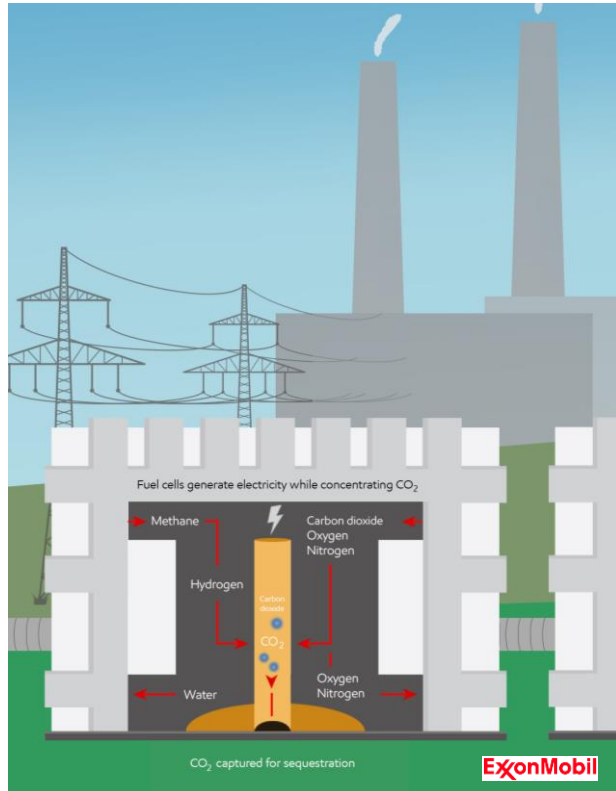
3

**Distributed hydrogen for transportation and industrial applications**

4

**Long-duration storage supports increased renewables penetration**

## How it works



## Benefits

- Fuel cells separate carbon dioxide from a power plant's exhaust stream, making the carbon dioxide easier to capture and sequester (90% CO<sub>2</sub> capture, 70% NO<sub>x</sub> elimination)
- This process could vastly reduce carbon dioxide emissions by dramatically reducing carbon capture costs
- A breakthrough in commercialization would lead to a global marketplace

### Concentrates CO<sub>2</sub>



Carbonate fuel cells can concentrate up to 90% of carbon emissions that come out of power plants – concentrated emissions can be captured and stored deep underground

### Cleaner air



Removing carbon dioxide from the power plant exhaust eliminates a majority of smog-producing emissions



**EnergyFactor**  
By ExxonMobil

### Generates power



Carbon capture using fuel cells generates power, critical to the commercialization of carbon capture

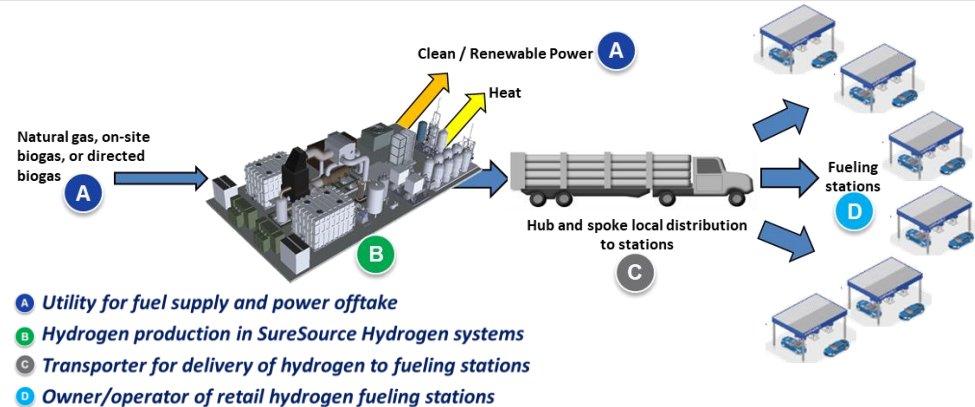
### Customizable



Modular solutions, allowing for gradual investments that help utilities meet carbon-capture targets over time

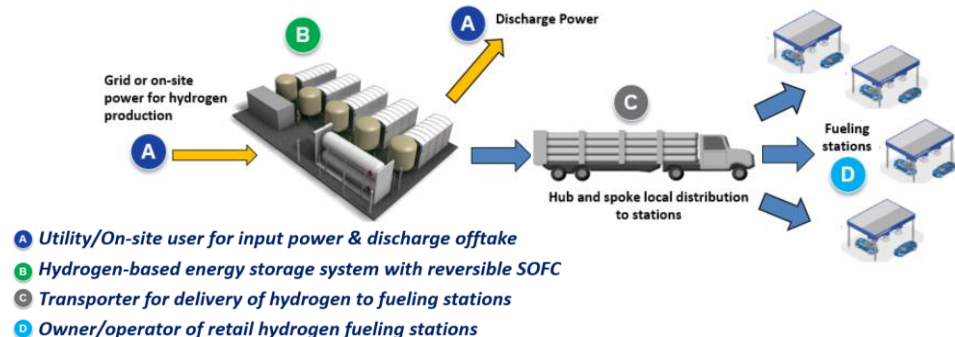
## Power Generation and Hydrogen for Mobility and Industrial Use

- Efficient, clean production of hydrogen near end users
- Co-production of power enhances hydrogen affordability. Reduced transport distance reduces cost and emissions of hydrogen delivery
- Power, heat and hydrogen produced electrochemically, **avoiding pollutants** such as nitrogen oxide (NOx) that causes smog, sulfur dioxide (SOx) that contributes to acid rain, or particulate matter that aggravates asthma



## Electrolysis, Storage and Hydrogen for Mobility and Industrial Use

- Efficient and cost effective energy storage for long discharge durations where input power is converted to hydrogen and stored
- Stored hydrogen can be converted back to power at high efficiency or exported to hydrogen user, e.g. industrial user or vehicle fueling station



# Questions?

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