



FuelCell Energy

Ultra-Clean, Efficient, Reliable Power



Company Update
March 2014

Ultra-Clean | Efficient | Reliable Power

This presentation contains forward-looking statements, including statements regarding the Company's plans and expectations regarding the development and commercialization of fuel cell technology. All forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially from those projected. The forward-looking statements 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 statements to reflect any change in the Company's expectations or any change in events, conditions or circumstances on which any such statements are 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 the ongoing performance of its underlying business.

Integrated Fuel Cell Company

Design

Megawatt-class distributed power generation solutions



Manufacture

Global manufacturing footprint

- North America
- Europe
- Asia via partner



Sales

Direct & via Partners

Installations & orders in 9 countries



EPC*

Project Development and Project Finance, Engineering & Construction

Over 300 megawatts installed and in backlog

* Engineering, Procurement & Construction



Services

Operate & maintain power plants

- Over 100 DFC® plants operating at more than 50 sites globally
- Two billion kWh ultra-clean power produced



Providing turn-key distributed power generation solutions that meet both economic and sustainability goals

➤ Ultra-Clean distributed generation addresses global power challenges

- **Approaching Grid Parity:** Attractive ROI
- **Distributed Generation:** On-site power easy to site, permit and construct; short-lead-time
- **MW-class Base Load Power:** Complements intermittent solar/wind
- **Fuel Flexible:** Clean natural gas, renewable biogas, directed biogas or propane

➤ Global production capacity adequate for profitability & below-grid pricing

North America: 100 MW annual capacity,
70/80 MW EBITDA breakeven

Asia: 100 MW initial capacity,
sized for 200 MW

Europe: Supports European content
and market entry



➤ Market and business model validation

- **Fuel Cell Parks:** 15 MW in U.S., 59 MW in South Korea (world's largest)
- **Strong Global Partners:** Accelerates market adoption
 - POSCO Energy: Asia, Fraunhofer IKTS: Europe, Dominion/NRG: North America
- **Growing Pipeline:** Revenue diversity and strengthening margins
- **Competitive Advantage:** Low cost and versatile technology

Sizable Market Opportunity

Clean Natural Gas

- **\$4 billion mid-term market opportunity for power plants**
- **\$4 billion services opportunity**
 1. Electric Utilities & IPPs
 2. Education & Healthcare
 3. Gas Transmission
 4. Industrial
 5. Commercial & Hospitality
 6. Government
 7. Oil Production & Refining

Renewable Biogas

- **\$2 billion mid-term market opportunity for power plants**
- **\$2 billion services opportunity**
 1. Wastewater
 2. Food & Beverage Processing
 3. Agriculture
 4. Landfill Gas

\$12 billion market opportunity for power plants and services

Partners:

Customers:
Electric Utilities and IPP's

On-site Power (behind the meter):

North America

Logos for North America partners and customers include: nrg, ENBRIDGE, Dominion, Southern California Edison, Pacific Gas and Electric Company, Inland Empire Utilities Agency, Sierra Nevada, University of California San Diego, Pepperidge Farm, Gill's Onions, and City of San Jose.

Europe

Logos for Europe partners and customers include: Fraunhofer, ewz Die Energie, ABENGOA, Federal Ministry of Education and Research, THE CROWN ESTATE, CANARY WHARF GROUP PLC, and LandSecurities.

Asia

Logos for Asia partners and customers include: POSCO ENERGY, CHNP (China Nuclear Power), MPC (Meiya Power Company Ltd), ENERGY NATURA, EWP (E-Water Power), BYUCKSAN POWER, and Seoul Children's Grand Park.

Customer Operating Models

On-site Power (Behind the Meter)

- **Project sizes 1.4 – 11.2 MW**
 - High efficiency drives savings
 - Virtual lack of pollutants benefits public health
 - CHP reduces costs, supports sustainability and carbon reduction
 - Supports energy security/reliability (micro-grid)

FCE Approach to Market

- Direct Sale to End-Users
 - Product Sale/EPC/Service
- Long term Power Purchase Agreements
 - Partner ownership
 - Tax equity financing structure:
 - Debt at 50%
 - Tax Equity 30-35%
 - Partner or FCE Ownership 15-20%

Electric Grid Support

- **Project Sizes 5.6 – 60 MW**
 - Cost effective power generation when/where needed (i.e. sub-stations)
 - Enhances grid resiliency/reduces grid congestion
 - Supports renewable portfolio standards
 - Supports economic development

FCE Approach to Market

- Create and develop utility PPAs
 - Partners
 - Utility/State RFPs
- Project development
 - Regulatory, land/site access, interconnection
- Build projects which follow disciplined milestones and sell or utilize tax equity financing at COD

Type: 1.4 MW CHP
Owner: Project investor
DOC: Jan-2012



- High efficiency drives savings
- CHP for heating and absorption chilling
- Ultra-clean emission profile supports sustainability goals
- Micro-grid enhances energy security
- Private capital providing public benefits

*“CCSU’s **power costs** will be **reduced annually by more than \$100,000** -- a savings for both the university and Connecticut taxpayers”*

Jack Miller, President, Central Connecticut State University

Type: 14.9 MW fuel cell park
Owner: Utility owned
DOC: Dec-2013



- Power sold to grid
- Improved power reliability from distributed generation
- Renewable baseload power
- Easy to site – clean, quiet, vibration free with modest footprint

*“The Dominion Bridgeport Fuel Cell Park is another important step in our efforts to identify and develop opportunities to produce clean energy that is **reliable and cost effective**”*

Thomas F. Farrell II, Chairman, President and Chief Executive Officer, Dominion

Type: 1.4 MW CHP
Owner: Utility owned
DOC: July-2013



- CHP savings for university
- Enhanced grid resiliency for utility owner
- Improved air quality – easy permitting and removes future clean air compliance concerns

*“Electricity generated by the fuel cell is going straight into the Edison grid, and the university will be able to utilize the waste heat...resulting in an **estimated annual savings of \$120,000** from avoided natural gas costs”*

Tony Simpson, Senior Director of facilities services, CSU-San Bernardino

2012

Foundation

- POSCO 122 MW multi-year order
- 14.9 MW Bridgeport Fuel Cell Park developed and sold to Dominion
- Key global initiatives:
 - POSCO licensing agreement leads to multiple revenue streams
 - POSCO to build local manufacturing for second source of supply
 - European presence established utilizing asset-light model/ partner with Fraunhofer

2013

Growth and Margin Expansion

- Increased production levels and mix, leading to expanding margins
- Convertible bond issuance supports working capital investment and capacity ramp
- Validation from completing BFCP on schedule to meet ITC deadline
- NRG agreement
- North America capacity expansion – 11% from process improvements
- 2 billion kWh achieved

2014

Growth and EBITDA breakeven

- Multi-MW order flow in 2014
- Continued margin expansion
- Capture growing utility opportunities:
 - Bridgeport validation
 - Project financing availability
 - Development capability
- Grow pipeline size and order closure volume
- POSCO 100 MW plant under construction & coordinating global supply chain

Business Activity Overview

North America Direct & Partners

- Pipeline > 220 MW
- Services pipeline incremental
- Plus: Targeting multiple megawatts in 2014 from NRG agreement
- Plus: Targeting bidding > 100 MW into utility opportunities in 2014



Europe Direct & Partners

- Pipeline > 90 MW
- Showcase references established

New Markets

- Expanding geographies
- Distributed hydrogen
- SOFC applications
- Carbon capture

Asia Royalty Model

- Pipeline > 300 MW
- Services pipeline incremental
- Recent orders include 20 MW and 40 MW fuel cell parks
- Possible RPS expansion to include large power users
- Building applications



Further Growth Opportunities

Distributed Hydrogen (MCFC)



- Lowers the cost of Hydrogen for Industrial and Refueling applications
- Multi year operation of facility within CA WWT plant: hydrogen, electricity and heat
- Advanced electrochemical purification and compression systems under development
- MW scale plants under discussion with global partners

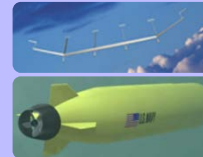
Sub-MW (SOFC) Applications

- Leading SOFC technology
- Target sub-MW applications adjacent to carbonate market
- CHP capability
- Fuel flexible: on-site and directed biogas
- Global partner discussions in process



Mobile (SOFC) and Storage Applications

- SOFC propulsion system for unmanned submersible under U.S. Navy program
- Unmanned aerial powered by SOFC combined with storage under contract with Boeing



Carbon Capture (MCFC)

- Versatile carbonate technology
- Flue gas from coal-fired power plants directed to DFC® plant for CO₂ separation
- Programs with U.S. DOE and U.S. EPA
- Partner discussions in process



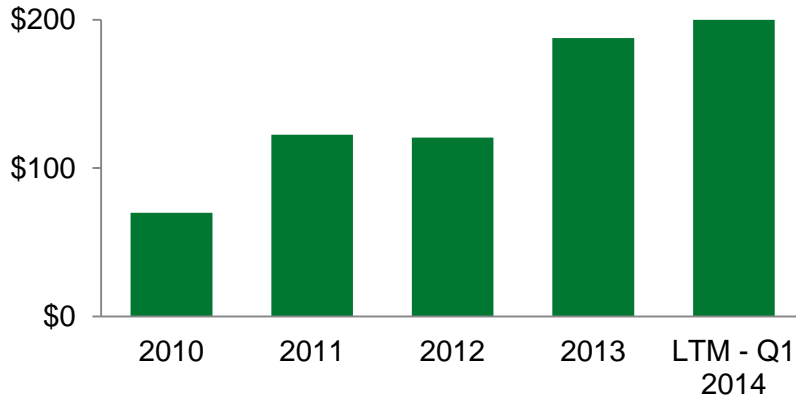
44 MW System

Investments Double Market Opportunity

Financial Highlights

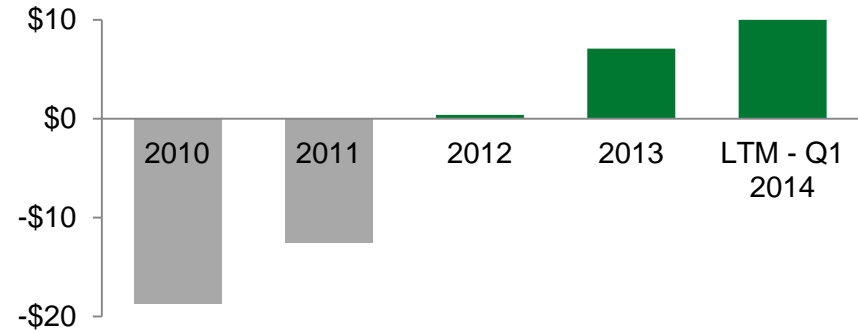
Revenue

USD in millions



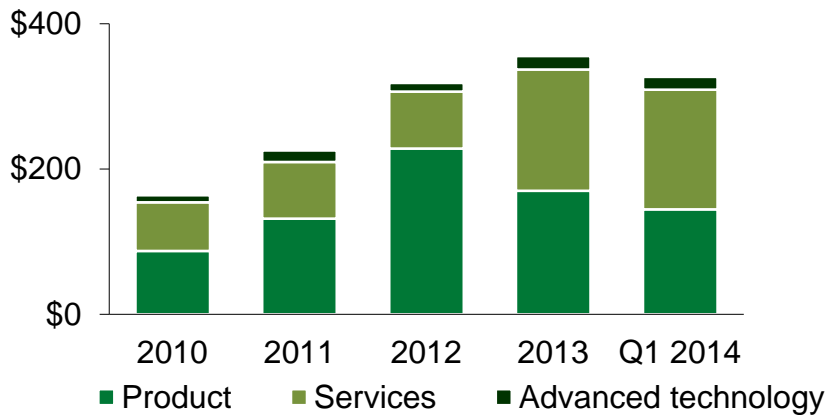
Gross Profit

USD in millions

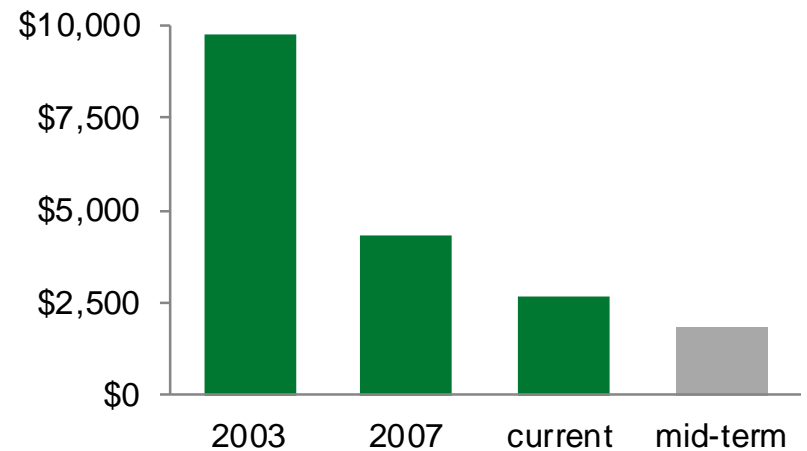


Revenue Backlog

USD in millions



Product Cost per kW



Foundation for Profitable Growth

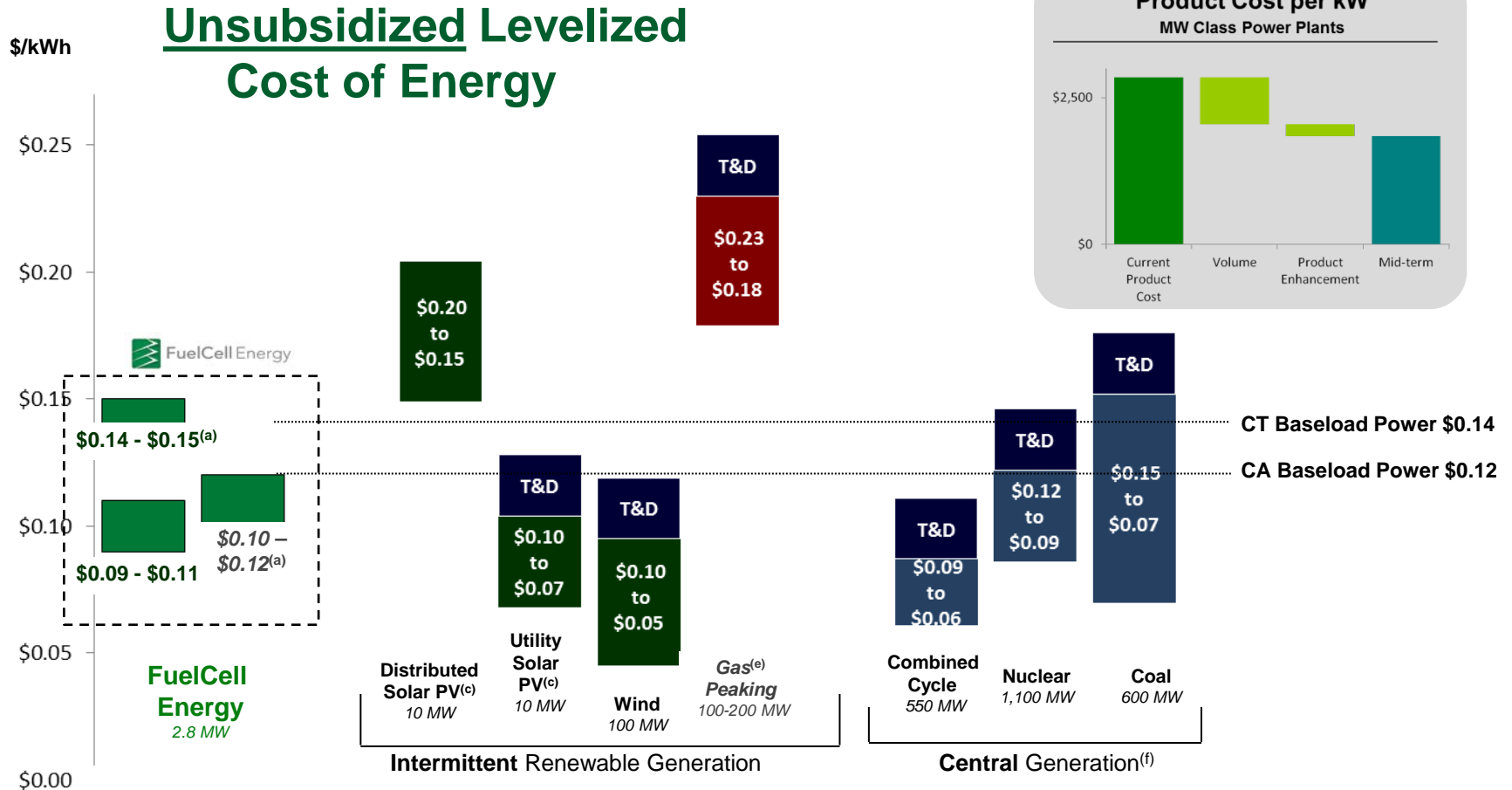
- **Efficient and clean distributed generation solution meeting market needs**
- **Clear path to profitability with committed order backlog and growing global market adoption**
- **Volume will enable below-grid pricing, without incentives**
 - Needed capacity already in place or under construction
- **Strong Global Partnerships**
 - Partners helping to drive market demand and contribute to FCE margin improvement
- **Well capitalized to support growth**



59 MW fuel cell park
Hwasung City, South Korea

Appendix

Competitive LCOE - USA



- (a) LCOE of \$0.15/kWh with natural gas at \$8/mmBtu or \$0.14/kWh at \$6/mmBtu; each \$2/mmBtu change equates to about \$0.01/kWh. Subsidized price range of \$0.10-\$0.12 includes 30% ITC and state-level incentive of \$1,000/kW
- (b) Mid-term LCOE target of \$0.09-\$0.11/kWh based on global production volume of approximately 210 MW annually.
- (c) Distributed solar based on rooftop installation in SW USA with 20-23% capacity factor; Utility solar based on tracking technology and 27-28% capacity.
- (d) Installation and maintenance cost of Transmission & Distribution (T&D) is estimated to add up to \$0.024/kWh.
- (e) Gas peaking addresses intermittency of solar and wind when power is required but sun not shining/wind not blowing.
- (f) Does not include waste disposal costs, incremental emission clean-up costs or nuclear-related security costs.

Growing Installed Base

