



## Manufacturing Automation and Recycling for Clean Hydrogen Technologies

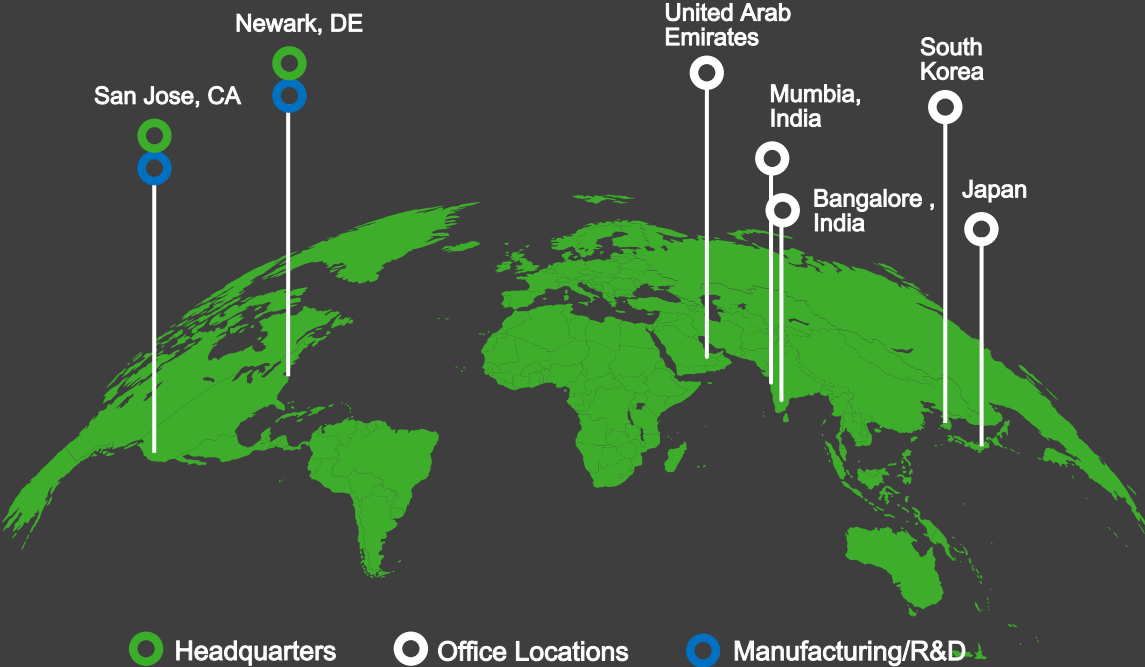
Fuel Cell Manufacturing and Assembly Panel

Natalya Bailey, SVP and Head of Strategy

May 24, 2022

# Bloom Energy at a Glance

BE  
LISTED  
NYSE



## Global Footprint

Our corporate, manufacturing, and R&D offices serve as a strategic global anchors to help organizations around the world reduce carbon emissions, enhance resiliency, and chart a path toward a net - zero carbon future.



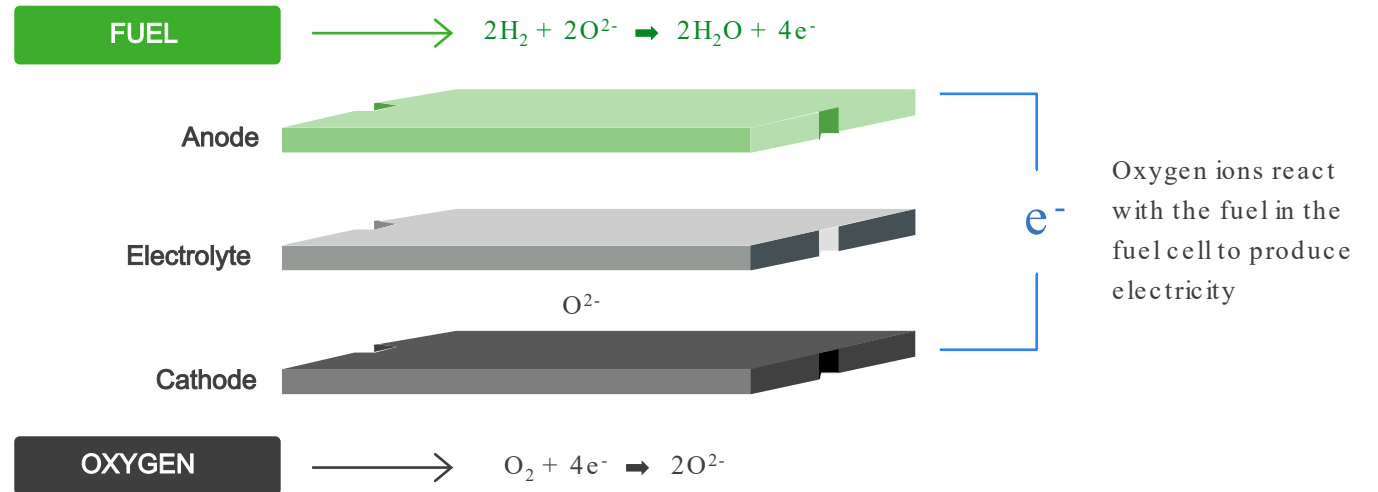
**MISSION**  
To make clean, reliable energy affordable for everyone in the world.

<b>\$972m</b> 2021 Revenue	<b>30% CAGR</b> Over last decade	<b>\$8.5bn</b> Backlog
<b>&gt;650MW</b> Installed Base	<b>&gt;364</b> Issued Patents	<b>&gt;\$1bn</b> Cumulative R&D

# Fuel Cell Basics

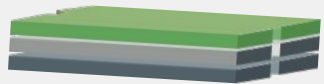
## 1. How it Works

Solid oxide fuel cells convert fuel into electricity without combustion.

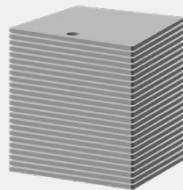


## 2. Cell to Server

The building blocks come together to form the Bloom Energy Server platform.



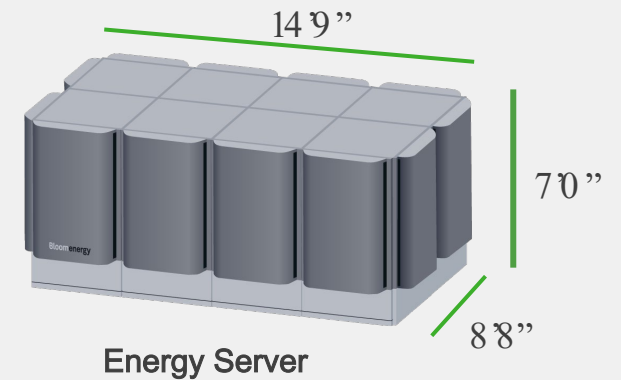
Fuel Cell



Stack



Power Module



# Clean, Reliable, Affordable Power to Customers

## Cloud Services & Technology

APPLE

Google

EQUINIX

IBM

Cyxtera

NOKIA  
Connecting People

intel

Adobe

Microsoft

ORACLE

NOKIA  
Connecting People

SoftBank

DIGITAL REALTY

CORESITE

II-VI

Extreme

## Hospitals & Healthcare

KAISER PERMANENTE

Sutter Health

Prime Healthcare

hoag  
A member of the  
St. Joseph Hoag Health alliance

PARTNERS  
HEALTHCARE

SUNY  
DOWNSTATE  
Medical Center

hfsc  
Hospital for  
Special Care

NYC  
HEALTH+  
HOSPITALS

Hartford  
HealthCare

## Manufacturing

KEYSIGHT  
TECHNOLOGIES

SANMINA

OWENS  
CORNING

JSR Micro  
MATERIALS INNOVATION

XILINX

flex

+GF+

taylorMade

StanleyBlack&Decker

## Consumer Retail, Food & Beverage

Walmart

THE HOME  
DEPOT

Taylor  
FARMS

IKEA

Ahold  
Delhaize

SAFeway

FedEx

macy's

TARGET

The Coca-Cola Company

STAPLES

WILLIAMS-SONOMA, INC.

URBN

Kellogg's

theWonderful company

MACERICH

Pacific  
CREESE

ramar foods international

AMERICOLD

TJX

## Biotech & Pharma

Genentech  
A Member of the Roche Group

Medtronic

ThermoFisher  
SCIENTIFIC

BioMed Realty  
Discover here

BD

GILEAD

Takeda

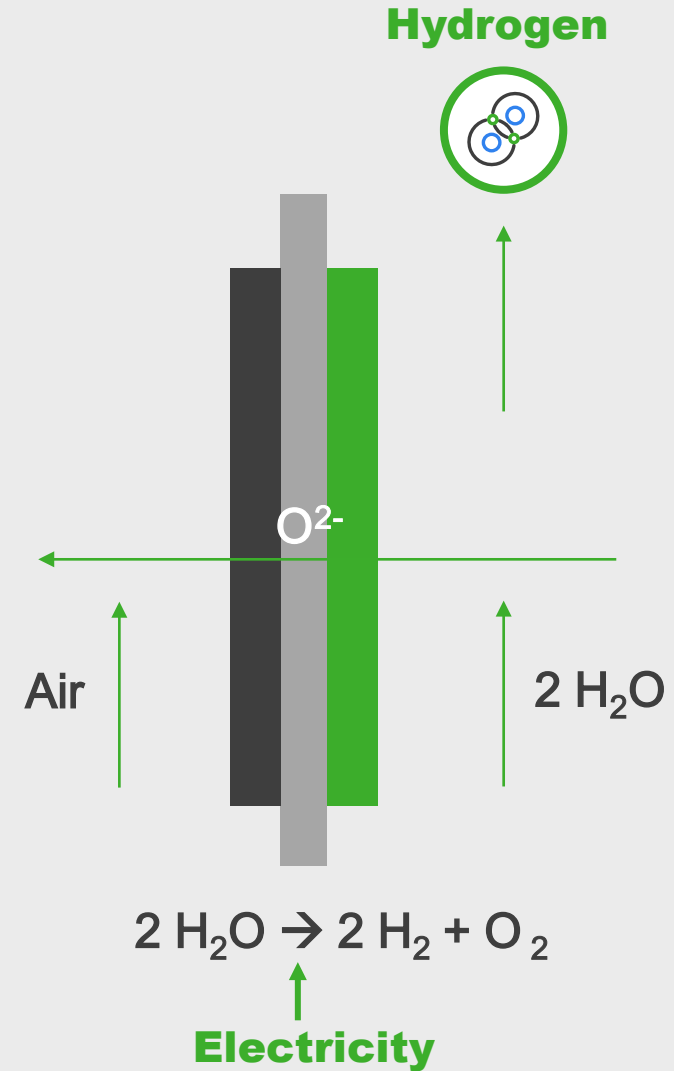
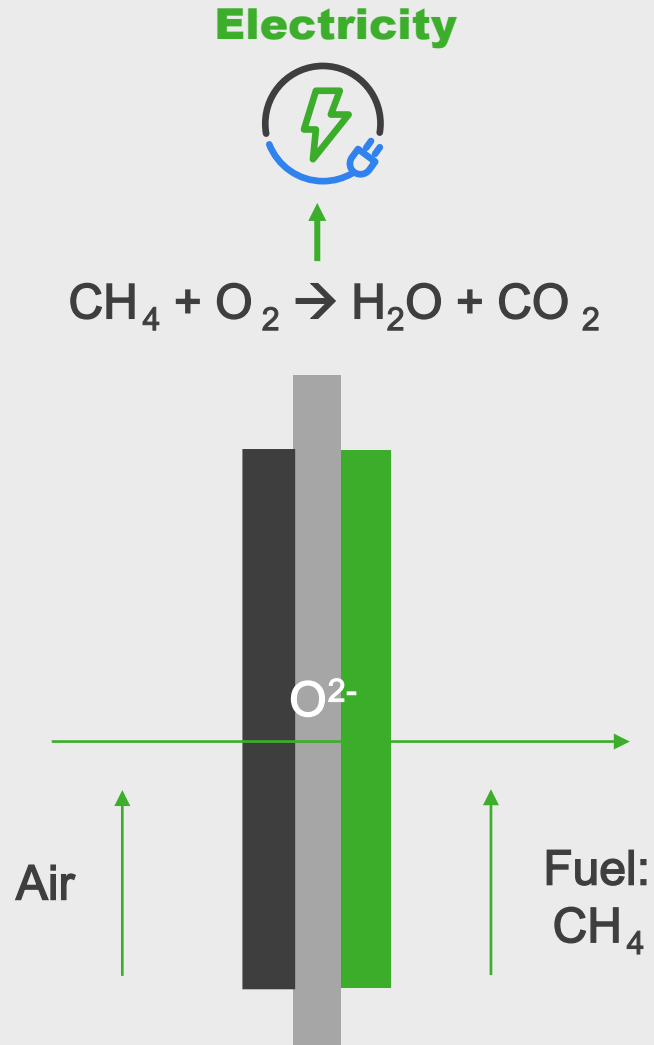
illumina

REGENERON

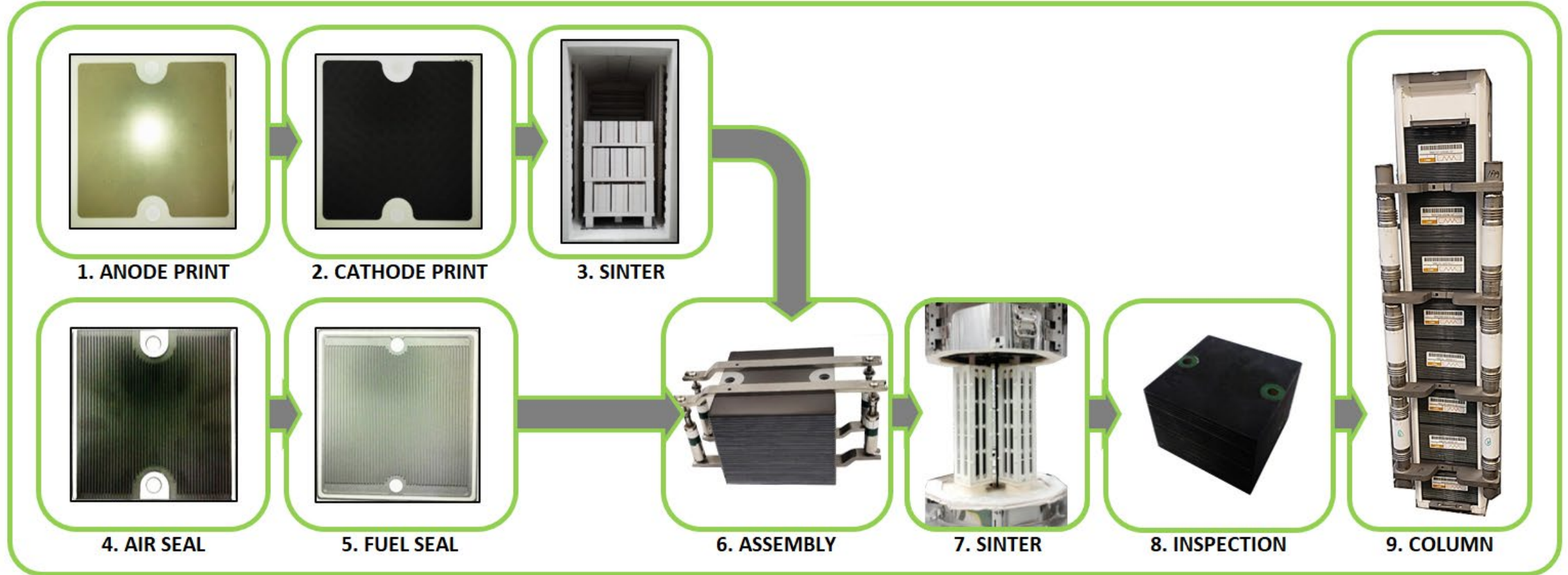
Agilent Technologies



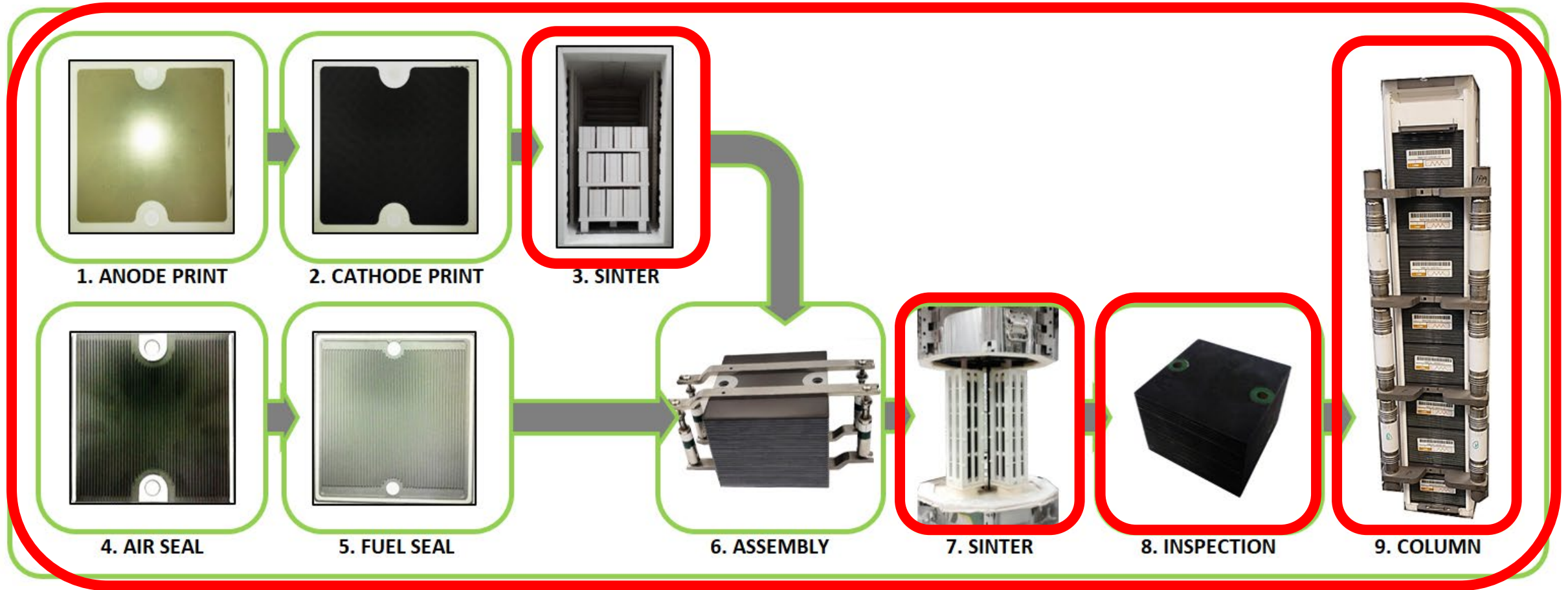
# Hydrogen from Bloom's Solid Oxide Platform



# Cell and Stack Manufacturing



# Cost Reduction Opportunities



# Cost Reduction Opportunities

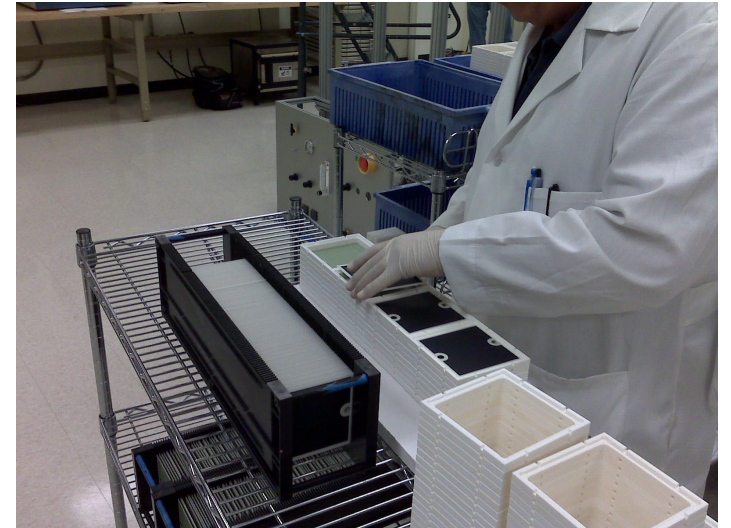
Continuous furnaces



Column assembly

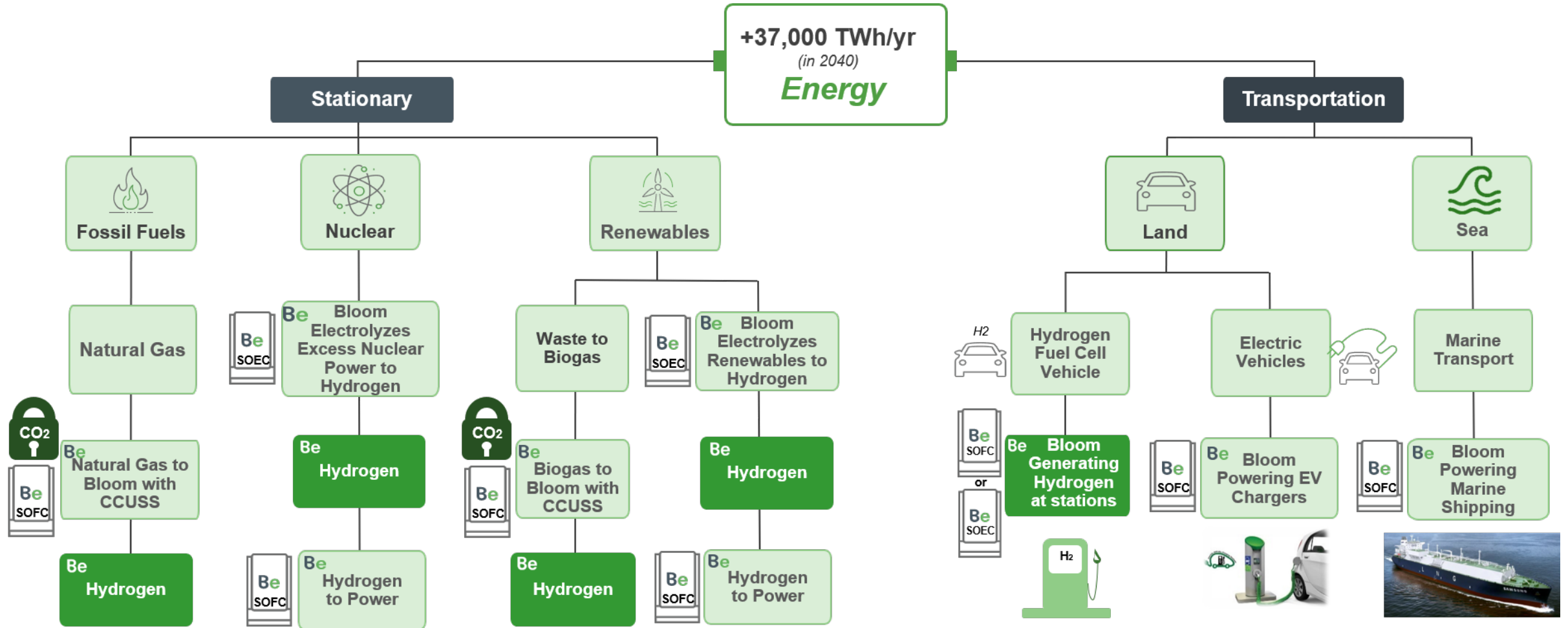


Warehouse automation





# The Future of Energy



A wide-angle, high-angle photograph of the San Francisco skyline, featuring numerous skyscrapers and buildings under a clear blue sky. The city is densely packed with structures, and the background shows distant hills and mountains.

Bloomenergy®

What  
Powers  
You