



GenCell Energy

A Multi-Use Energy Solution

www.GenCellEnergy.com



OUR VISION IS TO BRING

GREEN POWER FOR HUMANITY

We develop and provide innovative, clean and long-duration stationary power solutions that can be used anywhere.

Green
Energy
Reinvented



 **GENCELL** 2023

GENCELL AT A GLANCE



**Develops innovative
fuel cell & green
ammonia technology**



**GenCell (GNCL)
trades on TASE**



**Deployed in 22
countries**

158

Employees

18

**PhDs and Veterans of Space and
Submarine Programs**

35

Patents (Registered & Pending)

100s

of Trade Secrets

1,280

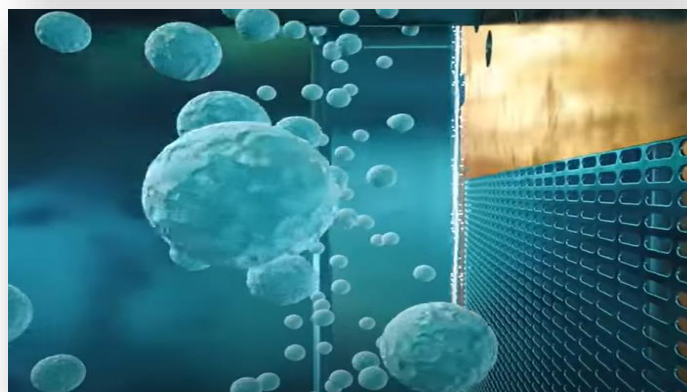
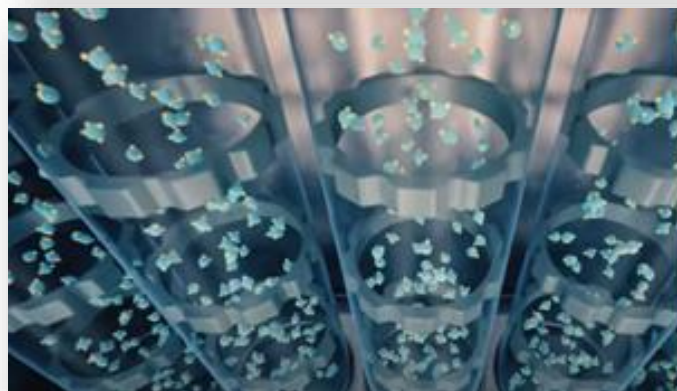
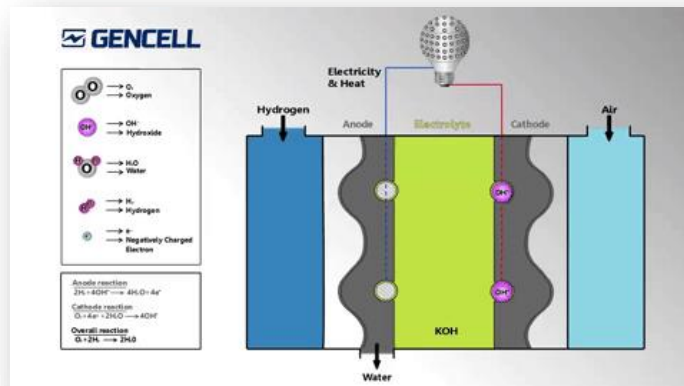
R&D Man-Years

Green
Energy
Reinvented



 **GENCELL** 2023

THE EVOLUTION OF GENCELL TECHNOLOGY



HYDROGEN TO POWER

- **The highest electrochemical efficiency** among known fuel cell types
- **Highest resiliency** - resistance to extreme weather conditions
- **Non-noble catalysts** enable cost-efficient fuel cell solutions

AMMONIA TO POWER *

- **Ammonia cracking** - extracts hydrogen from liquid ammonia - a highly efficient H₂ carrier – to reduce transport & storage costs.
- **Cost-effective** - total cost for primary power is less than that of diesel.

WATER TO POWER *

- Innovative synthesis of green ammonia on-site from **sun, air and water**
- Self-sustained circular economy to enable **well-to-wheel clean power anywhere**

* R&D

FROM AMERICAS TO ASIA:



Neyderlinan - Iceland



Vodafone - Romania



CFE - Mexico



Hillel Yaffe Medical Center - Israel



Deutsche Telekom - Germany



EV Motors - Israel



San Diego Gas & Energy



Douglas PUD - USA



Aicox - Spain



Magyar Telekom - Hungary

We apply technology to match
application Requirements

Green
Energy
Reinvented



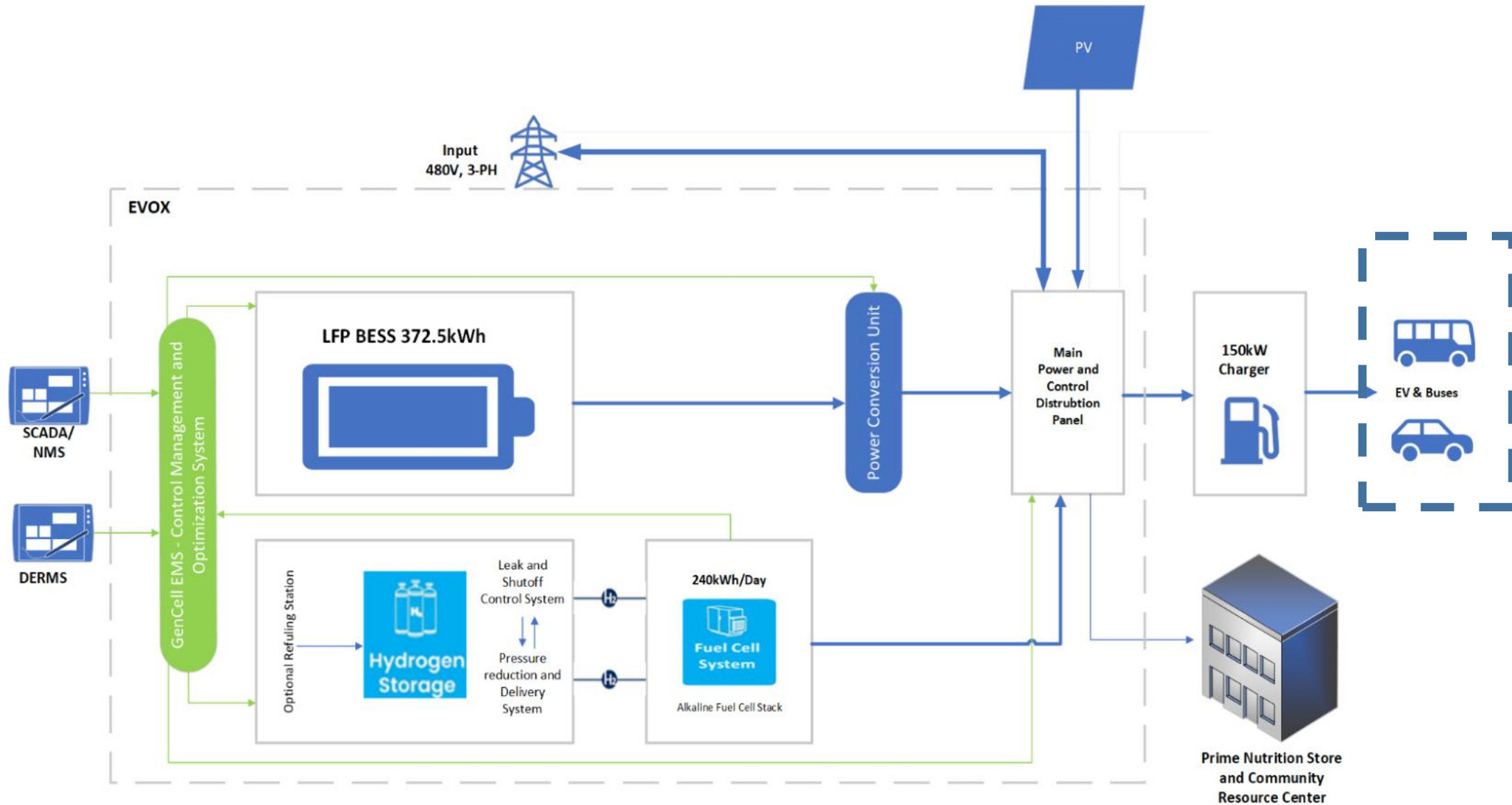
 **GENCELL** 2023

Why are Microgrids and Resiliency Important

- Resiliency is the ability to withstand and recover from disruptions, such as power outages, natural disasters, cyberattacks, etc.
- Supports the integration of renewable energy sources to the grid with minimal investment compared to building power plants.
- Distribute Renewable energy resources throughout the grid.
- Enhanced security and stability of the power grid and the critical infrastructure that depends on it.
- Microgrids using solar, battery and fuel cells “smooth out” the demand on the grid while enabling DC fast charging.
- Reduces the need for new transformers and switchgear with included 480V 3 Phase output.
- Provides business continuity for charging stations and adjacent businesses.
- Allows for emergency services and charging on site.



Gencell Energy EVOX Solution. Storage, Resiliency and Charging.



Microgrid Capabilities and Benefits

Benefits

- ✓ Provide business continuity for Resource Center and Prime Nutrition Store through solar storage and fuel cell production
- ✓ Prevents food spoilage and store closures due to unexpected grid outages
- ✓ Allow for emergency services to operate from Resource Center in Emergency Situation
- ✓ Provides energy storage from Solar array
- ✓ Minimizes peak demand charges by pulling stored energy from battery
- ✓ Give SMUD the ability to add a Zero Carbon energy resource without buying land or assets
- ✓ Add Fast Charging without impacting the grid(Energy Store and Forward Concept)



Adding DC Fast Charging With Minimal Grid Impact

The Solution

- ✓ Large Storage Battery with 480V 3 Phase output(372KWh).
- ✓ Store Solar Energy in the battery when conditions permit.
- ✓ Smoothing out the demand curve when multiple EVs are fast charging.
- ✓ Peak power available when needed 300+KW output for 2,3 or 4 fast chargers from 150-62KW.
- ✓ Allow facilities to draw power from EVOX during high impact grid events.
- ✓ Maintain business Continuity during grid outages.
- ✓ Speed time to deploy fast charging without requiring transformer upgrades.

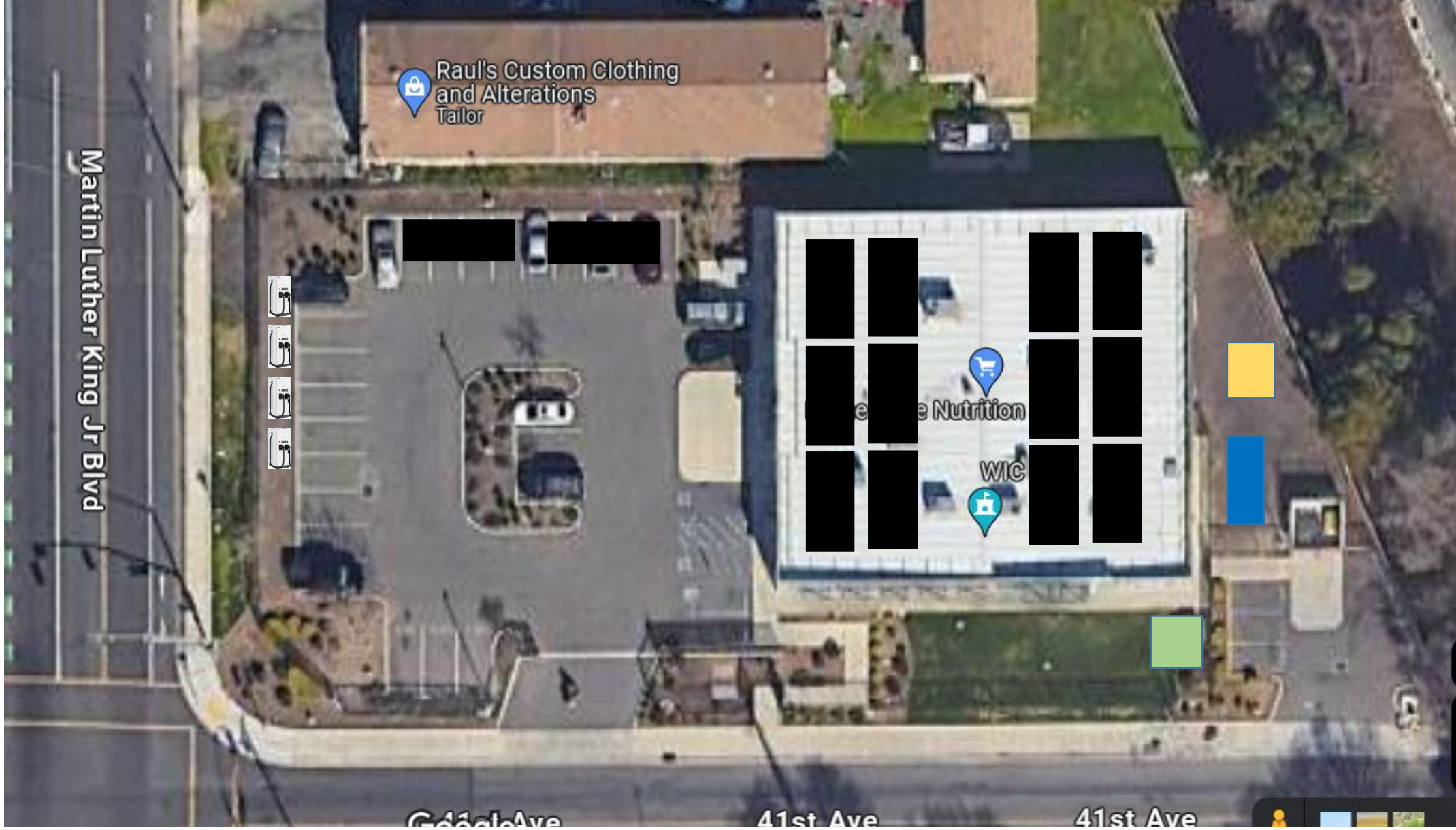


Converting your facility to a Microgrid Charging Hub.

Electrification Proposal for creating microgrids from existing locations

- ✓ Provide energy storage for solar arrays.
- ✓ Level out energy load throughout the day by regulating power inputs and outputs(Software)
- ✓ 3rd level back up with grid plus solar plus hydrogen fuel cell
- ✓ Provide back up power for business continuity adjacent business(Office, C-store, Emergency Center)
- ✓ Prevent food spoilage and store closures due to unexpected grid outage
- ✓ Allow for emergency services to operate from Resource Center in Emergency Situation
- ✓ Provide power to EV Chargers without impacting the Grid
- ✓ Provide a Distributed Energy Resource for the local power utility









GenCell Workforce Development Plan

GenCell Workforce Development Plan

Our innovative EVOX solution provides the base station for a microgrid design while creating a distributed energy resource that supports EV charging stations and act as a backup generator for facilities. This configuration will produce multiple benefits to the communities we serve, such as:

- ✓ EVOX will showcase state-of-the-art renewable energy equipment at traditionally disadvantaged communities to put them on a path to learn skills around cutting edge technology.
- ✓ Enhancing energy resilience and security for these communities
- ✓ Support local economic development and job creation in the high-tech power grid and EVSE industries
- ✓ Promote social justice and environmental equity in the neighborhoods where they are deployed
- ✓ Help the local utility district to stabilize the grid by providing onsite clean power generation which can be sent back to the grid in times of need.
- ✓ Ensure the power stays on for essential onsite services like resource centers, cooling and warming stations, grocery stores, and EV charging.





Next Steps...

THANK YOU!

