

**GENCELL LONG-DURATION UPS (LDU) SOLUTION BASED ON ALKALINE
FUEL CELLS BACKS UP, REGULATES VOLTAGE AND CONTRIBUTES GRID
STABILITY TO THE ENERGY CLOUD**

**Gil Shavit CBDO & Shelli Zargary Marketing Strategy & Content
GenCell Energy**

**NL-IL Mini-Symposium on Hydrogen and Renewable Energy
February 2021**



DISCLAIMER

The information included in this presentation (the "Information") and any other information provided in the presentation is presented for convenience only and does not exhaust all of the data about GenCell Ltd. (the "Company") and the Company's activities, and does not substitute the review of the more detailed information contained in the Company's Periodic Report and its immediate reports, as reported via the Magna distribution site to the Israeli Authority Securities (the "ISA") and the Tel Aviv Stock Exchange Ltd. (the "TASE"), including the prospectus published by the Company in November 2020. This presentation does not constitute an offer to buy or sell or an invitation to accept offers to purchase any securities of the Company and is intended to be informational only. Such an offer shall be made only in subject to the Israeli law, after receiving the necessary permits from the ISA and the TASE. The information does not constitute a basis for making an investment decision, nor does it constitute a recommendation or opinion or substitute for the discretion of a potential investor. This presentation does not include the full results and financial information of the Company and the notes to them, and / or the Company's business plans or the description of all of the Company's activities and / or risk factors. Therefore, each investor must make its own independent assessment of the Company after making such investigations and taking such advice as may be deemed necessary. The presentation does not constitute a substitute for investment advice or investment marketing advice that takes into account the data and special needs of each person and / or investor and the data included in this presentation does not constitute a substitute for individual discretion and judgment of each potential investor. The company is not responsible for the entirety or accuracy of the information, and will not be held liable for any damages and / or losses that may be caused as a result of any use of the information included in this presentation.

To the extent that there is a discrepancy between the information included in this presentation to the information included in the company's reports, the Company's public reports shall prevail.

This presentation includes forward-looking information, as defined in the Securities Law, 5728-1968, including forecasts, goals, assessments, estimates and other information pertaining to future events and / or matters, the occurrence of which is uncertain and beyond the Company's control. Any forward-looking information contained in this presentation is based, in addition to existing information of the Company, on current Company expectations and assessments. Although the Company believe the assumptions upon which any forward-looking statements are based are reasonable, any of these assumptions could prove to be inaccurate and the forward-looking statements based on these assumptions could be incorrect.

The main facts and data that used as the basis for this information are facts and data regarding the current status of the company and its business and economic macro facts and data, all as known to the company at the time of preparation of this presentation. Any forward-looking information contained in this presentation is based, in addition to the existing information of the company, on the Company's current expectations and assessments regarding future developments in the Company, and on the integration of such developments with each other. It should be emphasized that the presentation may include information that has not been included in the Company's reports and reports in the past and / or has been presented in a manner, characterization, editing, processing, or segmentation different from the way this information is presented in the presentation. The realization or non-realization of the forward-looking information will be affected, inter alia, by risk factors that characterize the Company's operations, as well as by developments in the general environment and external factors affecting the Company's operations, which are unpredictable and does not under the Company's control.

Also, as of the date of this presentation it is not possible to estimate the full effect of the Corona virus (COVID-19) on the economy and the results of the company's operations. The Company has no certainty that its expectations and assessments, including in respect of its plans, will be materialized, and the results of the Company's operations may differ materially from the results estimated or implied by the foregoing, inter alia due to a change in any of the above factors. The Company also has no certainty that its basic assumptions conditional on third parties will be realized. Thus, readers of this presentation are warned that the actual results and achievements of the Company in the future may be materially different from those presented in the forward-looking information presented in this presentation.

It is clarified that the forward-looking statements and estimates are based on data and information that available only as of the time of preparation of this presentation and the Company does not undertake any obligation to publicly release any revisions to these forward-looking statements to reflect events or circumstances after the date of this Presentation.

The following English translation of the Company's presentation should not be regarded as a substitute for reading the full original Hebrew version of the Presentation. This translation was neither prepared nor checked by the Company. Accordingly, the Company does not warrant that the translation fully, correctly or accurately reflects the Presentation and its contents.

The binding version of the Presentation for all intents and purposes is the original Hebrew version, filed by the Company with the ISA through the MAGNA website. Nothing in this translation constitutes a representation of any kind in connection with the Presentation, nor should it be regarded as a source for interpretation of the Presentation or the Company's reports or statements. In any event of contradiction or discrepancy between this translation and the Hebrew version of the Presentation, the Hebrew version shall prevail.



OUR COMPANY

About GenCell



GenCell (GNCL)
trades on TASE



Founded in 2011
80 employees
HQ Israel



Deployed in
18 countries



Revolutionary process for hydrogen
on demand from ammonia



Unique intellectual
property - patents,
trade secrets and
knowhow



Develops innovative
alkaline fuel cell
technology



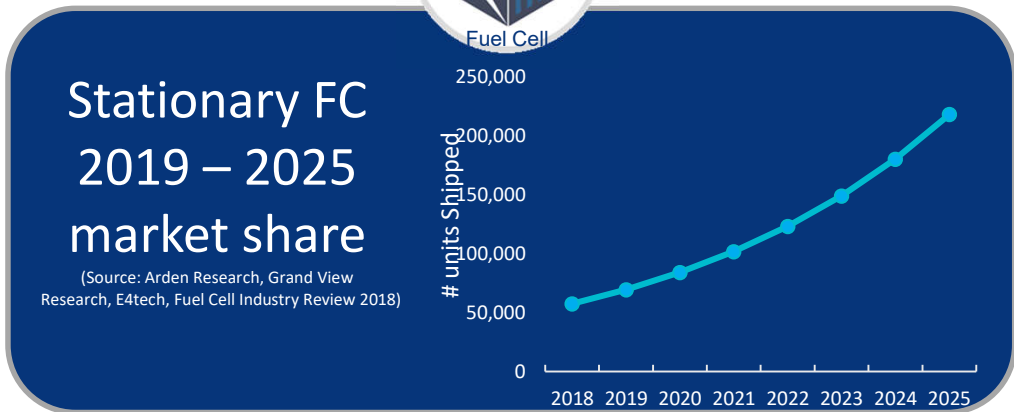
Reliable and
cost-effective backup
power solutions

SAY NO TO DIESEL

THE TIME FOR HYDROGEN & FUEL CELLS HAS ARRIVED

Global fuel cell market
**15.5% CAGR to
 US\$33.09 bn
 by 2027**
(source: Grand View Research)

Stationary fuel cell market
**Over 22% CAGR
 during 2018-2022**
(source: Technavio)



HYDROGEN
18%
 of final energy demand by 2050

550m tons
 annual increase in H₂ demand

\$2.5 trillion
 of industry revenues globally
(Source: Hydrogen Council)

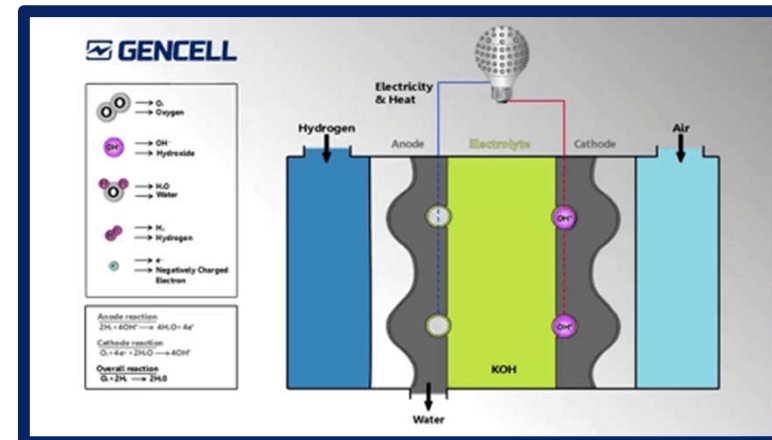


€750 billion
 European Commission recovery fund to support clean hydrogen
(Source: Energy Industry Review Hydrogen Europe)



KEY ADVANTAGES OF GENCELL'S ALKALINE FUEL CELL TECHNOLOGY

- **Highest electrochemical efficiencies** among the known fuel cell types
- Resistance to **extreme weather** conditions
- **Non-noble** catalyst
- Regenerative **CO2 scrubber** technology
- Use of **ammonia as a low-cost source of hydrogen, ammonia cracking and catalyst** technologies



SAY NO TO DIESEL

CHALLENGE: POWER OUTAGES OCCUR UNEXPECTEDLY, ANYWHERE



WEEKLY NEWS 
LATEST NEWS
AUSTRALIAN ENERGY GRID UNDER THREAT
as bushfires bear down on power lines

NEWS
READ ALL ABOUT IT
UK POWER CUT:
National Grid promises to learn lessons from blackout

SAY NO TO DIESEL

CONTINUOUS BACKUP POWER PROTECTS MISSION-CRITICAL EQUIPMENT, OPERATIONAL PROCESSES AND LIVES



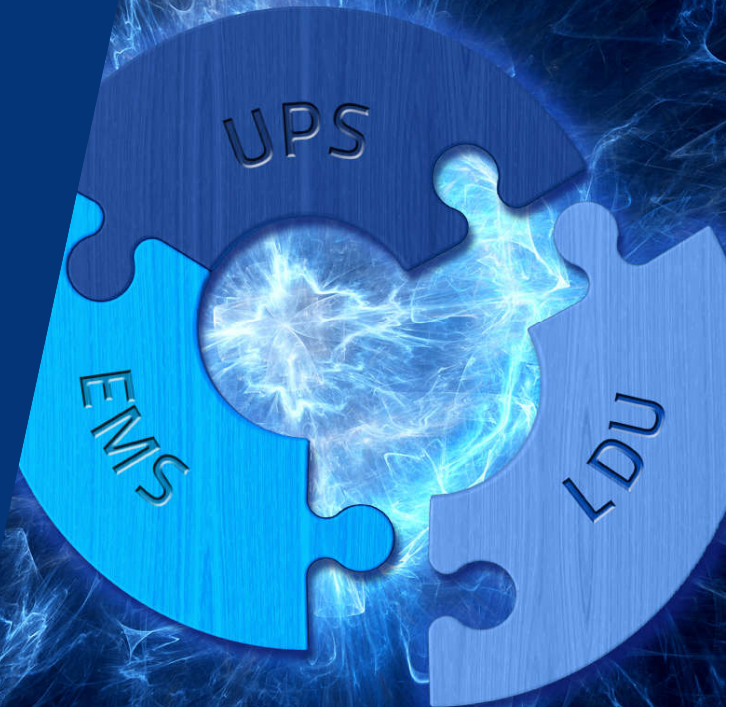
SAY NO TO DIESEL

UPS DEVICES PROTECT MISSION-CRITICAL
ASSETS FOR ONLY MINUTES:

Complementary Alkaline Fuel Cells Enable Long-
Duration UPS (LDU) for Hours and Days

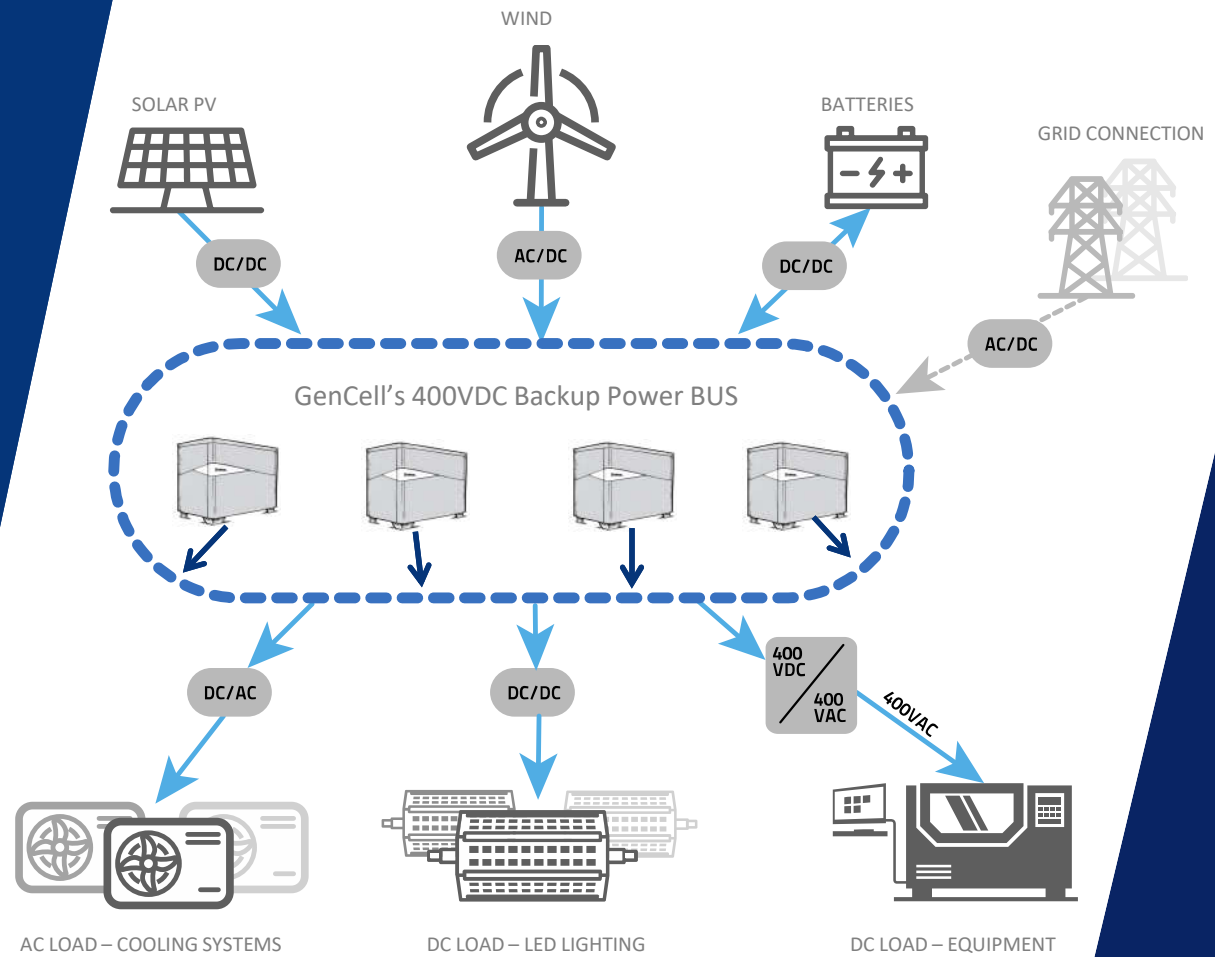
TARGETED ENERGY MANAGEMENT FOR OPTIMIZED CLEAN POWER ACROSS DC MICROGRIDS

SAY NO TO DIESEL

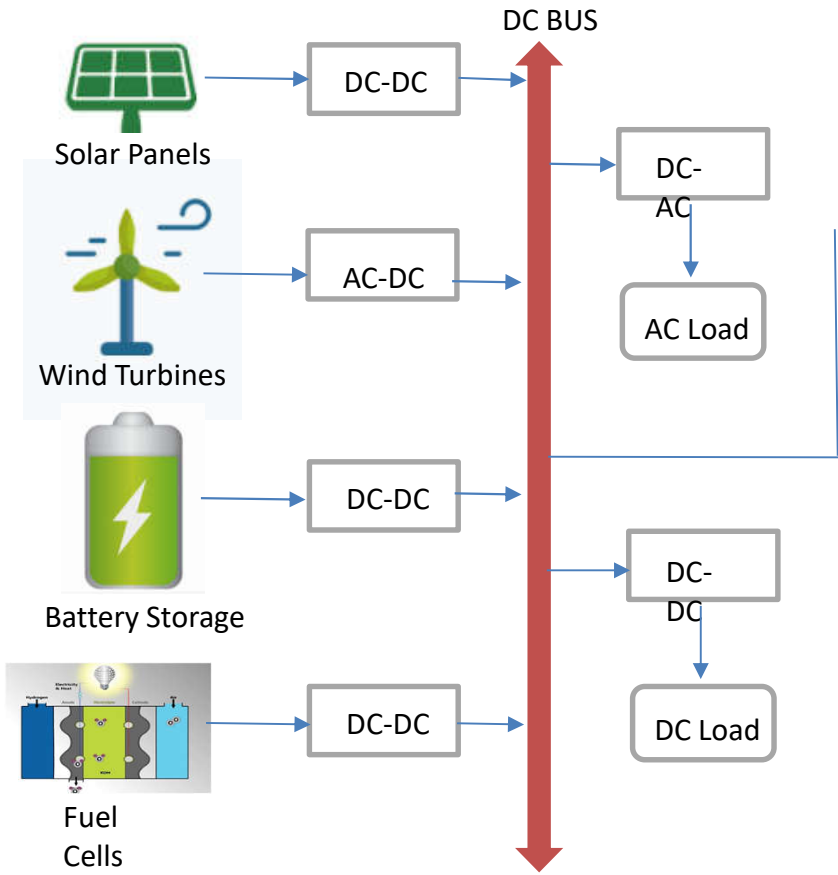


LONG-DURATION UPS DC MICROGRID TOPOLOGY

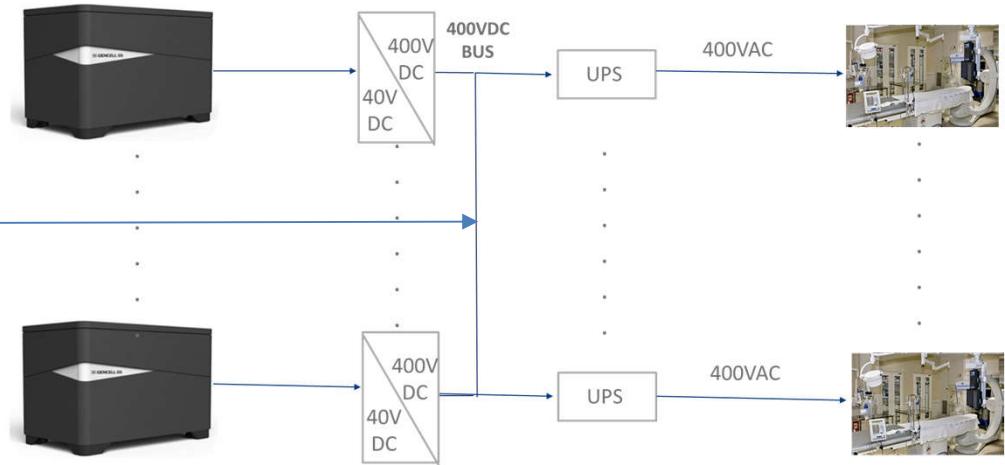
SAY NO TO DIESEL



RENEWABLE ENERGY DC MICROGRID



GENCELL'S 400VDC BACKUP POWER BUS

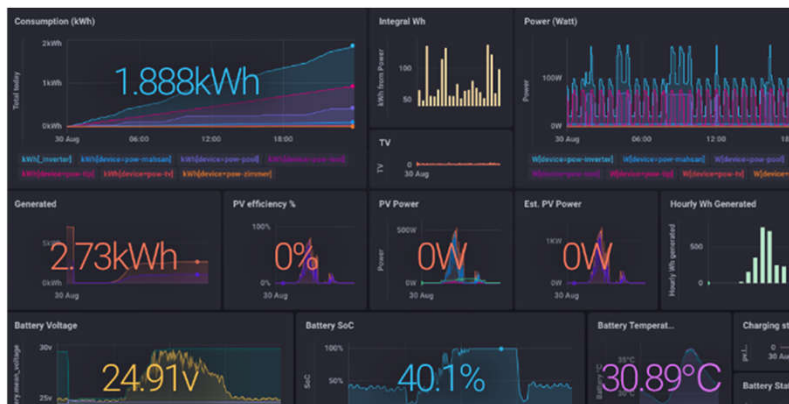
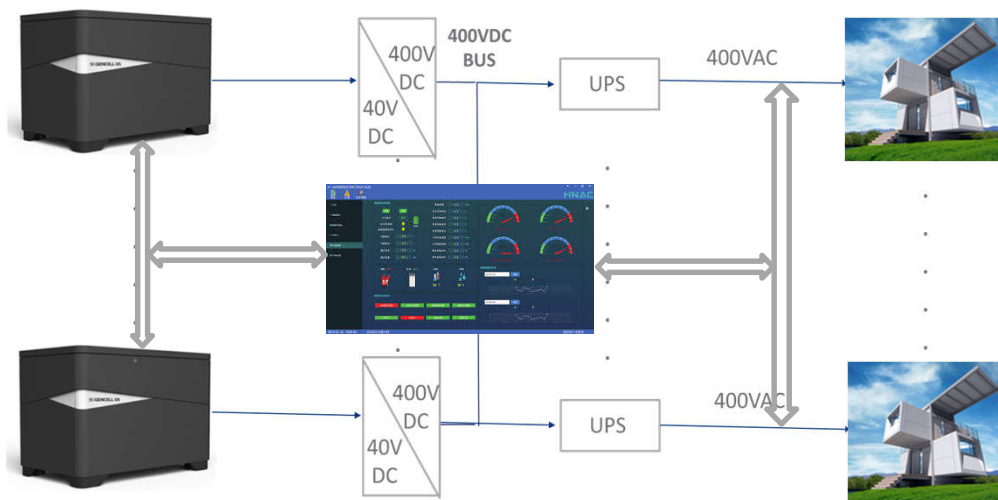


GENCELL'S FUEL CELL MEDICAL MICROGRID



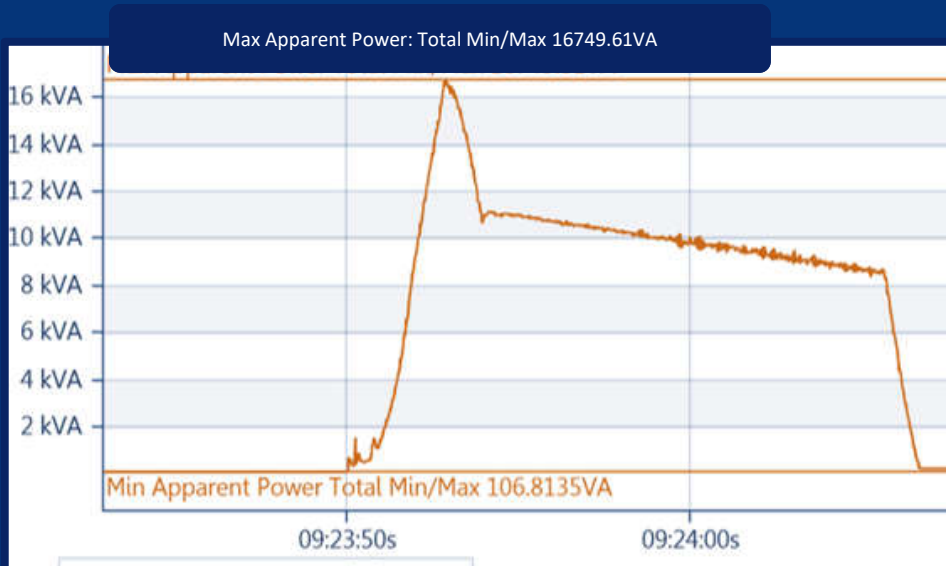
RENEWABLE ENERGY DC MICROGRID

Reliable microgrids incorporate hybrid combination of intermittent solar and wind, EMS software, short-duration batteries and long-duration fuel cells...



KEY FEATURE: DYNAMIC LOAD MANAGEMENT

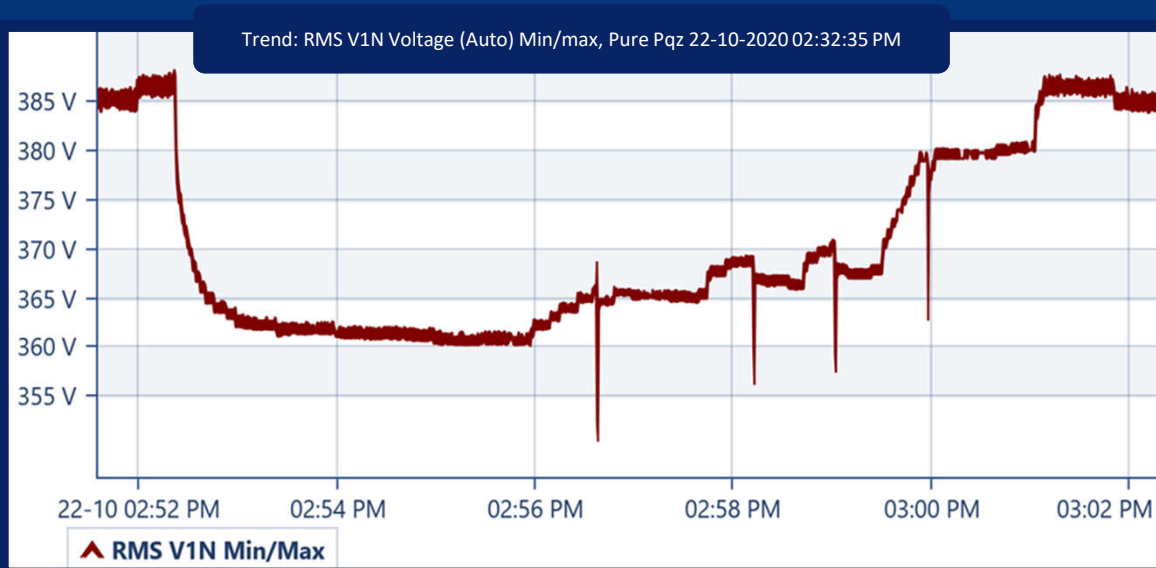
Targeted energy on demand delivers energy as needed to critical assets – AC and DC – ensuring robust, smooth and uninterrupted power for multiple critical loads for any duration



SAY NO TO DIESEL



KEY FEATURE: SEAMLESS POWER TRANSITION



In event of outage, failsafe backup kicks in immediately, every time

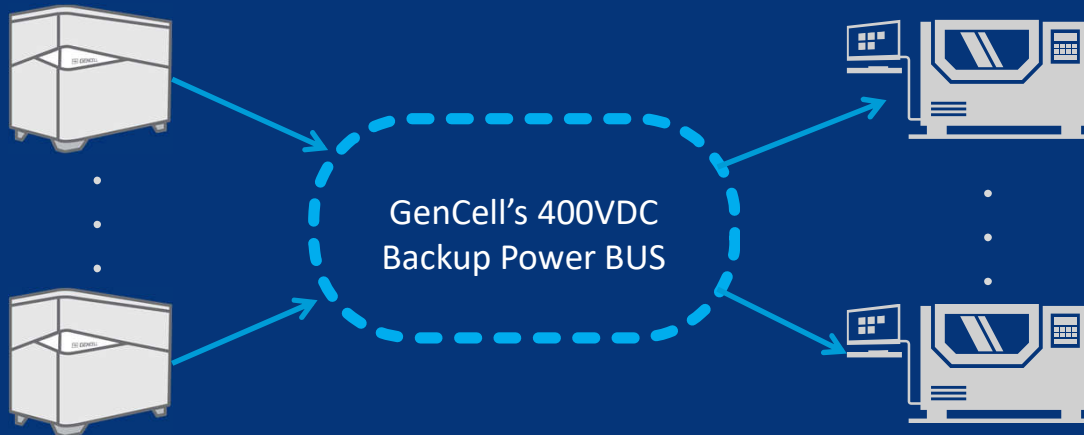
SAY NO TO DIESEL





KEY FEATURE: N+M REDUNDANT CONNECTIVITY

- Redundant stacks for failsafe operation of the fuel cell
- Multiple redundant fuel cells add second layer of protection
- Modular, scalable solution can be easily adapted to dynamic power requirements



SAY NO TO DIESEL



HYDROGEN'S COMPARATIVE ADVANTAGE

- Efficient hydrogen fuel supply logistics
- Extending the duration of the UPS devices with batteries would entail enormous cost, weight and space
- Future plan: extraction of hydrogen from liquid ammonia stored on-site will exponentially reduce cost of hydrogen storage and logistics

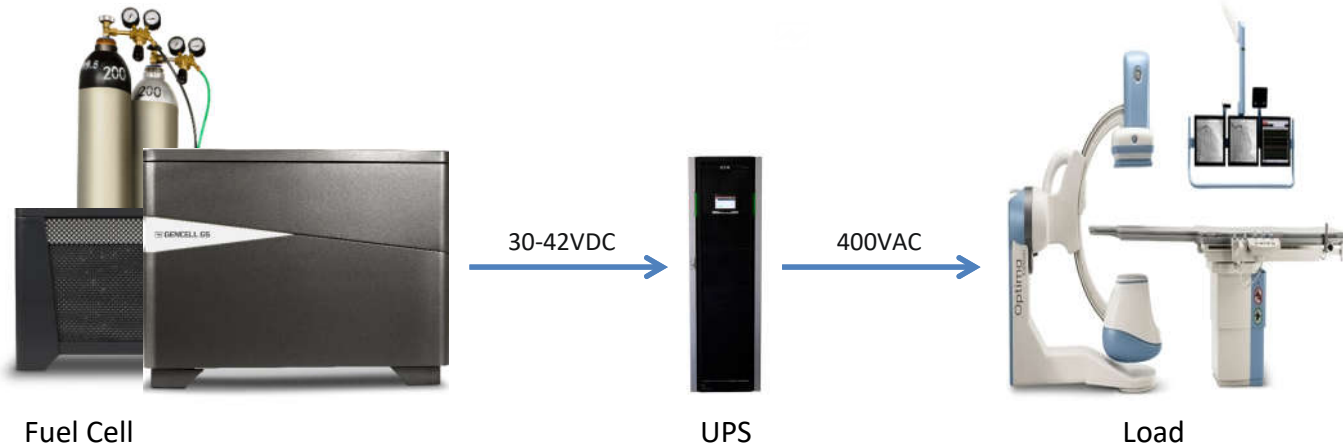
SAY NO TO DIESEL





GENCELL'S LDU SOLUTION PROTECTS CARDIO-CATHETERIZATION UNITS AT GREEN STANDARD HOSPITAL

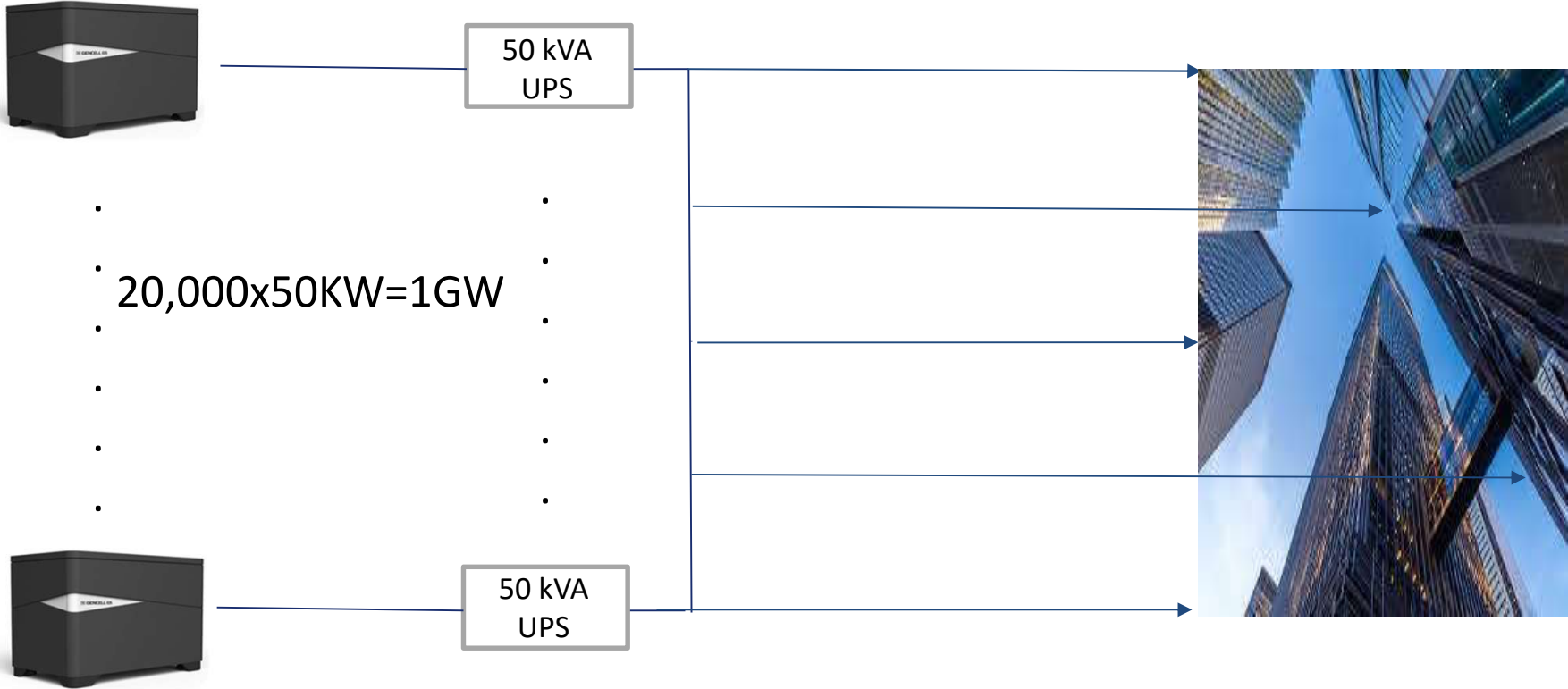
Long Duration UPS (LDU), enabling “Targeted Energy Management” with a lean and scalable solution combining our Alkaline Fuel Cells, UPS and EMS to orchestrate dynamic loads and optimize critical power systems to keep them running no matter what, such as in catheterization units at a green standard hospital in Israel.



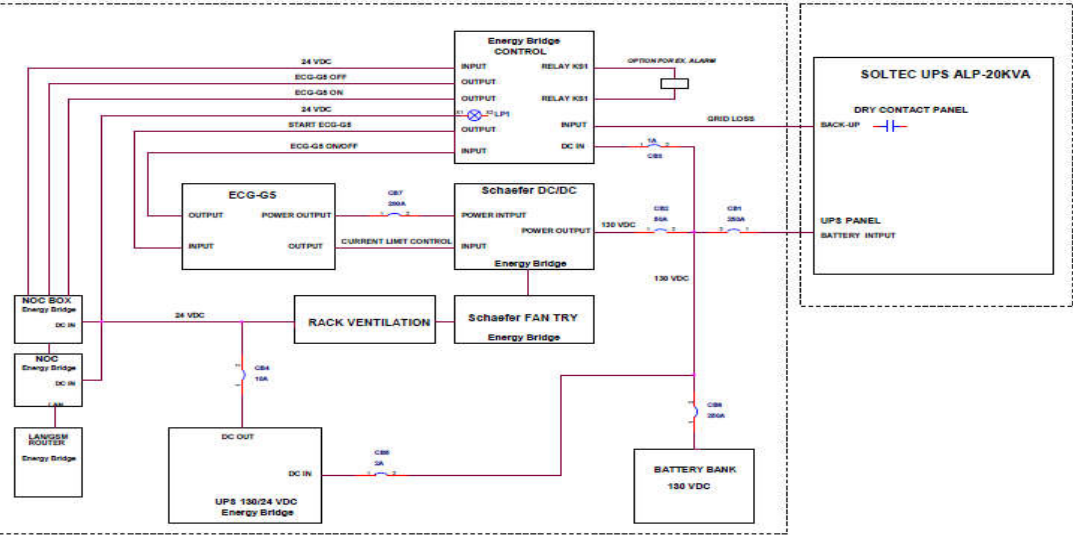
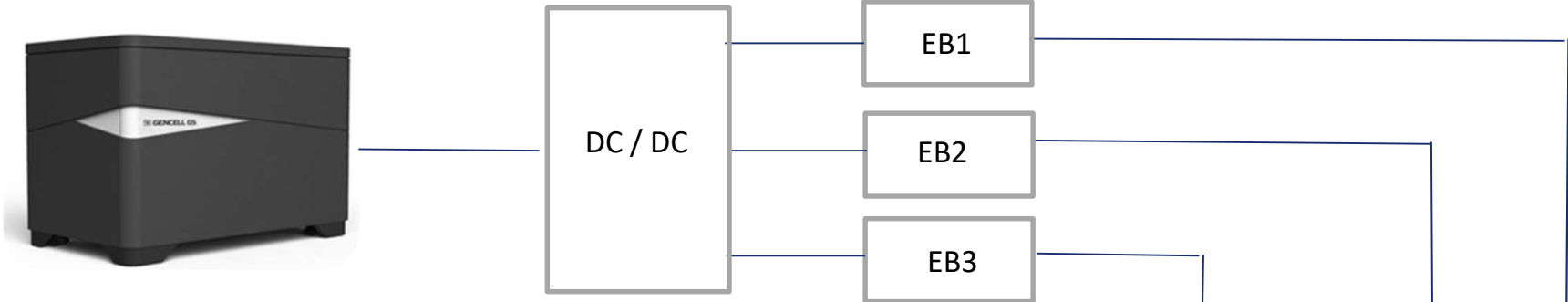
SAY NO TO DIESEL



GENCELL'S LONG-DURATION UPS (LDU) CAN PROTECT HIGH-RISE RESIDENTIAL BUILDINGS (50 FLOORS, 1 UNIT PER FLOOR = 1000KVA PEAK, 250KVA CONTINUOUS)

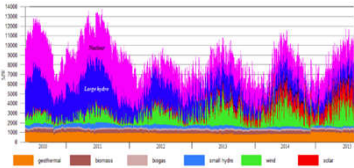


GENCELL'S LONG-DURATION UPS (LDU) SUPPORTS DIVERSE DYNAMIC LOADS

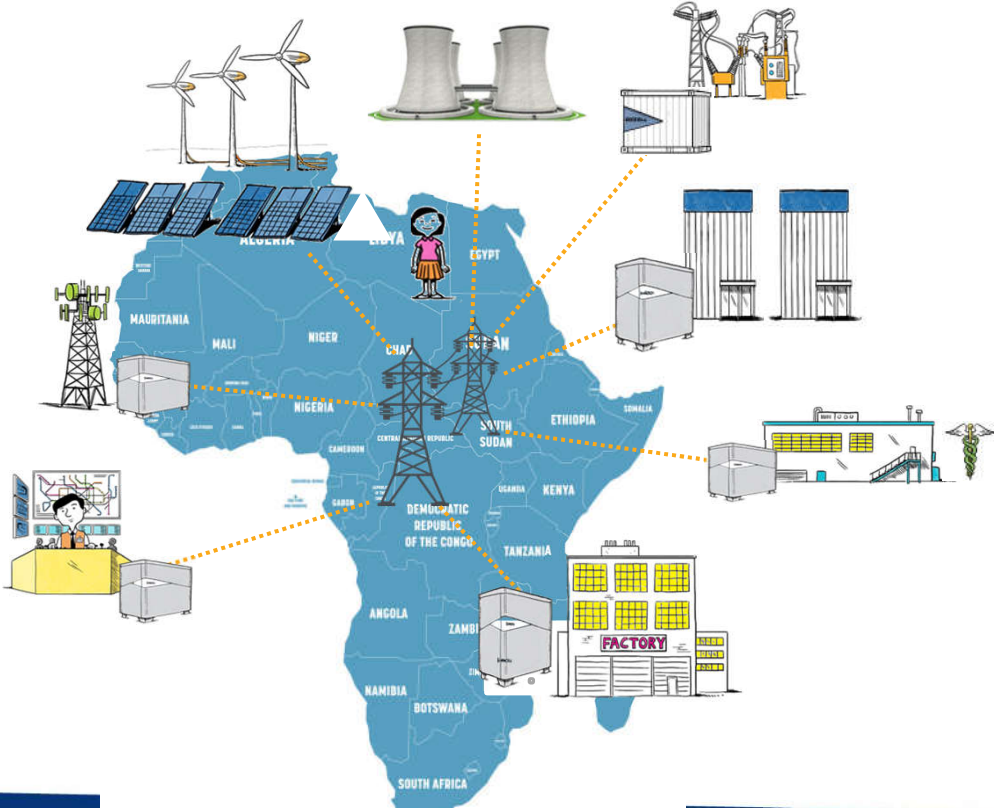


GENCELL'S LONG-DURATION UPS (LDU) SUPPORTS DISTRIBUTED POWER ENERGY CLOUD (MICROGRIDS) ANYWHERE

Renewable Energy Production



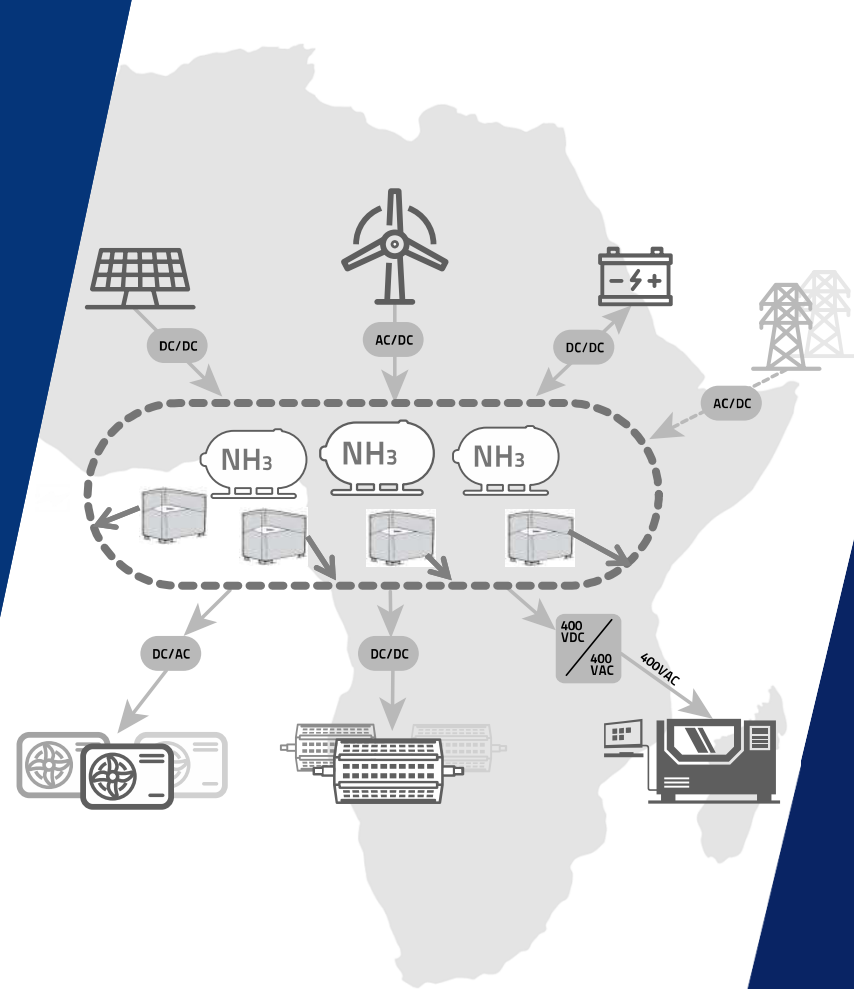
- Balance peaks from renewables
- Continuous backup for critical resources



GENCELL A5™ OVERCOMES CHALLENGES OF HYDROGEN INFRASTRUCTURE WITH LIQUID AMMONIA

- The GenCell A5 off-grid power solution extracts hydrogen from liquid ammonia
- A single 12–15-ton tank of ammonia provides enough fuel for a year of 24/7 operation
- Ammonia makes Targeted Energy Management long-duration UPS solutions accessible to multiple regions and use cases in any grid conditions

SAY NO TO DIESEL





KEY BENEFITS OF GENCELL LDU



99.999%



End Dependence
on Diesel

“Five Nines”
Reliability

Little to No
Maintenance

Certified &
Compliant with
Zero-Emissions

Targeted Energy
Network for
Efficient & Reliable
Load Management

SAY NO TO DIESEL

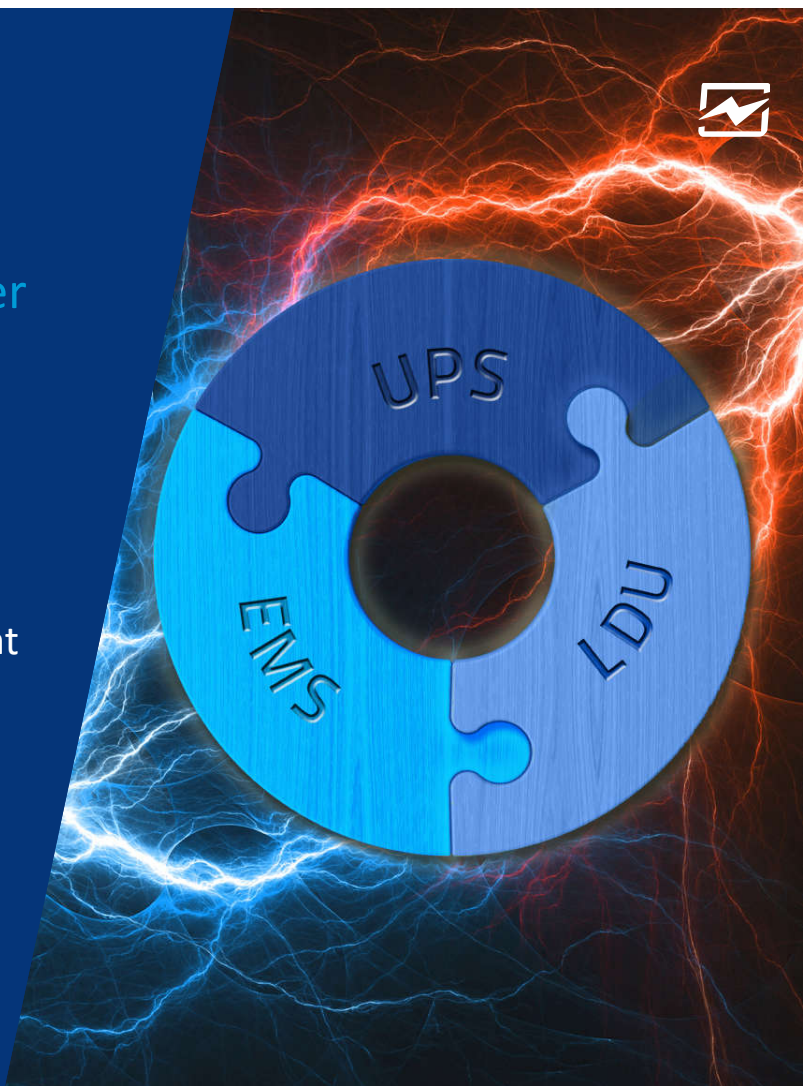




KEY TAKEAWAYS:

Long-duration UPS revolutionizes backup power for scalable microgrids

- COVID proves the importance of agile backup power
- Hydrogen enables reliable, scalable, cost-efficient & clean microgrids
- Targeted Energy Management open to OEM equipment manufacturers of any device and diverse applications
- LDU + UPS + EMS > cost-effective, clean energy loop



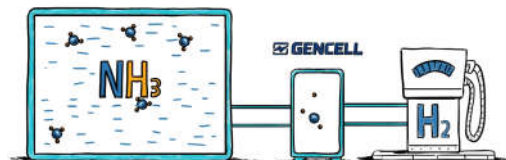
LOOKING AHEAD: ALKALINE FUEL CELLS FOR TRANSPORT

Challenge



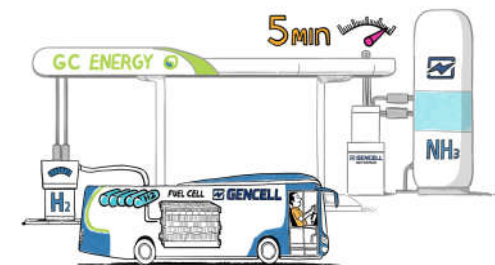
- Diesel buses and trucks belch smoke
- Li-Ion buses have limited range and long recharging time
- H2 infrastructure will cost billions (\$)

Solution



- Crack ammonia to create H2
- Bypass the H2 infrastructure

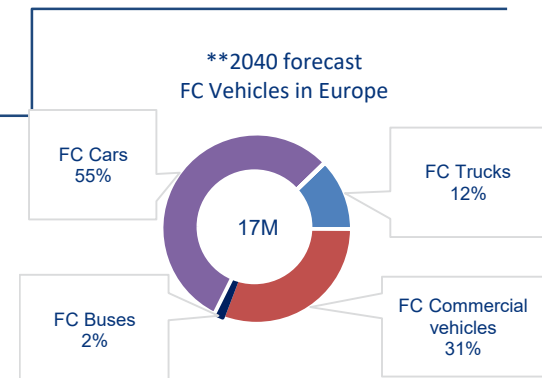
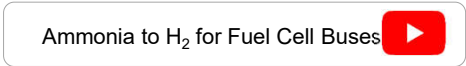
Markets



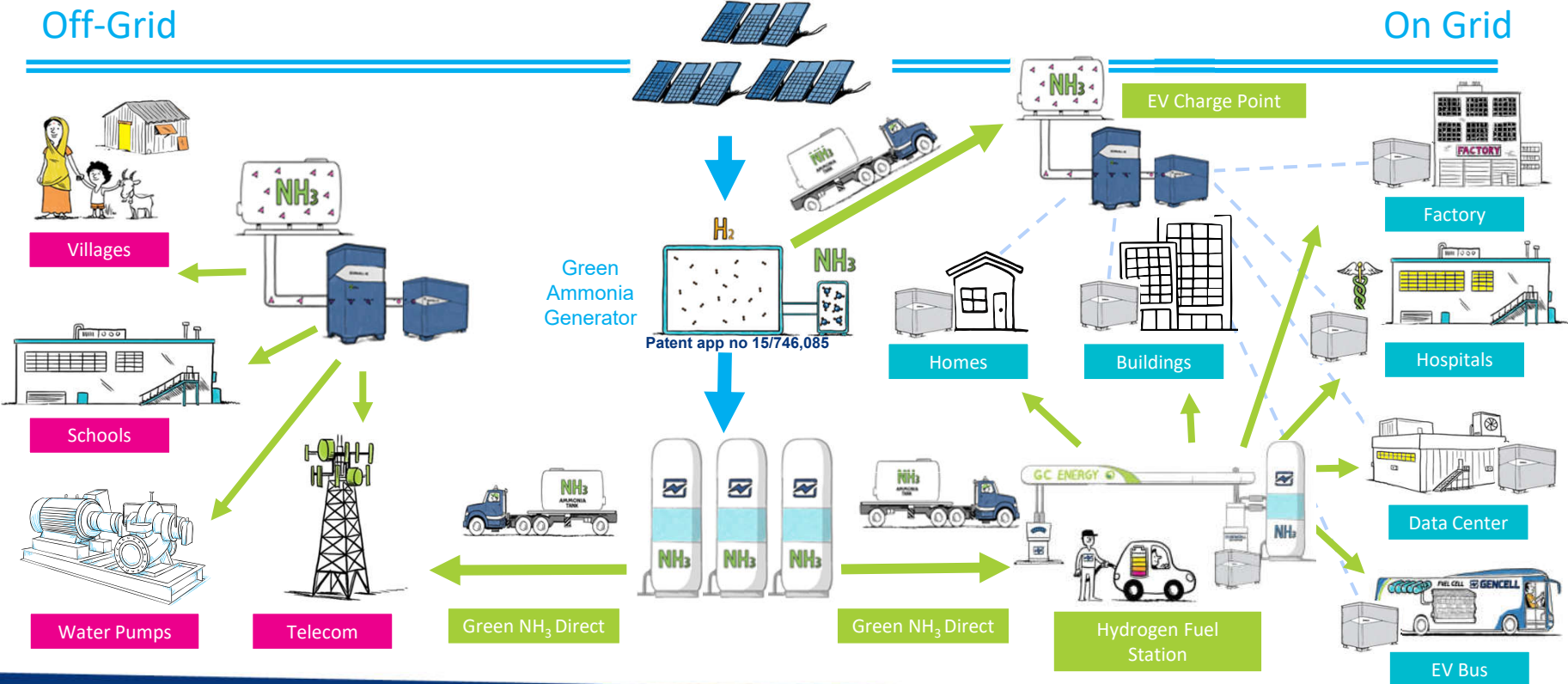
- Pump H2 into buses and trucks

** The combination of electric battery and fuel cell vehicles will drive an irreversible transformation of the mobility sector, to the extent we've not seen since Henry Ford pushed the 'Model T' upon the horse and carriage market in 1908.

• Source : Bekryl Market Analysts, 2018
 • **Source: Rethink Energy , 2020

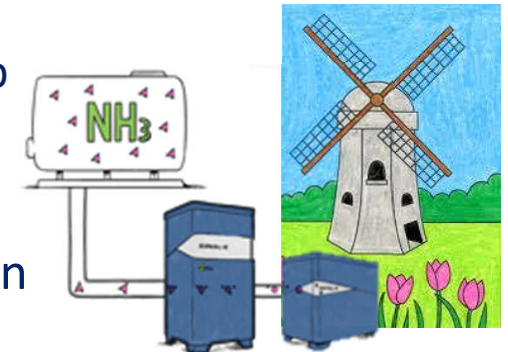


Our Vision: Green Ammonia to Drive Power Across the Energy Cloud



REALIZING OUR VISION – ISRAEL & THE NETHERLANDS

- GenCell's Energy Cloud meets Dutch Hydrogen Valleys
- GenCell Seeks Dutch Partners for:
 - Replicating GenCell LDU at Dutch Hospitals
 - Replicating Innovathuis/InnovationHub in Israel
 - Joint Industrial R&D Consortia with EC Funding to Develop Alkaline FCEV & Fueling Stations
 - Collaboration between GenCell FCs & Dutch ammonia
- Joint entity vis-à-vis Hydrogen Europe/Mission Innovation



KEEP RUNNING.

WITH FUEL CELL POWER SOLUTIONS



SAY NO TO DIESEL