

**NEWS RELEASE****GENCELL ENERGY UNVEILS WORLD'S FIRST AFFORDABLE OFF-GRID PRIMARY POWER FUEL CELL SOLUTION TO REPLACE DIESEL GENERATORS**

GenCell Energy, the fuel cell power solution provider and manufacturer, today unveiled the GenCell A5 off-grid power solution, the world's first affordable primary power alternative to diesel generators.

- ***GenCell A5 overcomes the OPEX barrier of rural telecom power, saving operators up to \$250M across 1,000 towers over a 10-year period compared to diesel generators.***
- ***GenCell A5 offers ultra-reliable power at a running cost of just \$0.50 per 1kW***
- ***GenCell A5 is first fuel cell solution to overcome the limitations of the current hydrogen infrastructure by creating hydrogen-on-demand from low-cost ammonia fuel***

Designed to provide cost-effective, ultra-reliable power for off-grid and poor-grid telecom base stations, the GenCell A5 fuel cell solution overcomes the high-costs of powering rural telecoms. When compared to using conventional diesel generator solutions over a 10-year period, the GenCell A5 solution can reduce OPEX costs of Tower Management Companies (Towercos) and Mobile Network Operators (MNOs) by up to \$250M across 1,000 towers<sup>1</sup>.

The GenCell A5 is the first fuel cell solution to overcome the limitations of the current hydrogen infrastructure by creating hydrogen-on-demand from ammonia, the world's second most-produced inorganic chemical. More than 200 million tons of ammonia is produced each year and distributed globally via pipelines, tankers and trucks, making it readily available and inexpensive. By creating hydrogen-on-demand from ammonia, the GenCell A5 provides clean fuel cell power at a lower cost than polluting diesel generators – at just \$0.50 per 1kWh<sup>2</sup>.

“In Q1/2018, we surveyed 55 MNOs and Towercos about their plans for powering base stations,” says Caroline Gabriel, Research Director & Co-Founder, Rethink Technology Research. “We found that the most important drivers for investing in a new power technology are to reduce fuel costs and operating costs. These are the only two areas where current hydrogen fuel cell solutions do not meet operator objectives.

“Ammonia fuel cell solutions, such as the GenCell A5, offer all the benefits of hydrogen fuel cells while reducing the fuel cell OPEX costs by at least 25%. Our study shows that this can accelerate operator investment and significantly impact the operator business model for off-grid communications, while contributing to government programs for universal connectivity and Internet services,” she adds.

Further reducing the OPEX costs for Towercos and MNOs, the new GenCell A5 off-grid power solution requires minimal maintenance. Unlike diesel generators that require time-consuming and

expensive monthly fueling and maintenance at each tower, a single 12-ton tank of ammonia provides the GenCell A5 with enough fuel for a year of 24/7 operation. The proprietary GenCell IoT Remote Manager enables remote diagnostics and monitoring of each fuel cell device, reducing the frequency and costs of onsite engineer visits.

Henry Calvert, Head of Future Networks, GSMA, comments: “This innovative solution will support remote or rural areas where power issues may exist and is a significant development for mobile operators who will now have a reliable and efficient supply of green energy for off-grid power generation for base stations. It will also help to support the UN’s Sustainable Development Goal of ensuring access to affordable, reliable, sustainable and modern energy.”

Rami Reshef, GenCell CEO, adds: “Today, 1.1 billion people lack electricity for lighting, communications, cooking and even clean water – with 84% of them living in rural areas beyond the grid. Ultimately, the GenCell A5 solution is not just for providing low-cost power for off-grid and poor-grid telecom. It’s about providing “power for humanity” through rural electrification that improves education, health and quality of life.

“Fuel cells offer many benefits, including unlimited run-time, simple annual maintenance and zero emissions, but a lack of infrastructure for distributing hydrogen has prohibited their mainstream adoption,” continues Reshef. “Fortunately, there is an alternative to investing billions of dollars on building hydrogen infrastructure: just create hydrogen from ammonia. This means that fuel cells are not only more reliable and cleaner than diesel generators, but now also significantly less expensive to maintain and operate.”

The GenCell A5 off-grid power solution is available for order today with commercial delivery expected in H2/2019.

1 Based on current global average price of diesel and ammonia, with the GenCell A5 providing 24x7 off-grid power at 1,000 towers

2 Based on average ammonia price of \$280 per ton

3 Rethink Research Ltd. Powering Off-Grid Mobile Networks and Universal Connectivity: A New Business Case.

---END---

## **About GenCell Energy**

GenCell Energy fuel cell solutions offer affordable, clean power for humanity that renders diesel generators obsolete. Using the ultra-reliable technology that powers American and Russian spacecraft, we deliver backup power for utilities, homeland security, healthcare and automated industries. Our revolutionary process to create hydrogen-on-demand from anhydrous ammonia (NH<sub>3</sub>) enables our fuel cell solutions to provide primary power for off-grid and poor-grid telecom, as well as rural electrification.

GenCell Energy has more than 80 employees, including many veterans of space and submarine projects. The company is headquartered in Israel with a worldwide distribution and support network and has unique intellectual property that includes patents, trade-secrets and know-how.

**Contacts:**

Worldwide PR for GenCell Energy

Ben Dodson

Incus Media

Tel: +44 1737 215200

[gencell@incus-media.com](mailto:gencell@incus-media.com)

[www.incus-media.com](http://www.incus-media.com)

Libby Alpert, Head of Marketing

GenCell Energy

Tel: +972 54 3266068

[libby@gencellenergy.com](mailto:libby@gencellenergy.com)

[www.gencellenergy.com](http://www.gencellenergy.com)