





## THIS IS POWERCELL

PowerCell Sweden AB (publ) is the Nordic region's leading fuel cell company that develops and manufactures environment-friendly electrical power systems for stationary and mobile customer applications. PowerCell has developed a modular system of fuel cell platforms that are powered by pure, environment-friendly produced hydrogen gas where only electricity, heat and water are emitted. The fuel cells are also designed to handle reformed hydrogen gas from biogas, natural gas, biodiesel or standard diesel, for example.

For conditions where no H<sub>2</sub> gas is available, PowerCell has combined its leading fuel cell and reformer technology and developed PowerPac, a fuel cell system that converts standard diesel to electricity by way of hydrogen gas. This takes place in an energy-efficient and environment-friendly manner, where the emissions of carbon monoxide, nitrogen oxide and particles are completely eliminated and the carbon dioxide is sharply reduced compared with a traditional diesel engine.

PowerCell Sweden AB (publ) is listed on First North on Nasdaq Stockholm and is an industrial spin-off from the Volvo Group.

### *Mission*

Our mission is to offer customers efficient, environment-friendly power products and systems based on leading fuel cell and reformer technology for existing and future fuel infrastructure.

### *Vision*

To be the world's leading innovative fuel cell company by:

- creating value for customers in selected segments
- developing innovative products and systems for existing and future fuels
- providing efficient products that reduce the environmental impact

SEK  
1,396  
million

MARKET CAPITALIZATION  
12/30/2015

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## SIGNIFICANT EVENTS IN THE PAST YEAR

• **Continued increased customer** interest and improved sales.

• **Per Wassén became the new President**, Magnus Jonsson became the new Chairman and Karin Nilsson became the CFO as of June 2015.

• **The PowerCell S1 platform** continues to note successes. The first repetitive order was received from a customer in Taiwan that is integrating the PowerCell S1 fuel cell into its latest micro-CHP generator. A contract was signed with H-O Enterprise for the installation of the PowerCell S1 fuel cell system for energy buildings in Agnesberg, Gothenburg.

• **Launch of the PowerCell S2 platform** at the Hannover Fair in April. The first orders of the PowerCell S2 platform were received in June for 25 kW fuel cell stacks.

• **Continued successful development** of the S3 platform with a power range of 20-100 kW within the Autostack Core project, in which, among others, VW and BMW are participating.

• **Order received from TeliaSonera** for the evaluation of PowerPac as an aux-

iliary power unit for telecom base stations in the Gothenburg area.

• **Letter of intent received through Midroc** with GORD (Gulf Organization for Research and Development) for the installation of a PowerPac for operations and cooling of buildings in the Middle East.

• **PowerCell Deutschland GmbH**, a subsidiary in Germany, was established.

• **Letter of intent** signed with energy supply company Mitochondria in South Africa for the commercialization of PowerCell PowerPac.

• **Letter of intent** signed with Wallenstam AB, Midroc Automation AB and Vätgas Sverige regarding the "PowerCell S2 module system" pilot study aimed at storing H<sub>2</sub>-generated gas using surplus energy from wind and solar power, as well as electrolytes.

• **Contracts signed with** Norwegian grocery distributor ASKO, ThermoKing of Norway and the research institute SINTEF to evaluate PowerCell PowerPac's ability to reduce diesel consumption for power generation when loading and unloading refrigerated transports.

• **The Minister for Infrastructure Anna Johansson** and the Chair of the Regional Development Committee of Västra Götaland Region Birgitta Losman inaugurated Sweden's third hydrogen filling station for fuel cell vehicles, located adjacent to PowerCell's premises.

### EVENTS AFTER THE END OF THE FISCAL YEAR

• At the end of the subscription period on December 30, 2015, **99.1% of all warrants from T01** had been exercised to subscribe for shares, which resulted in a capital injection of SEK 68.7 million to PowerCell.

• A European customer placed the **first order** for the PowerCell S3 platform for a 100 kW prototype stack for a vehicle application.

• **Additional order secured** for two PowerCell S3 fuel-cell stack prototypes from a strategically important global customer.

• Powertech System Integrators Ltd. is appointed PowerCell Sweden's **distributor in Africa**, with responsibility for sales and integration and for spare parts, service and maintenance.

FIVE-YEAR SUMMARY	2015	2014	2013	2012	2011
Net sales (KSEK)	5,100	1,492	2,513	840	49
Operating loss (KSEK)	-64,763	-45,910	-38,529	-42,011	-41,303
Operating cash flow (KSEK)	-64,543	-39,997	-38,529	-27,705	-40,384
Total assets (KSEK)	75,908	147,076	63,880	84,496	98,550
Equity (KSEK)	11,266	76,454	16,205	32,073	53,876
Equity/assets ratio (%)	14.8	52.0	25.4	38.0	54.7
Current assets/short term liabilities ratio (%)	2.3	4.3	2.3	2.6	4.6
Number of shares	35,698,392	35,419,605	1,065,215	1,065,215	1,065,215
Earnings per share (SEK)	-1.8	-1.3	-36.0	-39.2	-38.8
Dividends per share (SEK)	-	-	-	-	-

# Statement by the President

At the COP21 climate meeting in Paris, world leaders agreed to limit global warming to a maximum of 2 degrees. The agreement demands that the countries of the world immediately put the climate meeting into practical action to become sustainably fossil free. The world is facing a major technical shift – a game changer – where the fuel cell is a part of the solution.

Gasoline and diesel have been the dominant fuels in the past 100 years. Using these fuels, people have achieved both growth and opportunities for the communities to free themselves from poverty. At the same time, emissions from them have caused damage to both people and the environment. The risks of continuing to use fossil fuels are unpredictable, but the opportunities for a relatively painless transformation have never been greater. The renewable energy sources of wind, sun and water need fuel cells driven by hydrogen gas as a part of the solution. The fuel cell technology is already fully developed, flexible and attractive in its scalability. PowerCell is ready to meet the coming need with a broad range of scalable modularized cutting-edge products.

## Product range covers 1-100kW

Our fuel cell has the advantage of being useable in several different customer segments that jointly create industrial economies of scale and competitive advantages. PowerCell's offer covers the 1-100 kW power range, through the PowerCell S1, the PowerCell S2 fuel cell platforms and the latest addition, the PowerCell S3, which is under development. The S1 PowerCell fuel cell platform can be used in multiple applications, particularly for homes, properties and traffic systems and together with a natural/biogas reformer to generate electricity. The S2 is intended for a higher power range and designed for volume production. The S2 will be highly cost-effective, with increasing volumes in several customer applications, including a range extender for electric cars. Finally, the S3 PowerCell is a platform mainly intended for vehicle applications, such as a powertrain, based on industrial components suitable for volume production from the outset.

## Greater customer focus boosts sales revenues

We need to increase revenues and launch the platforms more broadly at the same time as we continue the ongoing industrialization process and intensive development phase towards serial production. This was the background to our greater customer focus in 2015, which resulted in a larger number of customer inquiries and higher sales revenue in the second half of the year, while the costs of the industrialization preparations were charged to earnings for the whole year according to plan. Notable among the successes, besides continued sam-

ple orders from almost every part of the world, was our first repetitive order for the PowerCell S1 from Taiwan. The launch of the PowerCell S2 in April led to the first orders from Germany and France and, as a result of the year's testing work, the B prototypes of our PowerCell PowerPac system are now being tested in South Africa, Sweden and Norway in the first quarter of 2016.

## Establishment of PowerCell Deutschland GmbH

Due to the strategic importance of the German market, PowerCell Deutschland GmbH has been established. This is in line with the objective of strengthening the market development in one of the most important markets in Europe and thus shoring up the company's growth strategy. Initially, marketing activities for PowerCell's fuel cell products will be expanded and the on-going research and development for the automotive sector enhanced and facilitated by the closer proximity to the customers.

## Hydrogen gas-powered cars are the future

It is increasingly clear that the transition to electric cars is absolutely necessary to handle the climate challenges. In our opinion, hydrogen gas is the fuel of the future since batteries have not yet managed to get passed their major disadvantages of range and slow charging time. When the world's largest manufacturer, Toyota, also confirms that the future is not in battery operation, but in hydrogen gas powered fuel cells even though it is at the cutting edge in battery technology, other car makers will very likely follow suit. PowerCell has already entered into technical collaboration with a number of these carmakers.

Hydrogen gas produced from renewable energy sources is an entirely fossil-free vehicle fuel. The cars can be fueled with hydrogen gas, which is converted into electricity through a fuel cell, which means that they only emit water vapor. Refueling takes some 3 minutes and the range is around 500-700 kilometers. But fuel cells can also be combined with batteries in the vehicles and serve as a range extender, known as a REX. In order for fuel cell vehicles to become a reality, the hydrogen gas infrastructure is now being rapidly expanded in the US, Germany, Japan and South Korea. The EU has set the target of



having a hydrogen filling station in place every 300 kilometers. On October 26, 2015, the Swedish Minister for Infrastructure Anna Johansson inaugurated Sweden's third hydrogen filling station directly adjacent to PowerCell's headquarters in Gothenburg. It is now becoming possible for PowerCell to test and develop fuel cells for our customers' fuel cell vehicles directly at our development laboratories. Of course, it is hoped that municipal and other private businesses close to the station will begin to use hydrogen vehicles.

### Renewable energy sources demand energy storage possibilities

PowerCell also sees opportunities in combining the production of renewable energy with the production of hydrogen gas. In the new fossil-free world, energy will be produced more locally and unevenly. The need for a flexible electrical grid will grow, making storage a central component to be able to balance the grid, especially now when nuclear power is beginning to be phased out. Renewable energy sources such as solar and wind power do not in fact produce electricity in a controllable manner. The days that the sun provides a great deal of energy, for example, may not be the days when we need the energy. It is not certain that the electrical grid in the summer can balance such a surplus. Batteries have a limited storage capacity and storage time. Hydrogen gas is the best alternative to create the necessary flexibility in the electrical grid by connecting it to the renewable production of hydrogen gas. In order for this to be done in a way that reduces the load on the electrical grid, the energy infrastructure needs to be optimized. It needs to be able to handle both the needs of hydrogen, such as more hydrogen filling stations, and storage possibilities from the perspective of the electrical grid.

### PowerCell's demonstration and reference facilities

To demonstrate the potential of the fuel cells and hydrogen gas, PowerCell has entered into a collaboration with the property company Wallenstam AB, which has considerable wind power interests, Midroc Automation AB, which is a comprehensive partner in such areas as property, building, industry and the environment, and the trade association Vätgas Sverige, aimed at launching a prestudy to develop an energy stor-

age system for properties. The prestudy is being financed by the Västra Götaland Region.

Our first reference facility in this context is a fuel cell system we developed in 2015 for a self-reliant low-energy building in the Gothenburg area. Interest from property owners has proven to be considerable for these "off-grid buildings". Not only will grid costs be avoided, but new buildings in Sweden will be required to be close to zero-energy buildings in 2020, which means that they will have to produce nearly as much energy as they consume.

In both cases above, the principle applies that surplus energy from wind and solar electricity will be intermediately stored as hydrogen gas, using electrolysis, to then be returned through a fuel cell system to emit new electricity and heating when necessary, such as on cloudy and calm days or in wintertime.

### Strategically positioned

PowerCell is strategically positioned at the very start of the growth phase in a curve of technological advances. It is our young, enthusiastic and incredibly competent employees that have made this possible. In this annual report, PowerCell has decided to present a cross-section of the team that is driving PowerCell forward and to reveal what has attracted them to work with us. Together, we are involved in creating the fossil-free sustainable society. The main tasks in the near term are to further increase customer focus, to provide the prototypes for customer testing in 2016 and to prepare and quality assure the planned serial production of our platforms and systems beginning in 2017.

With the above, I want to take this opportunity to thank our employees for their excellent work in the past year. Thanks to what is now happening in our surroundings, the technical shift and PowerCell's position, we can look forward to a very exciting future, which will enable us to generate considerable value for the environment, the company and its shareholders.

**PER WASSÉN**  
President  
PowerCell Sweden AB



# Market

On December 12, 2015, a new global climate agreement was adopted at the COP21 climate meeting in Paris. The agreement establishes that the global temperature increase must be kept well below 2 degrees and that efforts should be made to limit it to 1.5 degrees.

The agreement also states that countries should successively sharpen their commitments<sup>1</sup>. The wealthy countries must support the poorer countries in their transformation. This effort includes more stringent requirements for ever larger percentages of renewable energy sources. Among other efforts, the Swedish government has invested in small-scale renewable electricity that is produced outside the large electrical grids<sup>2</sup>.

In the renewable world, various energy sources will be produced locally, with solar panels, wind power turbines or home-based micro power plants, for example. To ensure reliability, auxiliary power is also needed when there is no sun or wind. This will require interaction between the alternative solutions and an ability to both distribute energy to the areas where a need exists on each individual occasion and to store surplus energy. In the latter context, electrolytic conversion of surplus energy to hydrogen gas has proven to be an increasingly attractive alternative since fuel cells then enable the feedback of the energy to where the hydrogen gas has been distributed.

It is in this environment of decentralized power generation, storage and auxiliary power that the need for fuel cells, with their high efficiency and reliability, exists and with it the need for PowerCell's products.

According to the analyst firm, 4th Energy Wave<sup>3</sup>, a specialist in the fuel cell sector, the major technical leap has not yet begun even if annual growth is in double digits. In 2014, the first one million of accumulated sold units, 1 GW, was achieved, but according to the analyst firm, the next million will probably not be achieved until 2016/2017.

The environmental aspects and, for example, government subsidies for the actual technology as well as expanded hy-

drogen gas distribution could accelerate the process. The current main alternatives for primary and auxiliary power supplies and today powertrains of various vehicles are mainly internal combustion engines. Opinion pressure to replace these increased strongly towards the end of 2015, especially following the Dieselgate in September, when the apparently improved performance of diesel-based powertrains was revealed largely to be a fabrication. Without the argument of operating economy, the disadvantages of diesel engines, including high nitrogen oxide content and toxic emissions, overshadow any remaining advantages, such as the fuel being readily available and high energy content.

Fuel cells can therefore look forward to continuing strong growth with major potential for exponential growth in the pursuit of replacements for the current solutions. Based on these market conditions, PowerCell believes that its fuel cell platforms cover an attractive power range with considerable ability to adapt to various needs. During a transitional period until an adequate hydrogen distribution network has been developed, PowerCell PowerPac, with its technology of integrated fuel cells and diesel reformers, will be an attractive bridge between the existing fuel infrastructure and the new renewable decentralized market.

## Fuel cell market

The diagram below shows the latest figures from the independent research and consulting firm 4th Energy Wave<sup>3</sup> for the number of fuel cell system deliveries. The increase compared with 2014 remained high at 55.4% to 104,900 units (with a total power increase of 22% to 221.8 MW) compared with the year before.

Stationary units, including the application PowerPac, accounted for most of the fuel cell systems delivered in 2014, 56,500

<sup>1</sup> Press release, regering.se, 12/12/2015

<sup>2</sup> Minister for International Development Cooperation Isabella Lövin, 12/8/2015, regering.se

<sup>3</sup> 4th Energy Wave, Fuel Cell Annual Review 2015, September 2015



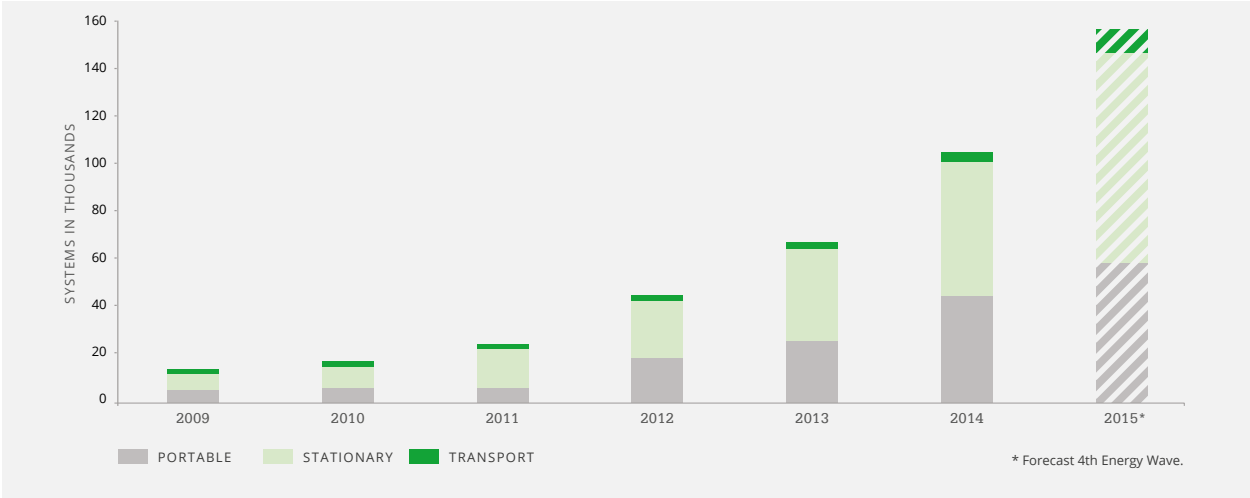
units (an increase of 46%). These primarily include mini generators, voltage stabilizers and auxiliary or reserve power generators. In contrast to 2013, portable applications, such as laptop and mobile phone chargers, had a larger increase in terms of units but a small power output per unit. The transport sector also recovered and was on the same level as in earlier years. Here, the opposite is true: we count relatively few units, just over 4,000, but these offer considerable output per unit, which derives from the fact that sales of mass-produced fuel-cell cars have begun.

According to analyst firm Navigant Research<sup>4</sup> the demand for reliable uninterrupted power supplies is the main reason for the growth in stationary units. Navigant Research expects the total stationary fuel cell market to grow to USD 40 billion in 2022 from today's levels. Besides mini power plants for households, residential Combined Heat and Power (mi-

cro-CHP), one of the largest drivers for growth in the stationary segment is considered to be mobile telecom, specifically in emerging markets where electricity grids are the least developed and the most unreliable. Navigant expects the investments of global telecom operators in local electricity supplies and energy storage to increase from the current USD 2.4 billion to USD 3.4 billion annually or accumulated USD 31.1 billion during the period 2015 to 2024<sup>5</sup>.

**Global market by region**

The largest fuel cell manufacturers are in Asia (Japan and South Korea, in particular, but also China), followed by Europe (mainly Germany and the UK) and North America. This largely reflects the proportion of government-subsidized investments in South Korea and Japan as well as the targeted investments in micro-CHP, such as the state programs in California (Self Generation Incentive Program, SGIP) and Germany's



Source: 4th Energy Wave, Fuel Cell Annual Review 2015, september 2015.

<sup>4</sup>Stationary Fuel Cells Will Reach \$40 Billion in Annual Revenue by 2022, Navigant Research press release, March 10, 2014.  
<sup>5</sup>Telecommunications Network Provider Spending on Distributed Generation and Energy Storage Systems Is Expected to Total \$31.1 Billion from 2015 to 2024, Navigant Research, Press release, November 4, 2015

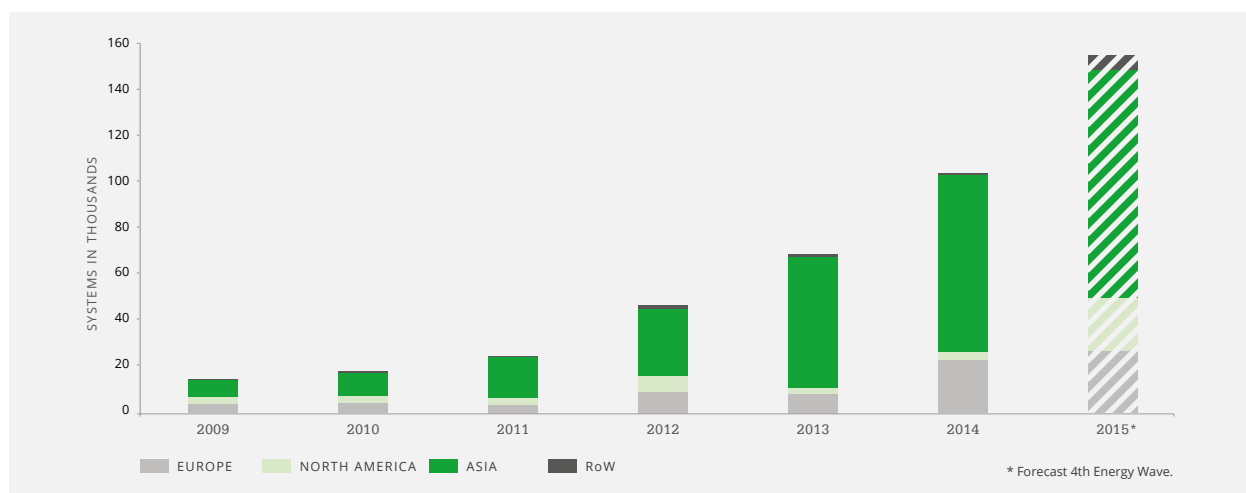
planned expansion of hydrogen gas infrastructure. According to 4th Energy Wave, Asia accounted for 60% of all deliveries in 2014, but it is believed that this percentage will increase to 75% in 2015 due to continued investments combined with a subsidized commercialization of fuel cell cars.

Japan is the country that has most unequivocally chosen hydrogen gas and fuel cell technology to handle the hydro-carbon problem. In 2014, the government launched a development plan "Promotion Project for Hydrogen Society Using Renewable Energy" with three phases until and beyond 2040. The main points are 100 hydrogen filling stations in 2015, a

five-fold increase in fuel-cell-supplied households by 2030 and increased hydrogen gas infrastructure to achieve an entirely nitrogen oxide-free hydrogen-gas-based society.

Europe's focus is more on subsidizing development rather than consumption, with an emphasis on the EU's Horizon 2020 program where EUR 1.3 billion is earmarked for fuel cell development of the program's total amount of EUR 80 billion.

4th Energy Wave is convinced that the focus on fuel cells in Europe will increase in pace with growing requirements for lower hydrocarbon emissions.



Source: 4th Energy Wave, Fuel Cell Annual Review 2015, september 2015.

## Industry colleagues

A short reference list of other listed global fuel cell companies follows. The information has been taken from the respective companies' websites.

### BALLARD

Ballard is the world's largest fuel cell manufacturer, selling PEM fuel cells with outputs ranging from 0.5 to 150 kW. Through Idatech, Ballard also has a methanol-fueled system that it sells as a backup for base stations. The company is listed on Nasdaq in the US.

### PLUGPOWER

Plugpower has a product called GenDrive, which primarily replaces batteries in forklifts, although the company's focus is on all areas of goods handling. GenDrive runs on pure hydrogen gas. PlugPower also supplies hydrogen gas infrastructure and fuel. The company is listed on Nasdaq in the US.

### INTELLIGENT ENERGY

Develops and sells fuel cells with an output range of 2 W to 100 kW. The company's focus is on the APU market segment (1-20 kW), the automotive industry (1-200 kW) and consumer electronics (<100W). Listed on the London Stock Exchange since 2014.

### HYDROGENICS

Hydrogenics develops fuel cells for electric vehicles and standalone CHP and UPS systems. Hydrogenics also supplies hydrogen gas infrastructure and electrolysis equipment. The company is listed on Nasdaq in the US.

### REDOX POWER SYSTEMS AND BLOOM ENERGY

These two companies develop larger fuel cell systems based on SOFC technology for distributed electricity generation.

### NEDSTACK

A fuel cell manufacturer, which sells fuel cell stacks in the output range 2 to 10 kW based on PEM technology.

### EBERSPÄCHER

Eberspächer develops APU systems with support from the German fuel cell program and focuses on power supplies for trucks. The company's system is based on SOFC fuel cell technology, which requires extremely long start-up times and is sensitive to thermal cycling.



Without the expertise, enthusiasm, creativity, drive and dedication that PowerCell's employees show daily, the products would not be so close to commercialization. Here, in this year's annual report, a selection of the team that forms the core of PowerCell's operations is presented.

"For an engineer, this job is as close to the dream as you can get."

**Rickard Nilsson, Master of Science in Engineering, Chalmers University of Technology, Electronics**

As a Project Manager for PowerCell's development projects involving fuel cell modules for households, Rickard is responsible for system development, specification, component selection, hydrogen systems... "In fact, everything that leads to the project succeeding," he says with a smile. The duties are multidisciplinary, with the benefit of taking a product all the way to market and of developing processes in the company along the way. It was a friend at PowerCell who convinced him to apply and he has now been here for 2.5 years. "A lot of what I've learned is put to good use, not detailed knowledge, but the ability to solve problems, take on a technical area. PowerCell is a young company that can be shaped." Rickard feels that an employee has to have technical know-how, bordering on being a bit of a "fuel cell nerd" and be solution oriented. There is an open atmosphere and discussions are open to new ideas. It is a matter of quick deci-

sions; there are no strict borderlines governing my responsibilities. "We have a problem. Solve it," describes Rickard. "You can hardly call this a steady state. If you're keen to stick to a job description, don't bother to apply." There are many changes and challenges and you cannot be afraid of change, he says. On the other hand, a somewhat adventurous person can and should take more responsibility early on. This is a major difference compared with large companies, which are suitable for those with special interests who want to delve deeper into details. PowerCell provides the opportunity to work broadly with verification, testing and different inputs, while having regular contact with production partners, suppliers and customers. "We are a fun gang, relatively young with a lot of social activities. Maybe not pranksters, not so much flying helicopter indoors. But for an engineer, this job is still as close to the dream as you can get."

# PowerCell's market offering

## - a modular concept

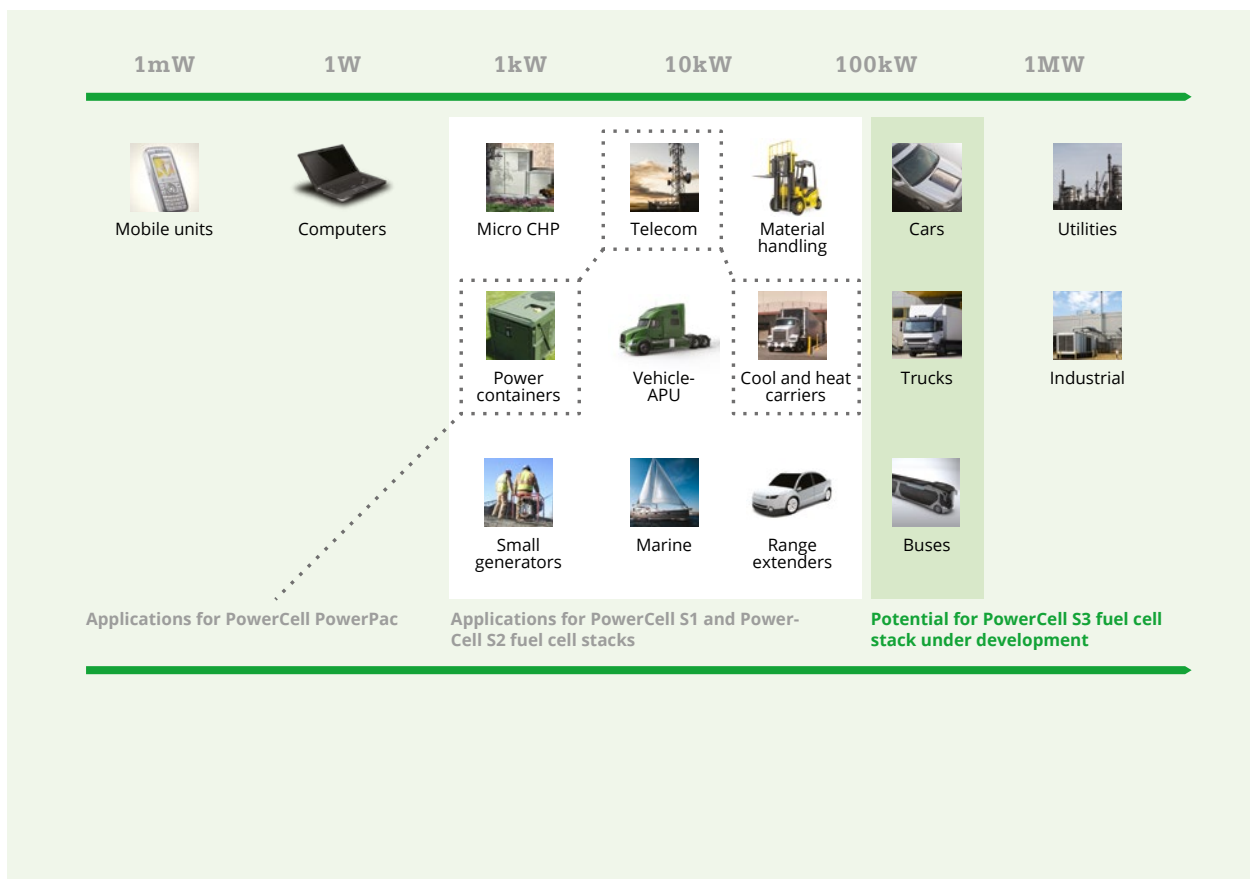
PowerCell focuses on acting as a system and component supplier, including sales of fuel cell stacks to partners who build fuel cell systems both for pure hydrogen gas and reformed gas, and have their own sales to the end customer.

Fuel cells have a broad area of use, from microwatt up to industrial MW power stations. On the lower end of the scale, we have mobile phone and laptop chargers. On the upper end, we have auxiliary power for hospitals, industrial plants or large buildings and as supplements to wind power and solar energy to enable the storage of energy in the power range of 1 mW - 1 MW. PowerCell focuses on the 1 - 100 kW power range.

To cover the range of conceivable applications, PowerCell has developed three fuel cell platforms: the PowerCell S1, the PowerCell S2 and the PowerCell S3. The PowerCell S1 and PowerCell S2 platforms have the unique characteristic of working with hydrogen gas and reformat<sup>6</sup>. With these plat-

forms, PowerCell modularly adapts the power from the fuel cell stacks to the power needs of the customer applications. Stacks can be connected in parallel like modules to achieve higher output.

Today, PowerCell develops products, prototypes and solutions based on these platforms in several different project formats, funded either through national or supranational authorities (such as authorities in the EU, the Nordic region or the Gulf States) or directly through partners and of course in combinations of both. PowerCell also develops and markets its own integrated electrical generation system the PowerCell PowerPac.



<sup>6</sup> Reformat is when fuel such as natural gas, LPG, gasoline or diesel is reformed into hydrogen gas, CO2 and water.

## S1 POWERCELL

- Runs on hydrogen gas or, if integrated with a reformer, with other fuels - for example, diesel, natural gas, methanol and ethanol - which enables use where hydrogen gas is not available.
- Scalable from 1-5 kW
- High tolerance to CO (generated in the reformer)
- Water-cooled
- Compact



## S2 POWERCELL

- Runs on hydrogen gas or, if integrated with a reformer, with other fuels - for example, diesel, natural gas, methanol and ethanol - which enables use where hydrogen gas is not available.
- Scalable from 5-25 kW
- High CO tolerance (generated in the reformer)
- Low pressure drop (provides low parasitic losses)
- Stable switching between humid and dry airflows (start/stop)
- Good fuel use (energy efficiency)
- Robust design for applications in both the auto industry and for stationary power applications, and designed for cost-effective serial production
- Water-cooled



## S3 POWERCELL

### UNDER DEVELOPMENT

To supplement the platform range, in the upper power range too, PowerCell is developing a high-quality fuel cell stack primarily for powering vehicles with the aim of having superior performance while meeting the automotive industry's commercial cost requirements for volume production. Like PowerCell's other platforms, the fuel cell stacks based on the S3 PowerCell platform will be able to be manufactured in various sizes in the 20-100 kW power range.

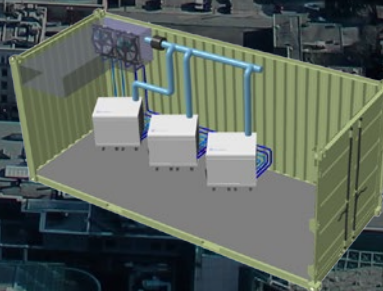



# POWERCELL POWERPAC

## ELECTRIC GENERATOR SYSTEM

The world's first LT-PEM based fuel cell system, with diesel reforming as a method to generate hydrogen gas.

- A 3 kW electricity generator that meets the power output needs of a number of units in the stationary electrical power, reserve power and vehicle APU areas.
- The world's largest system with a reformer that works with low-sulfur diesel and an LT-PEM fuel cell stack. Reforms commercial low-sulfur diesel into pure hydrogen-rich gas of PEM fuel cell quality (almost no hydrocarbon chains and very low carbon monoxide levels).
- No emissions of hazardous gases (NOx, CO, SOx, particles and hydrocarbons)
- Low sound levels and vibrations as well as a small heat signature
- Capacity to handle multiple starts and stops (> 1,000)
- Increased fuel efficiency, more cost-efficient, quieter and less polluting than a corresponding diesel generator (typical payoff time for switching from a diesel generator to a fuel cell system is 2-3 years).
- Opens the market for fuel cell-based power generation, back-up power generation and greater auxiliary power generation by using existing infrastructure for diesel distribution.
- Tested and verified functionality on the way to commoditization, commercialization and serial production.





"Now that we're approaching commercialization, we need to be able to help the customer on site."

**Lisa Kylhammar,  
PhD, Chalmers University  
of Technology**

Lisa is in charge of reformer development. An acquaintance suggested her as a substitute for somebody on parental leave at PowerCell in 2011. She has been here ever since. She likes the fast pace, from concept and words to action. Despite responsibility for a line organization, she can work with a cross-section of duties at PowerCell every day. A mix of planning and evaluation of projects, practical work in the lab and contact with customers and suppliers. Lisa enjoys the opportunities to work across disciplines and sciences, which creates a broad understanding of the product system. Her doctoral studies in catalysis is naturally proving very useful at PowerCell, as is her experience of handling the successes

and failures one is exposed to in a laboratory environment. Even if Lisa might miss the possibilities research provides to delve deeper into a problem, she prefers the feeling of being needed, playing an important part in a cooperative project and having to be prepared to jump in almost anywhere. "Things moves faster here than in the large companies," she says with a laugh. Now that PowerCell is growing, what other kinds of expertise would she like to see among her colleagues? "Knowledgeable service technicians, lab engineers and mechanics," she answers quickly. "Now that we're approaching commercialization, we need to be able to help the customer on site."

# Operations

## In 2015

In pace with the launch and the start of commercialization of the products, sales have also increased. Net sales for 2015 amounted to KSEK 5,100, up 342% compared with the preceding year. The broad commercial launch is still expected to take place no earlier than 2017. Due to the continually high development costs and the increased number of employees in connection with the commenced production, PowerCell reports a loss for the year, in line with expectations. The outlook is judged to be favorable.

PowerCell is strengthening its marketing activities as the company's various products approach their commercial phase. Initially, marketing activities for PowerCell's stacks will be expanded and the on-going development for the auto sector will be facilitated by moving closer to customers. During the year, PowerCell established a subsidiary in Germany, PowerCell Deutschland GmbH, with the aim of strengthening market development in one of the most strategically important markets in Europe.

PowerCell conducts its sales through distributors and one of the challenges in the near term will be to build a global network of suitable local distribution partners in selected markets with the right expertise and commitment to the products. Since 2014, the company has had an agreement with an independent distributor in South Korea that works under the name of PowerCell Korea. PowerCell is investigating opportunities to establish more international distributors/agents mainly in Southeast Asia and Subsahara. Market cultivation otherwise takes place through participation in major trade fairs where, for example, platforms and development collaborations are launched, and through direct contact with identified potential stakeholders. In addition to this, continuous requests are processed through other media, such as the website.

### The platforms

Sales of fuel cell stacks consist of sales of components for systems developed and marketed by PowerCell's customers on behalf of their end customers. The broad launch of the PowerCell S1 fuel cell stack platform continued during the year and met with great interest in a broad field of additional applications, such as for buildings, real estate and traffic systems. In addition to further test orders from the countries marketed previously, the first repetitive order was received from Taiwan in December. The Taiwanese client company has integrated the PowerCell S1 fuel cell stack into its new micro-CHP generator with a power output of around 1 kW directed to the consumer market. A similar trend is expected for in the other markets where the fuel cell is being tested.

An interesting reference facility with future market potential that is worthy of particular note is the development during the year of an initial fuel cell system for H-O Enterprise AB

for a self-reliant low-energy, "off-grid" building in Agnesberg, Gothenburg. The building produces electricity through solar collectors and wind turbines, which satisfy the continuous need for electricity. The surplus produced, on sunny or windy days, is converted using electrolysis into hydrogen gas that is stored in a tank. The hydrogen gas is used in PowerCell's S1 fuel cell system to emit electricity and heating when necessary, such as at night or during the winter. In 2020, new buildings in Sweden will be required to come close to being zero-energy buildings, which means that they must produce nearly as much energy as they consume. They are therefore generating considerable interest from property owners.

The S2 platform was launched according to plan at the Hannover Fair in April 2015 and received a great deal of attention from the industry. In connection with the trade fair, PowerCell received requests for tenders from countries such as Germany, France and Korea. The PowerCell S2's power offering ranges from 5 to 25kW creates an attractive application field in stationary and mobile power applications, such as in range extenders for electric and hybrid vehicles. The platform is robust and compactly designed for both production and the ability to use pure hydrogen gas as well as reformat, thus making it cost effective and flexible. In June, the first order was received from a German company and the stack was delivered in the third quarter. The last orders of the year were received in December from a French car manufacturer for delivery in the first quarter of 2016. In both cases, the orders were for stacks with an output of 25 kW. The PowerCell S2 is also used in the PowerCell PowerPac, the company's integrated generator system.

The development of the PowerCell S3 platform remained successful during the year. The first hardware generation was tested intensively during the year and largely exceeded set targets. The next generation of stacks was designed in 2015 and will be available in hardware for testing beginning the second quarter of 2016. The choice of specific industry components that are suitable for volume production proved particularly successful. Projected weight, volume, cost and performance for the generation that has now been developed are definitely world class. This EU project is now entering its final year and will be concluded at the end of 2016. Discussions are currently



*For the continued development of range extenders and various forms of powertrains, PowerCell is helped considerably by the fact that Sweden's third hydrogen filling station has been placed directly adjacent to the facility. The hydrogen filling station was financed by the Finnish company Woikowski Oy and the Västra Götaland Region. The station was opened in October 2015 in the presence of, from left: Chairperson Birgitta Losman, Regional Development Committee of the Västra Götaland Region, PowerCell's CEO Per Wassén, and Minister for Infrastructure Anna Johansson.*

under way with a number of stakeholders regarding the details of the industrialization phase and what form it should take.

### PowerCell PowerPac

A well-conceived development strategy for PowerPac is taking place in successive stages. The nearest focus at present is on tests in the following three areas of application:

- A stationary **PowerCell PowerPac for environment-friendly power supplies** for telecom masts either as primary power in areas outside reliable grids or as auxiliary power.
- A stationary **PowerCell PowerPac as auxiliary power for power supplies** to households in the Middle East.
- A **semi-mobile<sup>7</sup> PowerCell PowerPac** to supply electricity when loading and unloading refrigerated transports. Development is taking place with Norwegian ASKO, Thermoking of Norway and SINTEF.

PowerCell's efforts in the telecom industry address a growing problem for operators in respect of electricity supply for telecom base stations. The mobile phone industry's trade association GSMA has reported that about one million telemasts are outside of reliable electrical grids and another 200,000 are expected to be added by 2020. The traditional alternative is a diesel power unit, but global players are under strong pressure to find environment-friendly renewable alternatives. Considering Africa's huge potential for growth in telecommunications under uneven electricity supply conditions, collaboration was established in February 2016 with PowerTech Systems Integrators Ltd as distributor for PowerCell in South Africa. As a result, an improved B2 prototype underwent final adjustments and internal testing in this cooperation in the final quarter of 2015 ahead of testing together with Vodacom (South Africa) in the first half of 2016. The work on the electricity supply of telecom base stations has also led to a cooperation agreement with TeliaSonera to assess PowerPac's suitability as auxiliary power for one of this telecom company's deployed base stations. The test is taking place in the Gothenburg area through controlled simulated power failures and the aim is to evaluate the potential for all of Telia Sonera's markets.

A unique cooperation agreement has been entered into with the Gulf Organization for Research and Development (GORD) through one of PowerCell's main owners Midroc New Technology. GORD is responsible for developing sustainable energy solutions for the Gulf states of Qatar, Saudi Arabia, the United Arab Emirates, Oman, Kuwait and Bahrain. The application is intended to replace today's auxiliary power units powered by diesel combustion engines with a silent, environment-friendly back-up solution. PowerCell PowerPac also consumes significantly less fuel. The aim of this cooperation is to test and validate this application so that PowerCell will become the first-hand choice in terms of fuel cells for virtually half of the Gulf region.

Norway's largest grocery chain ASKO, in cooperation with Thermoking of Norway, has been seeking possibilities to reduce emissions in connection with loading and unloading. Truck engines are currently kept idling to maintain refrigeration levels. With electricity supplied by a PowerCell PowerPac unit, the main engine can instead be turned off on these occasions. The customer can thereby save around 1,900 liters of diesel per year and per refrigerated truck, thus simultaneously halving CO<sub>2</sub> emissions and entirely eliminating nitrogen oxide, carbon monoxides and particulates in sensitive urban environments. A PowerCell PowerPac B2 prototype will initially be placed inside a refrigeration/freezer trailer for testing in Trondheim in the first half of 2016.

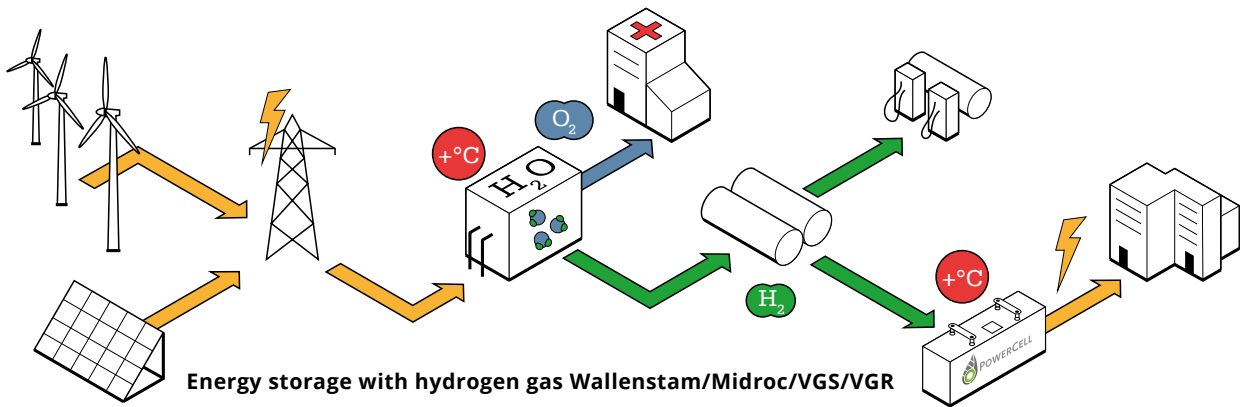
### Project assignments

PowerCell is engaged in several projects that are either customer or EU funded. Before the commercialization of the fuel cell platforms, they formed the basis of much of the company's revenues. Among those made public are the following projects:

#### ENERGY STORAGE SYSTEM

In the decentralized renewable energy supply of the future, the ability to store energy in an environment-friendly manner, even on a relatively small scale, will play an ever greater role. This is because the most well-known renewable energy alternatives, solar and wind power, cannot produce energy in a controlled and continuous manner, such as on calm or sun-free days and evenings. Here, hydrogen gas is seen as a

<sup>7</sup> A fully mobile application for trucks, for example, requires further development, which at present does not fit into PowerCell's business plan for 2016-2018. The development costs will require customer financing from truckmakers.



significantly more flexible and environment-friendlier energy storage alternative than batteries.

In cooperation with the property company, Wallenstam AB, which has major interests in wind power, Midroc Automation AB with a focus on system solutions and integration of efficient and environment-friendly technology, and the trade association Vätgas Sverige, PowerCell will begin a pilot study on energy storage for real estate. The objective is for this to lead to a demonstration facility in 2016 immediately adjacent to PowerCell's headquarters in Gothenburg. The Västra Götaland Region is funding the study. The concept is based on solar cell plants and wind power turbines generating energy continuously. On sunny or windy days, it should be possible to store surplus energy immediately through electrolytic conversion to hydrogen gas in a tank. Upon a deficit (read: energy need), the energy in the hydrogen is returned through fuel cells in the form of electricity, with the byproducts of oxygen and heat. To optimize utilization and the power grid, the hydrogen's various components must be managed. For example, heat can be connected to the district heating network; the oxygen is very pure and suitable for hospital use, for example; and hydrogen that is not used for electricity could be sold as vehicle fuel.

#### RANGE EXTENDER FOR ELECTRIC CARS WITH VOLVO CARS AMONG OTHERS

PowerCell and Volvo Cars have performed a prestudy on a 25 kW Range Extender for electrical cars. In phase two, a Volvo C30 DRIVe Electric is now being planned with a fuel cell.

A Range Extender offers all of the advantages of a pure electric car combined with the range of a conventional car if the hydrogen tank is adequately dimensioned. Once the car's battery has been discharged to a predetermined level, the fuel cell automatically kicks in. The built-in fuel cell converts the H<sub>2</sub> to electric energy which is supplied to the battery so that the driver can continue his or her journey. The car is powered by the electric motor and the average power output is provided by the fuel cell to keep the battery charged. The battery contributes maximum power, such as when overtaking. For the driver, this means that the car always achieves the same performance. With hydrogen gas, it is possible to fill the hydrogen tank in just a few minutes instead of being subjected to long charge times. The major environmental gain lies in the absence of emissions, with water being the only end product;

there are no other emissions. If the hydrogen gas is also produced with regenerative electricity from renewable sources, carbon dioxide-free vehicle transport can thereby be realized. Another advantage is that the surplus heat can be used in the winter time.

The project with Volvo Cars is ongoing in parallel with the More Zero project. In this project, PowerCell is responsible for developing a fuel cell module with an electric net power output of 25 kW as a hydrogen-based range extender for electrical vehicles. The module can be connected in parallel to provide increased power and the system is being developed based on PowerCell's fuel cell platform. Together with partners in Spain and Belgium, the consortium is developing a modular range extender system, and will install these together with a hydrogen storage system and power electronics in two electric vehicles: a small truck and a heavy truck. These vehicles will be exhibited thereafter. To date, a system that supplies electricity has been built in a laboratory environment. The next step is to pack this system so that it fits into the vehicle according to a packing study conducted earlier in the project. Funding for the Swedish component is being provided by the Swedish Energy Agency.

#### Fuel cell module for households

The aim of this project, which has recently begun, is to develop and commercialize a hydrogen gas system for stationary applications based on PowerCell's fuel cell platform. The electric output of this hydrogen gas system will be in the range of 1-5 kW. If more power is required, several systems can be connected in parallel. Heat from the fuel cell system's cooling can also be utilized to supply heat.

Applications for this kind of system are facilities that are not connected to the electricity grid, are connected to a generally poor electricity grid or as auxiliary power for critical infrastructure. Examples of two typical facilities would be for a single-family home and a mountain cabin, which are not connected to the electrical grid, and for telecom base stations, which need auxiliary power in the event of power failures. For single-family homes and mountain cabins, the fuel cell system is well suited if used together with solar or wind power and an electrolyte that creates hydrogen gas when there is surplus energy. The hydrogen gas is then used in the fuel cell system when there is an energy deficit.



## PowerCell's globally unique patented technology

There are several different types of fuel cells classified according to the type of electrolyte they use, which largely determines the properties of the fuel cell. PowerCell works with

Proton Exchange Membrane as the electrolyte, in PEM fuel cells. PEM fuel cells operate at a relatively low temperature (<100°C) with rapid start-up and response times. They have the highest energy density of all fuel-cell types and are the most commonly used and mature fuel-cell technology. This makes them ideal for most applications, including for deployment in the automotive industry. According to the research company 4th Energy Wave<sup>8</sup>, about 95% of all fuel cells delivered are of the PEM type. A previous drawback from PEM fuel cells is that they were most suited for use with pure hydrogen gas, but were not suited to reformed gas.

PowerCell is the only company in the world to have developed reforming technology with the capacity to produce hydrogen gas from commercially available diesel (but can also be adapted to such other hydrocarbon-based fuel as gasoline and biofuel) of such high quality that it can be used in a PEM fuel cell. PowerCell's fuel cell system thus has the potential to contribute to the introduction of fuel cells on a larger scale for several new applications in most locations and markets, given that every country in the world has a system in place for distributing diesel. Based on its technology platform, PowerCell is developing highly competitive products.

PowerCell is also developing fuel cell systems that run on pure hydrogen gas to offer cost-effective and entirely emission-free electrical generation for applications where hydrogen gas is available.

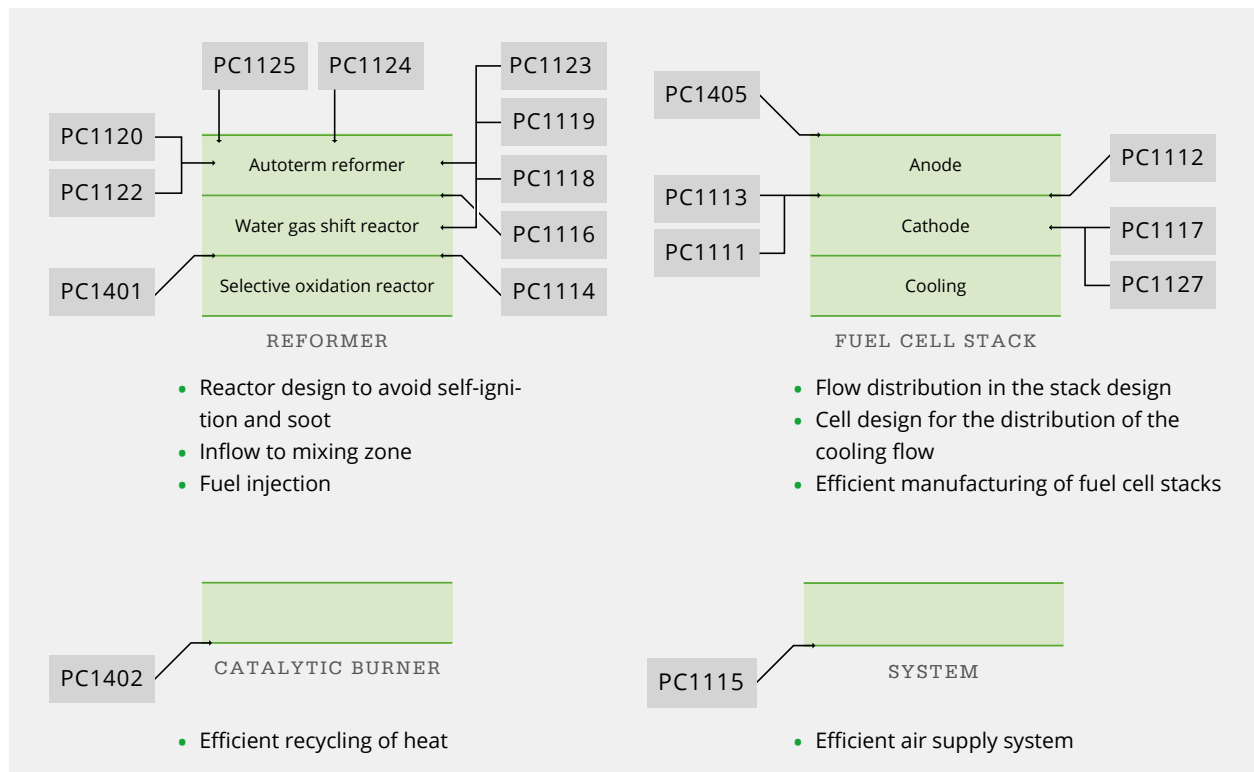
## PATENTS

PowerCell independently owns all of its patents with one exception, the PC1114, which is jointly owned with Volkswagen AG for Germany. The company allocates major resources to activities to protect its products with patents. The patent strategy is international and aims to build up a strong and competitive patent portfolio to consolidate the company's market position and safeguard investments in new products, services and technologies.


The patents encompass fundamental technology, predominantly in the core areas of fuel cell stacks and reformers. Particular focus is directed at safeguarding these core areas, which contain most of the company's patents. The company also wants to ensure coverage of potential key markets and the domestic and production markets of competitors. Patents have been approved in the following countries and regions: The US, Canada, China, Japan, Germany, France, the UK, Sweden and Taiwan.

During the year three additional patents were granted. PowerCell's patent portfolio currently comprises 58 patents granted and 29 patent applications subdivided into 18 patent families. All patents are valid for a period of 20 years from the date of application. A breakdown of the patent families into the various areas according to the diagram is presented below.

## POWERCELL'S PATENT PORTFOLIO



<sup>8</sup> 4th Energy Wave, Fuel Cell Annual Review 2015, September 2015




"PowerCell has a good atmosphere, a can-do attitude that I like."

**Timo Keränen, Master of Science in Engineering, Helsinki University of Technology, Automation Engineering**

An enthusiasm and a completely permeating goal awareness that is catchy is the closest Timo can get to describing the working climate at his workplace. He began at PowerCell one year ago, first on a "fly-in, fly-out" contract, which in practice was half-time to be able to be with his family who were still in Helsinki. The entire family finally moved half a year ago and they feel really at home. "PowerCell showed an incredible flexibility to our situation, which made the decision to move here much easier. My wife has now managed to get a local job with WSP in Gothenburg, our two-year-old goes to Finnish-language day-care and we've even got hold of a second-hand rental apartment." Timo has worked with fuel cells since his Master's thesis in 2007. For eight years, he worked for the government research institute VTT in Espoo, Finland, before a colleague he met convinced him to apply to PowerCell. The family also felt that it was time to try their luck abroad. He works here as a Development Engineer in control and automation systems on the Range Extender project. With his know-how, Timo wanted to get closer to the market, closer

to the product and closer to commercialization. What he had use of from the research world is a general understanding of global fuel cell development, who the competitors are and having established important industry contacts in every corner of the world. "PowerCell has a good atmosphere, a can-do attitude that I like. You feel free to question things, you get help and support; there's a lot of cooperation and team spirit, a bit like a family." No single day is like any other and he really appreciates his colleagues and their wonderful personalities. It has been a stimulating year where he has learned how quickly a small company can act and make decisions, how everyone has to be able to handle all practical matters that arise in day-to-day work. "A pleasant eye-opener," he says with experience from large and flat-footed organizations. But according to Timo, it is necessary to adopt the same spirit as the others at PowerCell, have a sense of humor, step up for the team and be convinced that no obstacles are too large. Would Timo say that he enjoys his job? "Very much!" he says and his eyes light up.



"PowerCell requires an ability to work freely but with accountability, to be results oriented and to be passionate about the environment and technology. And we have fun."

**Mattias Holmberg, Bachelor of Science in Electronics, Chalmers University of Technology**

Mattias is Production Manager and now has busy days ahead of PowerCell's impending industrialization process. Everything has to be documented at the ISO-9000 certification level, including purchasing, production and quality. For example, a deviation system, a new business system, instructions and processes have to be established. Everything that exists in an established industrial company has to be built from scratch. At the same time, it was this in particular that attracted Mattias to move from his position as Production and Administration Manager at Emerson Process Management. "The technology is great, with diesel reforming and heavy know-how in fuel cells. PowerCell is a new company with a new organization. A blank page in many respects, which gives me a unique opportunity to create the

processes for a company in transformation from a research to a production focus. Making something new is something that evolves. What you do has an impact, and you're not an anonymous cog in a big machine," he says. Mattias believes that PowerCell offers considerable freedom to act even under pressure to deliver. Employees are encouraged to take risks and make decisions. The atmosphere is open; requirements are set, but there is no micromanagement. "Everyone knows everyone else. Not much bureaucracy, but a pioneering and entrepreneurial spirit," says Mattias. "PowerCell requires an ability to work freely but with accountability, to be results oriented and to be passionate about the environment and technology. And we have fun." I really look forward to going to work."

# The share and history

PowerCell Sweden AB (publ) was registered under its current name with the Swedish Companies Registration Office in 2008 and operations have been conducted since that date. The registered office of the Board is in the municipality of Gothenburg in the County of Västra Götaland and the company's corporate registration number is 556759-8353. The company is a limited company and subject to the Swedish Companies Act (2005:551).

All financial instruments issued by the company have been prepared in compliance with the Companies Act. The company is affiliated to Euroclear Sweden AB. All of the company's financial instruments are denominated in SEK. The company's shares have been listed on First North on Nasdaq Stockholm since December 19, 2014. The share has ISIN code SE 000 642 5815. The ticker is PCELL. Only one class of shares exist.

The share capital in PowerCell amounts to SEK 785,365, represented by a total of 35,698,392 shares, each with a quotient value of SEK 0.022, December 31 2015. All shares are of the same class, carry one vote each and are entitled to an equal share in the company's assets and profits without any specific limitations.

Under the Articles of Association adopted on November 6, 2014, the company's share capital must comprise not less than SEK 500,000 and not more than SEK 2,000,000. The number of shares is limited to a minimum of 20,000,000 and a maximum of 80,000,000.

## Dividends

Dividends are proposed by the Board of Directors and resolved by a General Meeting of Shareholders in accordance with the Companies Act and the Articles of Association. PowerCell is in a period of rapid development and expansion. The current policy of the Board is to allow the company to carry forward any profits to finance the growth and operations of the company and, accordingly, the Board does not anticipate the payment of any dividends in the foreseeable future. No dividend was paid for the past fiscal year.

## Dividend policy

Even if no actual policy has been expressed or decided for the future in terms of the payment of a dividend, the Board will take into consideration several factors, including the company's operations, earnings and financial position, actual and expected liquidity requirements, expansion plans, contractual limitations and other material factors.

Dividends are paid to shareholders that are recorded in the shareholder register maintained by Euroclear Sweden AB on the record date determined at the General Meeting of Shareholders. The dividend is normally paid as a cash payment through the offices of Euroclear Sweden AB, but could also comprise other forms of cash payment.

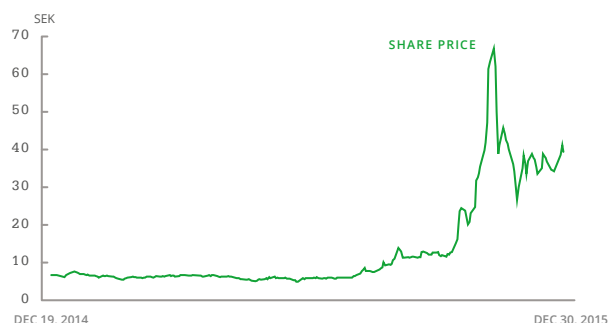
## Ownership structure

On December 31, 2015, PowerCell had 2,359 shareholders. The following table shows PowerCell's five largest owners as of Thursday, December 31, 2015.

SHAREHOLDERS AT DEC 31, 2015	NO. OF SHARES	PROPORTION %
Midroc New Technology	8,279,000	23.2%
Fouriertransform	8,279,000	23.2%
Finindus	5,857,464	16.4%
Volvo Group Venture Capital	3,962,562	11.1%
Avanza pension	1,443,850	4.0%
Others	7,876,516	22.1%
<b>TOTAL</b>	<b>35,698,392</b>	<b>100.0%</b>

## Share performance

The following diagram shows the share price trend from the listing date in December 2014 to December 31, 2015. As of December 31, 2015, the market capitalization was SEK 1,396 million. During the 2015 calendar year, the average stock turnover per trading day was 188,649 shares, corresponding to an average share price of about SEK 33. An average of 471 trades were made per day during this period.



### Share-based incentive program

The company has issued a warrants-based stock option plan to personnel, known as personnel stock options, and one other warrant plan open to both employees and Board members.

The company has an employee stock option program for senior executives and personnel. The program encompasses 403,200 stock options, December 31 2015, with each option entitling the holder to subscribe for one new share at an exercise price of SEK 12.25 per share during the period from January 1, 2017 to December 31, 2017. The dilution of this program will amount to a maximum of 1.1%.

The company has a warrant program for senior executives, personnel and Board members. The warrant program encompasses 1,950,520 warrants, December 31 2015, with each warrant entitling the holder to subscribe for one new share at an exercise price of SEK 12.25 per share during the period from October 1, 2016 to December 31, 2016. The dilution of this program will amount to a maximum of 5.2%.


Since its foundation in 2008 and until December 30, 2015, the company's share capital developed as follows:

### Share capital trend

Since its foundation in 2008 and until December 30, 2015, the company's share capital developed as follows:

Year	Transaction	Increase in Number of shares	Increase in share capital	Total share capital	Number of shares	Quotient value/share
2008	Foundation of the company	500,000	100,000.00	100,000.00	500,000	0.200
2009	New share issue	565,215	113,043.00	213,043.00	1,065,215	0.200
2014	New share issue	91,288	18,257.60	231,300.60	1,156,503	0.200
2014	Split 20:1	21,973,557	-	231,300.60	23,130,060	0.010
2014	Bonus issue	-	277,560.72	508,861.32	23,130,060	0.022
2014	New share issue	12,289,545	270,369.99	779,231.31	35,419,605	0.022
2015	New share issue	278,787	6,133.32	785,364.63	35,698,392	0.022
2016	Exercise of T01	7,135,480	156,980.55	942,345.18	42,833,872	0.022

99.1 % of all holders of outstanding options under the option programme TO1 to subscribe for shares, had at the end of the exercise period 30 December 2015 exercised their right to subscribe for shares, which resulted in a capital injection of 68.7 MSEK to PowerCell in January of 2016.

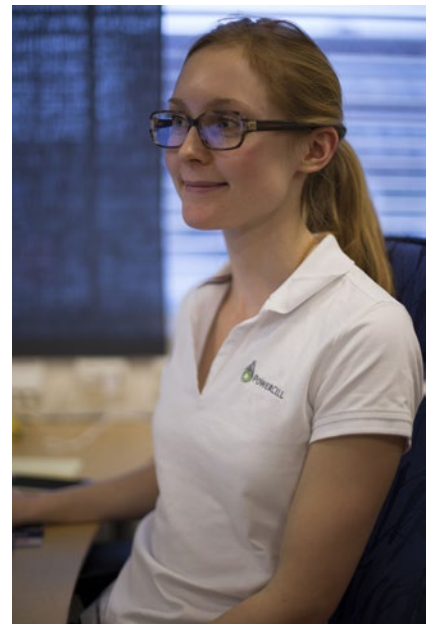
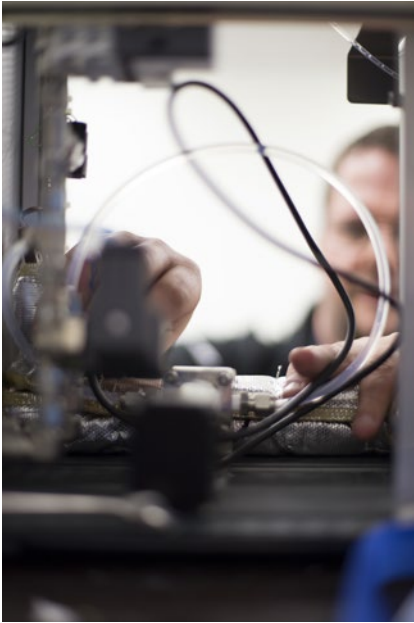


”The mood here is great, which is important in a small company. Nobody’s on the outside, we’re a team.”

**François Niederländer, Ingénieur  
Mécanique, ESSTIM, Nancy,  
France**

As an exchange student in Gothenburg in 2006-2007 under the Erasmus program, François from northeastern France fell for Sweden. After graduation, he found his way back, learned to speak Swedish perfectly and after a few jobs as a project administrator and various courses, he also fell for PowerCell three years ago. An acquaintance there had suggested that he should apply, and he began as a trainee. François now works with production development where he builds and tests fuel cell stacks. The production department is new and he is involved in planning of the commercialization of various projects, to improve the test possibilities and quality control. François was not interested in large companies after graduation. “You lose the engineer feeling in a big company.” After a short time at PowerCell, that feeling came to good use as he had not previously worked with electronics or chemistry, but

had to learn along the way. Now, he has developed into a young engineer rather than a recent graduate. “I trust myself more, I’m secure in the job and not as dependent on the decisions and approval of others.” PowerCell provides a great deal of freedom and is incredibly flexible, spontaneous and laid back in François’ opinion. If a good idea pops up, regardless of whether it came up outside one’s area of responsibility, they run with it. “If you like structure and set roles, PowerCell isn’t the right place.” He likes the many varying duties, which he believes contribute to his job satisfaction. “The mood here is great, which is important in a small company. Nobody’s on the outside, we’re a team.” Anything more about why he enjoys working at PowerCell? “Well, I like the fact that we don’t make weapons or anything like that. In our own little way, we actually contribute to improving the world’s environment.”



# Board of Directors' Report

The Board and President of PowerCell Sweden AB (publ) (PowerCell) hereby submit the following Annual Report. All amounts in KSEK unless otherwise stated. Figures in parentheses pertain to the preceding year.

## Information about operations

PowerCell develops, manufactures and produces environment-friendly electrical power systems for stationary and mobile customer applications. PowerCell has developed a modular system of fuel cell platforms that are powered by pure, environment-friendly produced hydrogen gas where only electricity, heat and water are emitted. The fuel cells are also designed to handle reformed hydrogen gas from biogas, natural gas, biodiesel or standard diesel, for example.

## Significant events during the fiscal year

Sales increased during the year from SEK 1,492,000 in 2014 to SEK 5,100,000 for 2015, as a result of more sales of both products and prototypes tied to several strategically important customer cooperation arrangements.

**The PowerCell S1 platform** has met with continued success. The first repetitive order was received from a customer in Taiwan that had integrated our S1 fuel cell into its latest micro-CHP. During the year, an S1 fuel cell system was also installed in an energy building in Agnesberg, Gothenburg.

The launch of the **PowerCell S2 platform** took place at the Hannover Fair in April. The first orders were then received in June for fuel cell stacks with a power output of 25kW and continued orders for and considerable interest in the S2 platform are being noted.

The successful development of the 20-100kW **PowerCell S3 stack** continued within the Autostack Core project, in which VW and BMW, among others, are participating.

A contract was concluded with TeliaSonera for the evaluation of **PowerCell PowerPac** as an auxiliary power unit for telecom base stations in the Gothenburg area. Agreements were also reached with GORD (Gulf Organization for Research and Development) for the installation of a PowerCell PowerPac for operations and cooling of buildings in the Middle East. Another strategically important agreement was reached with the Norwegian grocery distributor ASKO on a project to reduce

diesel consumption for electricity generation during loading and unloading of refrigerated transports.

The subsidiary, PowerCell Deutschland GmbH, was established in Germany.

Per Wassén started as the new President and Magnus Jansson as new Chairman of the board in June, the management group was expanded with Andreas Bodén who began as the new Director of Marketing and Sales in February and Karin Nilsson began as the new CFO in August.

## Significant events after the end of the fiscal year

At the end of the subscription period on December 30, 2015, 99.1% of all warrants from the T01 warrant program had been exercised to subscribe for shares, which resulted in a capital injection of SEK 68.7 million to PowerCell (publ) in January 2016.

A European customer placed the first order for the PowerCell S3 platform for a 100 kW prototype stack.

The company secured an additional order for two PowerCell S3 fuel-cell stack prototypes from a strategically important global customer.

Powertech System Integrators Ltd. is appointed PowerCell's distributor in Africa, with responsibility for sales and integration and for spare parts, service and maintenance.

## Future development and significant risks and uncertainties

In the next year, the company intends to continue the development and industrialization of our fuel cell platforms and modules. The field studies of the second generation PowerPac will be completed and the on-going commercialization phase will intensify with a focus on the PowerCell S1 and the PowerCell S2 platforms and prototype sales of the PowerCell S3 platform.



## OPERATIONAL RISKS

PowerCell (publ) is exposed to risks and uncertainties through its operations. The company's operations have, to date, primarily comprised product development. In addition, the company has delivered a number of products that are currently being evaluated by customers. Accordingly, risks are associated with development operations continuing according to plan and not being affected by major delays, cost increases or experiencing other difficulties. Risks are also associated with customer evaluations leading to the desired results and with the company's sales being initiated on a larger scale within the time frame deemed probable by the Board.

## FINANCIAL RISKS

The company is financed by external capital in the form of share capital and loans and this structure will continue until

sales of products are started on a larger scale. With increased sales, the company will be exposed to currency exposure since most of the income and expenses are expected to be obtained and paid in currencies other than SEK.

## MARKET-RELATED RISKS

The company's products are based on fuel cell technology, which is relatively new in a commercial context. This may mean that customers replace their systems at a slower rate than anticipated, despite the commercial and performance superiority of the company's products compared with competing technology.

Five-Year Summary	2015	2014	2013	2012	2011
Net sales (KSEK)	5,100	1,492	2,513	840	49
Operating loss (KSEK)	-64,763	-45,910	-38,529	-42,011	-41,303
Operating cash flow (KSEK)	-64,543	-39,997	-38,529	-27,705	-40,384
Total assets (KSEK)	75,908	147,076	63,880	84,496	98,550
Equity (KSEK)	11,266	76,454	16,205	32,073	53,876
Equity/assets ratio (%)	14.8	52.0	25.4	38.0	54.7
Current assets/short term liabilities ratio (%)	2.3	4.3	2.3	2.6	4.6
Number of shares	35,698,392	35,419,605	1,065,215	1,065,215	1,065,215
Earnings per share (SEK)	-1.8	-1.3	-36.0	-39.2	-38.8
Dividends per share (SEK)	-	-	-	-	-

## Proposed distribution of profit

The following earnings are at the disposal of the Annual General Meeting:

Retained earnings	SEK 75,669,400
Net loss for the year	SEK -65,188,128
	<b>SEK 10,481,272</b>

The Board of Directors proposes that profit be appropriated such that the following amount be carried forward

	SEK 10,418,272
	<b>SEK 10,418,272</b>

## Income statement

Amounts in SEK 000s	NOTE	2015	2014
Net sales		5,100	1,492
Cost of goods sold		-4,956	-2,086
<b>Gross profit/loss</b>		<b>144</b>	<b>-594</b>
Administrative expenses		-790	-292
Research and development costs		-73,086	-51,355
Other operating income	3	9,004	6,385
Other operating expenses		-35	-54
<b>Operating loss</b>	4, 5, 7	<b>-64,763</b>	<b>-45,910</b>
<i>Profit/loss from financial items</i>			
Other interest income and similar profit/loss items		26	74
Interest expenses and similar profit/loss items		-451	-1,146
<b>Loss after financial items</b>		<b>-65,188</b>	<b>-46,982</b>
Tax on net profit for the year	8	0	0
<b>NET LOSS FOR THE YEAR</b>		<b>-65,188</b>	<b>-46,982</b>

## Statement of Cash Flows

Amounts in SEK 000s	NOTE	2015	2014
<b>Operating activities</b>			
Operating loss		-64,763	-45,910
Adjustments for non-cash items		5,387	5,315
Interest received		26	77
Interest paid		-451	-
Income tax paid		-7	-8
<b>Cash flow from changes in working capital</b>			
Decrease(+)/increase(-) in operating receivables		1,491	-4,130
Decrease(+)/increase(-) in inventory		-1,013	-385
Decrease(-)/increase(+) in operating liabilities		-5,214	5,044
<b>Cash flow from operating activities</b>		<b>-64,544</b>	<b>-39,997</b>
<b>Investing activities</b>			
Investments in non-current assets		-2,466	-1,234
<b>Cash flow from investing activities</b>		<b>-2,466</b>	<b>-1,234</b>
<b>Financing activities</b>			
Borrowings		-	9,987
Bridge loan received from shareholders		-	30,000
Investment in subsidiaries		-234	-
New share issue		2,398	82,373
<b>Cash flow from financing activities</b>		<b>2,164</b>	<b>122,360</b>
<b>CASH FLOW FOR THE YEAR</b>		<b>-64,846</b>	<b>81,129</b>
<b>Cash and cash equivalents at beginning of year</b>		<b>105,854</b>	<b>24,725</b>
<b>Cash and cash equivalents at year-end</b>		<b>41,008</b>	<b>105,854</b>
<i>Adjustments for non-cash items</i>			
Depreciation		6,153	6,084
Other items not affecting cash flow		-766	-769
		<b>5,387</b>	<b>5,315</b>

## Balance sheet

Amounts in SEK 000s	NOTE	12/31/2015	12/31/2014
<b>ASSETS</b>			
<b>Non-current assets</b>			
<i>Tangible assets</i>			
Equipment, tools and fixtures and fittings	9	21,520	25,207
<i>Financial assets</i>			
Participations in Group companies	10	234	-
<b>Total fixed assets</b>		<b>21,754</b>	<b>25,207</b>
<b>Current assets</b>			
<i>Inventories</i>			
Raw materials and consumables		1,702	689
<i>Current receivables</i>			
Accounts receivables		2,486	427
Current tax assets		647	640
Other current receivables	11	1,415	6,236
Prepaid expenses and accrued income	12	6,896	8,023
		<b>11,444</b>	<b>15,326</b>
<i>Cash and bank balances</i>			
		41,008	105,854
<b>Total current assets</b>		<b>54,154</b>	<b>121,869</b>
<b>Total assets</b>		<b>75,908</b>	<b>147,076</b>
<b>EQUITY AND LIABILITIES</b>			
<b>Equity</b>			
<i>Restricted equity</i>			
Share capital		785	779
Ongoing new share issue		-	6
		<b>785</b>	<b>785</b>
<i>Non-restricted equity</i>			
Share premium reserve		236,372	236,373
Retained earnings		-160,703	-113,722
Net loss for the year		-65,188	-46,982
		<b>10,481</b>	<b>75,669</b>
<b>Total equity</b>	13	<b>11,266</b>	<b>76,454</b>
<b>Provisions</b>			
Pension provisions and similar commitments	14	1,368	2,135
		<b>1,368</b>	<b>2,135</b>
<i>Non-current liabilities</i>			
Other non-current liabilities	15	39,987	39,987
		<b>39,987</b>	<b>39,987</b>
<i>Current liabilities</i>			
Advance payments from customers		160	129
Accounts payable		5,459	14,859
Other current liabilities		1,616	1,205
Accrued expenses and deferred income	16	16,052	12,307
		<b>23,287</b>	<b>28,500</b>
<b>Total equity and liabilities</b>		<b>75,908</b>	<b>147,076</b>
Pledged assets		None	None
Contingent liabilities	17	27	43

# Notes

## Note 1 Accounting policies and valuation policies

The company applies the Swedish Annual Accounts Act and the Swedish Accounting Standards Board's recommendation BFNAR 2012:1 Annual accounts and consolidated accounts (K3). Pursuant to the Swedish Annual Accounts Act 7:3 a, the company does not prepare consolidated financial statements since the subsidiary is dormant and consolidated financial statements would consequently not differ materially from the Parent Company's statements.

### FOREIGN CURRENCIES

Monetary asset and liability items in foreign currencies are measured at the Riksbank closing rate on the balance sheet date. Transactions in foreign currencies are translated at the spot rate of the Riksbank rate on the transaction date.

### INCOME

Sales of goods are recognized when the significant risks and benefits are transferred from the seller to the buyer in accordance with the terms of sale. Sales are recognized after deductions for VAT, discounts and exchange-rate differences for sales in foreign currencies.

For fixed-price service assignments and subsidy-financed assignments, income and expenses attributable to a completed service assignment are recognized as income and expenses, respectively, in relation to the assignment's stage of completion on the balance-sheet date (percentage of completion). The stage of completion of an assignment is determined by comparing the accrued expenses on the balance sheet date with the estimated total expenses. For cases where the outcome of an assignment cannot be estimated reliably, income is recognized only to the extent that the assignment costs incurred are likely to be recoverable. An expected loss on an assignment is immediately recognized as an expense.

### GOVERNMENT ASSISTANCE

Government assistance is recognized as income when there is reasonable certainty that such assistance will be received and the company will meet all of the associated conditions.

### LEASES

All leases for which the company is the lessee are recognized as operating leases (rental agreements), regardless of whether the leases are financial or operating. Leasing fees under operating leases, including higher first-time rent but excluding expenses for such services as insurance and maintenance, are recognized as expenses straight-line over the leasing period.

### INCOME TAX

Current tax is measured based on the tax rates and tax rules on the balance sheet date. Deferred tax is measured based on the tax rates and tax rules decided prior to the balance sheet date. Deferred tax assets relating to loss carryforwards or other future tax deductions are recognized to the extent it is likely that the loss carryforwards can be settled against surpluses in conjunction with future taxation.

### EMPLOYEE BENEFITS

#### Post-employment benefits:

The company has both defined-contribution and defined-benefit pension plans.

Under defined-contribution plans, the company pays fixed contributions to another company and does not have a legal or informal duty to pay additional contributions even if the other company is unable to meet its obligations. The company's earnings are charged with expenses in line with the employees performing the pensionable services.

For defined-benefit plans, the company essentially bears the risks of compensation costing more than expected and the return on related assets deviating from expectations. PowerCell recognizes defined-benefit pension plans in accordance with the K3 simplification rules. In Sweden, the company has defined-benefit plans, among other plans, that entail that pension premiums are paid and these plans are recognized as defined-contribution plans. The company pays pension premiums to PRI that it finances itself. Pension liabilities are recognized according to the amount received from PRI.

#### Share-based payments

The company has a share-based remuneration plan whereby the company receives services from employees and, as remuneration, the company issues equity instruments in the form of share options to employees. The total amount to be expensed is recognized in profit or loss as personnel costs and in equity under the item "Retained earnings," distributed over the vesting period. For changes to assessments of the number of equity instruments expected to be earned, the deviation is recognized in profit or loss in the period in which the assessment is changed. The social security contributions arising on the allotment of share options are recognized as personnel costs and liabilities. Subsequent revaluations are recognized in profit or loss.

## INTANGIBLE ASSETS

Principle choices have been made for internally created intangible assets. The expense model is applied. All expenses attributable to producing internally created intangible assets are recognized as research and development costs when they arise.

## PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment are recognized at cost less depreciation.

Property, plant and equipment are depreciated straight line over the estimated useful lives of the assets since these lives reflect the expected utilization of the assets' future economic benefits. Depreciation is recognized as an expense in profit or loss.

The following depreciation periods apply:

Equipment, tools and fixtures and fittings	5 years
Computers	3 years

If an asset's carrying amount exceeds its estimated recoverable amount, the asset is immediately impaired to its recoverable amount.

## FINANCIAL INSTRUMENTS

Financial instruments recognized in the balance sheet include accounts receivable, other receivables, accounts payable and loans. The instruments are recognized in the balance sheet when PowerCell Sweden becomes party to the contractual terms of the instrument.

Financial assets are derecognized from the balance sheet when the right to receive cash flows from the instrument has expired or been transferred and the company has assumed essentially all risks and benefits connected with the right of ownership. Financial liabilities are derecognized from the balance sheet when the obligations in the contract are met or extinguished in another manner.

### Accounts receivable and other receivables

Receivables are recognized as current assets, with the exception of items falling due more than 12 months after the balance sheet date, which are classified as non-current assets. Receivables are recognized at the amount at which they are expected to be received less individually assessed doubtful receivables.

### Loans and other accounts payable

Liabilities are recognized at nominal amounts. Financial liabilities cease to be recognized only when the liability has been settled by payment or by being waived.

## INVENTORIES

Inventories are measured at the lower of cost and net realizable value. Cost is calculated according to the first-in, first-out (FIFO) principle. For raw materials, all expenses that are directly attributable to the acquisition of the materials are included in cost.

## PROVISIONS

A provision is recognized in the balance sheet when the company has a legal or informal obligation due to an event that has occurred, and it is probable that an outflow of resources will be required to settle the obligation and a reliable estimate of the amount can be made.

## SHAREHOLDERS' CONTRIBUTIONS

The company recognizes shareholders' contributions in accordance with statement UFR 2 from the Swedish Financial Reporting Board.

## CASH FLOW STATEMENT

The cash flow statement was prepared in accordance with the indirect method. The recognized cash flow includes only transactions that involve cash payments and disbursements.

## DEFINITIONS OF KEY FIGURES

### Equity/assets ratio

Equity as a percentage of total assets

### Current assets/short term liabilities ratio

Current assets as a percentage of current liabilities

### Earnings per share

Earnings per share in relation to number of shares

### Dividend per share

Dividend decided per entitled share

## Note 2 Estimates and assessments

No assessments or estimates have been made that have a significant effect on the amounts recognized in the financial statements or that would entail a significant risk for a material adjustment of the carrying amounts for assets and liabilities in the next fiscal year.

## Note 3 Other operating income

	2015	2014
Project financing subsidies and government assistance	8,868	6,385
Other items	136	0
<b>Total</b>	<b>9,004</b>	<b>6,385</b>

## Note 4 Operating leases

Future minimum lease charges to be paid for non-cancelable leases:

	2015	2014
Due for payment within one year	2,805	4,851
Due for payment after one, but within five years	8,076	12,398
Due for payment after more than five years	0	0
<b>Total</b>	<b>10,881</b>	<b>17,249</b>

Lease charges expensed during the period	5,213	6,309
--	-------	-------

Operating leases essentially comprise rented premises. The lease expires on December 31, 2019, with the option of being extended for additional three-year periods. The amount of future lease charges is based on the trend in the consumer price index. This note also includes financial leases, which are recognized as operating leases. In addition to renting premises, the leases pertain to leasing cars for transport purposes. Cars are normally leased for three years, with a buy-out option.

## Note 5 Personnel

	2015	2014
<b>Average number of employees</b>		
Women	5	5
Men	19	15
<b>Total</b>	<b>24</b>	<b>20</b>

### Board members and senior executives

Number of Board members on the closing date

Men	5	5
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	2015	2014
Number of presidents and other senior executives		
Women	1	0
Men	4	4
<b>Total</b>	<b>10</b>	<b>9</b>

### Salaries, other remuneration and social security expenses

Board members, President and senior executives	6,786	4,967
Other employees	8,961	7,050
<b>Total</b>	<b>15,747</b>	<b>12,017</b>

Statutory and contractual social security expenses	4,112	3,545
Pension costs	3,178	2,362
<b>Total</b>	<b>23,037</b>	<b>17,924</b>

During the year, the company paid remuneration for a six-month period to both the new and the old president; in total, salary and benefits of 3,072 (1,534) were paid.

Variable remuneration is paid to the President and senior executives, in addition to fixed monthly salary, if established earnings targets are achieved. Remuneration is determined by the Board. A total of 309 (386) was paid in variable remuneration to the President during the fiscal year and 162 (388) to other senior executives. This remuneration is payable in spring 2016.

Of the company's total pension costs, 678 (281) refers to the President and 1,013 (605) to other senior executives.

The President and the company are subject to a mutual period of notice of six months and the President is also entitled to six months' severance pay if employment is terminated by the company. There are no agreements on severance pay for other employees.

### Board of Directors

According to an AGM resolution in May 2015, Board fees are payable for the period January 1, 2015 to December 31, 2015 totaling 650, of which 250 to the Chairman of the Board and 100 to each of the other members who are not employed by the company. A consultancy fee of 330 (63) was also paid to Board member André Martin during the fiscal year. The pricing of this fee was based on commercial terms.

### Note 6 Share-based payments

The company has an employee stock option program for senior executives and personnel. The program encompasses 403,200 stock options, with each option entitling the holder to subscribe for one new share at an exercise price of SEK 12.25 per share during the period from January 1, 2017 to December 31, 2017. The dilution of this program will amount to a maximum of 1.1%.

The company has a warrant program for senior executives, personnel and Board members. The warrant program encompasses 1,950,520 warrants, with each warrant entitling the holder to subscribe for one new share at an exercise price of SEK 12.25 per share during the period from October 1, 2016 to December 31, 2016. The dilution of this program will amount to a maximum of 5.2%.

### Note 7 Government assistance

During the year, government assistance for part-financing of development projects was received in the amount of 12,087 (7,919) and 8,868 (6,385) was recognized in profit or loss, among other operating income.

### Note 8 Income tax

	2015	2014
Current tax	-	-
Deferred tax	-	-
	<b>0</b>	<b>0</b>

#### Reconciliation of tax expense

Tax according to current tax rate (22%)	14,295	10,336
Tax effect of non-deductible expenses	-275	-94
Tax effect of non-taxable income	6	1
Tax effect of unrecognized loss carryforwards	-14,026	-10,243
<b>Recognized tax expense</b>	<b>0</b>	<b>0</b>

Unrecognized loss carryforwards amounted to 370,577 (305,609).

### Note 9 Equipment, tools and fixtures and fittings

	12/31/2015	12/31/2014
Opening cost	49,349	48,115
Purchases	2,466	1,234
Closing accumulated cost	51,815	49,349
Opening depreciation	-24,142	-18,058
Depreciation for the year	-6,153	-6,084
Closing accumulated depreciation	-30,295	-24,142
<b>Closing residual value according to plan</b>	<b>21,520</b>	<b>25,207</b>

### Note 10 Participations in Group companies

	12/31/2015	12/31/2014
Opening cost	0	0
Acquisition of PowerCell Deutschland GmbH	234	0
Closing cost	234	0
<b>Residual value, closing balance</b>	<b>234</b>	<b>0</b>

Subsidiary	Proportion of equity	Share of voting power	Carrying amount
PowerCell Deutschland GmbH	100 %	100 %	234
<b>Total</b>			<b>234</b>

PowerCell Deutschland GmbH with corporate identity number HBR 28770 has registered offices in Idstein.

### Note 11 Other current receivables

	12/31/2015	12/31/2014
Tax account	205	440
VAT receivable	1,210	3,398
Subscribed, unpaid share capital	0	2,398
	<b>1,415</b>	<b>6,236</b>

### Note 12 Prepaid expenses and accrued income

	12/31/2015	12/31/2014
Prepaid rent	1,089	924
Accrued income, ongoing subsidy projects	5,399	6,682
Other prepaid expenses	408	417
	<b>6,896</b>	<b>8,023</b>

## Note 13 Change in equity

	Share capital	Ongoing new share issue	Share premium reserve	Non-restricted equity	Total equity
<b>Opening balance Jan 1, 2014</b>	<b>213</b>	<b>0</b>	<b>129,886</b>	<b>-113,894</b>	<b>16,205</b>
Bonus issue	278	-	-278	-	-
New share issue	288	6	106,764	-	107,058
Warrants	-	-	-	173	173
Net loss for the year	-	-	-	-46,982	-46,982
<b>Equity, 12/31/2014</b>	<b>779</b>	<b>6</b>	<b>236,372</b>	<b>-160,703</b>	<b>76,454</b>
<b>Opening balance Jan 1, 2015</b>	<b>779</b>	<b>6</b>	<b>236,372</b>	<b>-160,703</b>	<b>76,454</b>
Bonus issue	-	-	-	-	-
New share issue	6	-6	-	-	-
Warrants	-	-	-	-	-
Net loss for the year	-	-	-	-65,188	-65,188
<b>Equity, 12/31/2015</b>	<b>785</b>	<b>0</b>	<b>236,372</b>	<b>-225,891</b>	<b>11,266</b>

Share capital consists of 35,698,392 shares with a quotient value of SEK 0.022 per share.

The company has warrants listed on First North at Nasdaq Stockholm (PCELL T01, ISIN code: SE0006425823). These warrants were issued free of charge to subscribers in connection with the company's listing issue. A total of 14,394,092 warrants have been issued with two warrants entitling the holder to subscribe for one new share at an exercise price of SEK

9.63 per share during the period from December 1, 2015 to December 31, 2015. At the end of the subscription period on December 30, 2015, 99.1% of all warrants from T01 had been exercised to subscribe for shares, which resulted in a capital injection of SEK 68.7 million to PowerCell.

## Note 14 Pension provisions and similar commitments

	12/31/2015	12/31/2014
These commitments are insured through "Provisions for pensions" in the company	1,368	2,135
	<b>1,368</b>	<b>2,135</b>

The pension provisions of the Company amounted for the year to 3,178 (2,362), whereof the main part consists of continuing payments to non-related institutions who administrate pension plans. The capital value of the pension commitments at the end of 2015 amounted to 1,368 (2,135). These have been insured through "Provisions for pensions" in the Company.

## Note 15 Non-current liabilities

In 2009, the Swedish Energy Agency granted a conditional loan of SEK 30 million to the company, of which SEK 8 million was paid in 2009, and additional SEK 12 million in 2010 and the final SEK 10 million was paid in 2011. In 2014, an additional SEK 9.99 million was granted and paid under the same conditions as previously. Accordingly, the loan amounts to a total of SEK 39.99 million. Repayment and payment of interest will commence when the company has reached the commercial-

ization phase, which is why no interest or loan repayments were made in 2015.

## Note 16 Accrued expenses and deferred income

	12/31/2015	12/31/2014
Vacation pay	2,396	2,076
Accrued salaries	1,847	1,300
Accrued social security expenses	1,599	1,897
Deferred income	8,038	6,695
Other items	2,172	340
	<b>16,052</b>	<b>12,308</b>



## Note 17 Contingent liabilities

	12/31/2015	12/31/2014
Guarantee commitments, PRI	27	43
	27	43

The income statement and balance sheet will be submitted to the Annual General Meeting on 4/11/2015 for adoption.

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*Gothenburg, 2016-03-11*

Per Wassén  
**PRESIDENT**

Magnus Jonsson  
**CHAIRMAN OF THE BOARD**

Dirk De Boever

Göran Linder

André Martin

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Our audit report was submitted on 2016-03-11

Öhrlings PricewaterhouseCoopers AB

Birgitta Granquist  
**AUTHORIZED PUBLIC ACCOUNTANT**

# Auditor's report

To the annual meeting of the shareholders of PowerCell Sweden AB (publ), corporate identity number 556759-8353

## Report on the annual accounts

We have audited the annual accounts of PowerCell Sweden AB (publ) for the year 2015. The annual accounts of the company are included in the printed version of this document on pages 24-33

### RESPONSIBILITIES OF THE BOARD OF DIRECTORS AND THE PRESIDENT FOR THE ANNUAL ACCOUNTS

The Board of Directors and the President are responsible for the preparation and fair presentation of these annual accounts in accordance with the Annual Accounts Act, and for such internal control as the Board of Directors and the President determine is necessary to enable the preparation of annual accounts that are free from material misstatement, whether due to fraud or error.

### AUDITOR'S RESPONSIBILITY

Our responsibility is to express an opinion on these annual accounts based on our audit. We conducted our audit in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the annual accounts are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the annual accounts. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the annual accounts, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the company's preparation and fair presentation of the annual accounts in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Board of Directors and the President, as well as evaluating the overall presentation of the annual accounts.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

### OPINIONS

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of PowerCell Sweden AB (publ) as of 31 December 2015 and of its financial performance and its cash flows for the year then ended in accordance with the Annual Accounts Act. The statutory administration report is consistent with the other parts of the annual accounts.

We therefore recommend that the annual meeting of shareholders adopt the income statement and balance sheet.

## Report on other legal and regulatory requirements

In addition to our audit of the annual accounts, we have also audited the proposed appropriations of the company's profit or loss and the administration of the Board of Directors and the President of PowerCell Sweden AB (publ) for the year 2015.

### RESPONSIBILITIES OF THE BOARD OF DIRECTORS AND THE PRESIDENT

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss, and the Board of Directors and the President are responsible for administration under the Companies Act.

### AUDITOR'S RESPONSIBILITY

Our responsibility is to express an opinion with reasonable assurance on the proposed appropriations of the company's profit or loss and on the administration based on our audit. We conducted the audit in accordance with generally accepted auditing standards in Sweden.

As a basis for our opinion on the Board of Directors' proposed appropriations of the company's profit or loss, we examined whether the proposal is in accordance with the Companies Act.

As a basis for our opinion concerning discharge from liability, in addition to our audit of the annual accounts, we examined significant decisions, actions taken and circumstances of the company in order to determine whether any member of the Board of Directors or the President is liable to the company. We also examined whether any member of the Board of Directors or the President has, in any other way, acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.


We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

### OPINIONS

We recommend to the annual meeting of shareholders that the profit be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the President be discharged from liability for the financial year.

Gothenburg, 2016-03-11  
Öhrlings PricewaterhouseCoopers AB

Birgitta Granquist  
**AUTHORIZED PUBLIC ACCOUNTANT**



PowerCell, the leading  
fuel cell company  
in the Nordics

# Board of Directors and company management

The Board's work is governed by the Swedish Companies Act, the Articles of Association and the formal work plan adopted by the PowerCell Board. The company's formal work plan includes instructions regarding the division of work between the Board and the President. The Board always proposes the principles for remuneration of the President.

A total of 11 minuted meetings were held in 2015, in addition to the statutory Board meeting. At these meetings, the Board discussed the future performance of the company, interim reports, budget and financing and performed standard follow-ups of the company's operations. Every year, the company's auditors participate in the Board meeting at which the annual accounts are approved and accepted.

## The Board of Directors comprises:



**MAGNUS JONSSON**  
**Chairman of the Board**  
Residence: Gothenburg  
Born: 1956. Elected: 2012  
Shares: 5,000  
Warrants (TO): 0

President of Magnus Jonsson Consulting AB. Formerly Senior Vice President Product Development at Volvo Cars. Broad experience from the automotive industry.



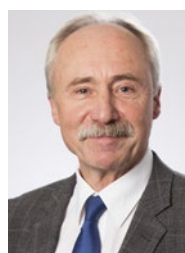
**DIRK DE BOEVER**  
**Board member**  
Residence: Ghent, Belgium  
Born: 1970. Elected: 2009  
Shares: 0  
Warrants (TO): 0

Head of Investments at Finindus. Finindus is an investment company that provides capital for early stage and growth financing, funded by ArcelorMittal and the Flemish Region. Past extensive experience in strategy and marketing at ArcelorMittal. Entrepreneur and consultant to several large companies in industry, banking and telecoms.



**GÖRAN LINDER**  
**Board member**  
Residence: Stockholm  
Born: 1962. Elected: 2009  
Shares: 2,000  
Warrants (TO): 0

Representative of Midroc New Technology. President of Midroc New Technology and Midroc Invest, and Board member of several other companies. More than 25 years of experience in sales, business development and management work, with broad knowledge of technology-related fields.



**ANDRÉ MARTIN**  
**Board member, President of PowerCell Deutschland GmbH since October 2015**  
Residence: Frankfurt, Germany  
Born: 1951. Elected: 2013  
Shares: 0  
Warrants (TO): 170,340

Consultant and adviser in the fields of fuel cells and hydrogen technology. Former head of Ballard's transportation unit and President of Ballard Power Systems AG.



**PER WASSÉN**  
**Board member, President since June 2015**  
Residence: Gothenburg  
Born: 1961. Elected: 2008  
Shares: 52,500  
Warrants (TO): 340,680

Chairman of the Board of PowerCell 2008-2015, Investment Director at Volvo Group Venture Capital and experienced Board Chairman and member of a number of venture/start-up companies. Former positions include Vice President, Head of Corporate Strategy and Business Development at the Volvo Group. Extensive commercial, industrial and financial experience.

## Company management comprises:



### PER WASSÉN

#### President since 2015

Born: 1961. Employed since: 2015.

Education: Master of Science in Engineering Physics, Chalmers University of Technology, Bachelor of Science in Business Administration and Economics from School of Business, Economics and Law, Gothenburg University

Shares: 52,500

Warrants (TO): 340,680

Stock options: 0

Chairman of the Board of PowerCell 2008-2015, Investment Director at Volvo Group Venture Capital and experienced Board Chairman and member of a number of venture/start-up companies. Former positions include Vice President, Head of Corporate Strategy and Business Development at the Volvo Group. Extensive commercial, industrial and financial experience.



### ANDREAS BODÉN

#### Director Marketing and Sales

Born: 1977. Employed since: 2009

Education: MSc in Chemical Engineering and PhD in Chemical Engineering from KTH in fuel cells and reformer technology

Shares: 4,000

Warrants (TO): 113,560

Stock options: 22,400

Board member of Vätgas Sverige with many years of international experience in the development of fuel cells and fuel cell systems. Former positions include Group Manager, Development Manager and Business Developer in PowerCell, Project Manager at Volvo Technology for PEM fuel cell development.



### PER EKDUNGE

#### Vice President & CTO and Head of Development

Born: 1955. Employed since: 2008.

Education: MSc in Chemical Engineering and Associate Professor of Electrochemistry at the Royal Institute of Technology (KTH)

Shares: 42,000. Warrants (TO):

227,120. Stock options: 224,000

More than 30 years of experience in fuel cell and reformer technology. Previous career at the KTH Royal Institute of Technology, Volkswagen and Dechema in Germany and Volvo Technology where his roles included head of development of fuel cells, batteries and alternative powertrains.



### ROBERT GUSTAFSSON

#### COO

Born: 1957. Employed since: 2009.

Education: MSc in Electrical Engineering, Chalmers University of Technology.

Shares: 15,000

Warrants (TO): 113,560

Stock options: 67,200

Broad experience in leading production processes, including production, purchasing and process improvements. Previous positions include Director Operations at Saab and member of the global operational management for Emerson Process Management.



### KARIN NILSSON

#### CFO, Manager of HR and IT

Born: 1969. Employed since: 2015.

Education: BSc in Business and Economics

Shares: 1,000

Warrants (TO): 42,585

Stock options: 0

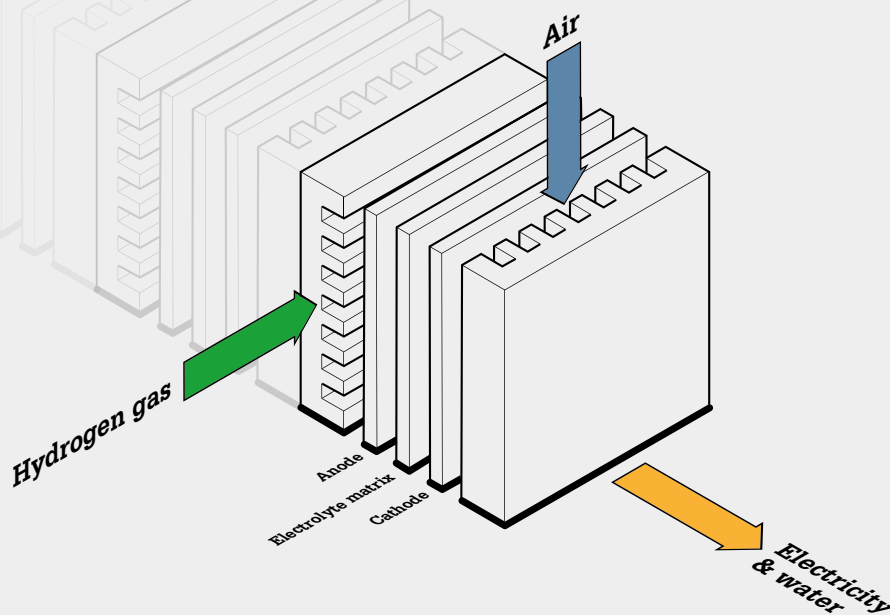
Many years of international experience of financial and operational management. Earlier positions as CFO at KVD Kvarndammen AB where she was also in charge of HR and IT and as the Business Controller in Sibelco Nordic AB and Gunnebo AB.

# What is a fuel cell?

## **A fuel cell generates electrical energy via an electrochemical reaction.**

The process is similar to a battery with the difference that a battery consumes its electrodes when they produce electricity and must be discarded or recharged. Fuel cells, however, produce electric energy as long as fuel is added in the form of hydrogen gas (or a hydrogen gas mixture) and oxygen, usually air. The required voltage is obtained by joining multiple cells in a fuel cell stack, and the desired amperage is achieved by selecting the size of the cell. Fuel cells have a broader field of application than any other available source of energy and can be manufactured for small units that produce only a few watts up to major power stations generating megawatts.

Compared with an internal combustion engine, which is also powered by a reaction between fuel and oxygen, the fuel cell's reaction takes place at a significantly lower temperature. The fuel cell converts chemical energy directly into electrical energy. A higher power efficiency is thereby achieved compared with the combustion engine's thermomechanical process, where a large part of the energy is always consumed as heat (Carnot efficiency). In contrast to the combustion engine water is the only emission generated by a fuel cell.



The fuel cell comprises two electrodes, the anode and cathode, which are separated by an ion-conducting electrolyte. The anode and cathode are connected via an external power supply. When in operation, the anode is fed with fuel in the form of hydrogen gas, while the cathode is continuously fed with air. The hydrogen gas molecules are oxidized at the anode, forming hydrogen gas ions and electrons. The electrons wander through the external electric circuit, and generate electricity. Meanwhile, the hydrogen ions are transported via the electrolyte to the cathode, where they - together with the electrons - reduce the oxygen molecules to form water.

# What is a PEM?

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**PEM is a fuel cell that uses Proton Exchange Membrane as an electrolyte.**

There are several different types of fuel cells classified according to the type of electrolyte they use, which largely determines the properties of the fuel cell.

**PEM fuel cells operate at a relatively low temperature (<100°C)** with rapid start-up and response times. They have the highest energy density of all fuel-cell types and are the most commonly used and mature fuel-cell technology. This makes them ideal for most applications, including for deployment in the automotive industry. About 95% of all fuel cells delivered are of the PEM type. The previous drawback was that PEM fuel cells were shown to be most suited for use with pure hydrogen gas, but were not suited to reformed gas. PowerCell has a reforming technology with the capacity to produce hydrogen gas of such a quality that it can be used in a PEM fuel cell from reformat based on fossil fuels. The area of use is thereby dramatically expanded.

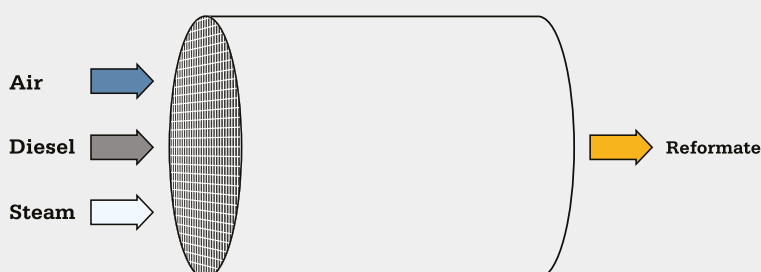
# What is a fuel reformer?

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**It is a device that converts fuel, such as natural gas, biogas, methanol or diesel, into a hydrogen-rich gas.**

The device mixes the fuel with vapors and/or air and lets the mixture pass a catalytic surface. The reagents are then converted into hydrogen gas, carbon dioxide, vapor and carbon monoxide. The reaction temperature is 250-800°C. To create an efficient reactor, the catalyst is distributed over a porous substrate.

To reform diesel, the process must be self-sufficient in terms of heat for the reactions. This is achieved by combining catalytic oxidation of diesel, which generates heat, with vapor reforming of diesel, which creates heat. By balancing these two reactions, a solution is created virtually independent of heat source, known as auto-thermal reformation (ATR).



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