CREATING INNOVATIVE ELECTRONICS TO IMPROVE THE WORLD AND HELP PEOPLE’S LIVES

discoverIE Group plc
IMPACT REPORT
June 2021
WE CREATE INNOVATIVE ELECTRONICS THAT MAKE A POSITIVE DIFFERENCE, CONTRIBUTING TO A BETTER FUTURE

discoverIE is an international leader in customised electronics, focusing on markets with sustained growth prospects and increasing electronic content, where there is an essential need for our products.

About this report
The Group manufactures and sells a range of products and solutions. Those products help our customers internationally in the global fight against climate change and in providing care and treatment to people individually.

This report provides a snapshot of some of the Group’s products and how we are helping to make a positive difference to the world and its people.

Navigating throughout this report

This icon refers to where you can find more information in this report.

This icon refers to where you can find more information in our Annual Report.

Read our Annual Report 2021
“Our strategy is based on helping customers address long-term challenges; together we will make a real difference.”

Nick Jefferies
Group Chief Executive

“We take pride in knowing we have a role to play in tackling the global issues facing the world today.”

Simon Gibbins
Group Finance Director

Visit our investor website
www.discoverIE plc.com

It contains a wide range of information of interest to institutional and private investors, including:

- Latest news and press releases
- Reports and presentations
OUR ROLE IN SOCIETY

How we benefit the planet and its people

**RENEWABLES**
Investing in renewable energy electronic solutions

**ELECTRIFICATION**
Advancing the electrification of transportation

**EFFICIENCY**
Contributing to improving efficiencies in energy use

See our Case Studies on pages 10 to 11

See our Case Studies on pages 12 to 13

See our Case Studies on pages 14 to 15
HOW WE ARE HELPING MEET THE CHALLENGES FACING THE WORLD TODAY

Our Contribution

As well as fighting the pandemic, the two biggest issues of the day are tackling climate change and providing high-quality care to people, especially as world populations age.

These challenges cannot be tackled alone; it requires a collective effort. The Covid-19 pandemic has shown the ability of governments and industry to work together to address huge issues and, while there is still a long way to go before the virus is defeated, vaccination programmes have shown what can be achieved when everyone pulls together.

We provide innovative electronic components that are critical to our customers’ products. It is those customer products that directly address these global challenges but our components play a key role in enabling our customers’ products to work effectively and efficiently.

This report provides a few examples of our products that provide benefits in the following ways:

- **Renewables**
  - Many of our products go directly into customer products that are used to generate electricity from renewable sources, such as wind and solar

- **Electrification**
  - Transportation is one of the largest sources of CO2 emissions globally; we help our customers create products that assist with the electrification of transportation, helping reduce those emissions

- **Efficiency**
  - If products can be replaced with more efficient equivalents, this will add to the reduction in emissions generated by their use

- **Medical**
  - Many of our customers' products are for healthcare, directly improving the life chances of those that rely on them

See our Case Studies on pages 16 to 17
discoverIE is an international group of businesses that designs, manufactures and supplies innovative components for electronic applications. We offer customers differentiated products in key growth markets on a global scale.

Our Purpose
Why we exist:
To create innovative electronics that help to improve the world and people’s lives.

Our Vision
Where we want to be:
To be a leading innovator in electronics across the globe

Our Mission
What we want to do:
To design and supply innovative customised electronics that help our customers create ever better technical solutions around the world

Our approach to Sustainability
Our focus as a business:

Our Planet
Our People
Our Products

Read more about our approach to Sustainability in our Annual Report pages 58 to 69

Our Governance
Underpinned by a clear and robust governance framework
ESG is a specific agenda item in all scheduled meetings of the Board and Group Executive Committee (“GEC”). Each member of the GEC has specific ESG responsibilities with oversight and challenge brought by the Board.

Read more in our sustainability section in our Annual Report on page 60

Our Risk Management
The Board of Directors has responsibility for the Group’s risk appetite and risk management strategy.

Read more about our approach to Risks on pages 40 to 51 of our Annual Report
Our global reach

With our global presence, we contribute to solving the sustainability challenges facing the world today.

As a global supplier, we are able to follow the opportunities of our customers internationally, matching our product diversity with quality, flexibility and technical engineering wherever there is a need for our solutions.

As part of our growing internationalisation, the Group recently acquired new facilities in the USA, Germany and Hungary.

We also expanded facilities in Bangalore and plans are underway to expand capacity in Mexico and Norway.

We provide innovative electronics that help our customers around the world to create new technologies for a sustainable future.

Read more about our Group in our Annual Report on pages 04 to 09

Our locations

**DESIGN & MANUFACTURING**

- Contour UK
- Cursor Controls UK
- Flux Denmark
- Foss Norway
- Hectronic Sweden
- Hobart USA
- Limitor Germany
- MTC Germany
- Myra Belgium
- Noratel Norway
- Phoenix USA
- Positek UK
- Santon Netherlands
- Sens-Tech UK
- Vertec UK

- Acal BFi UK
- Vertec South Africa

**CUSTOM SUPPLY**

- Acal BFi UK
- Germany
- France
- Netherlands
- Denmark
- Finland
- Norway
- Sweden
- Italy
- Belgium
- Spain

+24 COUNTRIES

28% OF FY2021 GROUP SALES WERE BEYOND EUROPE

4,400 EMPLOYEES
The discoverIE Group of companies has the potential to contribute positively to the major global challenges identified in the UN’s Sustainable Development Goals (SDGs).

**Good Health & Wellbeing**
Ensure healthy lives and promote well being for all ages

Our alignment
discoverIE’s products directly contribute to the health and wellbeing of people. The Group’s environmental focus also drives improved health outcomes for all.

**Affordable and Clean Energy**
Ensuring access to affordable, reliable, sustainable and modern energy for all.

Our alignment
Renewables is one of our target markets and our products contribute to the electrification of transportation and increasing energy efficiency.

**Industry, Innovation and Infrastructure**
Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Our alignment
The Group supplies differentiated innovative products. These help provide a better future for all, including connectivity solutions that underpin the “Internet of Things” that brings people and communities together.

**Sustainable Cities and Communities**
Make cities and human settlements inclusive, safe, resilient and sustainable.

Our alignment
The Group serves the mass transportation market and provides charging solutions for electric vehicles, both reducing the use of fossil fuels, as well as components that enable automation and efficiency. It also supplies fibre optic installations to people’s homes, providing more reliable, faster and more energy efficient communications technology.

**Climate Action**
Take urgent action to combat climate change and its impacts

Our alignment
The Group’s focus on products that reduce or replace carbon emissions, and aiding electrification, automation and improving efficiencies, assists in combating climate change.
OUR TARGET MARKETS

Markets driven by long-term needs

The Group focuses on four target markets, which account for over two-thirds of Group turnover: renewable energy, transportation, medical and industrial & connectivity.

Growth in these markets is driven by global macro trends such as the need for renewable sources of energy, more energy efficient transportation systems, a growing middle class population, an ageing affluent population and expanding infrastructure.

**Renewables**

**Market need**
Components that enable the effective transformation of wind and solar energy into electricity

**Transportation**

**Market need**
Products required to assist with mass transportation systems and, at an individual level, the charging of electric vehicles

**Medical**

**Market need**
Electronics that enhance the quality of life for people and improve the quality of care delivered by healthcare providers

**Industrial & Connectivity**

**Market need**
Increasing electronic content required in all forms of products across industry and connectivity in particular

Our global impact

See our Case Studies on pages 10 to 17
SUSTAINABILITY IN ACTION
**Heason Technology: ZX Lidars wind scanning**

**Customer application**
Vertical “cone” scanning LIDAR for wind turbines, used to analyse wind speed and direction.

**Benefits**
Wind scanners help site wind turbine farms to ensure maximum efficiency and yield, allowing for the increase of energy produced from wind. Our new turbine mounted system will greatly increase efficiency of off-shore turbines.

**Target market**
Renewables, Industrial & Connectivity

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**Heason Technology: Wind scanning**

**Customer application**
Wind resource assessment and wind mapping for wind turbines.

**Benefits**
Our optics pointing system including control rack allows for the analysis of wind vortex and wake on wind turbines which increases efficiency of the energy produced. The technology also analyses an aircraft’s taking off at airports to help traffic flow.

**Target market**
Renewables, Industrial & Connectivity

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**Laser air scanning for wind farms**

**Customer application**
LiDAR for sensing wind to help wind energy projects harvest as much power as possible.

**Benefits**
We supply the lasers for this unique LiDAR remote measurement method for wind speeds made possible with the help of our product. Wind measuring masts are often erected at the planned locations. However, this is expensive and technically limited. With this cheaper and more flexible mobile LiDAR system, the air area is scanned by laser, enabling the most efficient positioning of future wind farms.

**Target market**
Renewables, Industrial & Connectivity
**Routers and transformers**

**Customer application**
For wind turbines.

**Benefits**
Our reactors are used to filter the converted power and to supply the grid with clean electricity. Our current transformers measure and control the generator system and supply numerous power functions in the wind turbine’s electrical system. Each year we supply over 13,000 of these units for over 4,000 wind turbines. This leads to the generation of an estimated 18 Gigawatts of fossil free electricity each year.

**Target market**
Renewables

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**Small SVTS-A capsule slipring**

**Customer application**
Roller blind with solar panels built in. This uses a DC motor to automate the blinds and a slipring to transmit the electricity generated.

**Benefits**
Roller sun blinds are an innovative solution for offices and homes which can be lowered to block the sun and generate renewable electricity.

**Target market**
Renewables

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**Santon Solar DC disconnect switch**

**Customer application**
Solar farms.

**Benefits**
We are one of the leading suppliers of this DC disconnect switch for solar farms across the world.

**Target market**
Renewables

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“Our innovative electronics are used in renewables energy solutions, contributing to the generation of efficient fossil-free sources of energy.”

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**Pressure transmitter**

**Customer application**
Hydrogen based power train for zero emission buses.

**Benefits**
We designed and supply a pressure transmitter for this application which allows the use of hydrogen fuelled buses instead of traditional fuels. This enables buses to operate with zero emissions, contributing to the reduction of greenhouse gas emissions and the UK government’s target to be net zero by 2050.

**Target market**
- Renewables
- Transportation

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**Hypercharger**

**Customer application**
Used for charging electric vehicles, especially trucks.

**Benefits**
The hypercharger is three times faster than a normal charger, contributing to further efficiencies, reducing particle emissions and greenhouse gases. Each unit contains several nanocrystalline cores designed and produced by us in-house, plus a range of magnetics.

**Target market**
- Renewables
- Industrial & Connectivity

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**Temperature sensor**

**Customer application**
Electric vehicle plug.

**Benefits**
For this electric vehicle plug we have designed in and supply temperature sensors to avoid overheating of the cables during the charging process. Electric vehicles reduce particle concentration in urban areas and limit the emissions of greenhouse gases. Our product contributes to the reduction of greenhouse gases. It is estimated that electric cars have a carbon footprint up to 80% lower than that of fossil-fuelled cars.

**Target market**
- Renewables
- Transportation
**Electric motors**

**Customer application**
Used for powering electric vehicles and hybrid electric vehicles.

**Benefits**
We supply temperature sensors for motors in hybrid and electric vehicles to monitor potential overheating of the batteries and the motors themselves. Hybrid and electric vehicles

**Target market**
Renewables

**Charging stations**

**Customer application**
For electric vehicles.

**Benefits**
We supply components for EV charging stations that help the conversion from fossil fuels to renewable energy. We forecast 10,000 installations in the next year, helping governments to meet their carbon reduction commitments.

**Target market**
Renewables, Transportation

**Electric railways**

**Customer application**
Reduced emissions through electric railways.

**Benefits**
We supply a pressure transmitter and temperature probes for the cooling and thermal management systems for the batteries on electrified railways.

**Target market**
Transportation

**Vehicle computer**

**Customer application**
Refrigeration system for transport vehicles.

**Benefits**
We design and supply the computer that ensures the recommended temperature of refrigerated vehicle fleets is maintained and logged. This fleet management function is essential for just in time deliveries, for instance for vaccine manufacturers.

**Target market**
Transportation

“We provide electrification solutions, encouraging the conversion from fossil fuel usage to renewable energy.”

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discoverIE Group plc
CONTRIBUTING TO IMPROVING EFFICIENCIES IN ENERGY USE

**Wireless thermostat**
**Customer application**
Remote temperature control in residential homes.

**Benefits**
The customer is able to control temperatures remotely, with flexibility. As there is no need to heat or cool unnecessarily, the customer saves energy.

**Target market**
- Renewables
- Industrial & Connectivity

![Wireless thermostat image]

**Heat battery for phase change material (PCM) thermal energy storage solution.**

**Customer application**
Installed in household boilers.

**Benefits**
We provide temperature sensors for this product which helps to support the government’s commitment to reduce emissions to net zero by 2050, starting with a gas boiler ban, from as early as 2025. When installed in a household, our product generates proven energy savings of between 40% and 80% and carbon dioxide emission reductions of between 20% and 40% per unit. The product provides thermal energy storage at a low cost and reduces heat loss.

**Target market**
- Renewables
- Industrial & Connectivity

![Heat battery image]

**Windmill blade position**

**Customer application**
We have designed in and supply ring magnets which provides the pole count output needed by the sensor to determine the optimal blade position, to improve the efficiency of wind energy generation.

**Benefits**
This product contributes to reduced emissions by reducing use of carbon based fuels.

**Target market**
- Renewables
- Industrial & Connectivity

![Windmill blade position image]
Ventilation units

Customer application
Heat recovery ranges designed for better ventilation.

Benefits
We provide cable assemblies for these ventilation units, which reduces greenhouse gas emissions and energy consumption. We have provided over 100,000 units, delivering an estimated 650,000 MWh of recovered energy.

Target market
Renewables
Medical

High voltage, direct current (HVDC) power transfer

Customer application
Used in HVDC electric power transmission systems.

Benefits
We supply optical fibre cable for HVDC switches. HVDC technology improves efficiency by reducing power losses from 6.5% to 3.5% compared to alternative methods, such as AC transfer.

Target market
Renewables
Industrial & Connectivity

Smart meter

Customer application
Smart meter for electricity network.

Benefits
We supply the radio frequency chipset, antennas, and crystals for this smart meter application, shipping 2.4 million units per year. The application reduces carbon emissions through improved network efficiency and usage.

Target market
Renewables
Industrial & Connectivity

“Our products are designed to minimise energy consumption and emissions, ensuring great performance efficiently and effectively.”
ENHANCING THE QUALITY OF LIFE AND CARE FOR PEOPLE

**Nebulizers for effective aerosol drug delivery**

**Customer application**
Patients who need aerosol therapy, a technique of administering medication directly into the airway and lungs.

**Benefits**
We have designed and manufacture in-house the magnetic components for the mini internal power supplies in this medical equipment. This product increases the effectiveness of inhaled medication as patients inhale six times more medication which is directly administered to their lungs.

**Target market**
Medical

**Trackball modules**

**Customer application**
A core input in devices which support ultrasound imaging systems, with applications in areas such as cardiovascular and women’s health and dentistry.

**Benefits**
Our trackball module is one of the most frequently used ‘touch points’ within the system. We created a solution in response to the emergence of superbugs (such as MRSA) within hospital environments, in order to allow for easy cleaning and sterilisation.

**Target market**
Medical

**Transformers**

**Customer application**
For intensive care ventilators.

**Benefits**
This provides life sustaining ventilation and breathing support for critical care patients in hospitals and life-critical medical systems.

**Target market**
Medical

**Cable Assemblies, SLA Batteries, Speakers, Switches**

**Customer application**
Various components used in stair lifts.

**Benefits**
Our products were used in 48,000 stair lifts in the past year, providing a safer way for people to use stairs at home.

**Target market**
Medical
## Dual-energy X-ray absorptiometry (DXA) Bone Densitometer

**Customer application**
World class DXA systems for measuring bone density.

**Benefits**
The Densitometer is used to diagnose metabolic bone disease, such as Osteoporosis, and monitors body fat for research purposes (e.g. lipodystrophy in AIDS patients).

On average, one bone density densitometer helps diagnose 20 patients per day. Over 34,300 patients have benefited in the past year.

**Target market**
Medical

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## Surgical ultravision product

**Customer application**
Ultravision products used in surgery.

**Benefits**
We provide cable assemblies for this surgical product which uses the proven process of electrostatic precipitation to eliminate surgical smoke and provide a continuously clear visual field during laparoscopic surgery, without the need for CO2 exchange.

**Target market**
Medical

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## Blood analysis instrument

**Customer application**
The P200 is designed to deliver accurate and reproducible test results in both allergy and autoimmunity diagnostics.

**Benefits**
Detecting and quantitatively determining clinically relevant antibodies in blood, without the need to give possible allergenics to patients. The tests are done with a simple blood test instead of riskier skin testing. We designed in and supply the single board computer for this system and have shipped 200 complete systems that can perform 14.6 million tests each year.

The procedure takes less than an hour and patients can leave the hospital the same day. We sold 825 units in the last 12 months, which together can perform over 350,000 preventive surgeries each year.

**Target market**
Medical

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## The Quantien HMI with wireless communication

**Customer application**
Acts as a form of therapy that avoids an invasive approach for heart patients.

**Benefits**
For this product, we supplied the mechanics, display carrierboard, and the computer module. It is used in a type of heart surgery that allows for medical treatment instead of more complicated surgery. 46% of patients can be cured with medication instead of extensive surgery.

**Target market**
Medical

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