Invitation to acquire shares in LED iBond International A/S

Financial Advisor and Certified Advisor

Selling Agent

Nasdaq First North Growth Market Disclaimer

Nasdaq First North Growth Market is a registered SME growth market, in accordance with the Directive on Markets in Financial Instruments (EU 2014/65) as implemented in the national legislation of Denmark, Finland and Sweden, operated by an exchange within the Nasdaq group. Issuers on Nasdaq First North Growth Market are not subject to all the same rules as issuers on a regulated main market, as defined in EU legislation (as implemented in national law). Instead they are subject to a less extensive set of rules and regulations adjusted to small growth companies. The risk in investing in an issuer on Nasdaq First North Growth Market may therefore be higher than investing in an issuer on the main market. All issuers with shares admitted to trading on Nasdaq First North Growth Market have a Certified Adviser who monitors that the rules are followed. The respective Nasdaq exchange approves the application for admission to trading.
# Investment Highlights

## SUPERIOR TECHNOLOGY

- **One technology platform**
  - Superior cooling in super-slim wireless panel
  - Open source connectivity for IoT devices
  - Very strong patent portfolio

- **Several product lines**
  - Tracy® for general user cases (view the Tracy® video here*)
  - Custom solutions for special uses - elevators, vertical farming, disinfection etc.

## FOCUS ON GROWTH MARKETS

- **Smart buildings**
  - With its data transfer capabilities, LED iBond’s products are ideal for smart buildings.
  - Smart lighting market size 2023e > USD 20 bn

- **UV disinfection**
  - The ability to incorporate UV-C LEDs in the panel makes the technology highly suitable for applications within the UV disinfection industry.
  - Fighting viruses and bacteria.
  - UV disinfection equipment market size 2025e > USD 5 bn

- **Vertical farming**
  - Given the slim form factor and cooling properties of the technology, it is ideal for the vertical farming industry.
  - Market size 2027e > USD 16 bn

## HEADING FOR PROFITABLE GROWTH

- Solid customers and partners

- **Current orders**
  - DKK 4.8 million confirmed orders

- **Growth company**
  - 2016: commercialization, limited sales
  - 2019: net turnover DKK 12 million, up 80% over previous year
  - 2022: turnover target is DKK 100 million

## UN GLOBAL GOALS

- LED iBond’s technology enables profitable large-scale vertical farming, one of the sustainable farming methods to feed the world of tomorrow.

- LED iBond’s technology is key to human health and safety by improvement of the indoor climate and by disinfection, minimising the spread of contagious diseases e.g. virus.

- LED iBond’s technology is available as an open-source platform to everybody, encouraging innovation and proliferation of energy efficiency and climate improvement solutions.

- As a leading technology developer, LED iBond facilitates and supports the propagation of energy-saving LED-technology and IoT-based solutions for climate improvements.
SUMMARY OF TERMS

Offering Price  
Pre-money valuation  
Application period  
Marketplace  
Settlement date  
First day of trading  
Size of the Offering  
Ticker  
Temporary ISIN  
Permanent ISIN

OWNERSHIP BEFORE THE OFFERING

Shareholders  Percent  
Laromini ApS  34.49%  
NLR Invest ApS  42.20%  
Green Technology Investment ApS  22.88%  
Bjarne Henning Jensen  0.44%

Total  100.00%

SUBSCRIPTION UNDERTAKINGS

Shareholder  Conv. debt (DKK)  New capital (DKK)  
Midroc Invest AB  6,000,000  -  
Gerhard Dal  480,000  1,000,000  
STN Invest ApS  -  1,300,000  
HCS 82 ApS\(^1\)  1,200,000  -  
Brigitte Larsen  1,200,000  -  
Green Technology Investment ApS\(^2\)  1,056,000  -  
Frederik Topsøe  -  1,000,000  
Polyum Investment AB  -  997,600  
Michael Brag  -  825,600  
Christian Månsson  540,000  200,000  
2E Group A/S  600,000  -  
Modelio Equity AB  -  500,000  
Eastbridge Capital AB  480,000  -  
Råsunda Förvaltning AB  420,000  -  
Henrik Amilon  360,000  -  
Vivienne Angelique Jørgensen  360,000  -  
Paginera Invest AB  -  250,000  
John Andersson Moll  -  250,000  
Josiane Peronnet  204,000  -  
Houmøller Group Depot ApS  -  200,000  
Christina Bay  120,000  -  
Per Faartoft\(^3\)  120,000  -  
Peter Houmøller  120,000  -  
Louise Houmøller  120,000  -  
Kristjan Jørgensen  120,000  -  
Gorm Teichert  120,000  -  
Helle Karin Bruhn-Petersen\(^4\)  -  100,000  
Mette Boesgaard  60,000  -  

Total  13,680,000  6,623,200

\(^1\) Owned by Helle Karin Bruhn-Petersen, married to Frederik Bruhn-Petersen (Board member)
\(^2\) Partly owned by Rolf H. Sprunk-Jansen (CEO) and Lars Frederiksen (CTO)
\(^3\) Sales Manager at the Company
\(^4\) Married to Frederik Bruhn-Petersen (Board member)

SUBMISSION OF APPLICATIONS TO SUBSCRIBE

Applications to subscribe for Offer Shares in the Offering should be made by submitting the application form enclosed in the Prospectus to the investor’s own account holding bank. Clients at Nordnet may apply for the acquisition of shares through Nordnet’s Online Service. Application with Nordnet can be made up until 23:59 CET on 8 June 2020. More information regarding the application process is available at www.nordnet.dk and www.nordnet.se.

REASON FOR THE OFFERING

Aiming for substantial international growth, LED iBond has made detailed plans for its business development activities in coming years. The Company will continue building its international sales and partner organization including strategic partnerships with leading regional distributors. Development of new business within UV disinfection light and vertical farming is a highly prioritised area. LED iBond also expects to step up product development activities, both for hardware and software. In addition, the Company will expand and strengthen its patent portfolio, including 8 patent families related to the Company’s basic LED lighting panel concept and to the integration of IoT into the panel.
Letter from the CEO

To this day, LED iBond’s original idea – mounting LEDs in a sandwich of aluminium layers with an isolating core – is still key to understanding our product offering. With our internationally patented 6 mm sandwich structure, we can produce powerful lighting solutions in almost any shape and form without the need for additional cooling. At the same time, the aluminium sandwich works as a power base and digital network for all kinds of smart devices such as sensors, speakers and cameras to name just a few.

Over the years, LED iBond’s original sandwich concept has matured into a full-blown technology platform for integrating light, “smart” components, data and electricity in one very slim panel – a new open paradigm for the Internet of Things, IoT. What we can do with our technology is quite unique. With a minimum of space requirement, we can install a state-of-the-art digital lighting and connectivity solution, power most IoT devices and connect them to the Internet – all in a 6 mm ultra-thin panel with a discreet contemporary design. Not many can do that!

We bring our technology to market both in the form of stand-alone products and as customised smart lighting solutions for a wide range of residential and business applications. Tracy® is the family name of our signature product line, a modular smart-lighting system in a minimalistic design, which we manufacture ourselves. Easy to install, adapt and extend, Tracy® is marketed internationally as a premium lighting solution for kitchens, offices and many other purposes – with or without IoT-support. We also offer a range of customized solutions for elevator ceilings, shelving systems and a range of other applications where our slim form factor, efficient cooling and IoT-integration are key.

With the broad applicability of LED iBond’s technology and a very strong patent portfolio, we strongly believe in the solid growth potential of the company. And our sales records support our beliefs! In Denmark, LED iBond’s sales team is continuously starting and developing solid key accounts. In international markets, we team up with sales & distribution partners to extend our reach. For instance, we are working closely together with Nobia AB, Europe’s leading kitchen specialist, who is including Tracy® as a new option for its kitchen brands in the Nordics and UK. We are supplying ThyssenKrupp, the international elevator manufacturer, with “retro-fit” elevator ceilings for their elevator business in Denmark. We are even engaging with international partners to develop new integrated solutions, based on our technology. Right now, we are working with iWire in Dubai to develop a brand new and very promising smart building concept and with a partner in the Nordic region to develop new intelligent shelf solutions.

With LED iBond’s unique business case, a team of very committed employees and our strong international partners, I feel confident, that LED iBond can deliver on our ambitious financial target for 2022, profitable operations with a top-line of DKK 100 million.

For product and business opportunities outside our core business we will make our technology available for specialised spin-off business projects where LED iBond retains significant ownership. We have already launched the first three spin-offs – for animal farming, for the aviation industry and for the disinfection equipment market – and I am comfortable that we will launch several more projects with partners in coming years.

It is important for us to do our utmost to leverage LED iBond’s unique technology, not only for our own commercial benefit, but for the good of the planet. For example, our technology enables large-scale vertical farming, and supports substantial IoT-based solutions for better human health and well-being, higher energy efficiency and other climate initiatives. In fact, LED iBond contributes to four of UN’s 17 global sustainability goals – and we are enabling many others to make their best sustainability efforts too, saving energy, improving the global climate, feeding the world of tomorrow and more!

We are excited to invite new investors to join us on our journey, which has a dual purpose: achieving the full commercial potential of LED iBond and making our humble contribution to saving the planet at the same time. I sincerely hope to meet you at our next shareholder meeting!

Rolf H. Sprunk-Jansen
CEO, LED iBond International A/S
LED iBond International A/S is a Danish technology company that has developed and patented a LED lighting technology that lowers cost of ownership, enables easy LED installation, offers unlimited design possibilities and high IoT functionality. The Company is based in Kongens Lyngby near Copenhagen, Denmark. The organization is structured in Sales & Support (6.5 FTE), Marketing (0.5 FTE), Development (3.0 FTE), Production and Sourcing (2.3 FTE) and Finance & Administration (1 FTE).

THE TECHNOLOGY
LED iBond has developed a system, in which LEDs and other components are placed in an aluminium composite panel (ACP), i.e. a sandwich of aluminium layers with an isolating core. This structure is the basis for the development of LED lighting in super-slim panels with superior cooling properties.

VISION
LED iBond’s vision is to merge technologies on a single open-source platform for growth, human comfort and for the good of our planet.

BUSINESS LINES AND PRODUCTS
Smart Buildings - Tracy® is a true revolution in lighting technology, serving both as a lighting system and a digital infrastructure element for IoT devices. With a thickness of only 6 mm, the system simultaneously provides high-efficiency LED lighting and integrates a wide range of IoT devices such as CO₂ and motion sensors. Tracy® runs electric power, data and lighting for up to 50 meters with a single electrical input. LED iBond has set up an automated Tracy® production facility with a capacity of 300,000 units p.a. View the Tracy® video here.

UV Disinfection - In the rapidly growing market for disinfection, UV-C LEDs are used for disinfecting surfaces, components and purifying air and water. With LED iBond’s technology, UV-C-based disinfection systems may be miniaturised and LED iBond’s superior heat management concept secures significantly extended service life. In early 2019, LED iBond initiated a project with a leading supplier to the airport security industry for the installation of Tracy® UV-C units in passenger-critical areas. The project is expected to reach the market during Q3/Q4 2020.

Vertical Farming - LED iBond has engaged in a pilot project in vertical farming, where LED iBond’s technology offers advantages due to the minimalistic form factor and the extensive service life of LEDs. LED iBond’s vertical farming solution incorporates a new ventilation concept, which is one of the critical aspects of vertical farming.

Spin-offs and part-owned subsidiaries - To leverage the use of LED iBond’s technology and patent position, the Company has made the strategic decision to address certain high-growth market niches in collaboration with carefully selected partners.

- LED VirusKill A/S (55% ownership) - offers handheld UV disinfection equipment for disinfection of surfaces and components.
- LED Aviation A/S (41% ownership) - offers UV disinfection equipment for machinery in the aviation industry.
- LED Livestock ApS (49.3% ownership) - offers lighting equipment to improve productivity and animal welfare in the farming industry.

FINANCIAL TARGETS
LED iBond is operating with the following financial targets:

- Full year positive cash flow from operations in 2021
- Revenue of DKK 100 million in 2022
- Long term EBITDA-margin of > 30%

The financial objectives are dependent on the Company being successful in pursuing a number of current market opportunities.
For the smart building market, LED iBond’s technology platform offers numerous options to integrate light control and a variety of sensors for data collection for the Internet of Things (IoT). In addition, the emergence of UV-C LEDs has paved the way for products for disinfection of surfaces and components, a new and very promising market for the Company. Another huge market opportunity is the vertical farming market, where LED iBond’s superior form factor and cooling properties provide ideal conditions for growing plants in “layered” greenhouses.

SMART BUILDINGS
A smart building is any type of building infrastructure that makes use of automation to control the operations of the building such as ventilation, lighting, heating, air conditioning, security, and much more. To perform these functions, sensors and microchips are used to collect ambient data and manage a range of service functions.

The global smart building market was valued at appr. USD 60 billion in 2019 and is expected to reach USD 106 billion in 2024, corresponding to a CAGR of close to 12%. The smart lighting-subcategory amounted to appr. USD 8 billion in 2018 and is expected to reach USD 21 billion in 2023, corresponding to a CAGR of 21.5% during the period.

Market drivers for Smart Buildings and LED lighting:

• Use of LEDs enables significant energy savings - LEDs use significantly less electricity than many conventional lighting technologies, saving costs and reducing environmental impact.

• Changing building codes are driving the market for smart lighting, requiring increasing levels of lighting automation and controls.

• Emergence of smart lighting drives the entire market - Embedded sensors and digital communications facilitate the growth of integrated lighting networks.

• Regulatory mandates - Governments around the world are encouraging the use of LEDs in public and private spaces.

UV DISINFECTION
The COVID-19 outbreak has initiated a global search for solutions that can prevent the spread of the virus. One proven solution, that has been used for many years, is ultraviolet light (UV light). The most compact, concentrated and durable source of UV light is the UV-C LED that can inactivate a wide range of pathogens, including – but not limited to – MRSA, C. diff, E. Coli and Pseudomonas. In contrast to mercury-based UV light, UV-C LEDs contain no environmental contaminants and can be switched off and on immediately.

The global UV disinfection equipment market is valued at USD 2.9 billion in 2020, expected to reach USD 5.3 billion in 2025, representing a CAGR of 12.3%.

Market drivers for UV lighting in disinfection market:

• Recycling of wastewater from industries - Due to rising concerns about recycling of wastewater from industries, an increasing number of municipal corporations are moving to UV disinfection for recycling wastewater from industries.

• Increased focus on UV-C light - UV-C light’s ability to quickly and effectively kill germs has made the technology increasingly popular within hospitals in the last years, expected to spread to other industries as well going forward.

• Bulbs and pipes will be replaced with LEDs - Poor reliability of ultraviolet light-emitting bulbs is driving the market penetration of LED technology in UV lighting systems. LED lighting also offers other benefits such as mechanical robustness, design flexibility and long service life.
VERTICAL FARMING

Vertical cultivations are indoor cultivations in which the plants are stacked on top of one another. To succeed, vertical farmers must secure a long service life of LEDs, appropriate ventilation, limited heat, directed and controlled light on the plants, reducing manual labour and minimizing power consumption.

In 2017, the market value of the horticultural lighting market (at system level) amounted to USD 3.8 billion, expected to reach USD 8.6 billion by 2022 and USD 17 billion in 2027, primarily driven by indoor/vertical farms. HPS lamps make up the majority of existing installations, while LED lamps grow the fastest.

Market drivers for Vertical farming:

- **Urbanization** - In 2050, about 80% of the global population is expected to live in cities. Food demand is increasing in these areas, while cultivable land outside cities is limited and decreasing.

- **Population growth** - The global population is expected to exceed 10 billion people by 2050 and food production will increase by 70% in the coming forty-year period.

- **New installations and replacement lamps** - New installations are expected to drive the growth for LED lighting within the horticulture industry.

- **Emergence of legalized cannabis** - In recent years, a wave of cannabis legalisation has spread around the world. Given the rather high price for end-users, there is economic room for investments in LED lighting.

**Horticulture lighting market, 2017 - 2027, system level**

Source: Horticultural LED Lighting: Market, Industry, And Technology Trends report, Yole Group of companies including PISEO and Yole Développement, November 2017
LED iBond International A/S
Diplomvej 381,
2800 Kgs. Lyngby, Denmark
Phone (+45) 7070 7855
E-mail: info@ledibond.com
www.ledibond.com

Financial Adviser and Certified Adviser
Västra Hamnen Corporate Finance AB
Jungmansgatan 12, 211 11 Malmö, Sweden
Bredegade 30, 1260 Copenhagen, Denmark
Phone +46 40 200 250
E-mail: info@vhcorp.se
www.vhcorp.se

Auditor
PKF Munkebo Vindelev
Hovedvejen 56
2600 Glostrup, Denmark
Phone: +45 43 96 06 56
www.pkf.dk

Legal Adviser
Lundgrens Advokatpartnerselskab
Tuborg Boulevard 12
2900 Hellerup, Denmark
Phone: +45 3525 2535
E-mail: info@lundgrens.dk
www.lundgrens.dk

Issuing Agent
Arbejderenes Landsbank
Vesterbrogade 5
1502 Copenhagen V, Denmark
Phone: +45 38 48 48 48
www.al-bank.dk

Selling Agent
Nordnet Bank AB
Alstromergatan 39, Box 30099
104 25 Stockholm, Sweden
Phone: +46 8 559 035 70
www.nordnet.dk