

December, 2018

# SILVAIR

INVESTOR PRESENTATION



# Disclaimer



This presentation (“**Presentation**”) has been prepared by Silvair, Inc. (“**Company**”).

This Presentation does not constitute an offer for the sale of securities in the United States, Australia, Canada, Japan or any other jurisdiction where such offer for sale would constitute a violation of the applicable laws or would require registration. Securities may not be sold in the United States absent registration with the United States Securities and Exchange Commission or an exemption from registration under the U.S. Securities Act of 1933, as amended (the “**U.S. Securities Act**”). Securities of the Company have not been and will not be registered under the U.S. Securities Act and may not be offered or sold in the United States except pursuant to an exemption from, or in a transaction not subject to, the registration requirements under the U.S. Securities Act.

Neither the Presentation nor any copy hereof may be copied, distributed or delivered directly or indirectly to any person for any purpose without the Company’s knowledge and consent. Copying, mailing, distribution or delivery of this Presentation to any person in some jurisdictions may be subject to certain legal restrictions, and persons who may or have received this Presentation should familiarize themselves with any such restrictions and abide by them. Failure to observe such restrictions may be deemed an infringement of applicable laws.

The Presentation includes statements that constitute or may be deemed to constitute forward-looking statements. Forward-looking statements are statements other than statements of historical or current facts. Statements that contain the words such as “expect”, “intend”, “plan”, “believe”, “forecast”, “anticipate”, “will”, “aim”, “may”, “would”, “could”, “continue” and words of similar meaning that refer to future events are considered to be forward-looking statements. Forward-looking statements include statements concerning the Company’s and its group’s business strategy, plans and targets in the area of its future operations. Due to their nature, forward-looking statements involve risks and uncertainty, because they relate to future events and circumstances some of which are beyond the Company’s and its group’s control. Forward-looking statements are based on various assumptions regarding future events and, in particular, the Company’s present and future business strategy and the market environment in which the Company will operate in the future. Although the Company believes that these assumptions are reasonable, they may not materialize in the future.

No warranties or representations can be made as to the comprehensiveness or reliability of the information contained in this Presentation. Neither the Company nor its directors, managers, advisers or representatives of such persons shall bear any liability that might arise in connection with any use of this Presentation. Furthermore, no information contained herein constitutes an obligation or representation of the Company, its managers or directors, its Shareholders, subsidiary undertakings, advisers or representatives of such persons.

This Presentation contains certain statistical and industry information. All industry data contained in this Presentation are based on external sources which the Company considers accurate and reliable, but the Company accepts no responsibility for their accuracy and reliability.

This Presentation was prepared for information purposes only and is neither a purchase or sale offer, nor a solicitation of an offer to purchase or sell any securities or financial instruments or an invitation to participate in any commercial venture. This Presentation is neither an offer nor an invitation to purchase or subscribe for any securities in any jurisdiction and no statements contained herein may serve as a basis for any agreement, commitment or investment decision, or may be relied upon in connection with any agreement, commitment or investment decision.

The information and opinions contained herein speak only as at the date of the Presentation and are subject to change without notice. Neither the Company or any other entity is under any obligation to update or keep current the Presentation or inform its addressees of any changes in the information or opinions contained herein.

# Silvair, innovative company providing IoT software in B2B model



US Company with Polish roots,  
R&D Center in Cracow

The world's first company offering  
firmware solutions for lighting based  
on Bluetooth mesh networking  
technology

We redefine smart  
lighting experience  
in commercial spaces

Long – time international  
partners, i.e.: Murata,  
Fulham, McWong

# SILVAIR

TiL Award – Best  
Connected Lighting  
Solution in 2018

Company listed on the Warsaw  
Stock Exchange since July 2018



# Our background



## 2011

— The company was founded and started developing proprietary radio solutions for home automation systems commercialized on the Polish market

## 2014

— The company was registered in the U.S. and started providing services for commercial spaces the world over

— We made a strategic bet on Bluetooth® Smart and started contributing our core IP to the Bluetooth Special Interest Group (SIG)

## 2017

— Bluetooth mesh networking, adopted in July 2017, is the first low-power wireless technology designed for professional lighting applications

## 2018

— Silvair debuted on the Warsaw Stock Exchange



# Team



Rafał Han  
CEO, Co-Founder



Szymon Słupik  
CTO, Co-Founder



Adam Gembala  
CFO, Co-Founder



Michał Hobot  
VP of Product



Ray Pfeifer  
VP of Sales



Marek Wierzbicki  
CMO



Janusz Stasik  
COO

# Locations



United States of America

**717 Market Street, Suite 100**  
**CA 94103, San Francisco**



Poland

**Jasnogorska 44**  
**31-358, Krakow**



# Our goal



At Silvair, we're dedicated to improving building occupant experience.

We believe that holistic and harmonic buildings enable people to function better, and can make our living and working environments healthier, friendlier, more efficient and more inspiring.

- Sensors
- Maintenance
- IoT Services



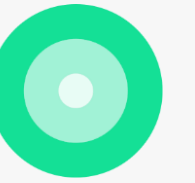
# Data is the key



## DATA / IoT

We deliver innovation that enables building owners and property managers to unlock the power of data that make businesses and buildings smarter and more sustainable than ever before.

# Internet not „things” but data...



What is Internet of Things? The concept, that describes the idea of everyday physical objects being connected to the internet and being able to directly or indirectly collect, process or exchange data, beyond standard devices.

**95%**

of electronics for new  
product designs in IoT  
technology by 2020

source: *Gartner Top Strategic  
Predictions for 2018 and  
Beyond, 2017*

**\$1.5 bn**

IoT global market  
value in 2022

source: *Worldwide Semiannual  
Internet of Things Spending  
Guide IDC*

**50 bn**

electronic  
devices by 2020

source: *Cisco, The Internet  
of Things, 2014*

7x more than  
people on  
earth

**\$11 bn**

value generated by  
IoT globally by 2025

source: *Unlocking the potential of Internet  
of Things, McKinsey, 2015*

# Light is where it all begins

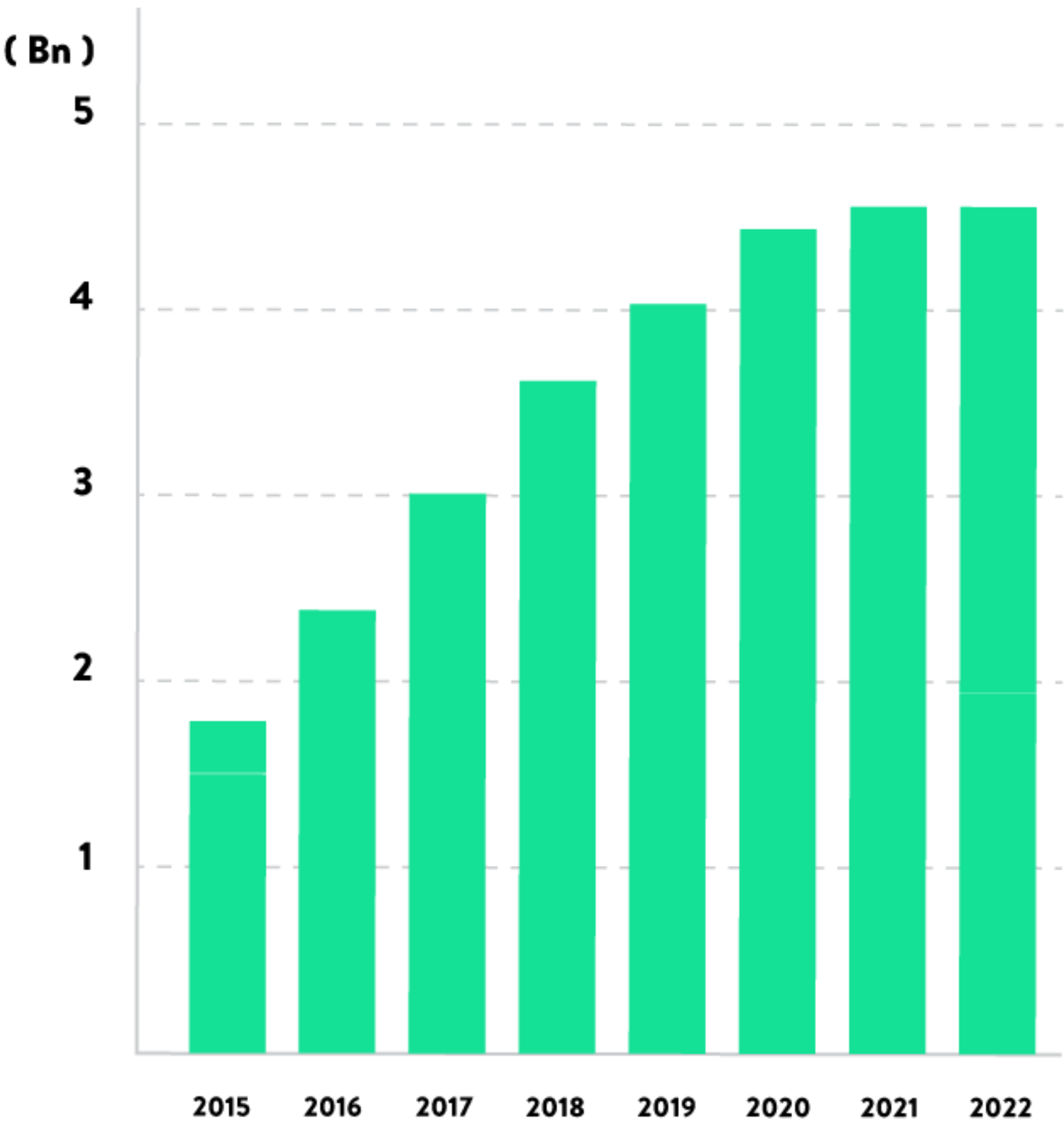
The connected lighting infrastructure becomes a backbone for multiple innovative and valuable services that drive efficiencies across all types of spaces.



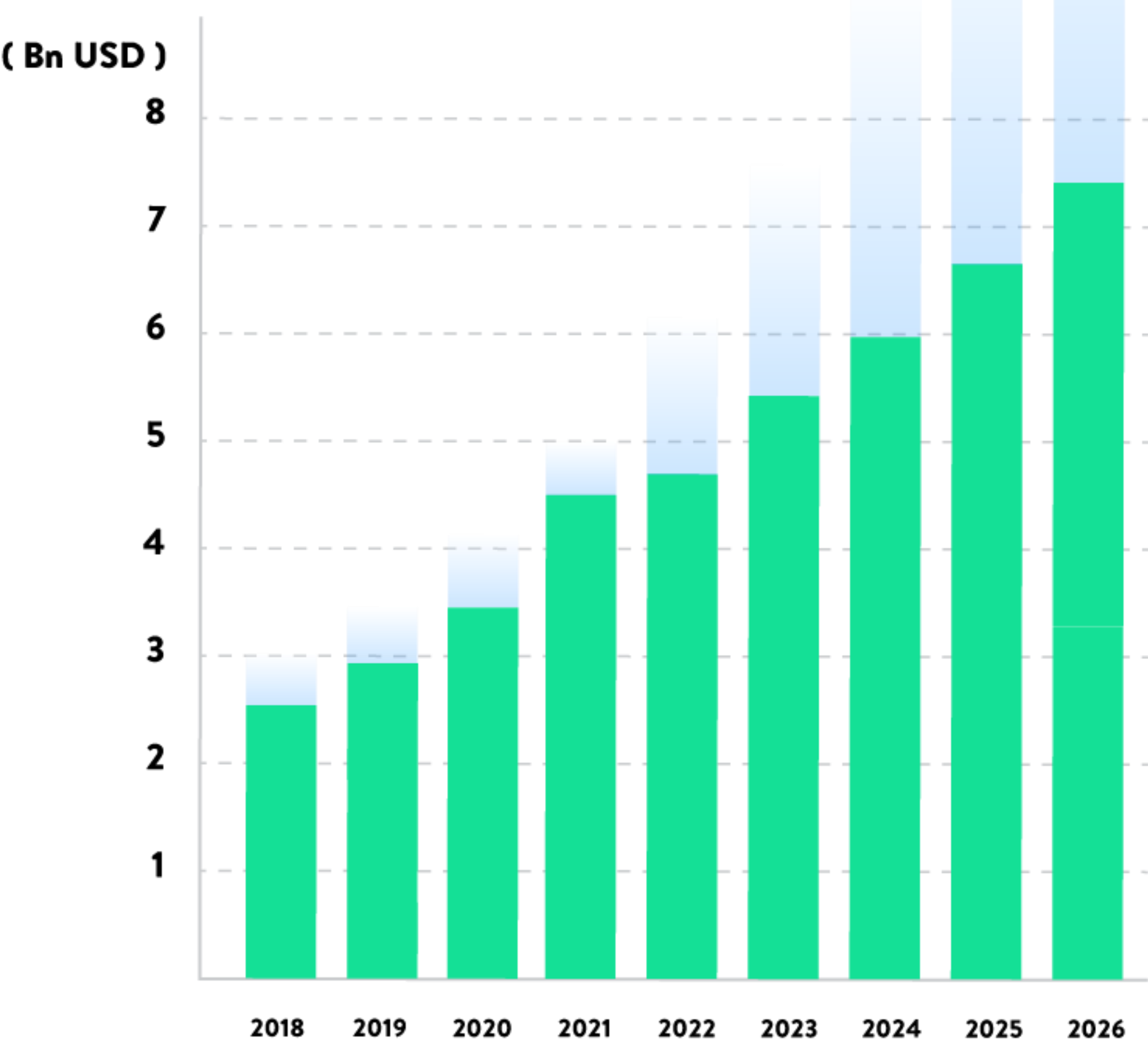
# Global LED market growth forecast



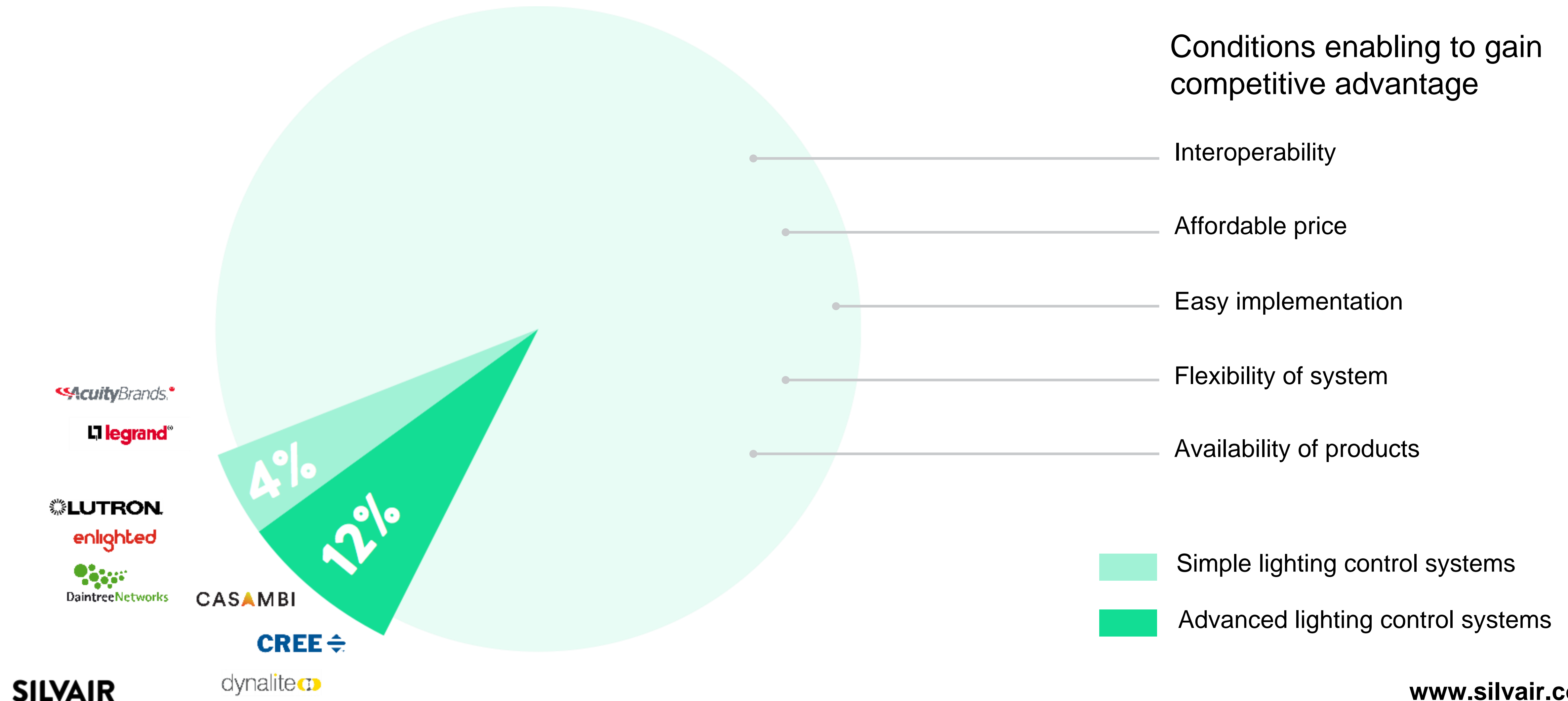
Global LED production  
(no of items)



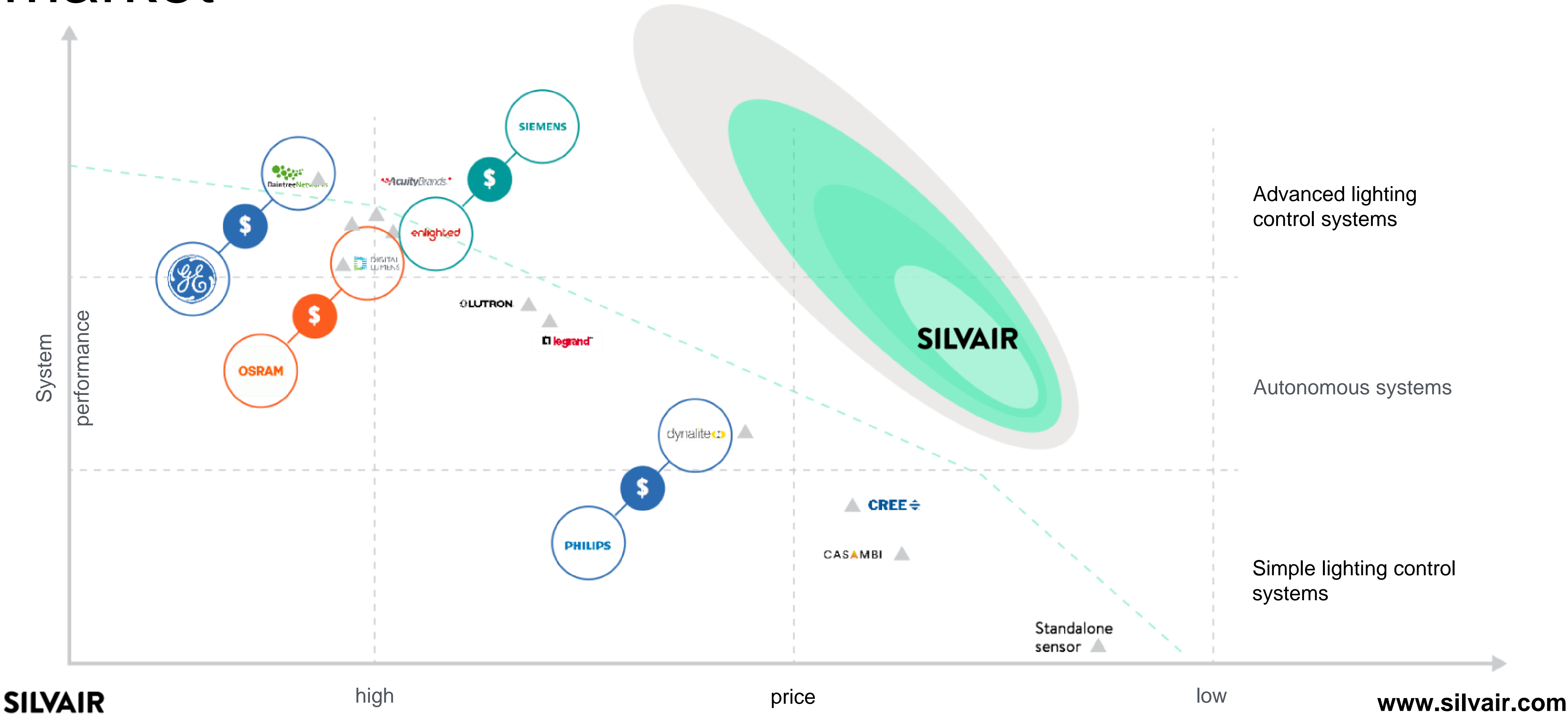
Global value of smart lighting control  
technology market in 2018 - 2026



# Enormous space on the lighting control market for development



# Current status of lighting control technology market



# Bet on a strong and secure technology standard



At the core of Silvair's solution lies Bluetooth mesh – a global wireless networking standard which expands the capabilities of the Bluetooth radio communication to serve many smart building applications and overcome the existing challenges.



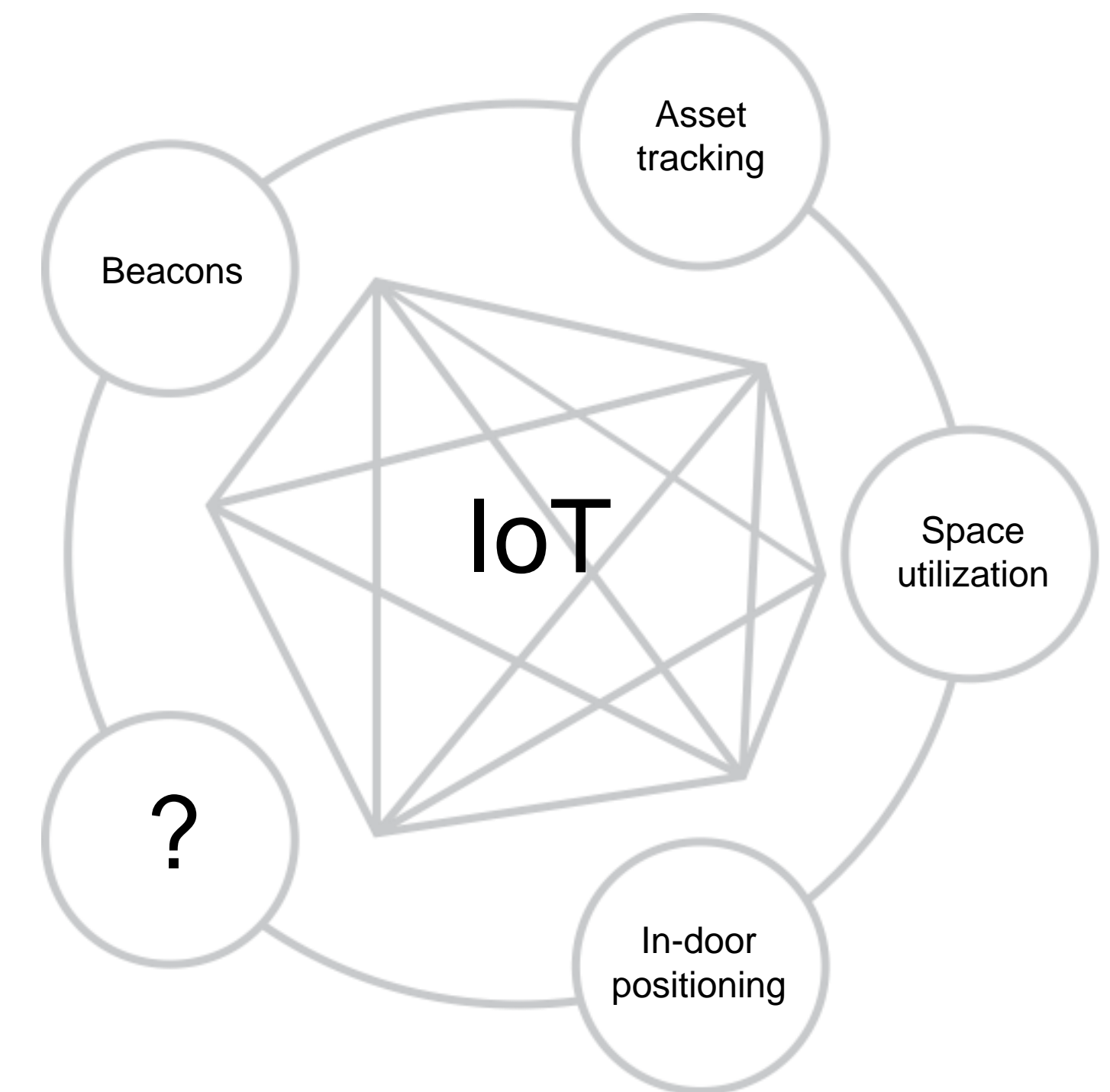
# Revolutionary communication wireless solutions where standard is fundamental



http



3G



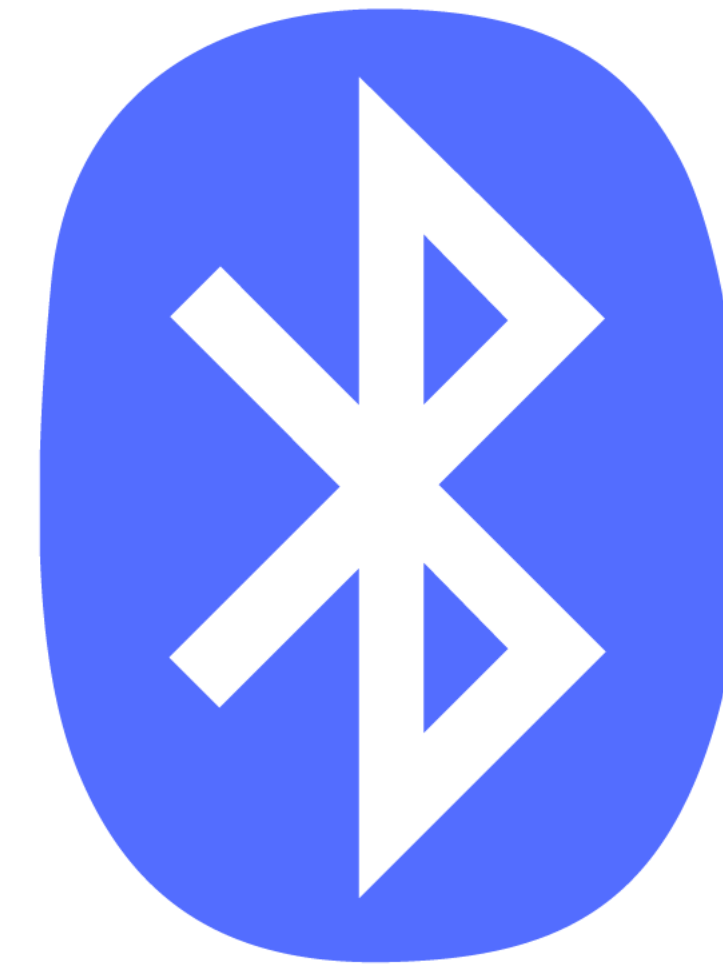
Bluetooth Mesh

# Bluetooth – standard with a global reach

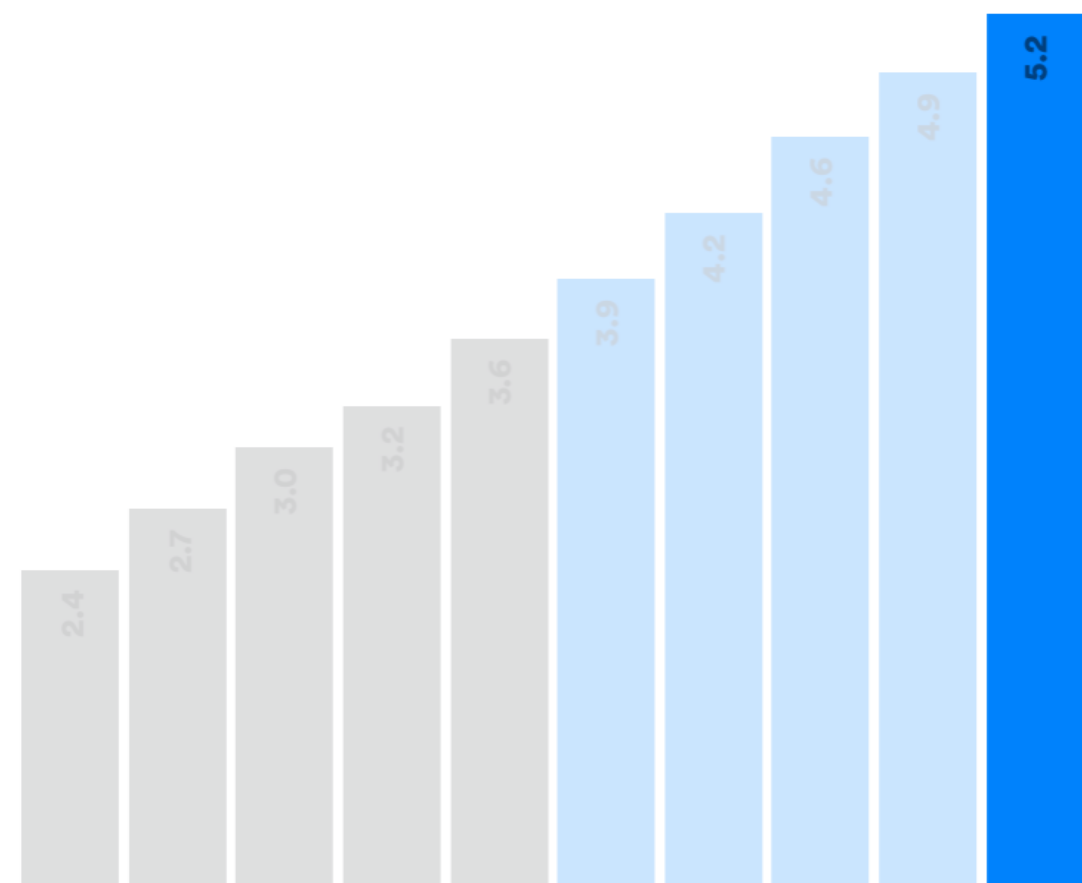
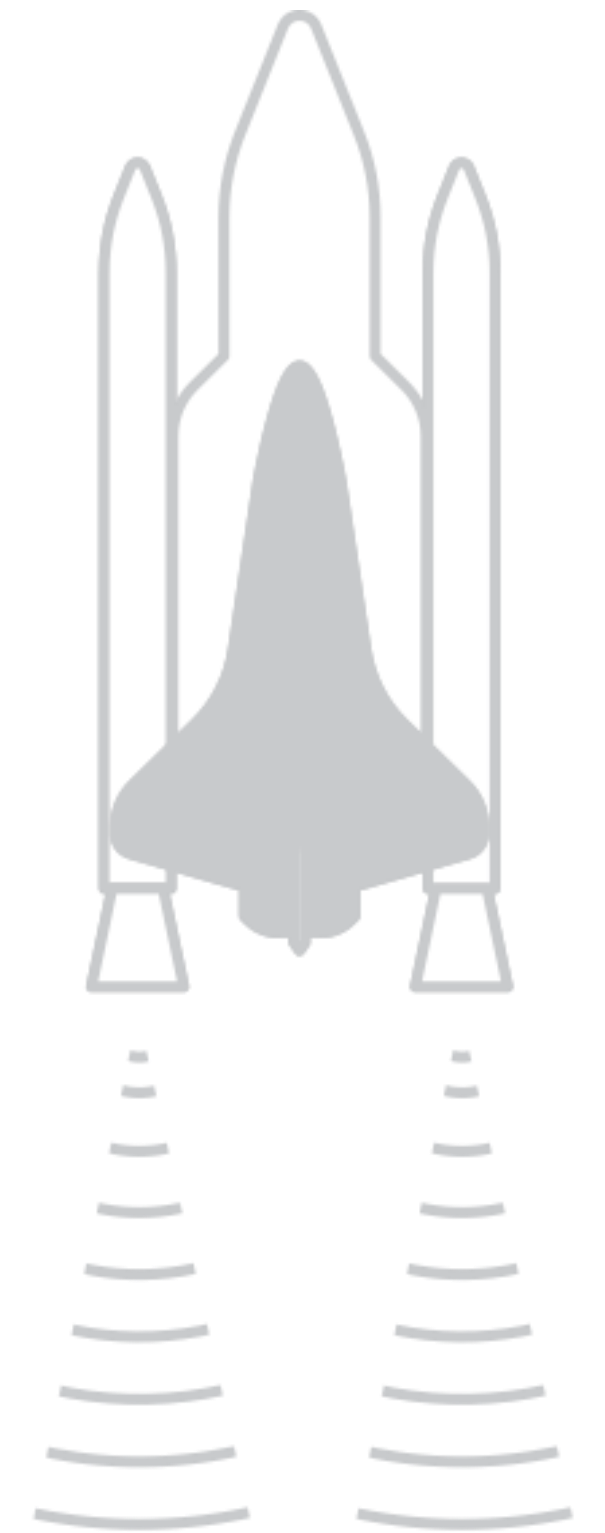


33,000

Bluetooth SIG members



the fastest growing  
wireless standard



520M

Bluetooth device shipments  
in 2022r.

Worldwide brand  
recognition

# Why Bluetooth mesh?



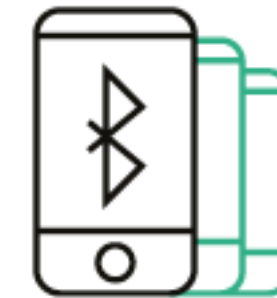
the fastest low-power communication



the most advanced encryption standards as well as the cutting-edge device authentication



scalability to thousands of devices

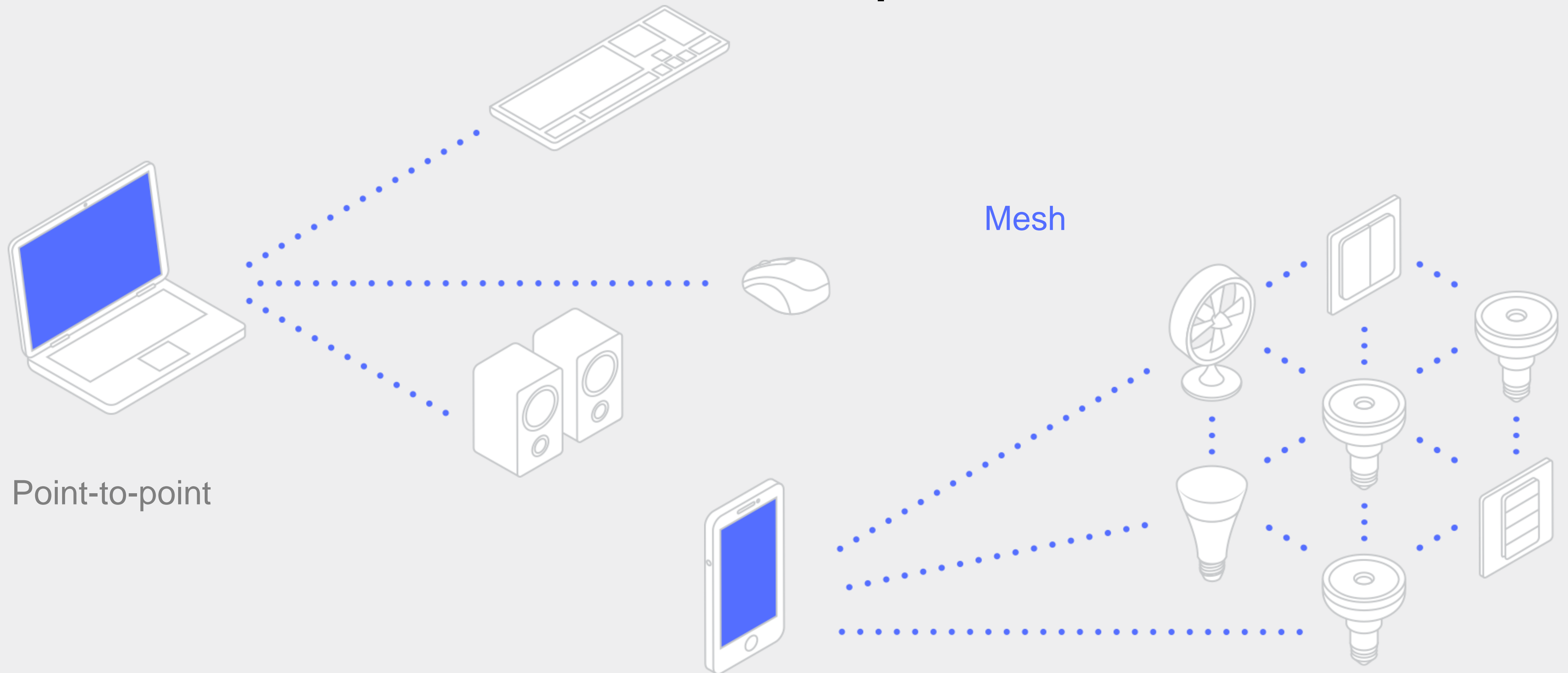


compatibility with an enormous installed base of devices (smartphones & tablets – both with Bluetooth 4.0 and Bluetooth 5)



no single point of failure (no central device)

# Bluetooth – reliable technology as a source of data with unusual potential



# Bluetooth recognition and support

We've been actively involved in building the architecture for Bluetooth's standardized mesh networking capability.

For the past 3 years we've received many Member Awards from Bluetooth SIG (i.a. for outstanding technical contribution).

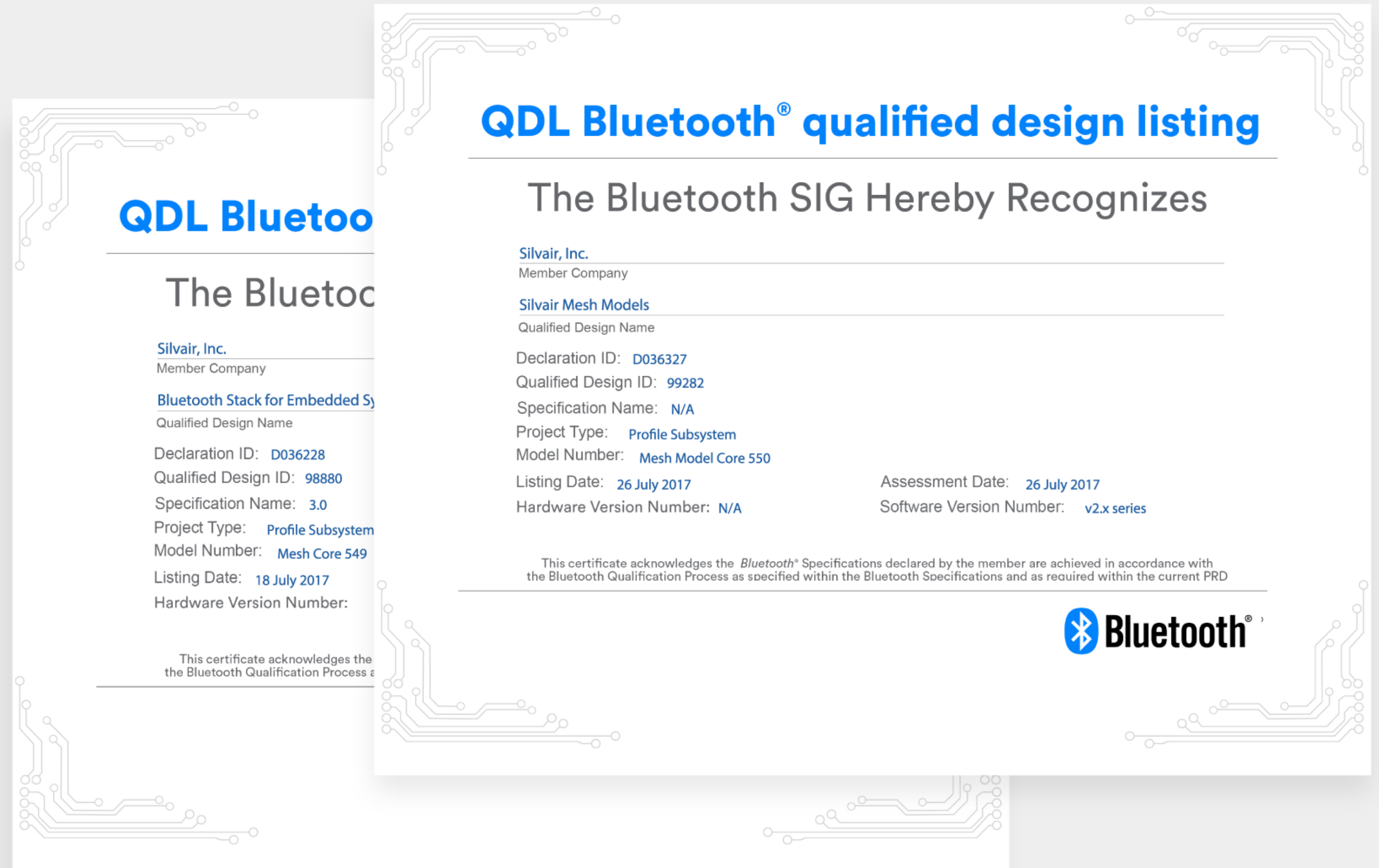
We are the world's first company offering firmware solutions for lighting that are officially qualified by the Bluetooth SIG.

We've been presenting our technology at special Bluetooth booths during the most important industry events (Barcelona, Bregenz, London, Santa Clara).



# Bluetooth mesh is here

- Adopted in July 2017
- Supported by leading chipmakers
- first wave of devices on its way to the market
- Mesh Model Specification focused heavily on lighting applications
- Szymon Slupik CTO of Silvair, also a Chairman of the Bluetooth Mesh Working Group at Bluetooth SIG



The image shows two overlapping Bluetooth SIG QDL (Qualified Design Listing) certificates for Silvair, Inc. The certificates are white with blue and grey text and circuit-like decorative borders. The top certificate is for 'Silvair Mesh Models' and the bottom one is for 'Bluetooth Stack for Embedded Systems'. Both certificates list technical details such as Declaration ID, Qualified Design ID, Specification Name, Project Type, Model Number, Listing Date, and Hardware/Software Version Numbers. The Bluetooth SIG logo is visible in the bottom right corner of the certificates.

**QDL Bluetooth® qualified design listing**

The Bluetooth SIG Hereby Recognizes

**Silvair, Inc.**  
Member Company

**Silvair Mesh Models**  
Qualified Design Name

Declaration ID: **D036327**  
Qualified Design ID: **99282**  
Specification Name: **N/A**  
Project Type: **Profile Subsystem**  
Model Number: **Mesh Model Core 550**  
Listing Date: **26 July 2017**  
Hardware Version Number: **N/A**

Assessment Date: **26 July 2017**  
Software Version Number: **v2.x series**

This certificate acknowledges the *Bluetooth®* Specifications declared by the member are achieved in accordance with the Bluetooth Qualification Process as specified within the Bluetooth Specifications and as required within the current PRD

**Bluetooth®**

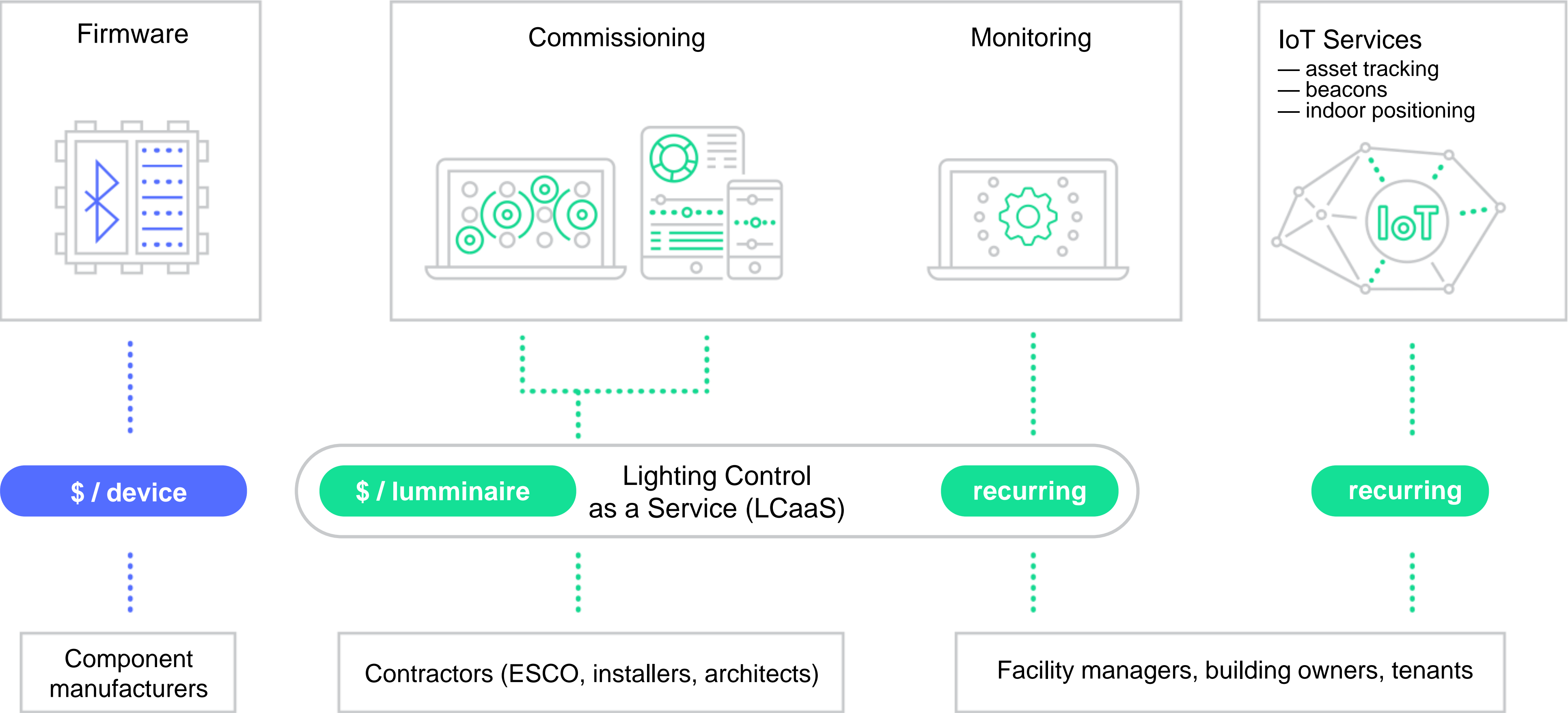
**Silvair, Inc.**  
Member Company

**Bluetooth Stack for Embedded Systems**  
Qualified Design Name

Declaration ID: **D036228**  
Qualified Design ID: **98880**  
Specification Name: **3.0**  
Project Type: **Profile Subsystem**  
Model Number: **Mesh Core 549**  
Listing Date: **18 July 2017**  
Hardware Version Number:

This certificate acknowledges the *Bluetooth®* Specifications declared by the member are achieved in accordance with the Bluetooth Qualification Process as specified within the Bluetooth Specifications and as required within the current PRD

# Our offering - B2B software

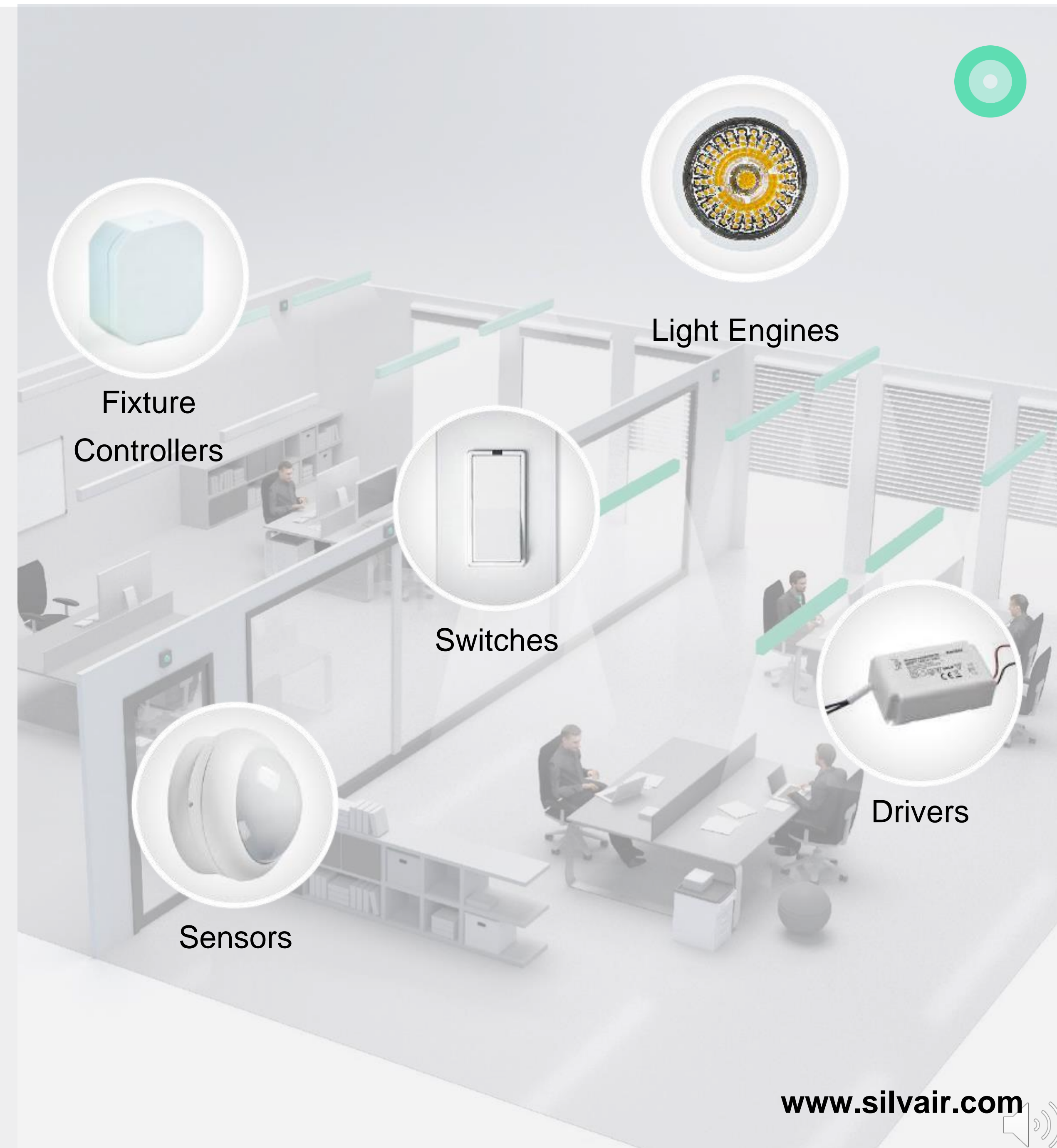


# Silvair Firmware

Silvair Firmware allows to easily incorporate the Bluetooth mesh standard into the products so they could be used for creating large-scale wireless smart lighting networks.

Our Firmware is ready for plug-and-play integration with a variety of LED lighting and sensor products, including:

- sensors / multisensors
- LED drivers
- light engines
- dimming switches
- fixture controllers
- sensor-controllers



# Types of components



# Available components



0-10V Bluetooth controller  
Wally driver



DG557 Bluetooth mesh to PWM  
DG558 Bluetooth mesh to DALI  
DG559 Bluetooth mesh to 0-10V



Draco5 LED driver with Bluetooth Mesh



Murata's Fixture-Integrated  
Sensor Controller



Ceiling High Bay (Narrow) PIR  
Occupancy Detector & Photocell

IP66 Rated Ceiling High Bay PIR  
Occupancy Detector & Photocell

Ceiling High Bay (Spot) PIR  
Occupancy Detector & Photocell

Passive PIR Occupancy Detector &  
Photocell Module

Ceiling High Bay (Wide) PIR  
Occupancy Detector & Photocell

IP66 Rated Ceiling High Bay PIR  
Occupancy Detector & Photocell

IP66 Rated Ceiling High Bay (Narrow)  
PIR Occupancy Detector & Photocell

IP66 Rated Ceiling High Bay (Spot)  
PIR Occupancy Detector & Photocell



Microwave Occupancy Dimming  
Sensor

PIR Occupancy Dimming Sensor with  
high bay lens

Fixture Controller EC Mesh 24VDC

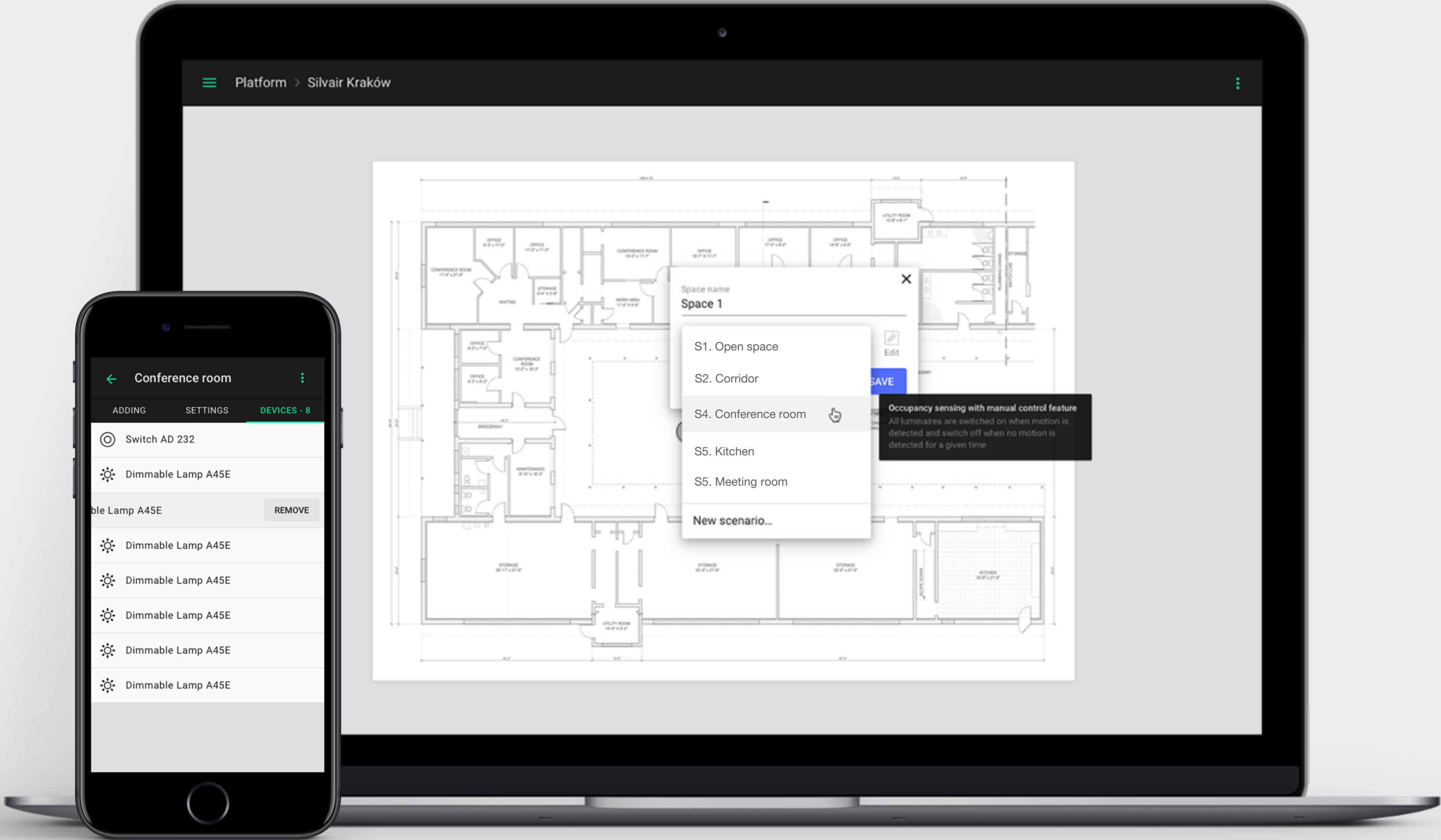
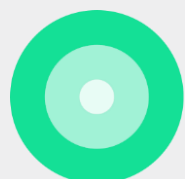
Fixture Controller EC Mesh 48VDC

Fixture Controller Mesh 48VDC

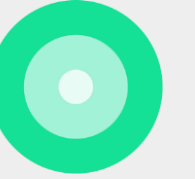
Fixture Controller Mesh 24VDC

25  
announced  
products

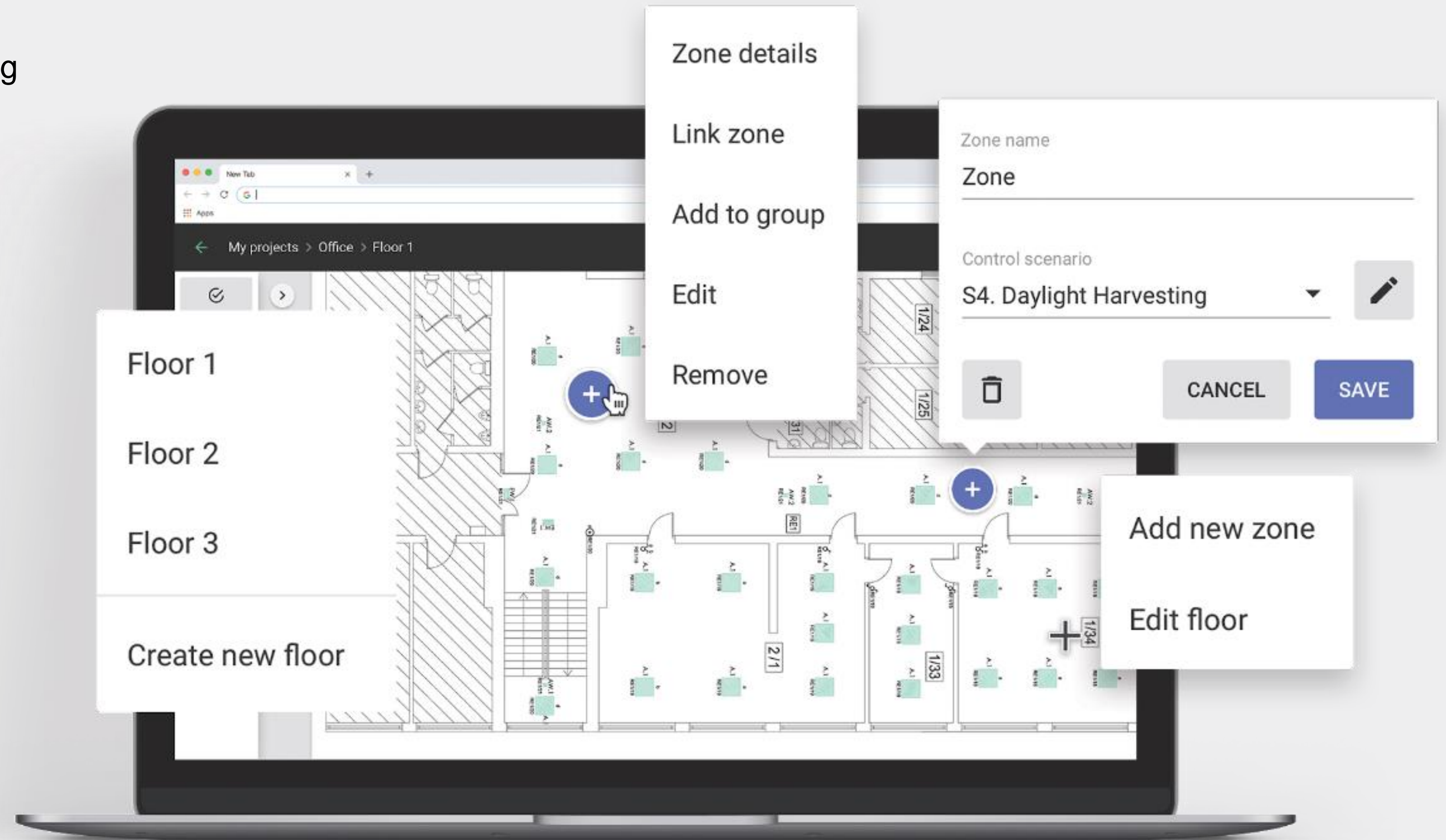
# Silvair Commissioning



# Planning Stage



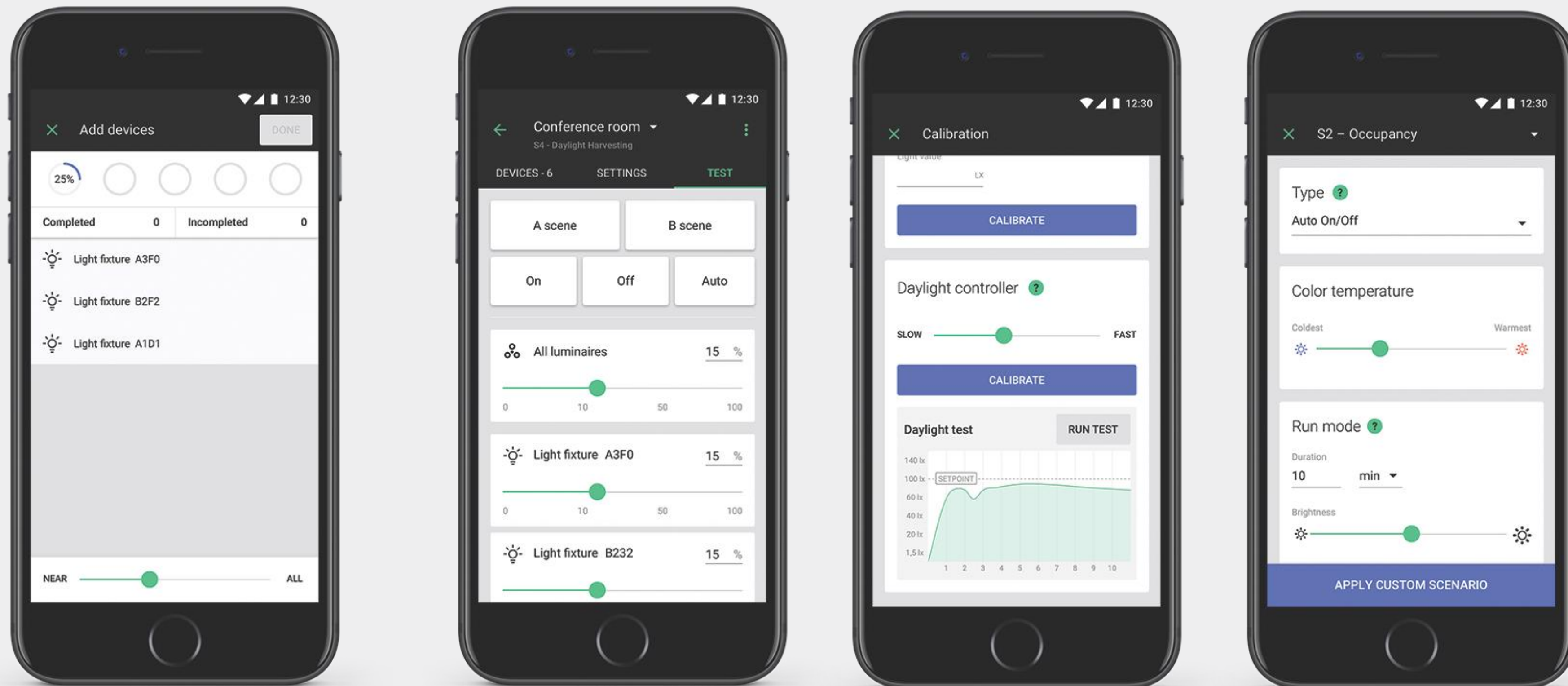
Remote preparation of a retrofit project with the use of a web app. Uploading floor plans, defining individual lighting zones and choosing lighting control scenarios



# Implementation Stage



Adding lighting devices to the Bluetooth mesh network on-site with the use of an iOS app. Customization and calibration of lighting control parameters.



# Current status



Suppliers of lighting systems

ALPHABET  
LEDRA brands

 **Ledeshi**

LumEfficient



ESCO

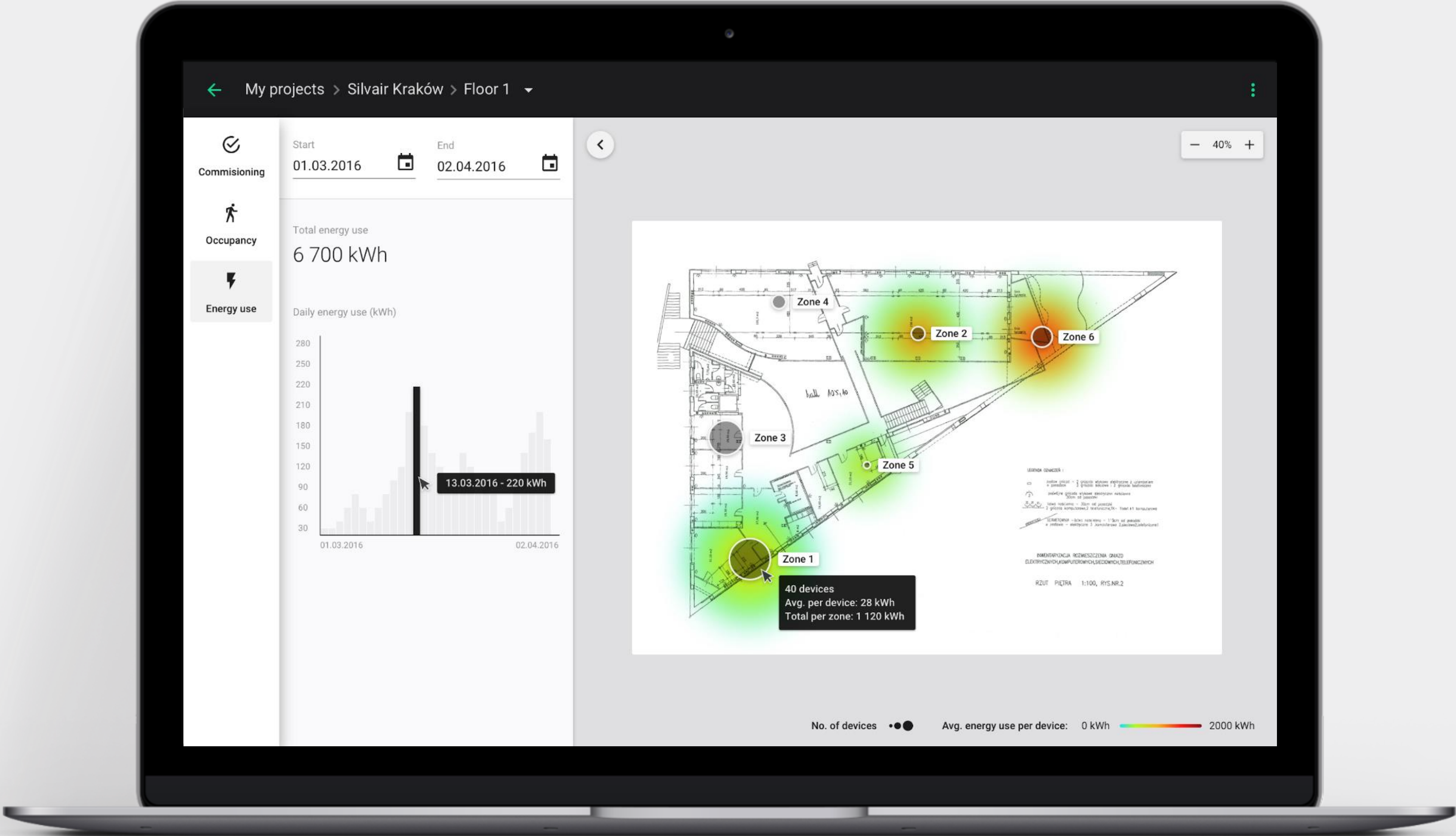
 **demand**  
lighting

**SYLVANIA**



*ESCO – Energy Service Company*

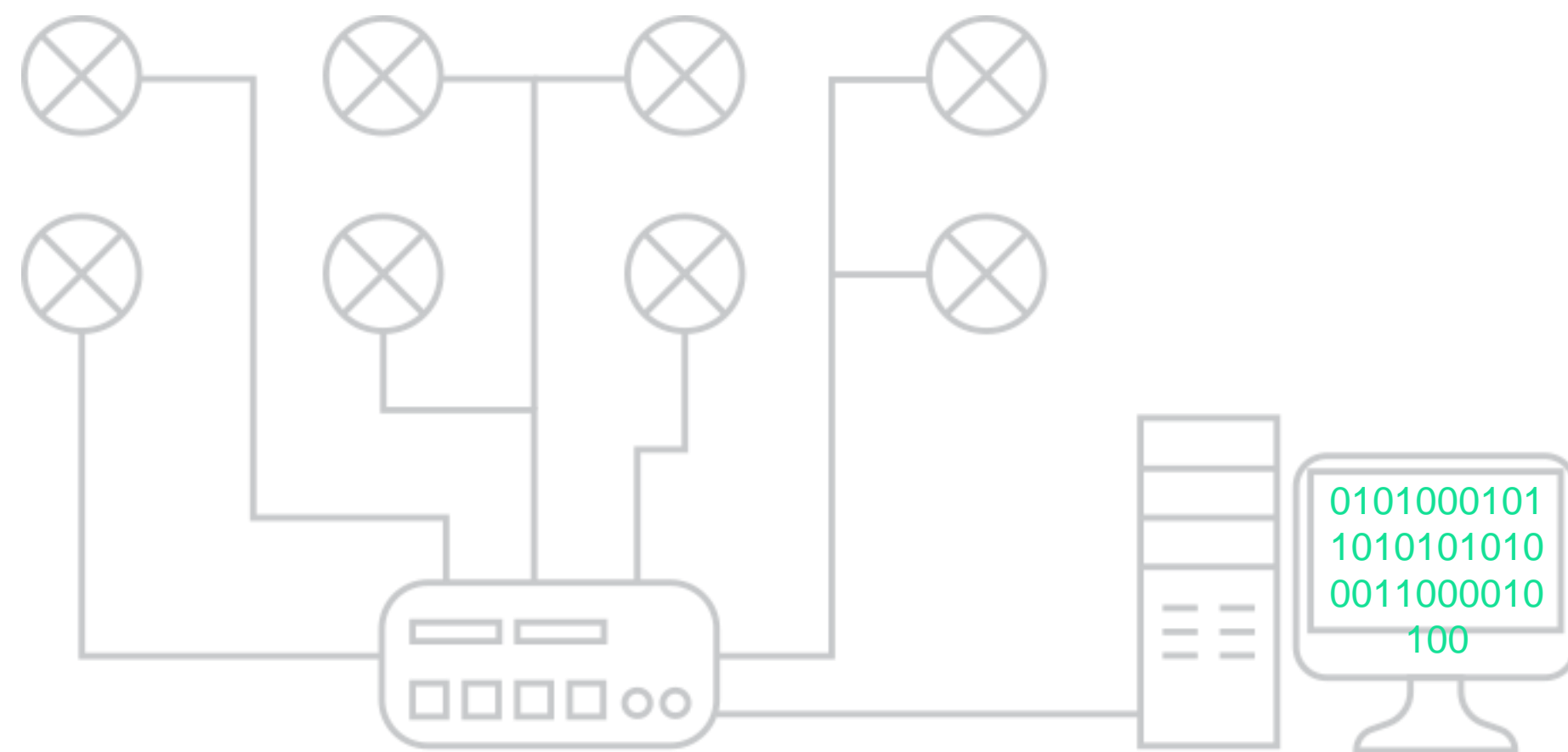
# Silvair Monitoring



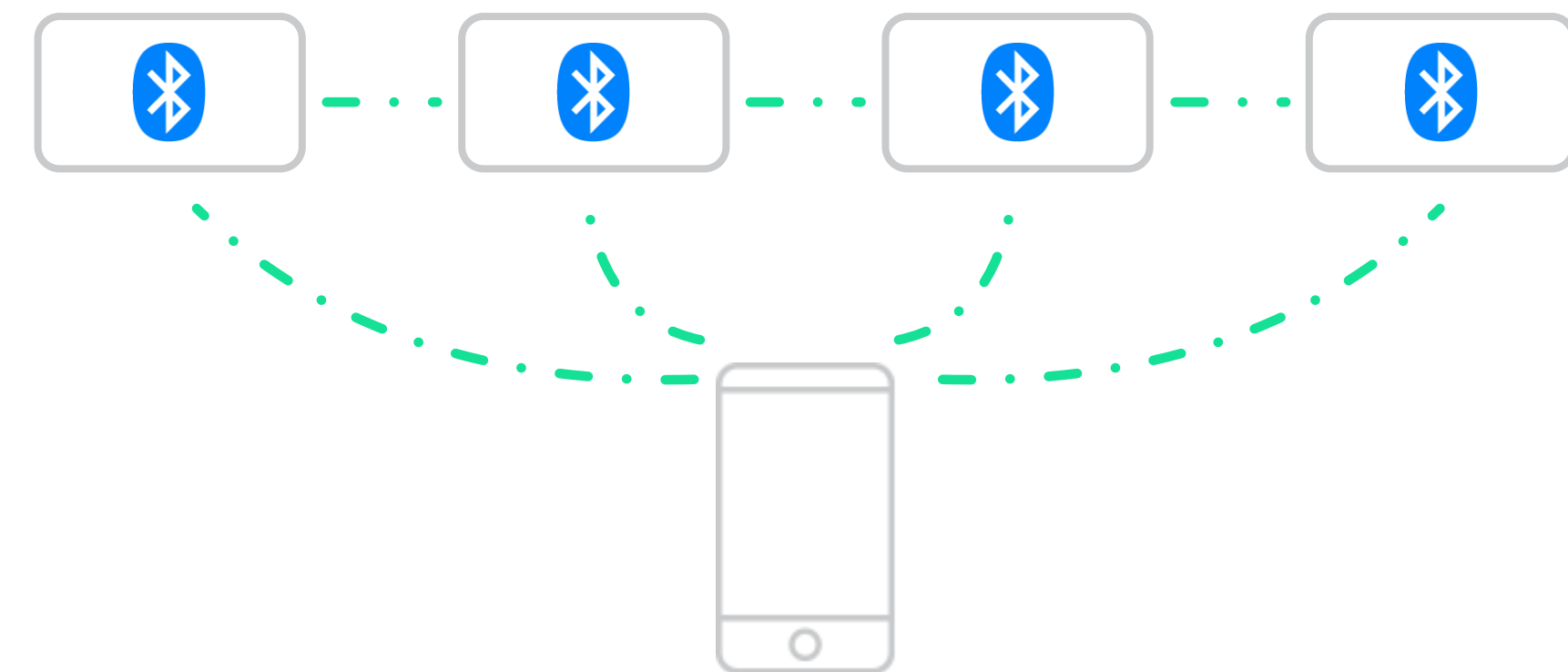
# Global go-to-market strategy (1/3)



Current lighting control systems



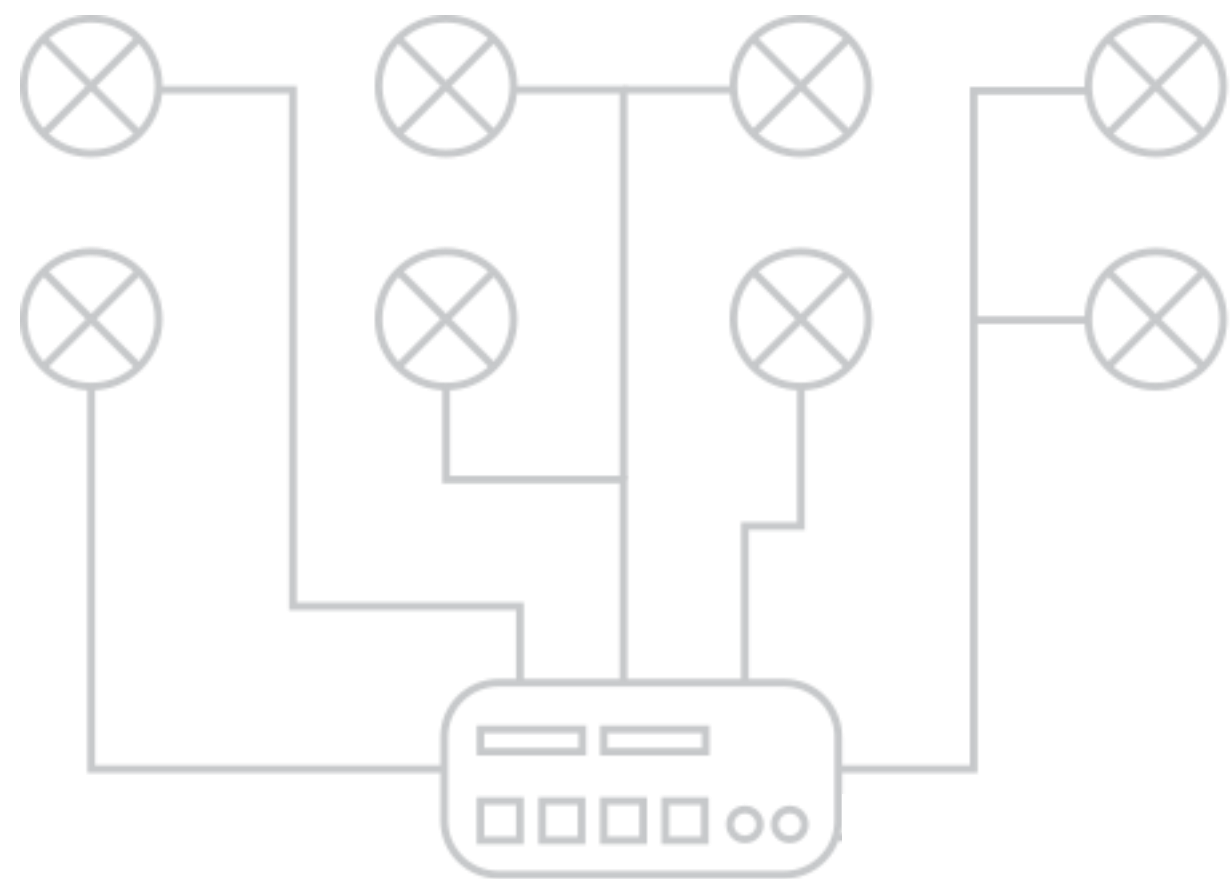
Lighting control system based on Bluetooth Mesh standard



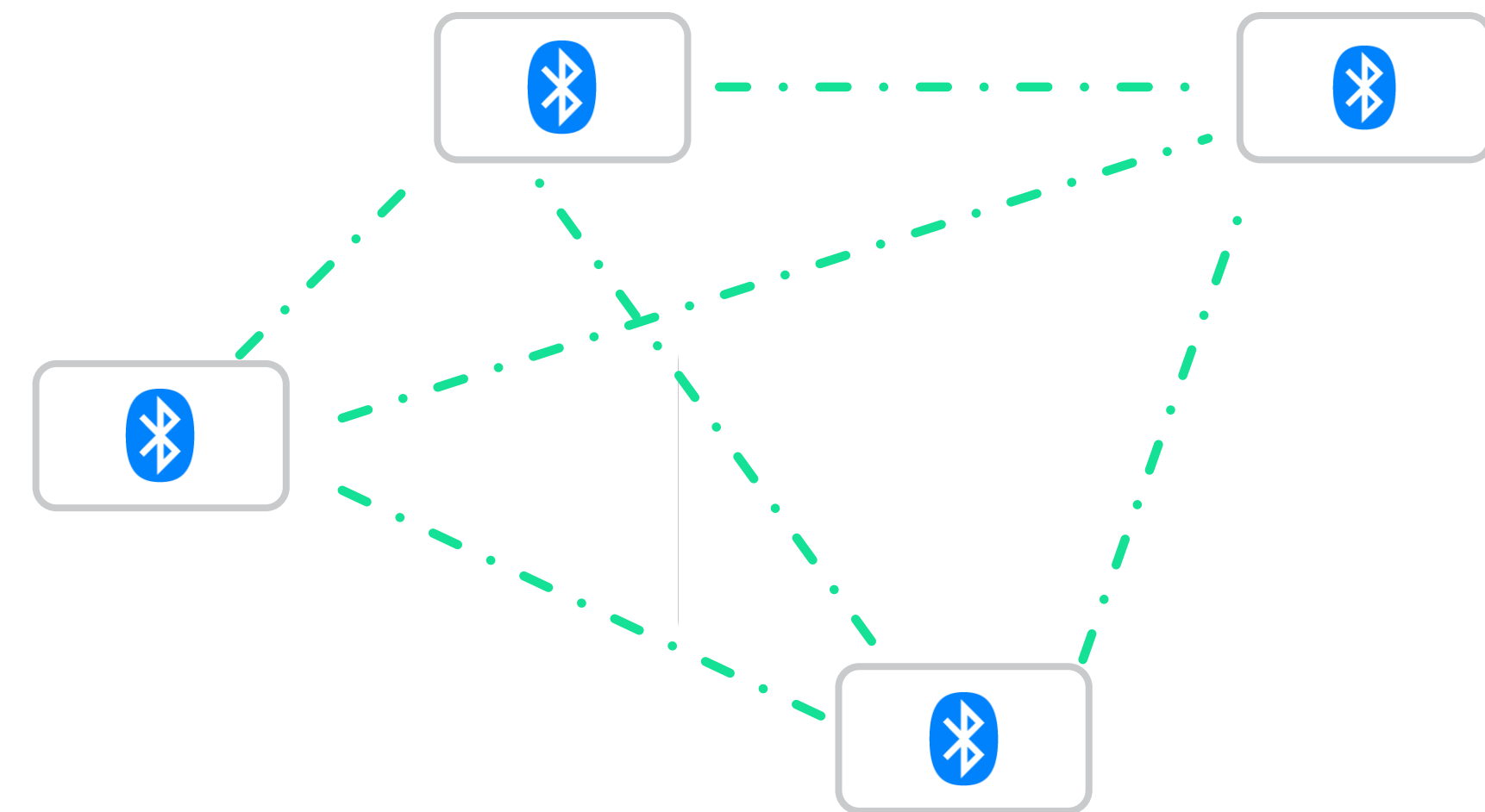
# Global go-to-market strategy (2/3)



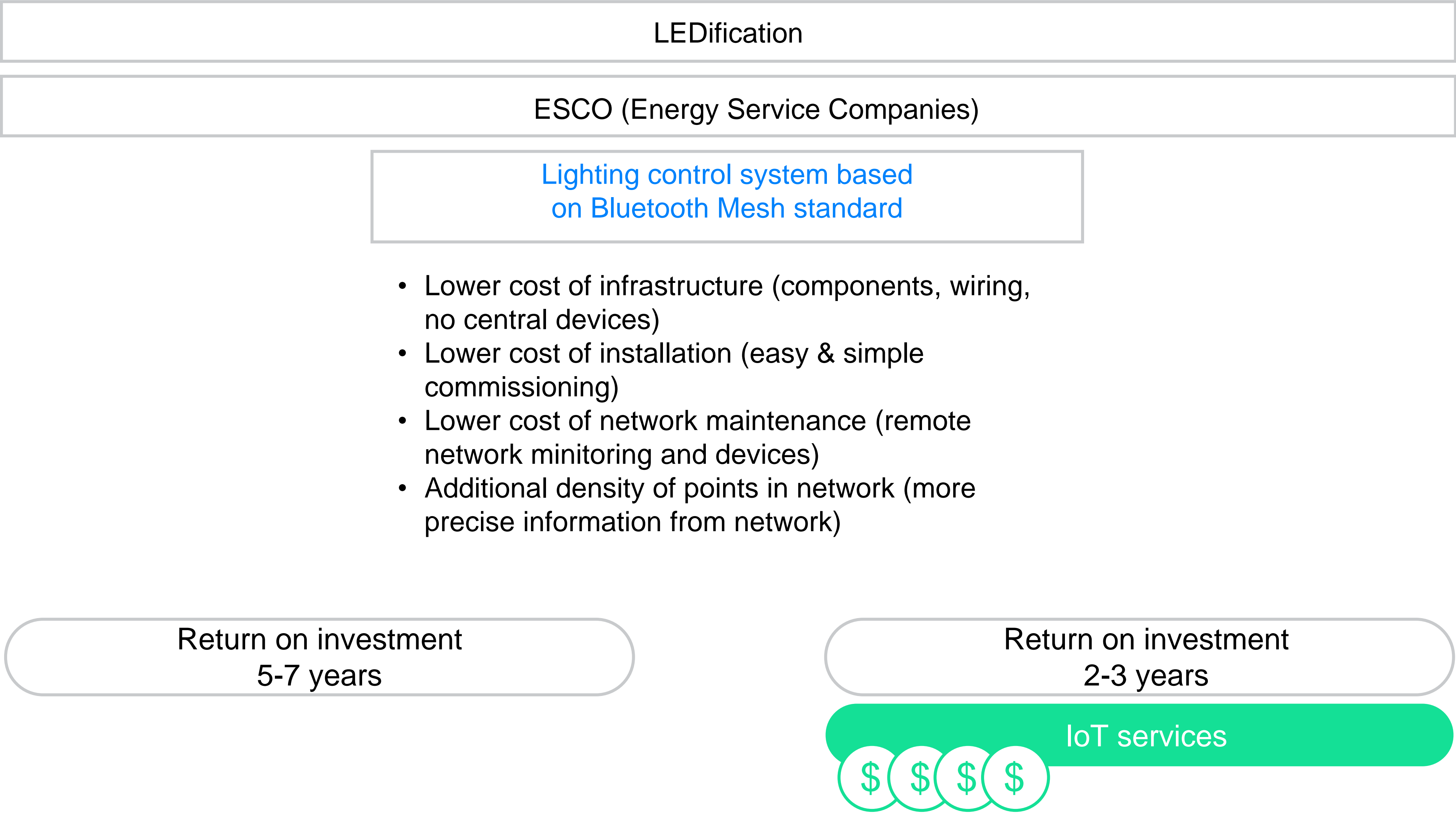
Current lighting control systems



Lighting control system based on Bluetooth Mesh standard



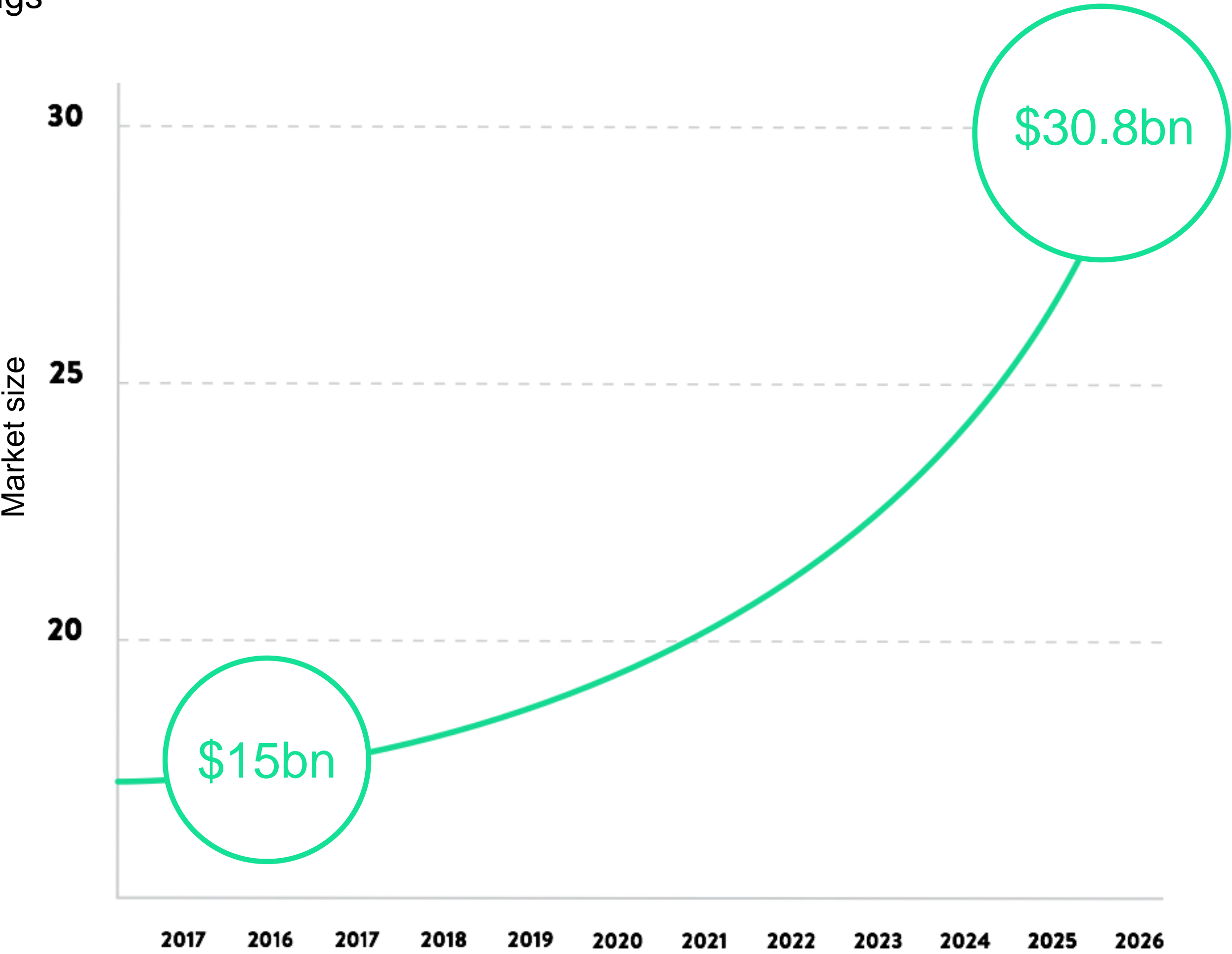
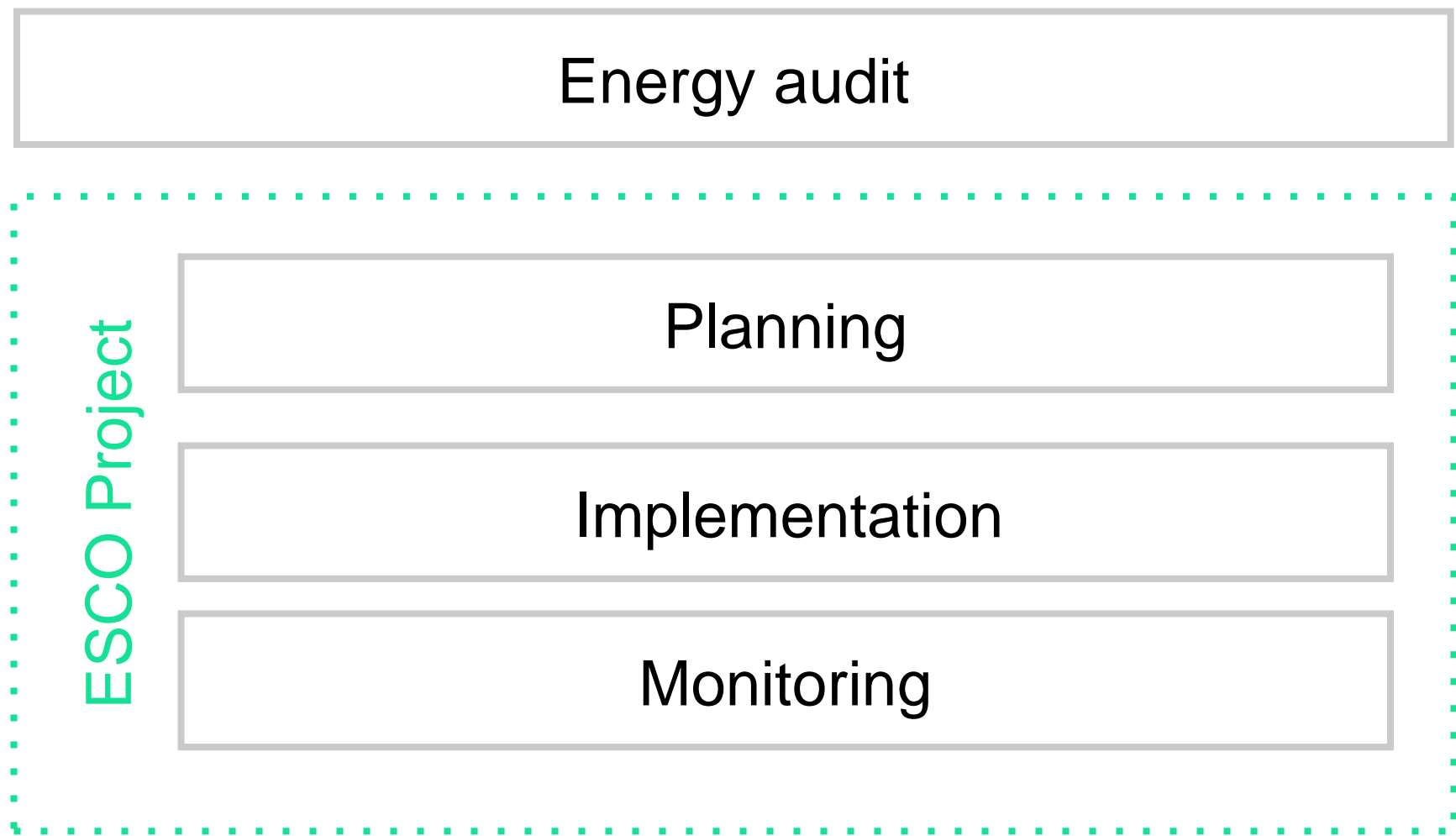
# Global go-to-market strategy (3/3)



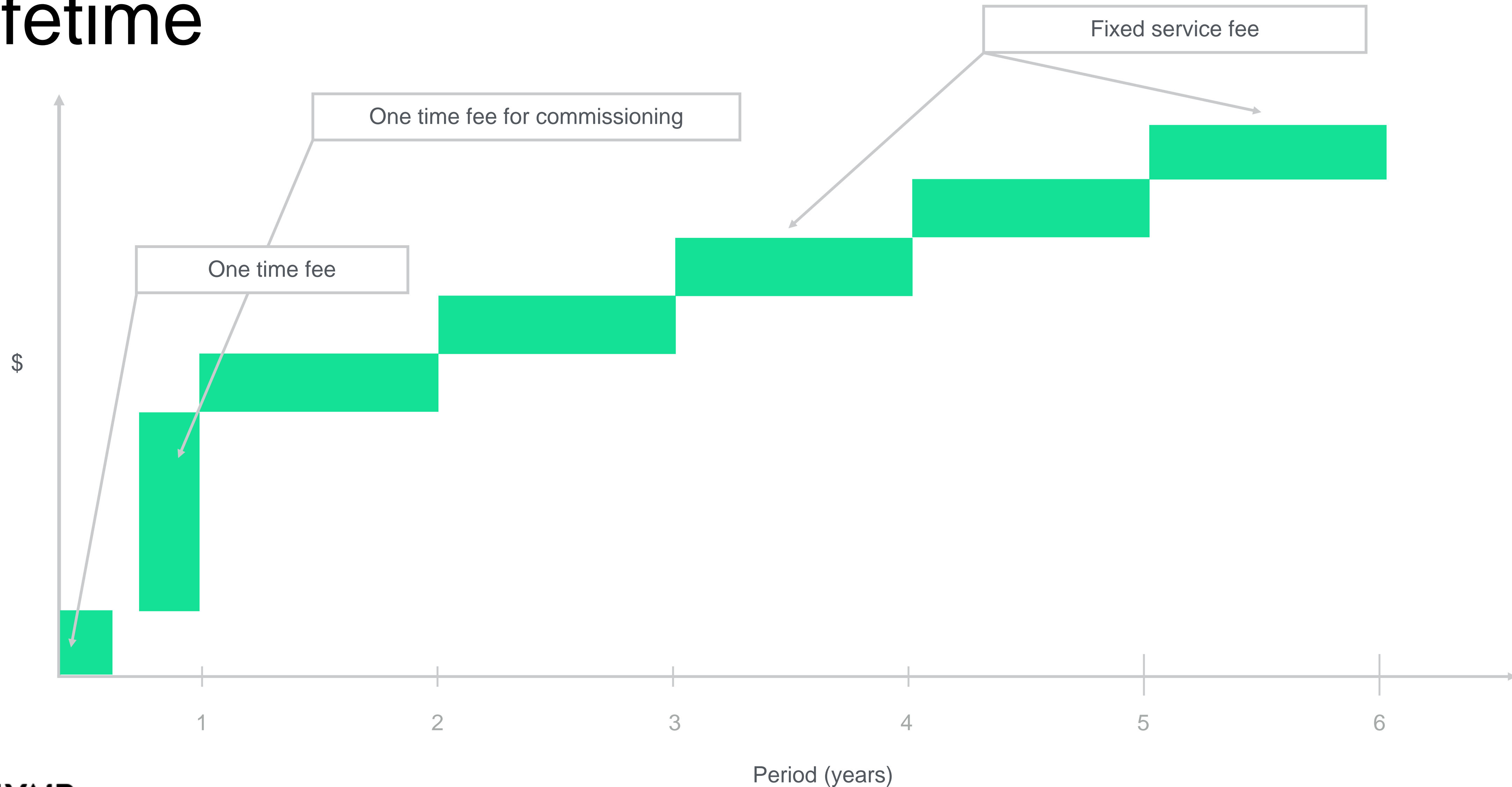
# ESCO – role and potential



ESCO (Energy Service Company) is a company providing a broad range of energy solutions including designs and implementation of energy savings projects.



# Increase in the device value - IoT network lifetime



# Real-life implementations

## Cracow, Poland



# Real-life implementations

## Dallas, Texas

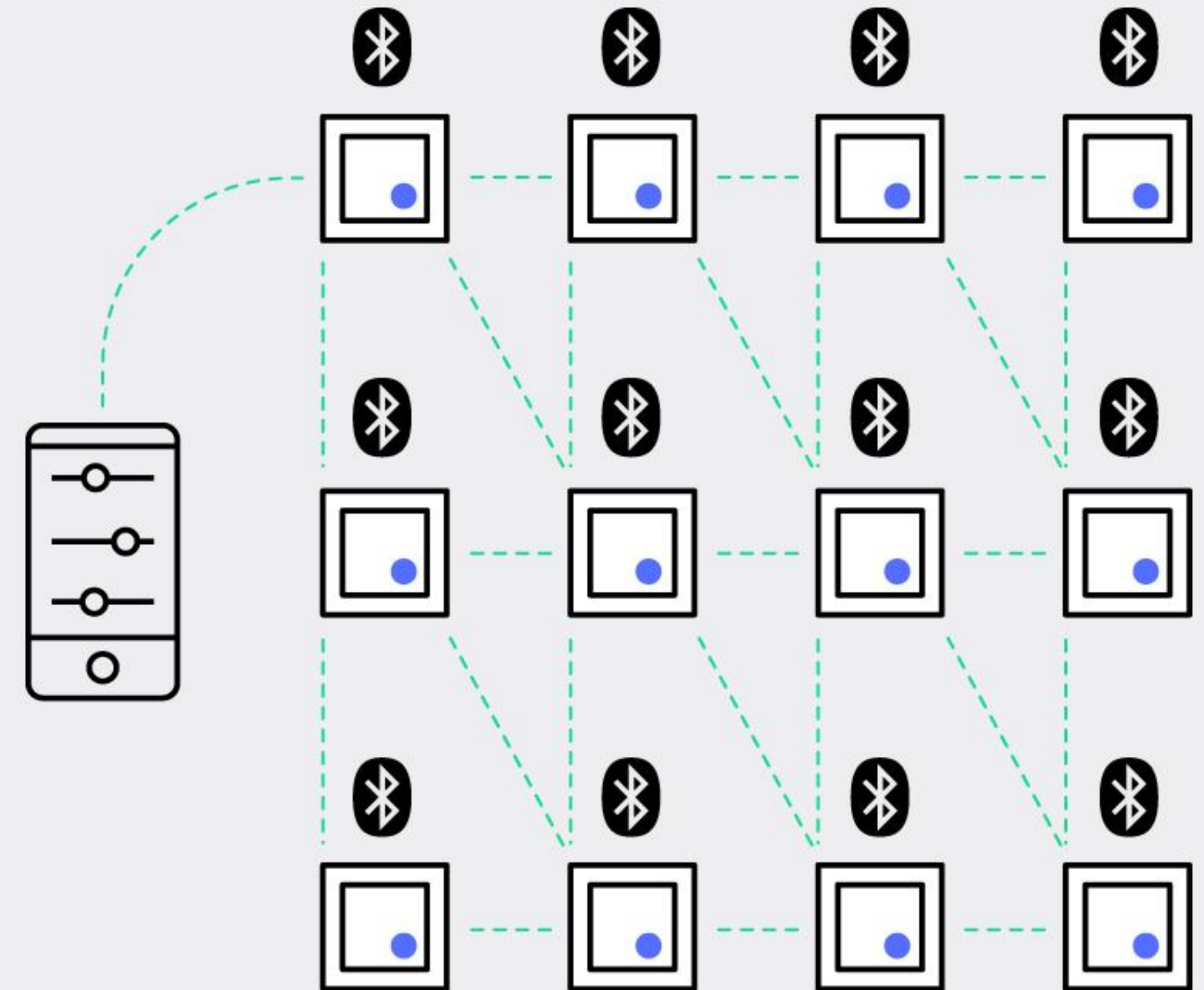


# Reliability



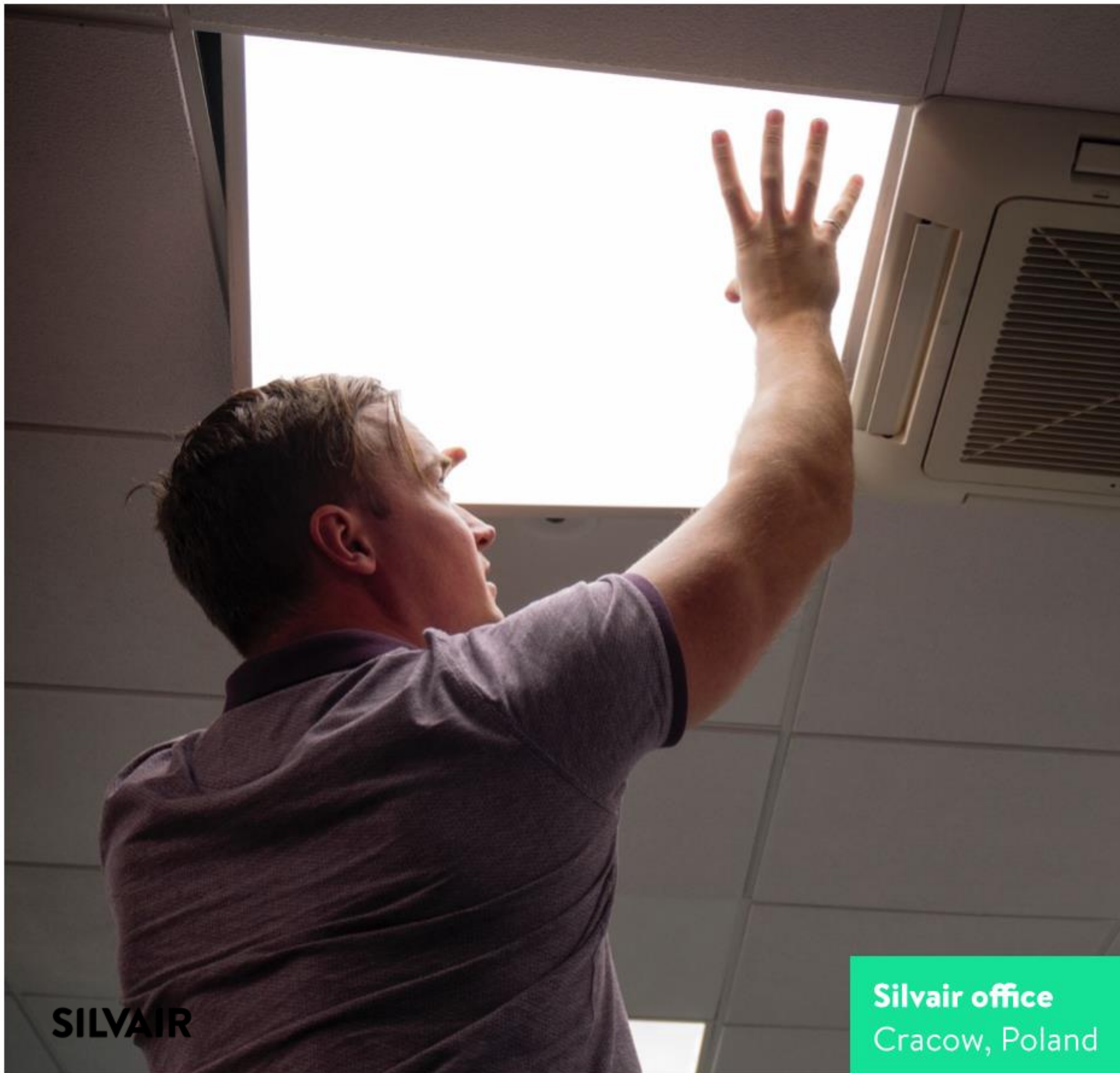
SILVAIR

Murata office  
Dallas, Texas



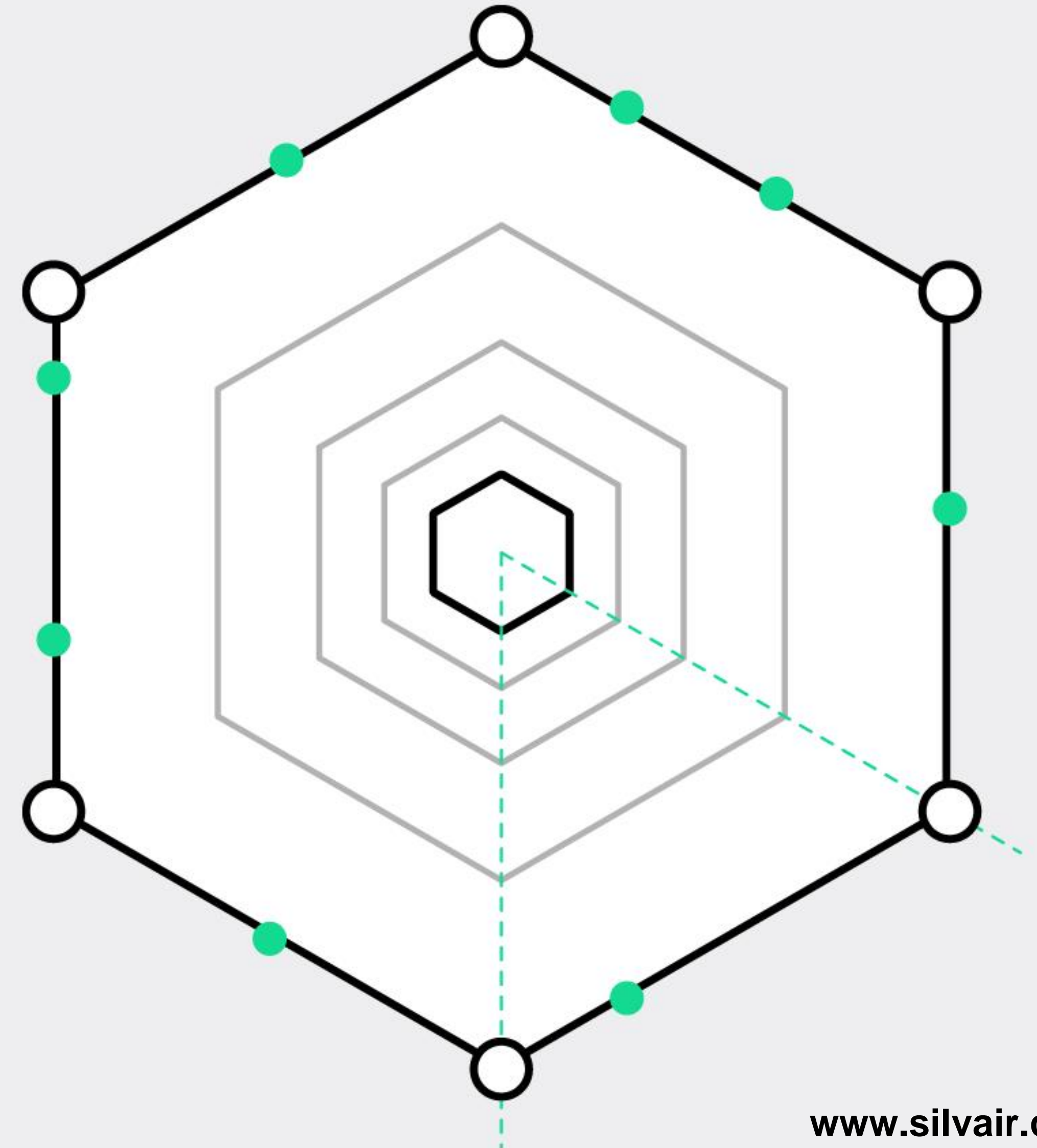
[www.silvair.com](http://www.silvair.com)

# Scalability



**SILVAIR**

**Silvair office**  
Cracow, Poland



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

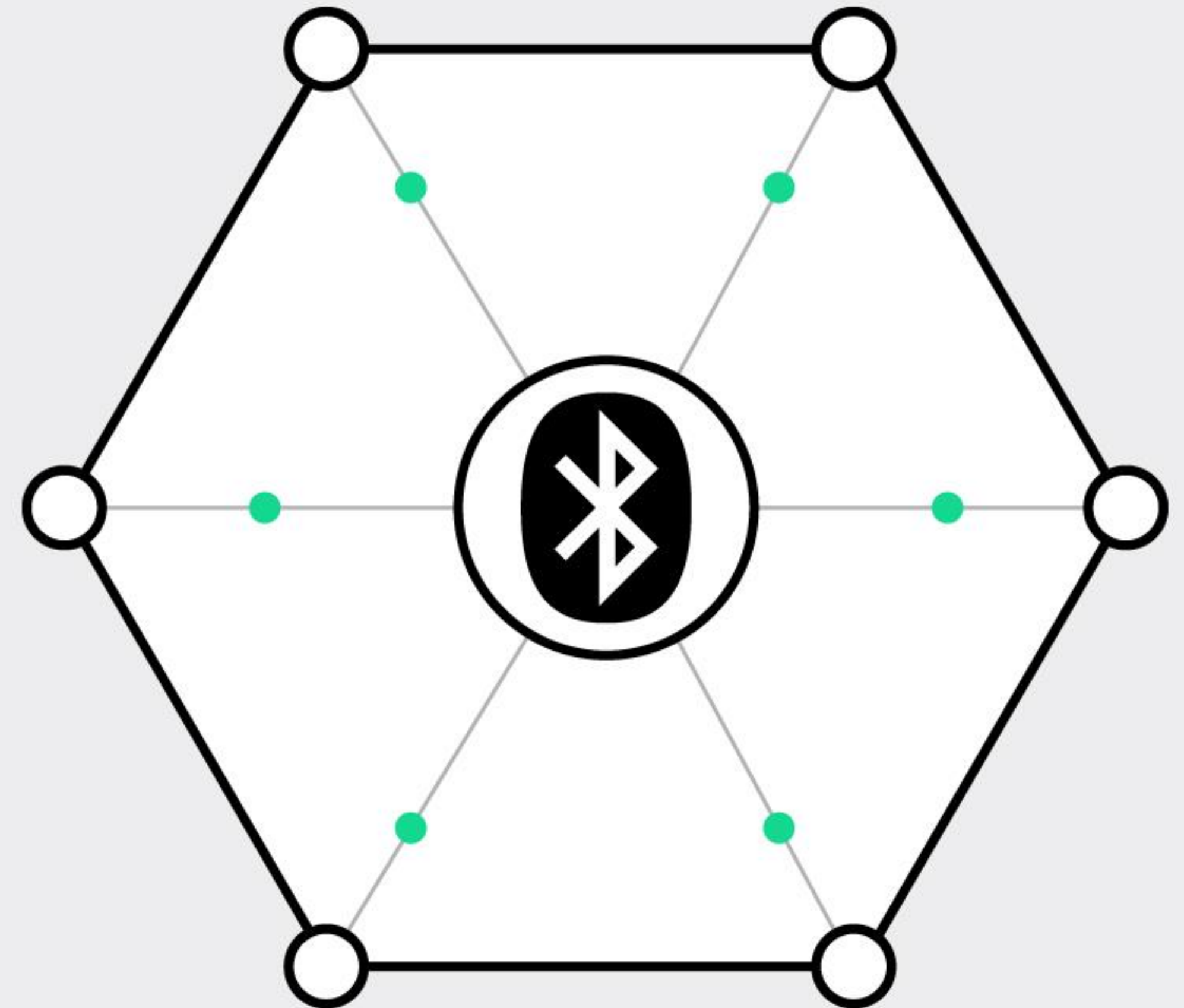


# Interoperability



Murata office  
Dallas, Texas

SILVAIR



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

# Ease of use— simple and affordable commissioning

## Network formation

- no IT expertise required
- no gateway needed
- no need to connect with the building's IT infrastructure

## Device identification / mapping

- RSSI and precise proximity data
- better UX (commissioning app narrowing down the list of visible devices)
- instant mapping of devices on a floor plan

## Logic configuration

- ICN simplifies and shortens the process, while solving the challenge of device addressing
- device replacement doesn't require network reconfiguration

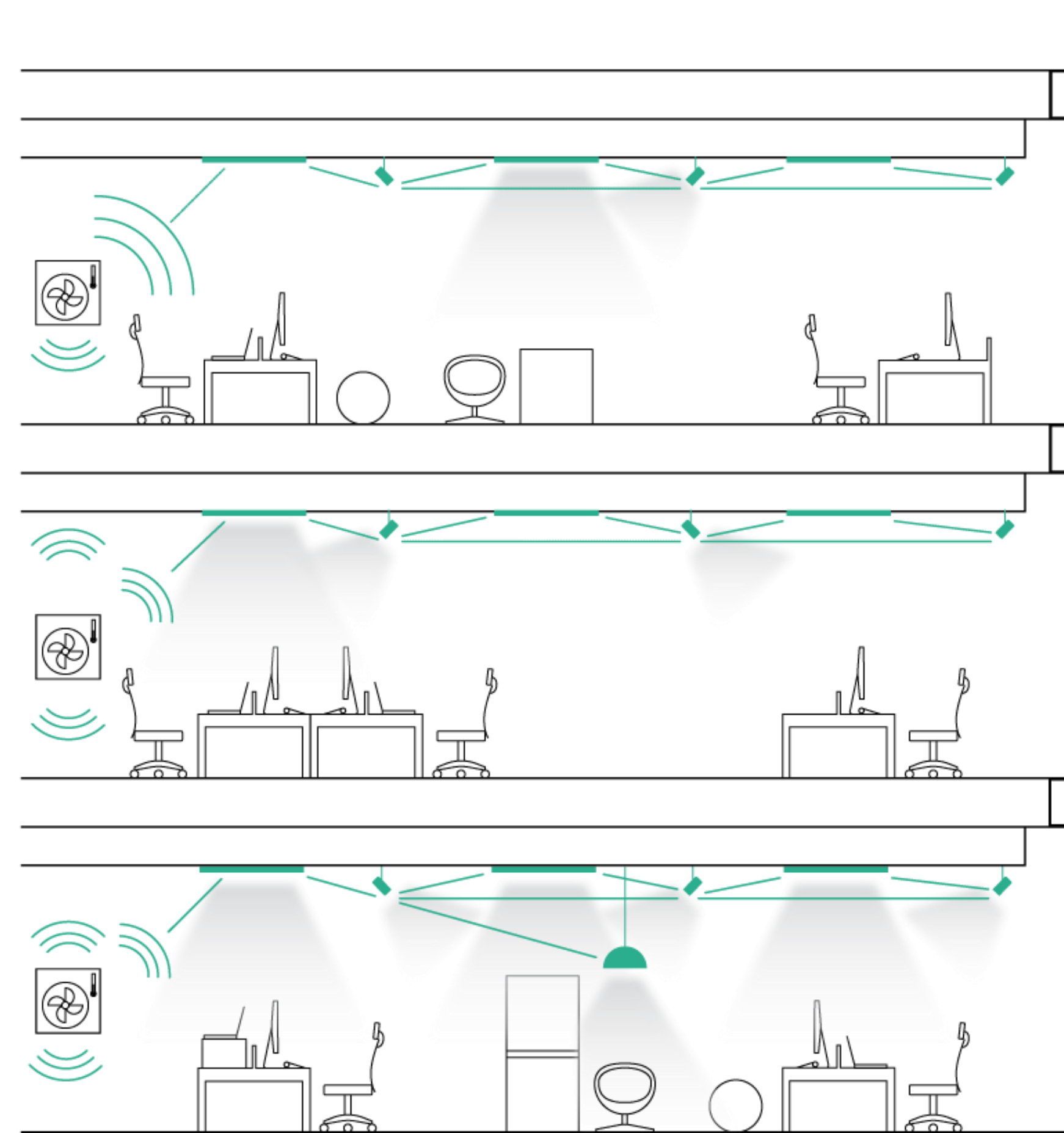
**SILVAIR**



# From smart lighting to smart building

## Key benefits

- improved quality of lighting
- lower operating and maintenance costs
- reduced energy consumption
- facilitated compliance with energy codes
- enhanced well-being of occupants
- new possibilities for optimizing workflow





**Thanks!**

# Silvair on the Warsaw Stock Exchange



## Shareholder structure

Shareholders having above 5% of votes on GM	Number of shares	% of equity	Number of votes on GM	Percentage of votes on GM
Szymon Słupik	1,884,711	16.56%	3,529,871	21.82%
Rafał Han	1,296,441	11.39%	2,928,441	18.10%
Adam Gembala	1,018,760	8.95%	2,145,520	13.26%
VENTURE FIZ with other funds under management of the Trigon TFI	2,213,781	19.45%	2,213,781	13.70%
Other shareholders	4,966,727	43.64%	5,362,807	33.15%
<b>TOTAL</b>	<b>11,380,420</b>	<b>100%</b>	<b>16,180,420</b>	<b>100%</b>

## Company data:

Company name: Silvair, Inc.

Short name: SILVAIR-REGS

Ticker: SVRS

ISIN: USU827061099

Listed from: 07.2018

Number of shares: 11,380,420

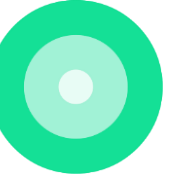
Free float: 43.65%

Sector: Software

Indices: WIG-IT, WIG



# Goals from the IPO sustained



**Silvair, Inc. issued new shares in an initial public offering at the Warsaw Stock Exchange (WSE) raising PLN 20.1 million (approx. \$5.5 million) from institutional and private investors.**

**New funds are obtained for the further development of the Comapny's wireless lighting control solution in key areas:**

- Spendings for Research & Development
- Marketing activities: focused on the US and Western Europe
- Business acivities: financing distribution channels, activities directed on acquiring new partners and building sales department.

# Patents



## **Patents received in the USPTO\*:**

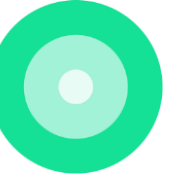
- „Peer-to-peer building automation system without knowledge being required of network topology”
- „System and method for administering licenses stored by a product unit, and administration of said unit in the field”
- „Automation and control system with Context awareness”
- „Automation System Comprising a Monitoring Device and Methods Therefor”
- „System and method for administering licenses stored in an electronic module, and product unit comprising said module”
- „System, method and apparatus for resupplying fast moving consumable goods associated with appliances”

## **3 international patent applications at the National Stage in the EPO:**

- „System And Method For Administering Licenses Stored In An Electronic Module, And Product Unit Comprising Said Module”
- “System And Method For Administering Licenses Stored By A Product Unit, And Administration Of Said Unit In The Field”
- “Automation System Comprising A Monitoring Device And Methods Therefor”

*\*18 patent applications to the United States Patent and Trademark Office (USPTO)*

# Our partners (1/4)



**Fulham** is a leading global supplier of intelligent, socially-conscious sustainable commercial lighting components, sub-systems, and electronics for use in commercial general lighting, parking structure, signage, horticultural, UV and other applications. The company develops and manufactures a variety of award-winning LED and emergency products, as well as legacy products across multiple lighting platforms, and sells its lighting solutions worldwide through original equipment manufacturers (OEMs) and electrical equipment distribution channels.



INNOVATOR IN ELECTRONICS

**Murata** is one of the global leaders in the design, manufacture and supply of advanced electronic components and modules used in various applications. Founded in 1944, the Japanese company has a globally known brand, more than 70 thousand employees and 50+ sales offices worldwide. Using its decades of RF and sensor engineering experience, Murata offers sensor/dimming units designed for commercial lighting fixtures.

# Our partners (2/4)



For more than 30 years, **McWong International** has combined the best of East and West in leading the design and manufacture of high-quality lighting control equipment and related electrical components. Through its respected PacWave™ and Pacific product series, the company has demonstrated an unparalleled mix of innovation, quality and service to a strong and loyal customer base. With state-of-the-art design and manufacturing facilities in both California USA and China, the company offers a comprehensive line of control components for OEMs as well as robust stand-alone solutions for contractors, ESCOs and facility managers seeking to implement energy-saving control solutions.



**Danlers** (Chippenham, UK) is a family owned company with a rich heritage of designing and manufacturing innovative electronic controls. Having 20+ years of experience, its current goal is to develop next generation lighting products for the industry undergoing rapid change due to influx of LED lighting and digital technology.

# Our partners (3/4)

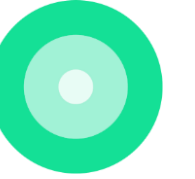


**Alphabet Lighting (LEDRAbands)** is an American manufacturer of innovative, commercial and architectural light fixtures and a brand of parent company LEDRAbands. Bruck, Molto Luce and ALPHABET (formerly WILA USA), offer several categories of commercial, retail, hospitality and residential lighting products. LEDRAbands continues to provide the latest in cutting-edge Bluetooth® control, Intelligent, Human Centric and Color Quality LED technology.



**Demand Lighting** is one of the leading woman owned, US based manufacturer direct supplier of commercial LED lighting solutions in North America. Demand Lighting brings value by cutting out the middleman and selling directly to the end user bypassing the traditional lighting distribution channels. Their solution goes beyond manufacturing LED lights. The company guides customers from start to finish - from analysis, product selection, installation, recycle and rebate capture.

# Our partners (4/4)



**Ledeshi**, established in 1991, specializes in manufacturing LED luminaires with tailor-made integrated driver. With its sophisticated design from the Netherlands, we have received two times of IF design awards. Continuously innovation in respect of both reliability and ease of installation, it has been rewarded by the market.



**LumEfficient**, located in Nashville, began their business in 2010 selling LUXIM's Light Emitting Plasma (LEP). As LED technology continued to improve in efficiency and reliability, LumEfficient gradually began replacing their entire LUXIM brand of LEP luminaires with the Resilient brand of LED Tough Light luminaires. Although LumEfficient products are designed for heavy industrial use, most are sold in the general lighting market because of their competitive price points. LumEfficient has luminaires installed throughout the U.S, as well as India, Russia, Thailand, Germany and the UK.

# Key Bluetooth Mesh competitive advantages



Requirements	Z-Wave	ZigBee	Thread	Wi-Fi	Bluetooth® Mesh
Mesh topology	✓	✓	✓	×	✓
Interoperability	✓	×	?	×	✓
Security	×	?	×	✓	✓
Scalability	×	×	×	✓	✓
Reliability	×	?	✓	✓	✓
Location services	×	×	×	×	✓
Wide range of products	✓	✓	×	✓	✓

# Knowledge sharing

We've been invited to share our knowledge about wireless communication and smart lighting during the most recognizable shows and conferences, such as:

Department of Energy U.S. Conference

IES Annual Conference

Strategies in Light Europe and the USA

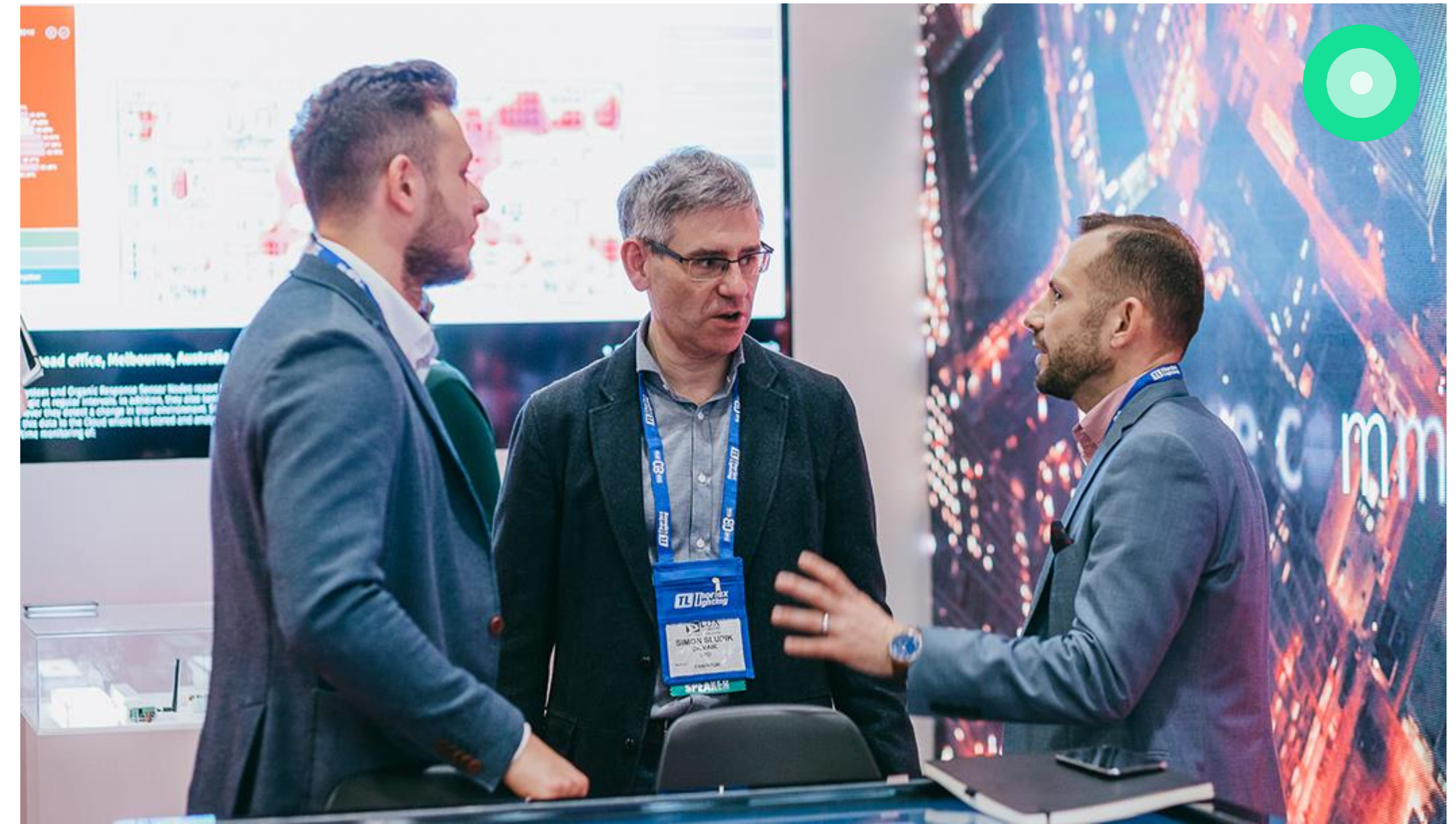
Wireless Congress

Smart Building Conference

LightFair International

Bluetooth World

LED Professional Symposium and Expo



# Education

One of our main goals is to keep all industry stakeholders informed about the Bluetooth mesh technology and its relevance for lighting.

Apart from developing our own set of materials including e-book specials, detailed whitepapers, and series of blog posts, we partner with globally-known magazines and organizations to co-host exclusive webinars and events providing lighting industry professionals with specialized knowledge regarding lighting control systems.

Each of our webinars gathers more than 500 industry specialists and is supported by hundreds of downloads of our ebooks and whitepaper.



# Events



Over the past few years, we took part in some of the most important industry events to explain what the adoption of the Bluetooth mesh standard means for the lighting sector and how we envision the future of smart lighting.

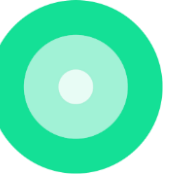
**Strategies in Light.**



**light+building**



# Member of



# Featured in

