



# LumiFree LED Free Lighting New Product Announcement

Japan Display Inc. October 31, 2022



# LumiFree LED Free Lighting New Product Announcement

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- 3 LumiFree Technology & Product Introduction





# METAGROWTH 2026 Growth Strategy

Chairman & CEO  
Scott Callon







# METAGROWTH 2026







# META

**“Comprehensive, Overarching”  
Underscores JDI’s Commitment to  
Transformational Growth**

**Metaverse Also a JDI Growth Driver**





## Core Strategy

**Global No. 1 Technology Leadership to  
Best Serve Customers and Deliver  
PersonalTech For A Better World**

**METAGROWTH in Value Creation**





# JDI's Six Proprietary Growth Drivers







JDI's six proprietary growth drivers are all Global No.1 technologies that provide significant customer value & drastically improve JDI's profitability

Customer Value

## 1 eLEAP (NextGen OLED)

- High brightness, long life, & high resolution while supporting a wide range of shapes & sizes
- Environment positive GreenTech with superior cost performance



## 2 HMO (High Mobility Oxide)

- Backplane technology with ultra-low power consumption, high resolution, & large display size capability
- Foundational technology for G8 & G10 fabs



## 3 Metaverse (Ultra High Resolution)

- Unparalleled sense of reality & immersion
- High yields & outstanding quality







# JDI's Six Proprietary Growth Drivers



JDI's six proprietary growth drivers are all Global No.1 technologies that provide significant customer value & drastically improve JDI's profitability

Customer Value

## 4 AutoTech

- EV-focused, best-in-class integrated cockpit development
- HUD development driving safety improvements



## 5 Rælclear (Transparent Interfaces)

- World's highest transparency
- Social contribution by enabling more interactive & inclusive communication



## 6 New Tech, Products, & Businesses

- Expand applications of JDI proprietary technologies
- New businesses that address important social needs





## LumiFree is the world's first LED Free Lighting technology

Developed by an internal JDI start-up, it is the foundation for a new JDI business built upon JDI's deep expertise in advanced frontplane & backplane display technologies

### 6 New Tech, Products, & Businesses

- Expand applications of JDI proprietary technologies
- New businesses that address important social needs



Revolutionary GreenTech to freely & flexibly tailor light to diverse needs, reduce energy consumption & light pollution, & contribute to a more sustainable world







# LumiFree Technology & Product Introduction



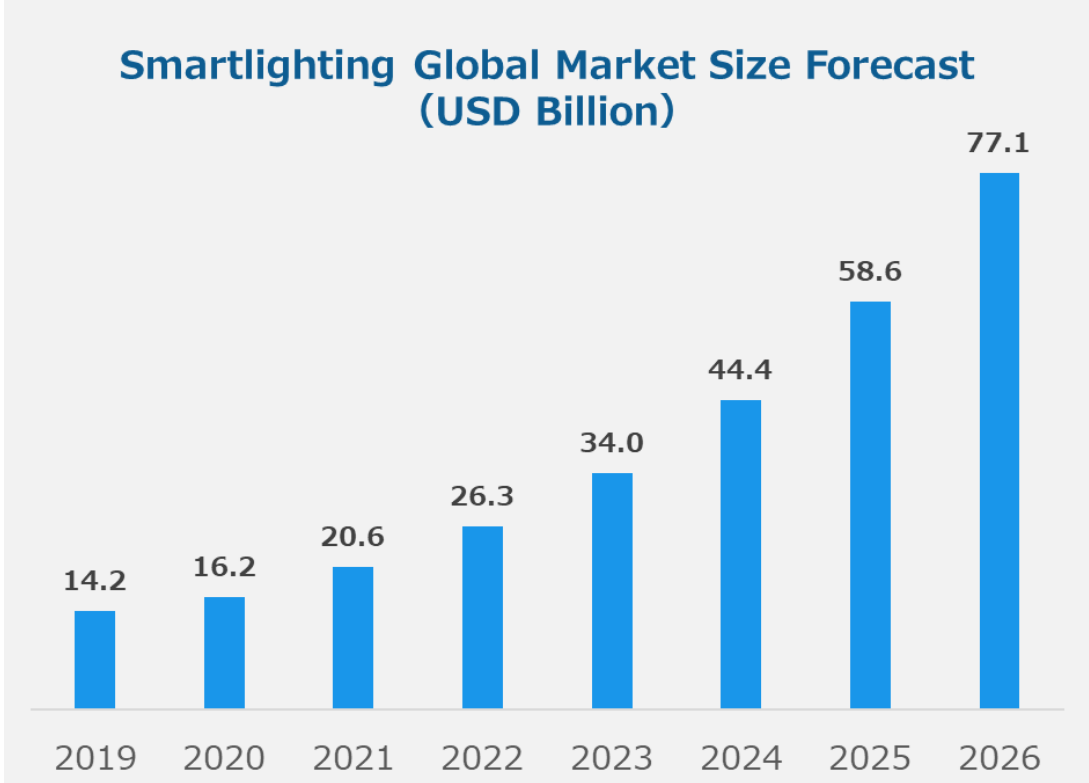
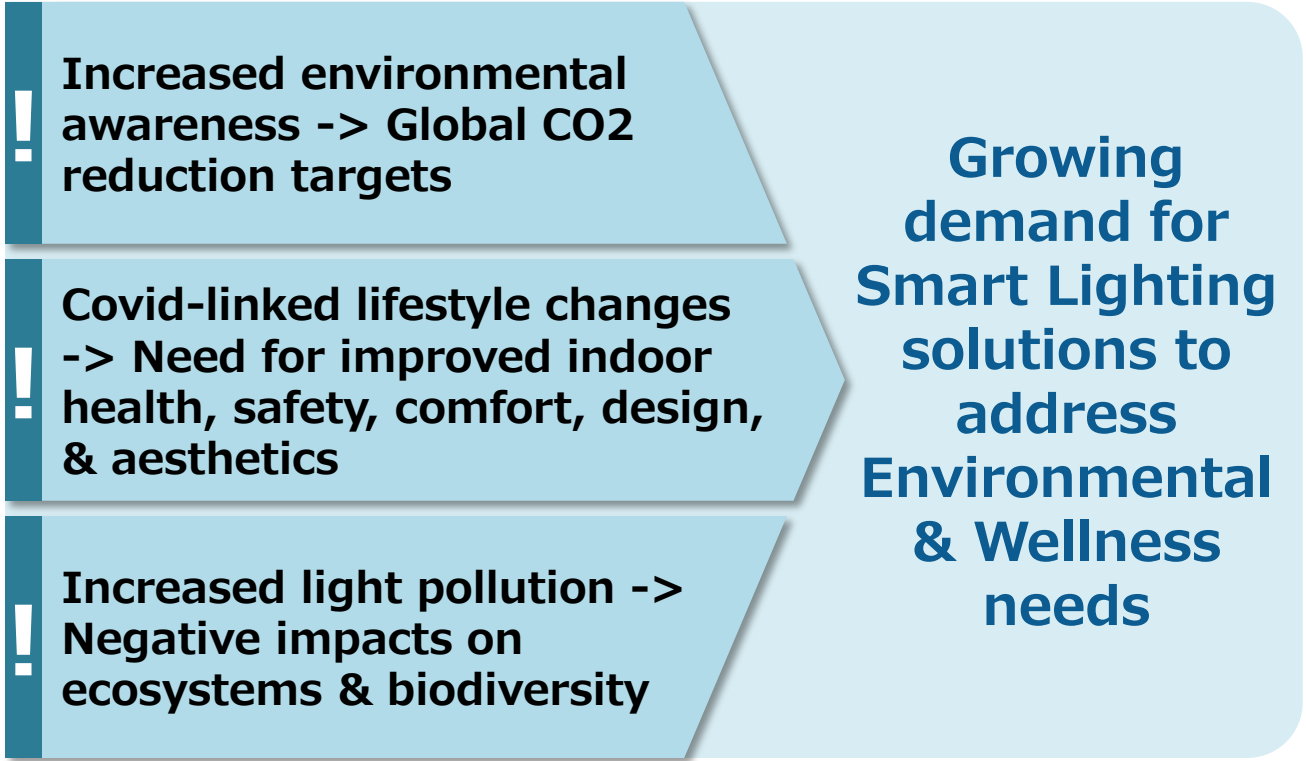
# Freedom For Light, Beauty For The World







## Changes in external environment driving Light Control needs Increased demand for Smart Lighting to address negative externalities of industrialization

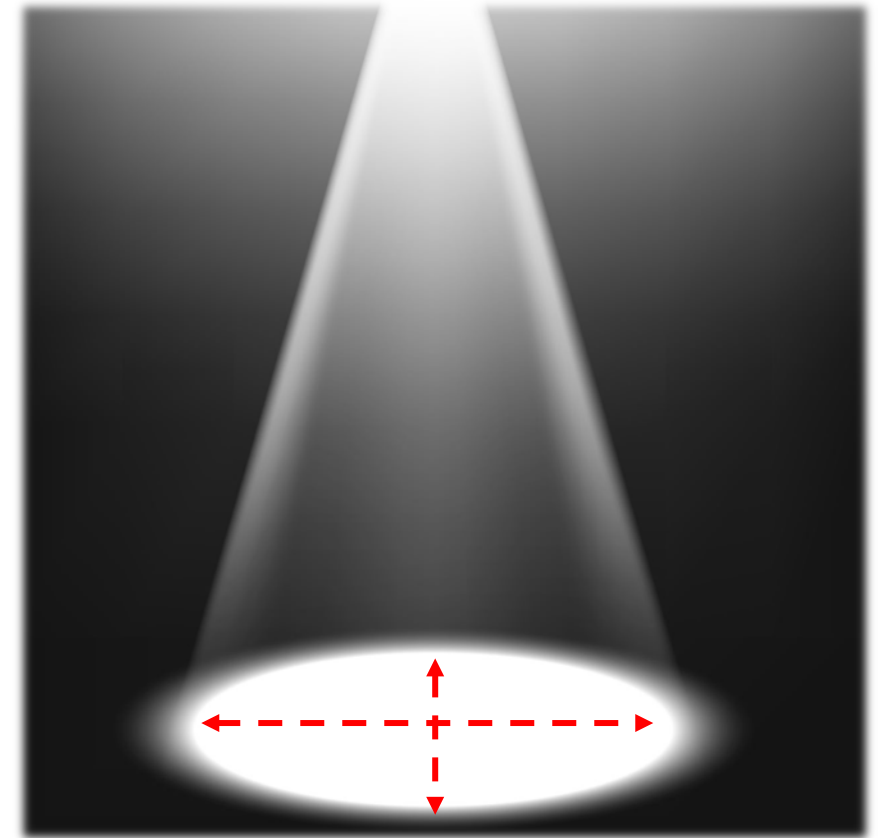
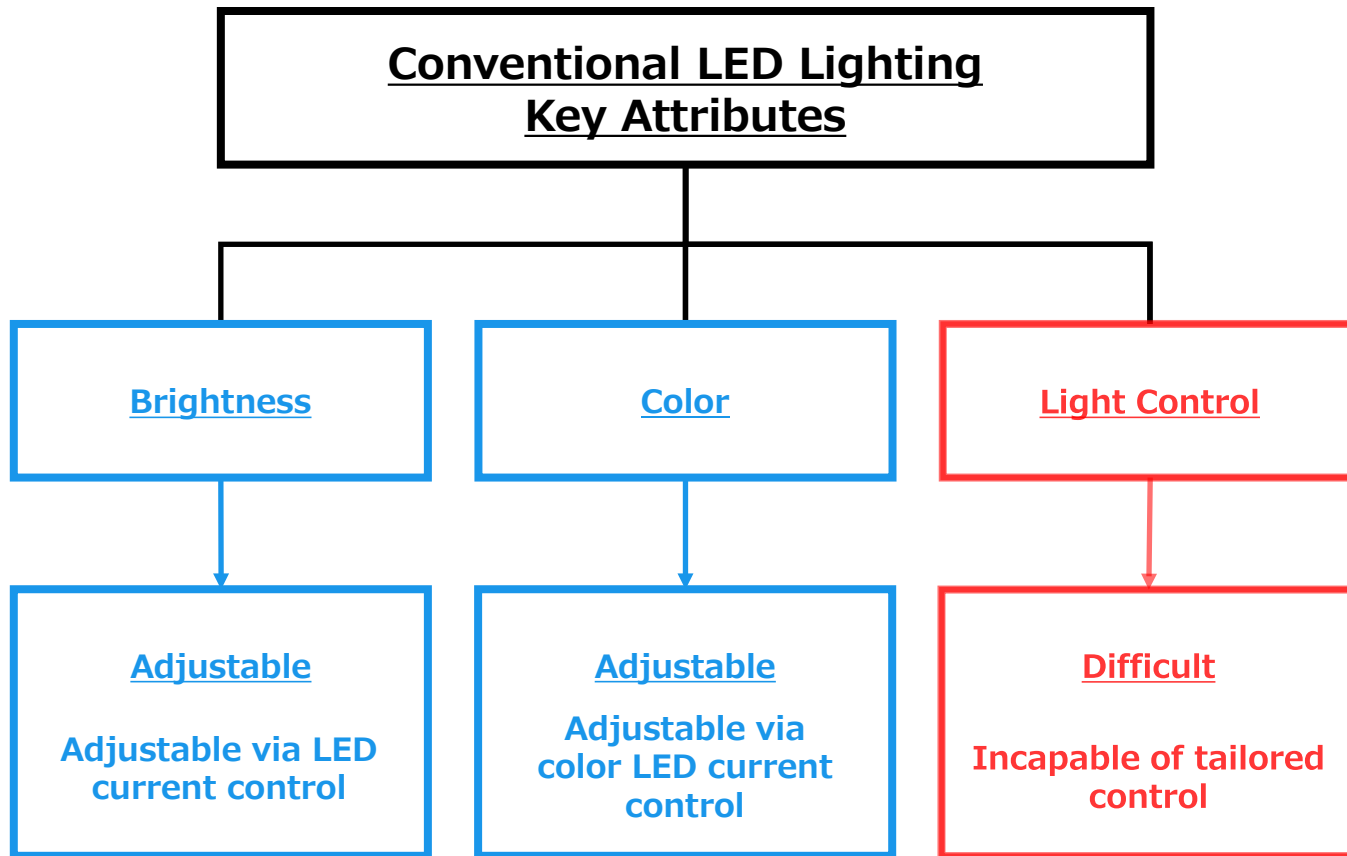


By Modor Intelligence , Global Smart Lighting Market (2021-2026)



**Conventional LED technology has difficulty controlling light amount, shape, size, & direction after manufacturing & installation**

**This has created a mismatch between manufacturers' products & users' needs**





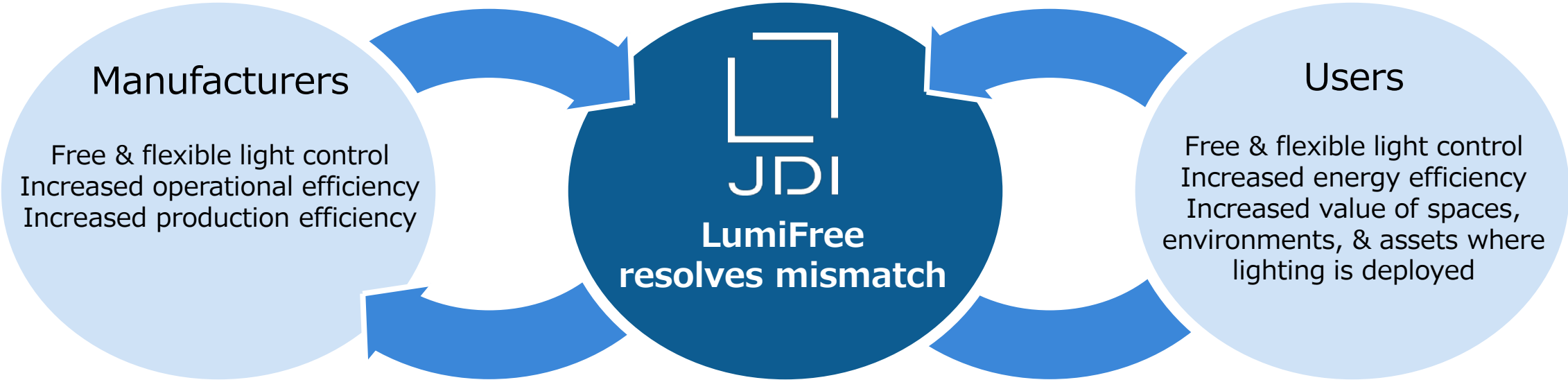
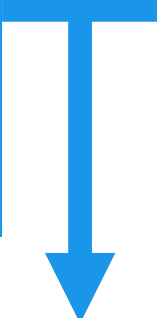


# Lighting Industry Mismatch



Issues in Product Structure of LED Lighting  
Light control is generated by lenses and reflectors. New molds must be made for each new product, ruling out small-scale production of tailored lighting for diverse needs.  
In addition, complex inventory & production management for broad, tailored product portfolios reduces operational & production efficiency.

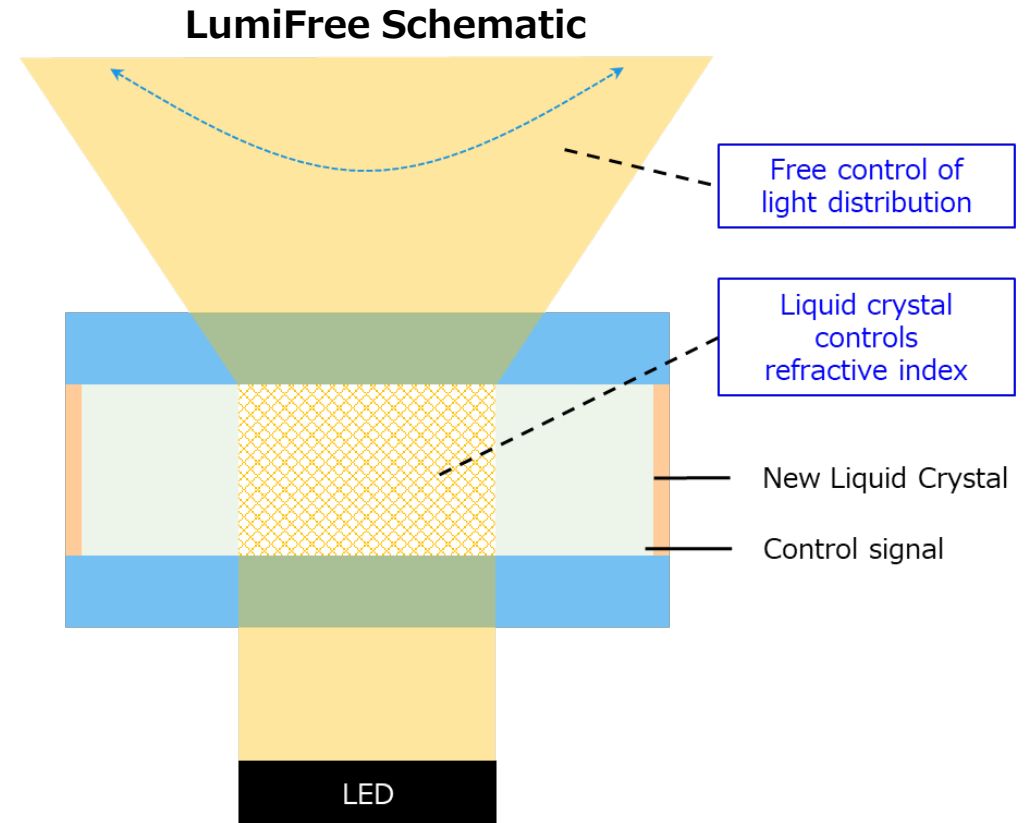
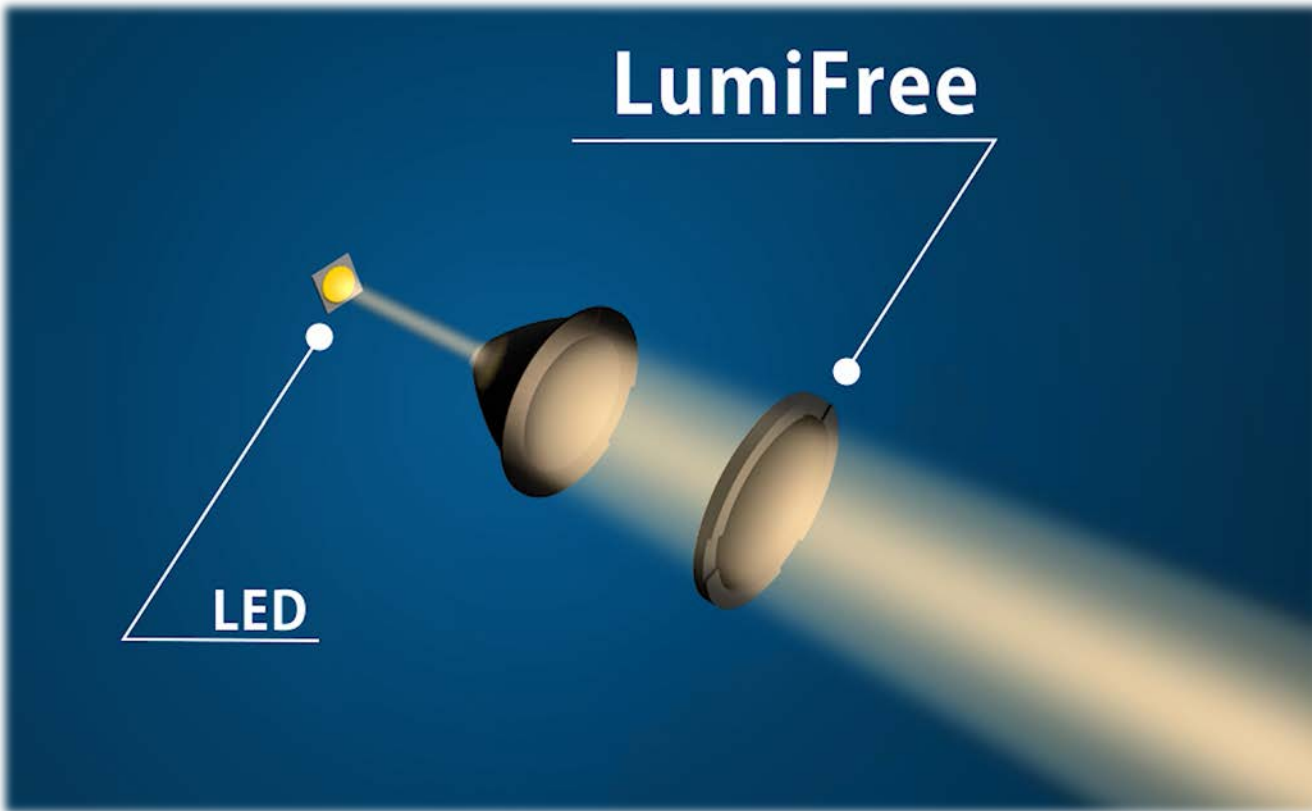
Issues in Installation & Use of LED Lighting  
Societal & environment changes have led to calls for reductions in CO2 emissions and countermeasures against light pollution.  
Lighting optimized for the use purpose & installation environment is required, and lighting should be tailored to and fully accommodate diverse needs.





**JDI developed LumiFree to address important societal & user needs**

**LumiFree allows for fully free & flexible control of light to improve how we experience illumination of people, places, & things and tailor to diverse user needs & environments, while reducing energy consumption & light pollution**



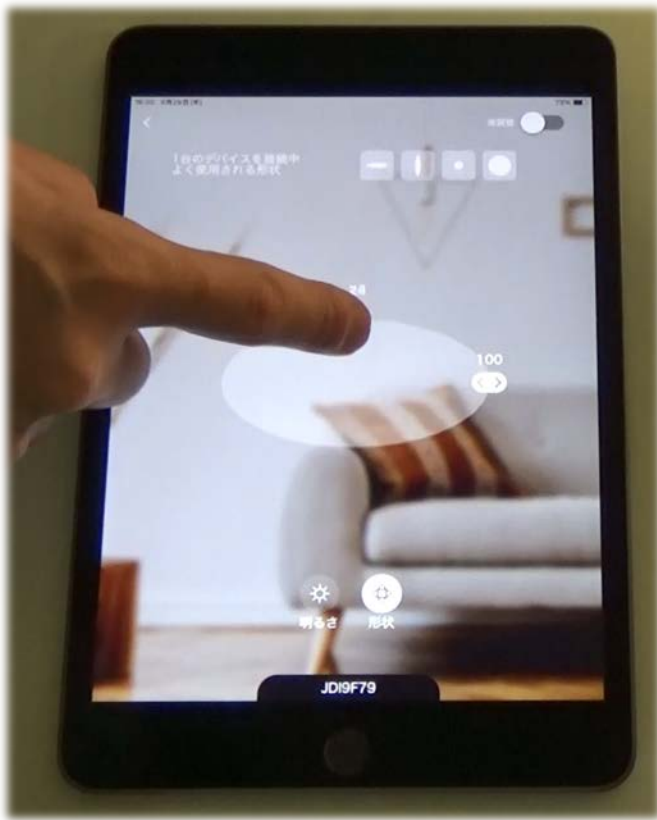




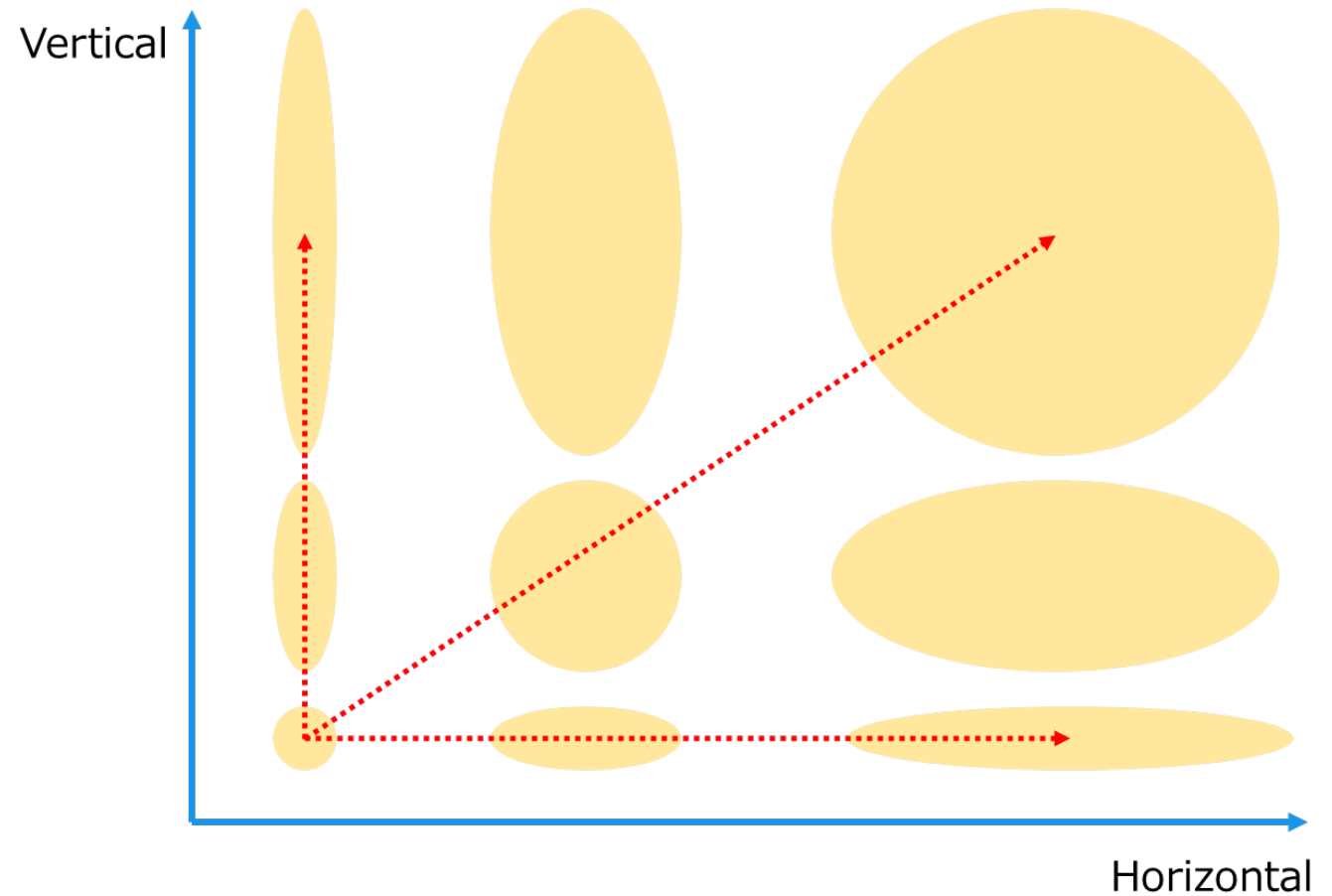
## About LumiFree (2)



**LumiFree allows for fine control of light in two axes (vertical and horizontal), enabling lighting to be optimized & tailored to diverse user needs & environments**

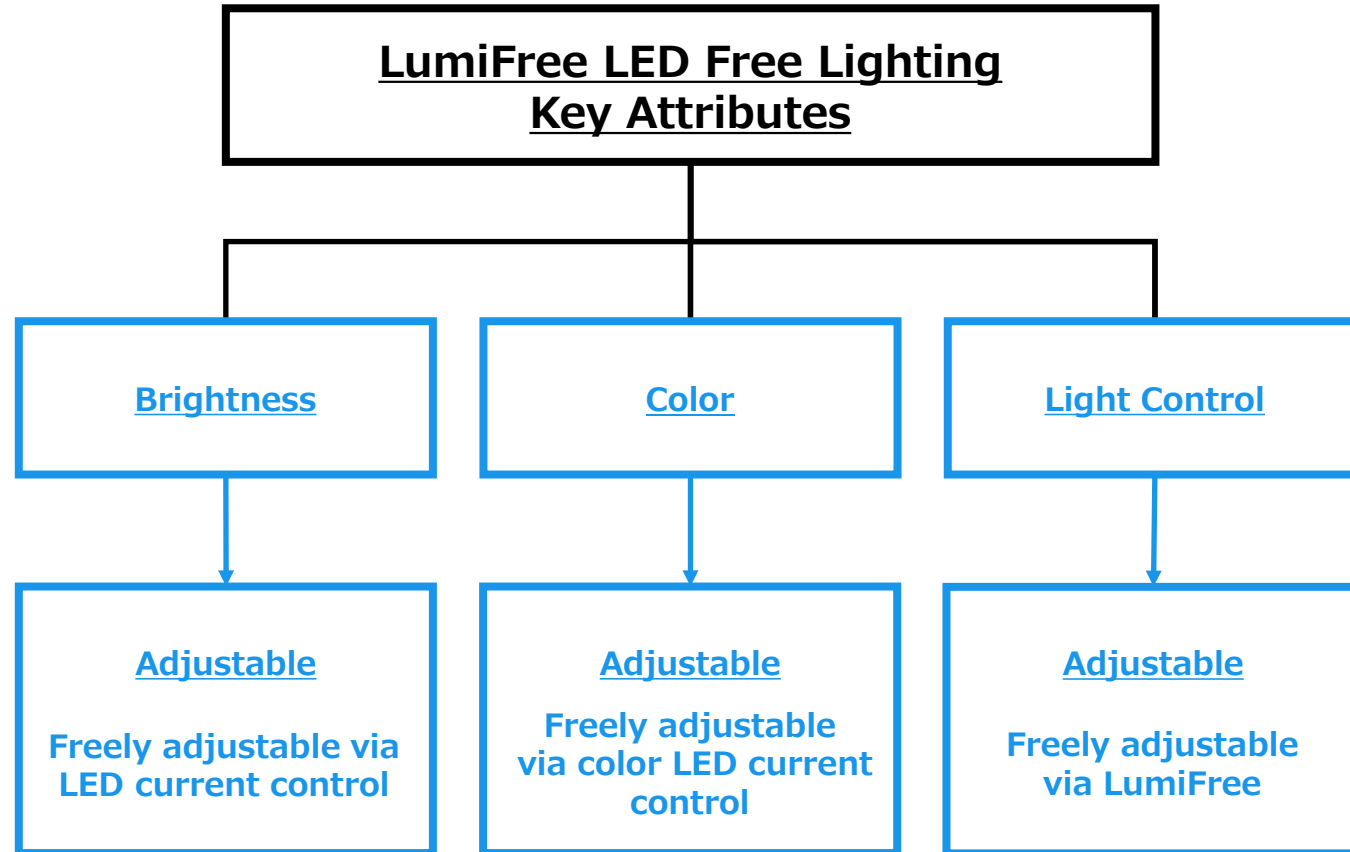


**LumiFree App**





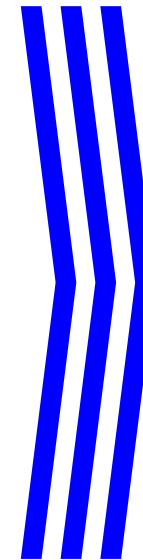
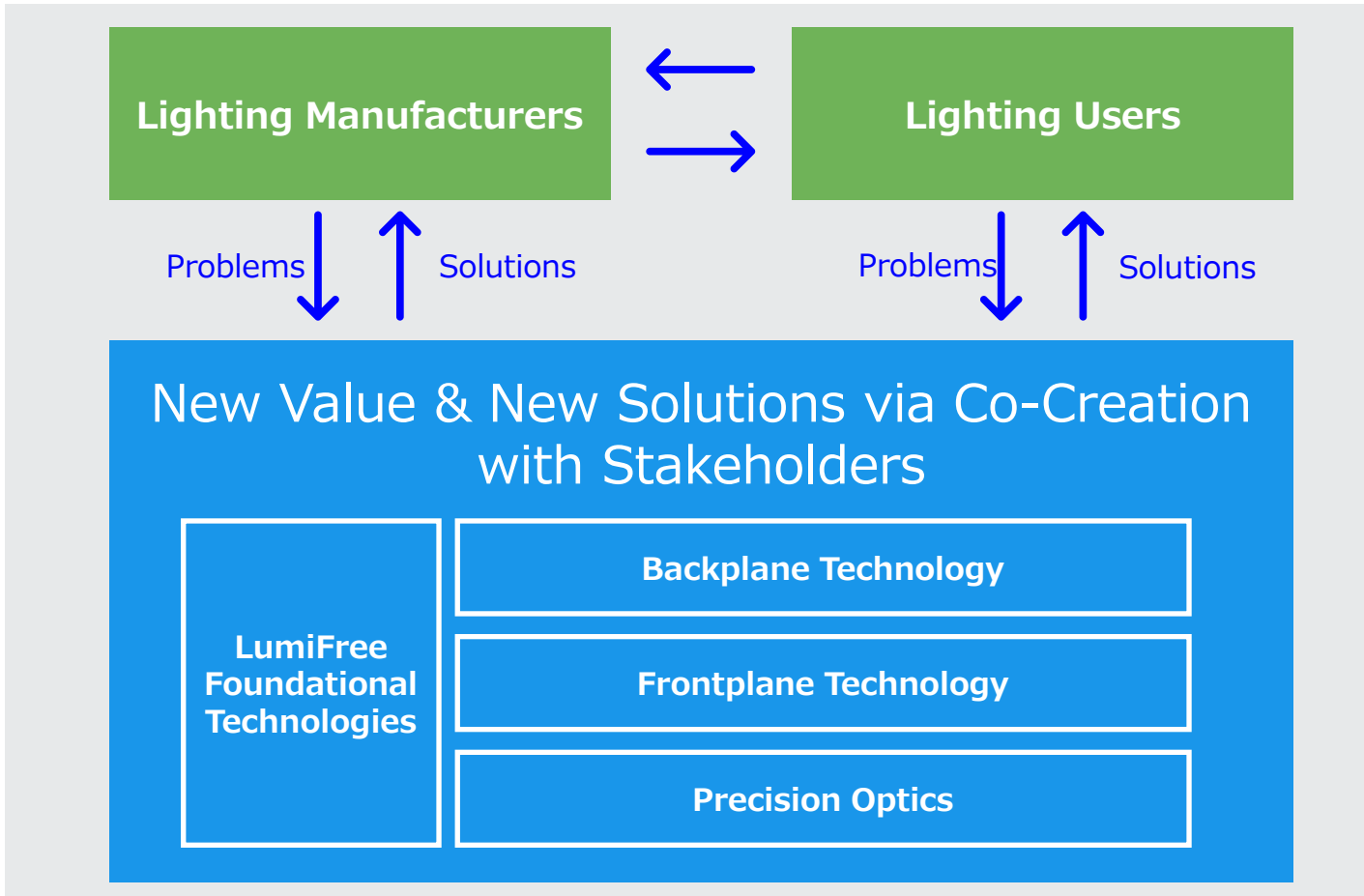
**LumiFree's free & flexible control of light allows us to choose the exact amount, shape, & location of light that best fits the needs of users, spaces, & environments, while reducing energy consumption & light pollution to support the achievement of a more sustainable society**





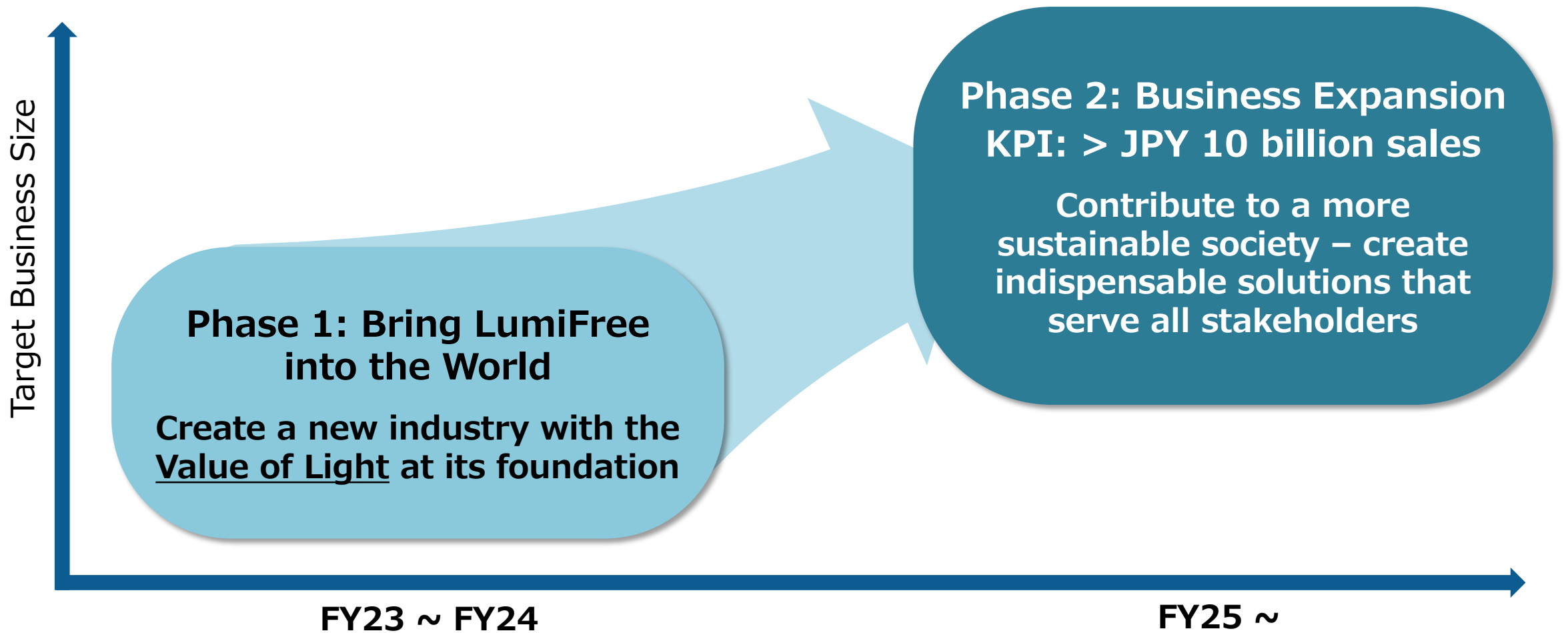


**Through open & collaborative creation with all stakeholders,  
we are working to create new value & a better future**





**Create long-term value & drive business growth by serving diverse user & societal needs**







**PersonalTech**  
**For A Better World**