

ANMD-MRS26-251 · Smart Building Technologies

# Smart Lighting Systems

A Global Sustainability Due Diligence & Market Research Study

History 2020–2024 · Base Year 2025 · Forecast 2025–2032 · Outlooks 2035 / 2040 / 2050 · Currency US\$

## WHY THIS REPORT

Smart lighting systems combine connected LED luminaires, sensing and controls to cut energy, automate spaces and serve as a building-wide sensing backbone, delivering combined performance and sustainability outcomes with minimal waste. This decision-grade study sizes the global market three ways — value, volume and luminaires — across the report’s segmentation axes, seven regions and four scenarios to 2032, with outlooks to 2050.

## SUSTAINABILITY & SDG IMPACT — THE ANMD LENS

Sustainability is this report’s backbone, not an afterthought. Beyond performance, smart lighting systems deliver measurable energy savings and building-performance outcomes, while resource-efficient design and circularity strengthen the natural-capital story.

### Mapped Sustainable Development Goals:

<b>SDG 7</b> Affordable & Clean Energy	<b>SDG 11</b> Sustainable Cities	<b>SDG 12</b> Responsible Consumption
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### Measurable sustainability outcomes assessed:

- Energy savings from connected LED and adaptive control
- Occupancy- and daylight-driven consumption reduction
- Space utilisation and analytics from the lighting layer
- Luminaire embodied carbon and end-of-life circularity as material risks

**Framework alignment:** Double materiality mapped to GRI, SASB, ISSB, TCFD, TNFD, CSRD and the EU Taxonomy, with greenwashing and SDG-washing screens applied throughout.

## WHAT'S INSIDE AT A GLANCE

<b>53</b> Chapters	<b>9</b> Report Parts	<b>7</b> Regions Covered	<b>40+</b> Country Markets
<b>2025–32</b> Forecast Horizon	<b>4</b> Forward Scenarios	<b>25+</b> Companies Profiled	<b>3</b> SDGs Mapped

## REPORT COVERAGE

Geographic scope: North America, Europe, Asia Pacific, Latin America, Africa, Middle East and Rest of World — with named country intelligence. North America adoption leader ; Europe policy leader ; Asia Pacific scale engine.

## MARKET OVERVIEW

### From efficiency retrofit to building sensing backbone — where light becomes a connected, data-rich layer.

Smart lighting is moving from LED retrofit to networked sensing infrastructure. Demand is driven by energy codes, retrofit economics and the value of lighting as a building-data layer, supported by maturing connected-control technology. The market is read three ways — value, unit volume and luminaires — and forecast under conservative, base, accelerated and disruption scenarios, with every projection resolved to the 2025 base year and each region reported separately rather than folded into Rest of World.

- North America leads networked adoption, anchored by the United States and Canada, where energy codes and commercial retrofits drive connected lighting.
- Europe scales on efficiency rules, with Germany, the United Kingdom and the Nordics combining strict energy codes with smart-control mandates.
- Asia Pacific is the volume engine, as China, Japan and India drive LED scale and new-build smart lighting.
- Technology and control segment the value, across connected LED, daylight-harvesting and occupancy-based lighting, and standalone, networked and PoE control, each with distinct economics.
- Lighting-as-a-data-layer is the differentiator, energy savings plus space analytics underpin value conventional lighting cannot match.

## REGIONAL OUTLOOK

Across the seven reporting regions, the report separates adoption leaders from high-growth and emerging markets, profiling named country sub-markets, building-code regimes and project pipelines in each. North America and Europe anchor near-term value; Asia Pacific scales on smart new construction; while Latin America, the Middle East and Africa are assessed on their own merits — for commercial modernisation, smart-city programmes and efficiency retrofit — rather than aggregated away.

Region	Stage	Lead Markets & Drivers
North America	Adoption leader	United States, Canada — large commercial stock, retrofit demand, ESG reporting
Europe	Policy leader	Germany, United Kingdom, France, Nordics — energy codes, CSRD, healthy-building rules
Asia Pacific	Scale engine	China, Japan, India, Australia, Singapore — smart new-build, urbanisation, manufacturing
Latin America	Emerging	Brazil, Mexico — commercial modernisation, energy-cost drivers
Middle East	High-growth	UAE, Saudi Arabia — smart-city programmes, green-building mandates
Africa	Frontier	South Africa, Kenya — commercial estates, efficiency retrofit

## KEY MARKET DRIVERS & RESTRAINTS

Drivers	Restraints
<ul style="list-style-type: none"> <li>• Energy codes &amp; lighting-efficiency mandates</li> <li>• LED retrofit economics &amp; payback</li> <li>• Occupancy &amp; daylight-driven savings</li> <li>• Space analytics &amp; sensing-backbone value</li> <li>• Connected-control &amp; PoE technology gains</li> </ul>	<ul style="list-style-type: none"> <li>• Networked-control cost premium</li> <li>• Integration &amp; commissioning complexity</li> <li>• Interoperability &amp; protocol fragmentation</li> <li>• LED &amp; driver cost variability</li> <li>• Cybersecurity &amp; data-privacy concerns</li> </ul>

## SEGMENTATION SNAPSHOT

<b>By Technology</b>	Connected LED · daylight-harvesting · occupancy-based
<b>By Control</b>	Standalone · networked · PoE control
<b>By Component</b>	LEDs · drivers · sensors · controls · software
<b>By Application</b>	Standalone · networked · PoE control
<b>By End User</b>	Commercial offices · retail · industrial · institutional
<b>By Business Model</b>	Hardware sale · SaaS · lighting-as-a-service

## TABLE OF CONTENTS — PARTS & CHAPTERS

The full report is organised into nine parts across 53 chapters, listed below. Detailed sub-headings, country tables and directories are provided in the full report.

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- › Chapter 2. Industry Discovery Summary — Smart Lighting Systems
- › Chapter 3. Executive Intelligence and Decision Dashboard
- › Chapter 4. Strategic Findings, Materiality and Investment Verdict Preview

### Part II — Market Intelligence, Sizing, Forecasting and Segmentation

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- › Chapter 20. Emerging and Next-Generation Technology Intelligence
- › Chapter 21. Category-Specific Intelligence Module
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- › Chapter 23. Competitive Landscape
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## Part VIII — Scenario, Future Intelligence and Final Due Diligence Verdict

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## Part IX — Annexes, Directories and Reference Material

- › Chapter 47. Methodology Annex
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- › Chapter 49. Patent Directory and Patent Intelligence Annex
- › Chapter 50. Project Intelligence Annex
- › Chapter 51. Forecast Annex
- › Chapter 52. Sustainability KPI Annex
- › Chapter 53. Reference Annexes

## COMPETITIVE & INVESTMENT SNAPSHOT

The competitive field spans established building-technology majors, specialist hardware and software vendors, and systems integrators. Profiled players include Signify / Philips, Acuity Brands, Legrand, Schneider Electric and Cree Lighting. Deal activity — partnerships, technology licensing and demonstration programmes — signals a market consolidating around bankable, repeatable designs.

### Representative players profiled in the full report:

Signify N.V. · Acuity Brands, Inc. · Legrand SA · Schneider Electric SE · Cree Lighting USA LLC · and 20+ further profiled players across the value chain.

**Investment intelligence:** venture, growth, infrastructure, development, climate and blended finance, green bonds and sustainability-linked instruments — culminating in a bankability assessment and a Go / No-Go / Conditional-Go investment verdict.

## KEY QUESTIONS THIS REPORT ANSWERS

- ? How large is the global smart lighting systems market, and how fast will it grow to 2032?
- ? Which regions, countries and segments offer the strongest risk-adjusted opportunity?
- ? How do the category's economics change returns versus conventional approaches?
- ? Who leads, and where is the competitive and patent white space?
- ? Is the investment case bankable — and under what conditions?
- ? How does the technology align with the SDGs and emerging disclosure regulation?

## WHY ANMD — THE DIFFERENCE

*Most market studies stop at units and revenue. This report is built as a sustainability due diligence instrument — fusing market sizing with ESG, SDG, climate and natural-capital intelligence and a decision-ready bankability verdict in a single architecture.*

- **Triangulated sizing** — every market read three ways so value, volume and adoption views reconcile rather than conflict.
- **Region-honest forecasting** — Latin America, Africa and the Middle East reported in full, never hidden inside Rest of World, every forecast resolved to the 2025 base year.
- **Integrated evidence base** — company, patent and project databases linked to the analysis, with published-filing patents and FTO treated as an indicator, not a legal conclusion.
- **No-fabrication discipline** — every estimate carries a data-confidence rating and disclosed sources; gaps are flagged for further diligence, never filled with invented numbers.
- **Anti-greenwashing rigour** — SDG-washing and greenwashing screens plus claim-substantiation checks built into the ESG and project analysis.
- **Decision-first structure** — 9 Parts and 53 Chapters culminating in stakeholder playbooks and a clear Go / No-Go / Conditional-Go investment verdict.

## WHO SHOULD BUY THIS REPORT

Investors, lighting OEMs, integrators, building owners, facility managers, EPCs, lenders, and corporate strategy and ESG teams — alongside strategic corporate planners and decision-makers.

### Access the Full Report

The complete report delivers all 53 chapters in full, with every sub-heading, country table, company and patent directory, forecast model and due diligence checklist.

Purchase at [www.anewmarketdynamics.com](http://www.anewmarketdynamics.com) · Standard & Premium licences · Single-Site (SSL) and Global-Site (GSL) options at checkout.

### Want the Complete Detailed Table of Contents?

This prospectus lists the nine parts and 53 chapters. The complete detailed table of contents — every sub-heading, country table, exhibit, company and patent directory and annex — is available on request to registered users. To receive it, register with your official company email at [www.anewmarketdynamics.com](http://www.anewmarketdynamics.com). The full detailed table of contents will be sent directly to your registered company email address.