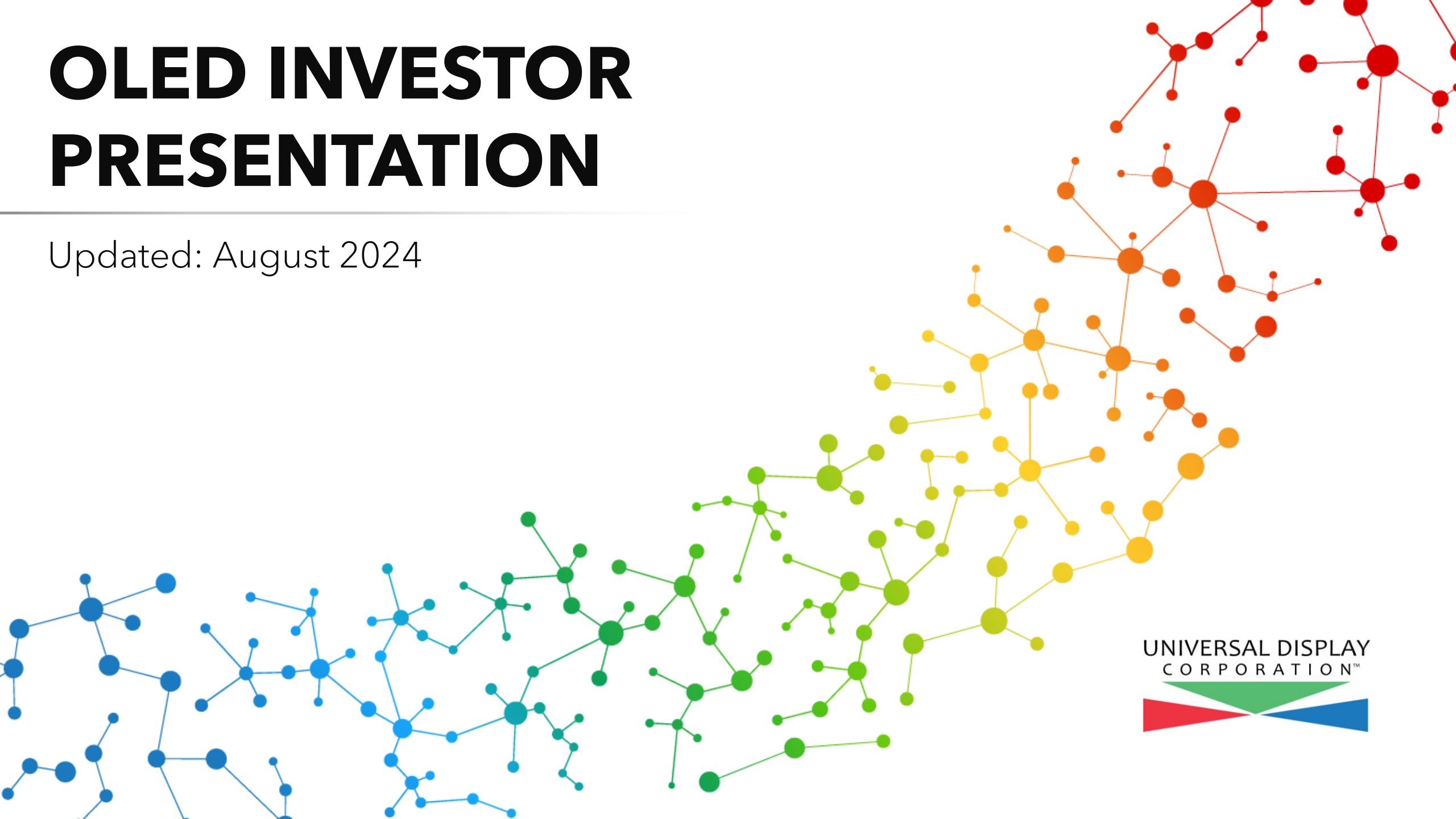
OLED INVESTOR PRESENTATION

Updated: August 2024



UNIVERSAL DISPLAY CORPORATION™

Forward-Looking Statements

All statements in this document that are not historical, such as those relating to the projected adoption, development and advancement of the Company's technologies, and the Company's expected results and future declaration of dividends, as well as the growth of the OLED market and the Company's opportunities in that market, are forward-looking financial statements within the meaning of the Private Securities Litigation Reform Act of 1995. You are cautioned not to place undue reliance on any forward-looking statements in this document, as they reflect Universal Display Corporation's current views with respect to future events and are subject to risks and uncertainties that could cause actual results to differ materially from those contemplated. These risks and uncertainties are discussed in greater detail in Universal Display Corporation's periodic reports on Form 10-K and Form 10-Q filed with the Securities and Exchange Commission, including, in particular, the section entitled "Risk Factors" in Universal Display Corporation's Annual Report on Form 10-K for the year ended December 31, 2023. Universal Display Corporation disclaims any obligation to update any forward-looking statement contained in this document.

Universal Display Corporation (UDC) Overview

Who We Are

UDC (Nasdaq: OLED) is a leader in the research, development & commercialization of OLED technologies and materials for use in display and solid-state lighting applications.

- Founded in 1994
- Subsidiaries and offices around the world
- Since inception, UDC's innovation strategy has centered on building a strong foundation of best-in-class OLED materials and technologies.

OLED Pioneer Enabling Industry Growth

Leading Global Supplier of Energy-Efficient PHOLED Materials

Innovator with Robust IP Portfolio of 6,000+ Patents Issued and Pending Worldwide*

Key Industry Partner Providing Support with 30-Years of OLED Expertise

*As of June 30, 2024

UDC: Strong Corporate Citizen

UDC's Energy-Efficient Phosphorescent Materials

- 100% UniversalPHOLED® emitters save energy
- UDC's emitters do not use conflict minerals

Diverse & Inclusive Workplace

- Geographic: from over 25 countries
- Gender: 22% female and 78% male[1]
- Cultural diversity

Diverse Board of Directors[2]

- 40% female and 60% male[2]
- Named a 2023 Champion of Board Diversity by The Forum of Executive Women

Community Outreach

- Foster educational STEM initiatives
- Support community organizations
- Employee charity matching program

ISO Certifications

- ISO 9001:2015 (quality)
- ISO 14001:2015 (environment)
- ISO 45001:2018 (health/safety)

Recognitions

- *Newsweek*: America's Greenest Companies 2024
- *WSJ*: The 250 Best-Managed Companies 2023

[1]As of December 31, 2023 | [2]As of March 4, 2024

UDC's Global Footprint

United States
UDC HQ (NJ)
Adesis, Inc. (DE)
OVJP Corporation (CA)
UDC Ventures LLC (NY)
PPG (PA & OH)

UDC **China**

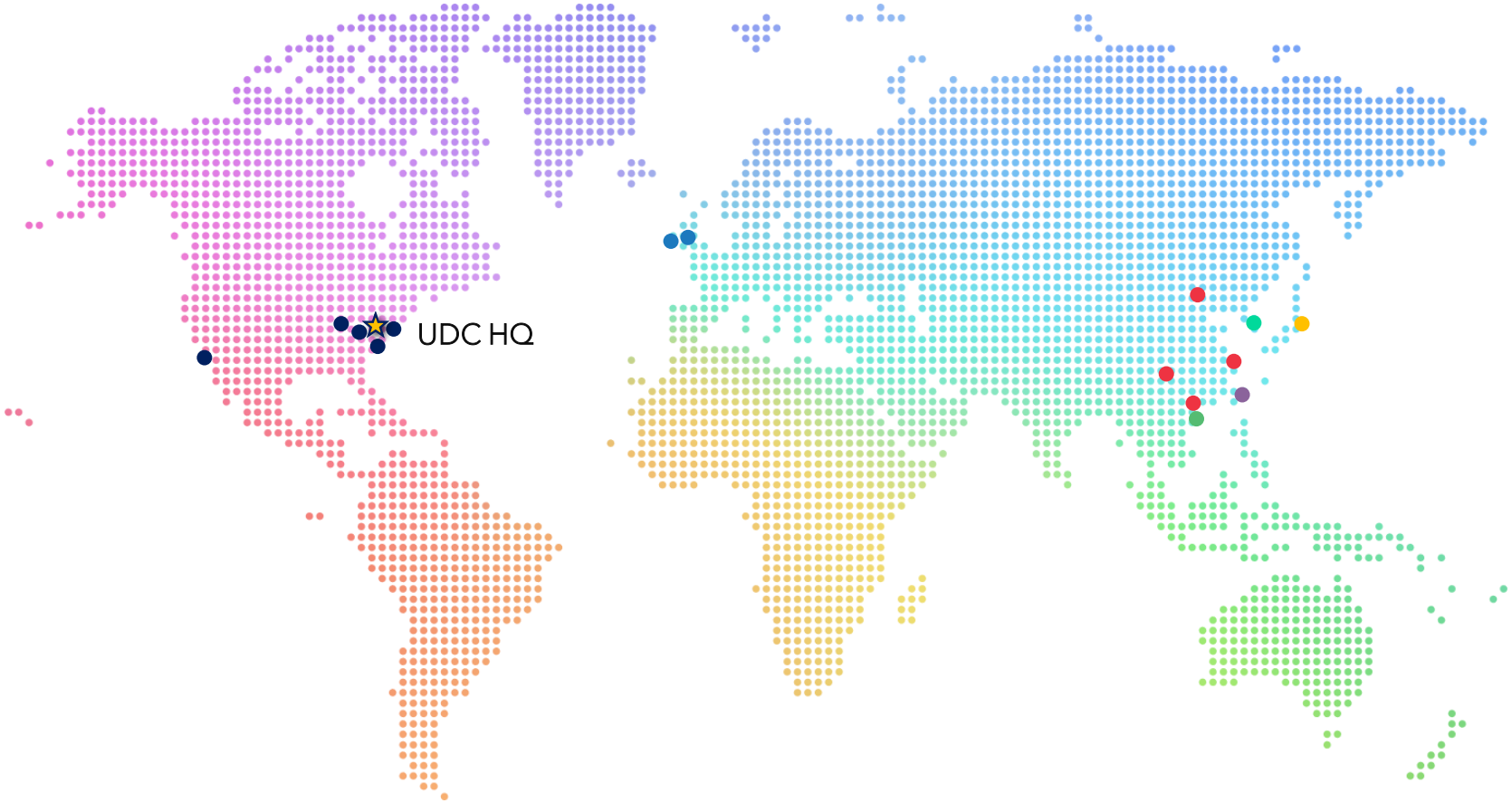
UDC **Hong Kong**

UDC **Ireland**
OLED Material Manufacturing Ltd (OM^2) & PPG

UDC **Japan**

UDC **Korea**

UDC **Taiwan**



More Than
460
Employees

Including more than
320
Scientists, engineers and technicians

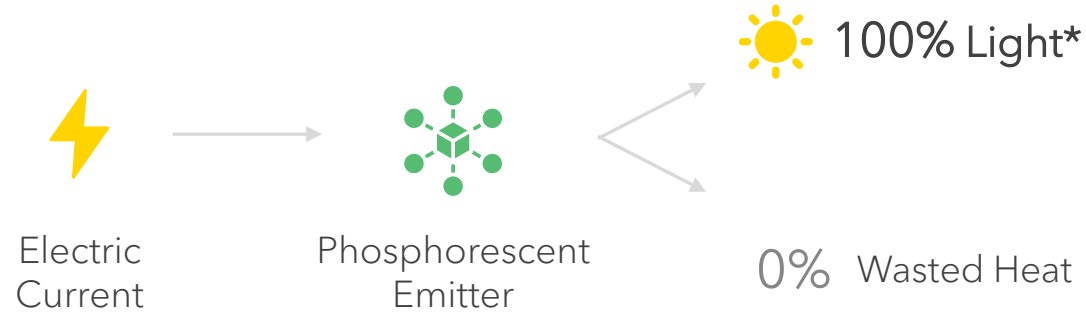
UniversalPHOLED® = Energy Efficiency

UDC's patented and award-winning phosphorescent OLED technology and materials are integral to enabling low power consumption in OLED displays and lighting.

Key Benefits of Phosphorescent Emitters

- Enable energy efficiency
- Reduce requirements for heat dissipation components
- Increase lifetime
- Lower product cost

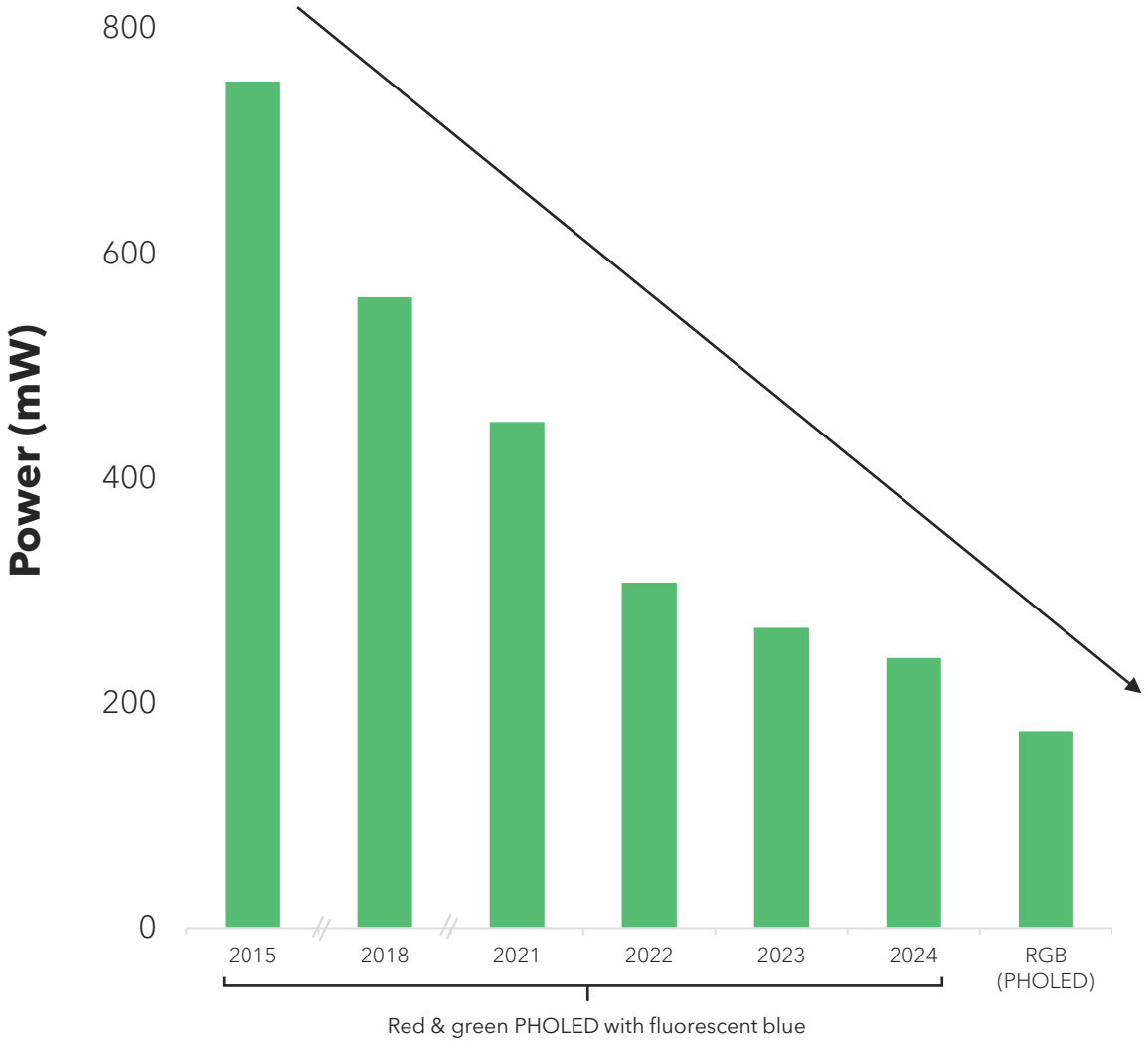
Cornerstone: Phosphorescent OLED (PHOLED) Innovation
Energy Efficiency



With trailblazing energy efficiency:
Up to 4x the efficiency of fluorescent OLED

*100% Internal Quantum Efficiency
Baldo et. al., Nature, 395, 151 (1998)

UniversalPHOLED® Energy Efficiency Innovation



Smartphone Display Power Consumption

Current performance (2024)

Red & green PHOLED w/ fluorescent blue

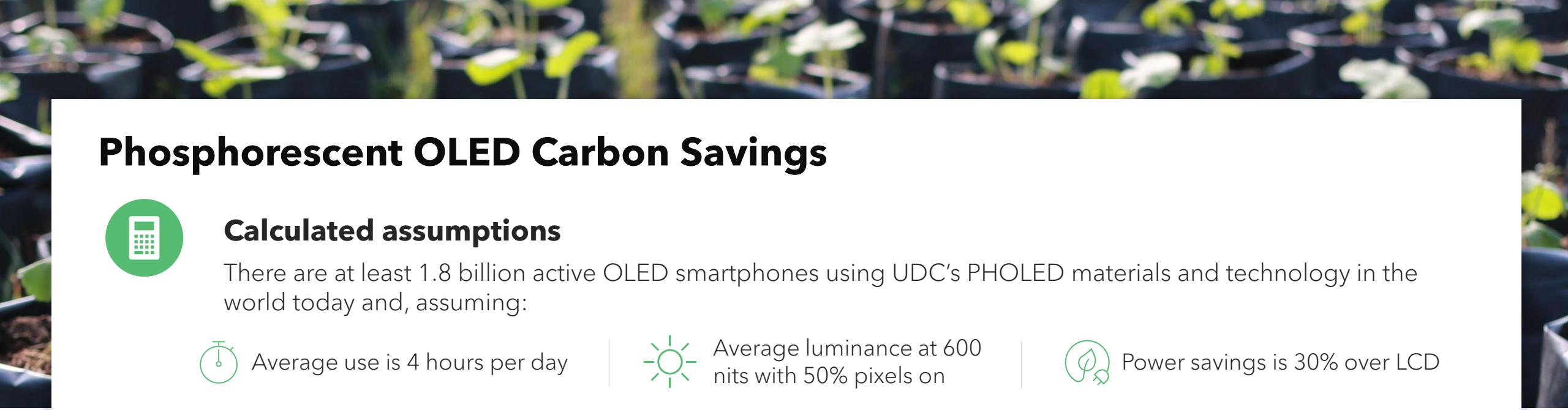
↓ **~68%** Energy consumption compared to 2015

Projected *additional* performance improvement

Full red, green & ***blue*** PHOLED vs. Prior devices containing fluorescent blue

↓ **~25%** Energy consumption compared to 2024

Based on a 5.0" OLED display operating at 600 cd/m2 with video (50% pixels on). PHOLED data is based on UDC estimates. PHOLED=Phosphorescent



Phosphorescent OLED Carbon Savings

Calculated assumptions

There are at least 1.8 billion active OLED smartphones using UDC's PHOLED materials and technology in the world today and, assuming:

- Average use is 4 hours per day
- Average luminance at 600 nits with 50% pixels on
- Power savings is 30% over LCD

Power savings

- Power saving per display is 0.46W
- Total savings per year is an estimated 1,216 GW-h per year

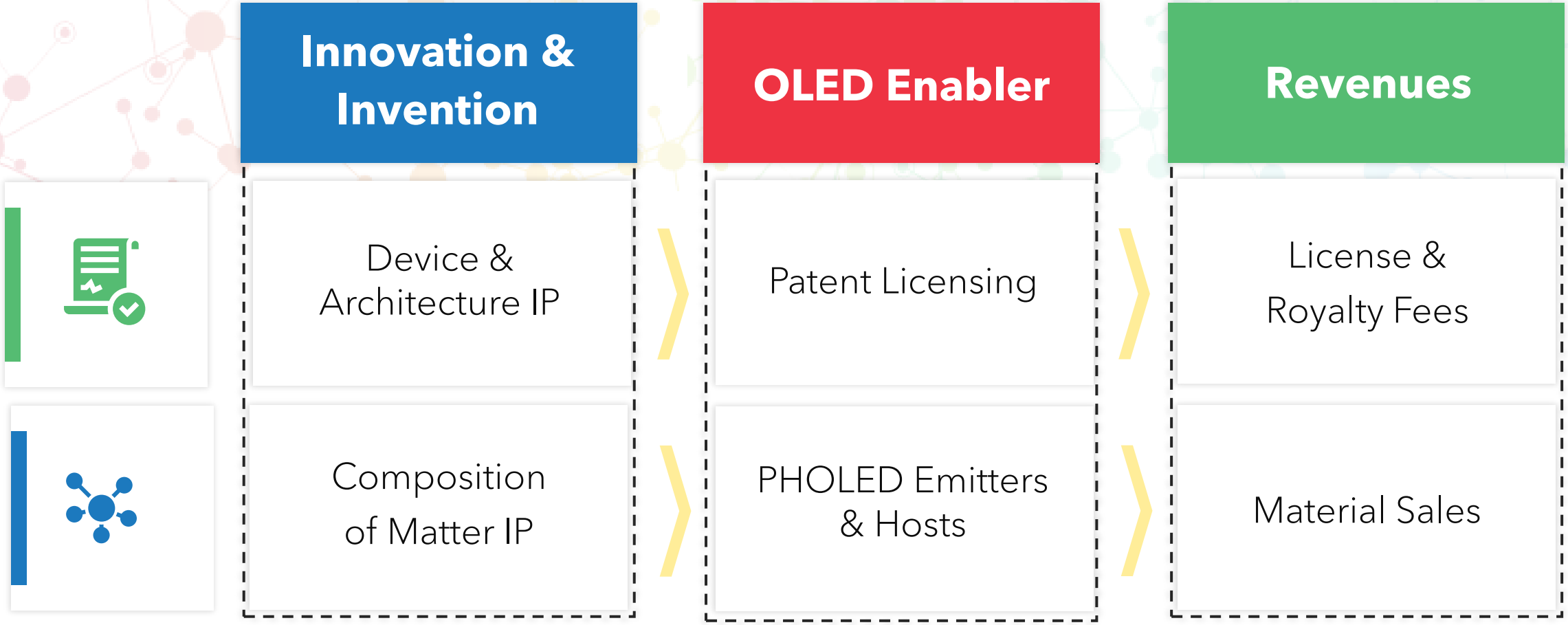
=

861,758 Metric tons of carbon dioxide (CO_2) equivalent avoided per year[1]

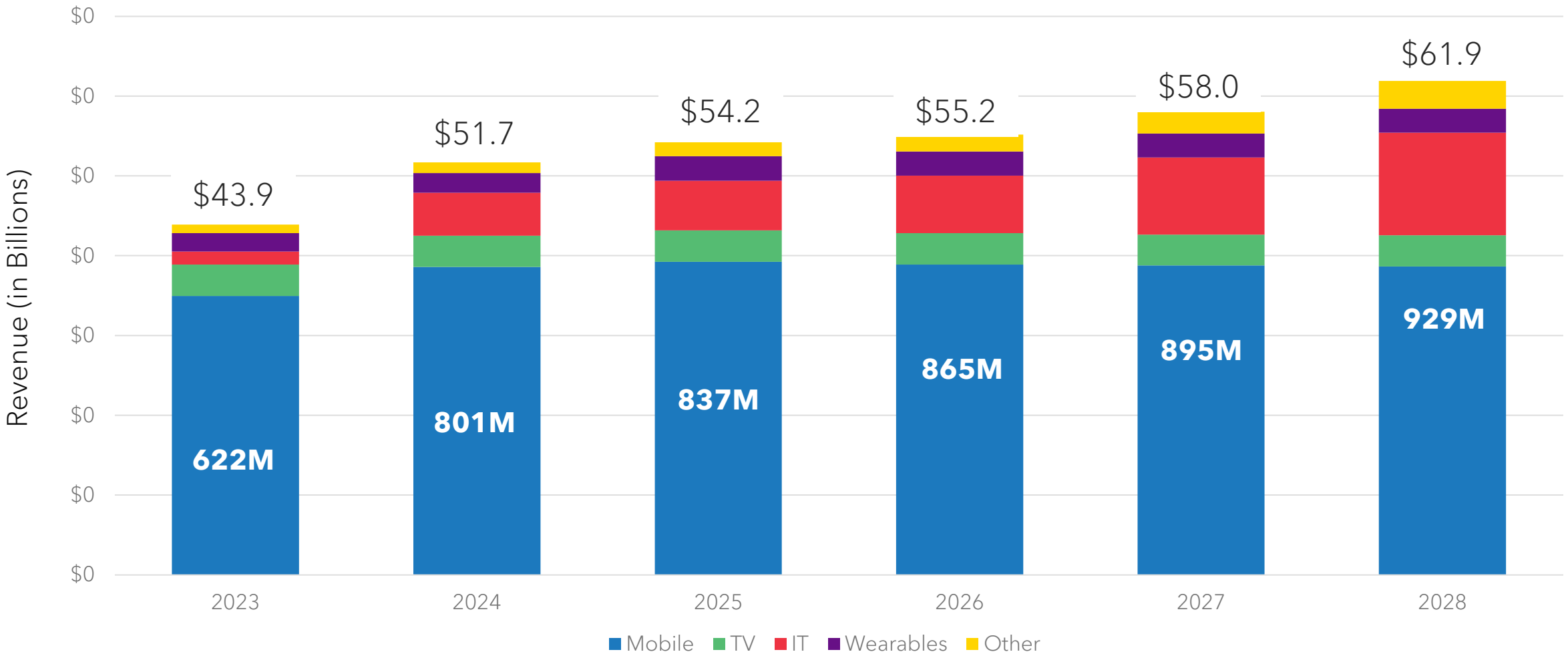
Equivalent to carbon sequestered by 14,249,241 tree seedlings grown for 10 years[1]

[1]https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator

UDC's Business Model

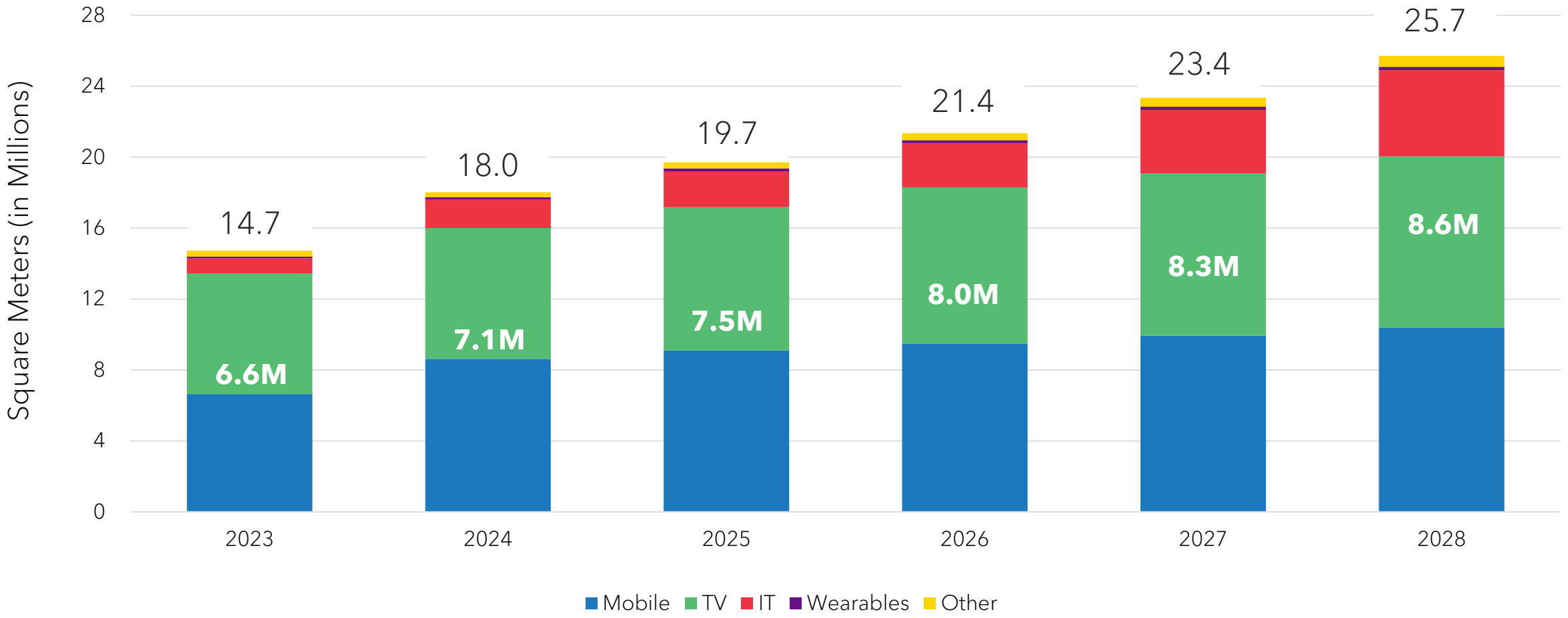


OLED Display Market Potential



Unit numbers are for OLED smartphones only
Source: Omdia OLED Display Market Tracker – Q1 2024 (July 2024)

OLED Display Panel Demand



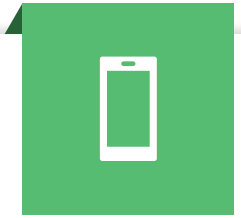
Unit numbers are for OLED TVs only
Source: Omdia OLED Display Market Tracker – Q1 2024 (July 2024)

Strong OLED Display Market Drivers

Lower Power Usage

- RED Phosphorescence reduces power consumption by 25%
- Add GREEN: 45% cumulative reduction
- Add BLUE: 75% cumulative reduction
- Enabled by PHOLEDs

Superior Aesthetics



- Improved image quality
- Thin and Light
- 180 degree viewing angle
- Near infinite contrast ratio (true black)
- Real-time video speeds (great for 3D)
- Self-emissive display
- Low UV output
- Minimal bezel
- Flexible

More Cost Effective

- Fewer manufacturing process steps
- Lower bill-of-materials
  - No backlight required
  - No color filter required
  - No liquid crystal required
  - Reduced driver IC costs
- Enables non-glass substrates

OLED Smartwatches & Smartphones

Samsung Galaxy Watch7

Motorola Moto Watch 200

Honor Watch GS 4

Apple Watch Series 9

Xiaomi Watch S3

Garmin Forerunner 165

OPPO Reno12

vivo S19 Pro

Samsung Galaxy S24

iPhone 15 Pro

Honor Magic6

Motorola Edge

Google Pixel 8 Pro

Tecno Pova 6

Meizu 21 Pro

HTC U24 Pro

OnePlus Nord 4

Xiaomi 14

OLED TVs and AR/VR

LG OLED evo G4

Samsung S95D

BRAVIA XR Class A95L QD-OLED

Loewe Stellar 55 DR+

LG 4K Transparent OLED T TV

Apple Vision Pro

PlayStation VR2

OLED IT Products

Apple iPad Pro

Samsung Galaxy Tab S9, S9+ and S9 Ultra

Microsoft Surface Pro

ASUS Vivobook S 15

DELL XPS 13 OLED

Samsung Galaxy Book4 Edge

Samsung 32" Odyssey OLED G8

LG 39" UltraGear™ OLED curved gaming monitor

Automotive OLED Displays & Lighting

2025 Hyundai Genesis GV80

2025 MINI Countryman SE EV

BYD's Yangwang U8 Premium Edition Hybrid

Mercedes EQS OLED MBUX Hyperscreen

Audi

BMW

Mercedes-Benz

LCD vs. OLED

- Lower BOM (bill of materials)
- Better Performance, More Efficient
- Thinner and Flexible Form Factor
- Vivid Colors and Superior Contrast Ratio

Image based on illustration from LG

Form Factor: Flexible, Foldable, Rollable

Samsung Display Flex Note Extendable (CES 2024)

LG 42-Inch OLED Flex TV with Bendable Screen

BOE Multifold Display

Asus Zenbook 17 Fold

Google Pixel Fold

Samsung Galaxy Z Fold6

Samsung Galaxy Z Flip6

vivo X Fold3 Pro

OPPO Find N3

Xiaomi Mix Fold 4

Honor Magic V3

Tecno Phantom V Flip

Groundbreaking Organic Vapor Jet Printing (OVJP)

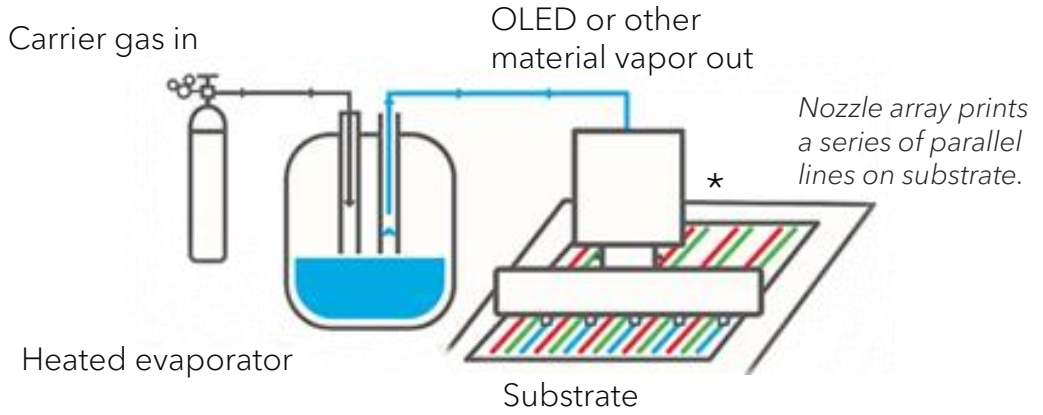
Organic **V**apor **J**et **P**rinting enables deposition of patterned organic films without a fine metal mask

OLED materials and substrate are the same as in today's proven mass production VTE process

Direct pattern RGB SBS Top Emission

- Lower manufacturing cost
- VTE equivalent device performance
- Meets Advance TV Requirements

Enables advanced device layer architecture to support TV roadmap



* Image depicts printing of blue after dry printing red and green using OVJP.

Supports 4K and 8K resolution

Applies to thermally vaporizable organic molecules

Benefits:

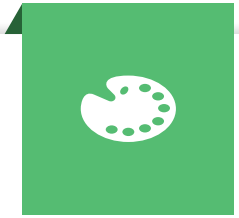
- Cost-effective
- High throughput
- Dry printing
- Highly scalable
- Digitally controlled patterning
- Precise thickness control
- Co-deposition and multilayer printing
- Multiple deposition layers in one chamber

Strong OLED Lighting Market Drivers

Energy-efficient & environmentally friendly

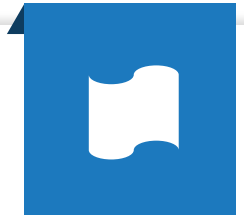
- Low drive voltage
- Low operating temperatures, cool to touch
- Long lifetime
- Easy to control

Highly desirable color quality



- Wide range of CCT, high CRI possible
- Color tunable
- Instant “ON” , Dimmable without flicker
- No glare, no noise
- Low UV content

Form factor & low-cost potential

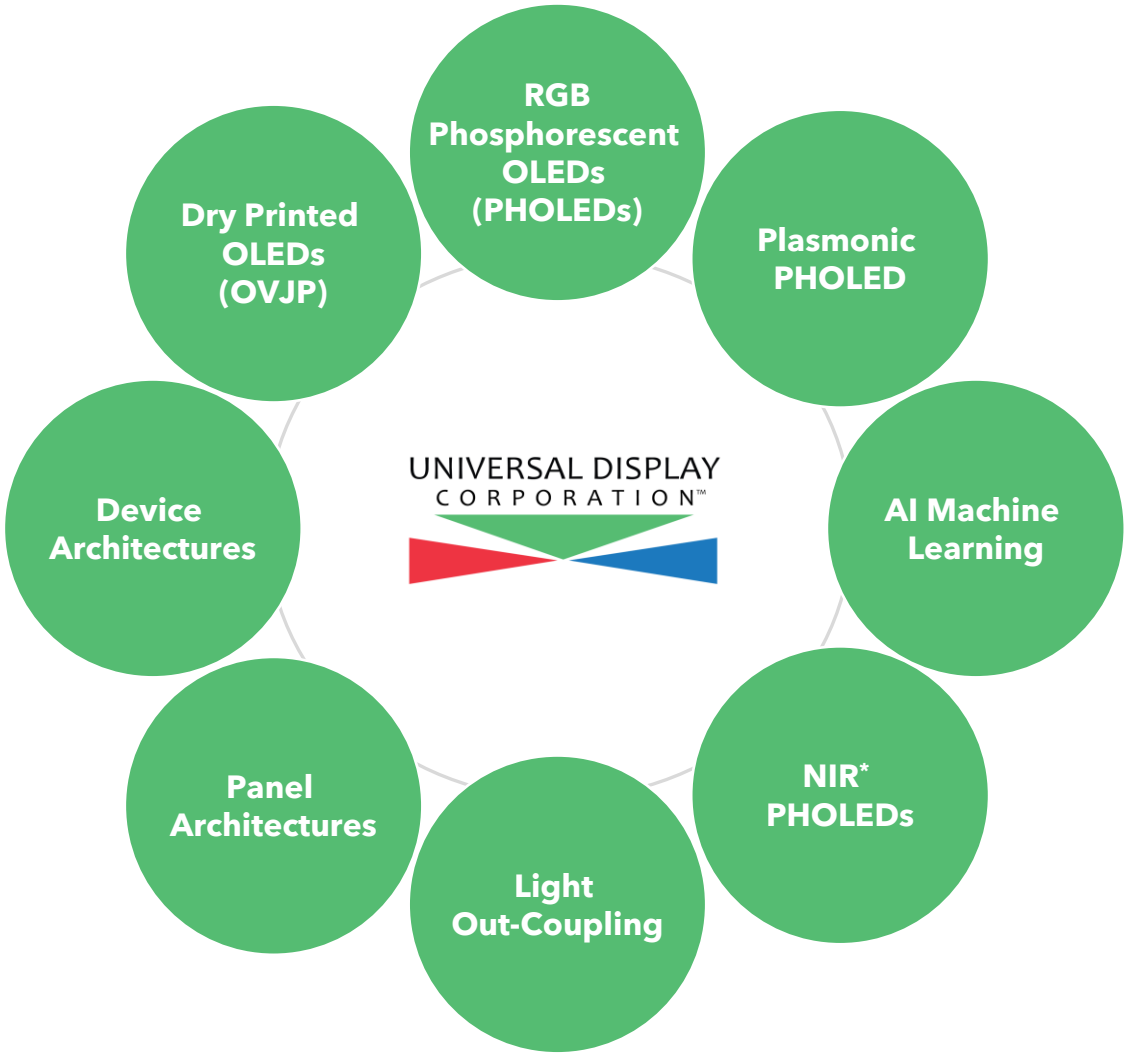


- Thin and lightweight
- Transparent
- Non-breakable, Conformable, Flexible, Foldable, Rollable
- Scaling advantage
- Roll-to-roll process

OLED Lighting Around the World

OLEDWorks
CERTIFIED CHANNEL PARTNER

Strong, Broad & Deep Patent Portfolio



- We develop and license enabling technologies that are at the heart of consumer OLED products worldwide, from AR/VR, smartwatches, smartphones, IT (tablets, laptops, monitors), automotive and TVs to lighting products.
- We believe that our extensive portfolio of patents, trade secrets and know-how enable our leadership position in the OLED ecosystem.
- Our R&D innovations allow us to continuously bolster the depth and breadth of our global OLED intellectual property framework, which currently stands at more than 6,000 issued and pending patents worldwide (as of June 30, 2024).

*NIR=Near Infrared

Global Patent Portfolio

6,000+ Worldwide Patents Issued & Pending*

- **China**
- **South Korea**
- **Europe**
- **Taiwan**
- **Japan**
- **United States**

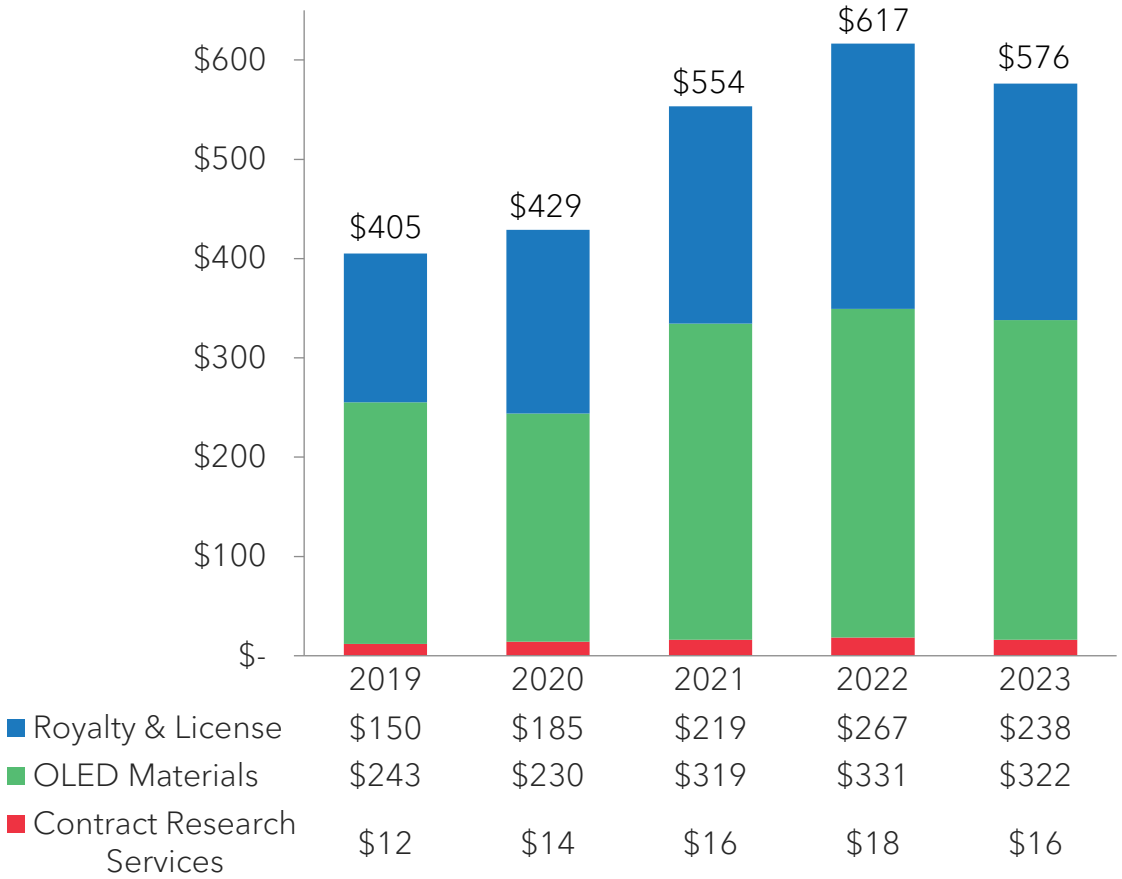
* as of June 30, 2024

Strategic Display & Lighting Partnerships

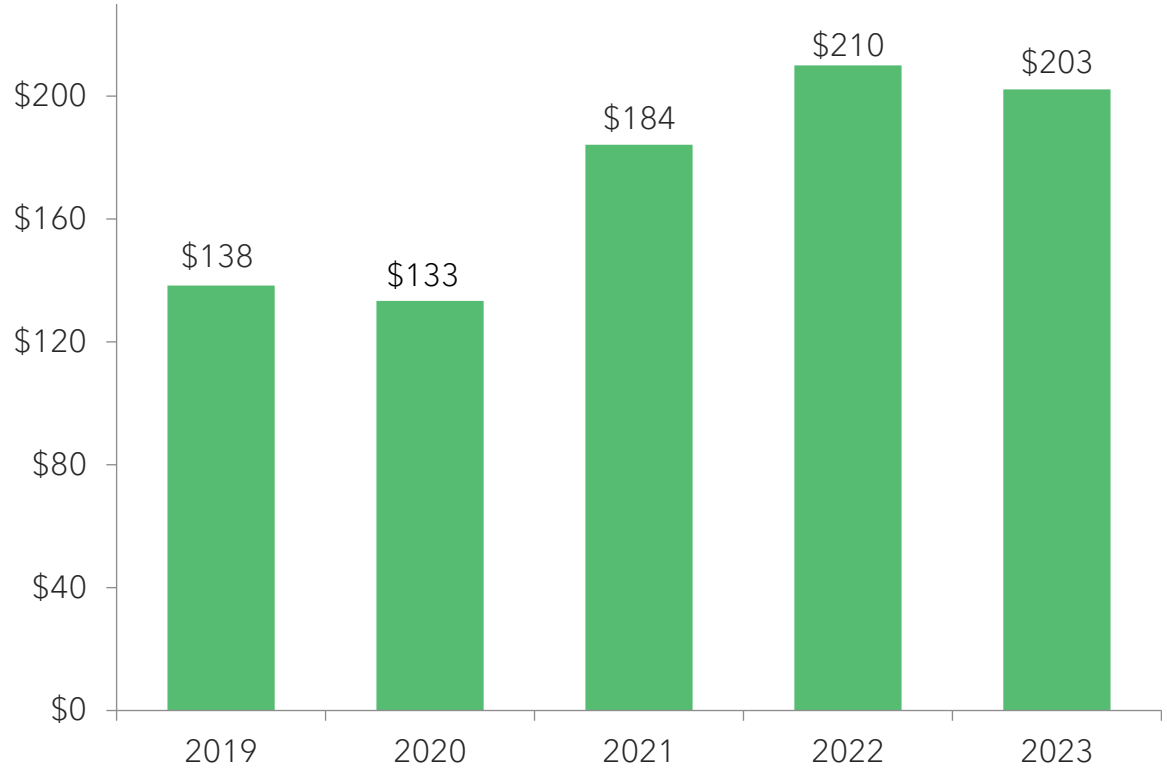
Historical Financial Performance

Revenue

($ in millions)



Income



Robust Capital Structure

In thousands, except share data

	June 30, 2024
Cash, Cash Equivalents, Short-Term and Long-Term Investments*	$878,936
Total Assets	$1,776,561
Long-Term Debt	--
A/P and Accrued Liability	$82,260
Deferred Revenue	$70,516
Shareholders' Equity	$1,526,838
Total Shares Outstanding	47,628,113

*Please refer to our recent 10-K filing for information regarding minority investments.

Company Summary

Lighting up the OLED Revolution

OLED Leader

- Inventing, Developing and Commercializing Proprietary Phosphorescent OLED Technologies & Materials to enable *Display* and *Lighting* Manufacturers
- Fabless Model; Partnering w/ PPG for 20+ Years
- ~465 Employees (321 R&D, 141 PhDs); Largest Global PHOLED Team*

Strong Financials

- $879M Cash, No Debt*
- $18.45 in Cash/Share*
- High Margin Business
- Lean Operating Model

Comprehensive & Robust IP

- Largest Phosphorescent OLED (PHOLED) Technology & Materials Portfolio
- More than 6,000 Issued & Pending Patents Worldwide* and Growing

Blue-Chip Customer Base

- Displays: Samsung, LG Display, BOE, Tianma, CSOT, Visionox, JDI
- Lighting: Kaneka, Konica Minolta, Lumiotec, OLEDWorks, Sumitomo Chemical
- Partnering with *more than* 25 companies

*As of June 30, 2024