

# **SAMSUNG DISPLAY**



**Investor Presentation**

**2024**

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# DISPLAY OVERVIEW

**\$24B**

Revenue ('23)

**\$4.3B**

Profit ('23)

Business Accomplishment

[ Market Share ]

**1**

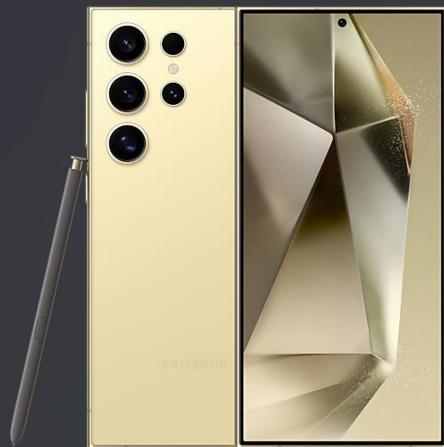
Smartphone Display 50%

Smartphone AMOLED Display 58%

(Revenue base, Omdia)

# LEADERSHIP IN DISPLAY

## Small-Medium Display



Smartphone



Foldable Phone



Tablet



Note PC



Automotive



Smart Watch

## Large Display



TV



Monitor

# OLED EVERYWHERE

SDC will cover all sizes of display

Small size

Large size



**VR/AR**



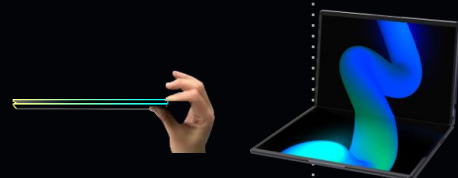
*"Small & High Resolution"*

**Smartphone**

*"Foldable / Slidable"*



**IT** *"Slim / Foldable"*



*"Various Aspect Ratio"*

**Monitor** 16:9 / 21:9 / 32:9



**Auto**

*"Seamless & Free form"*



**TV** *"Large Size Screen"*

55"/65" → 77" ↑



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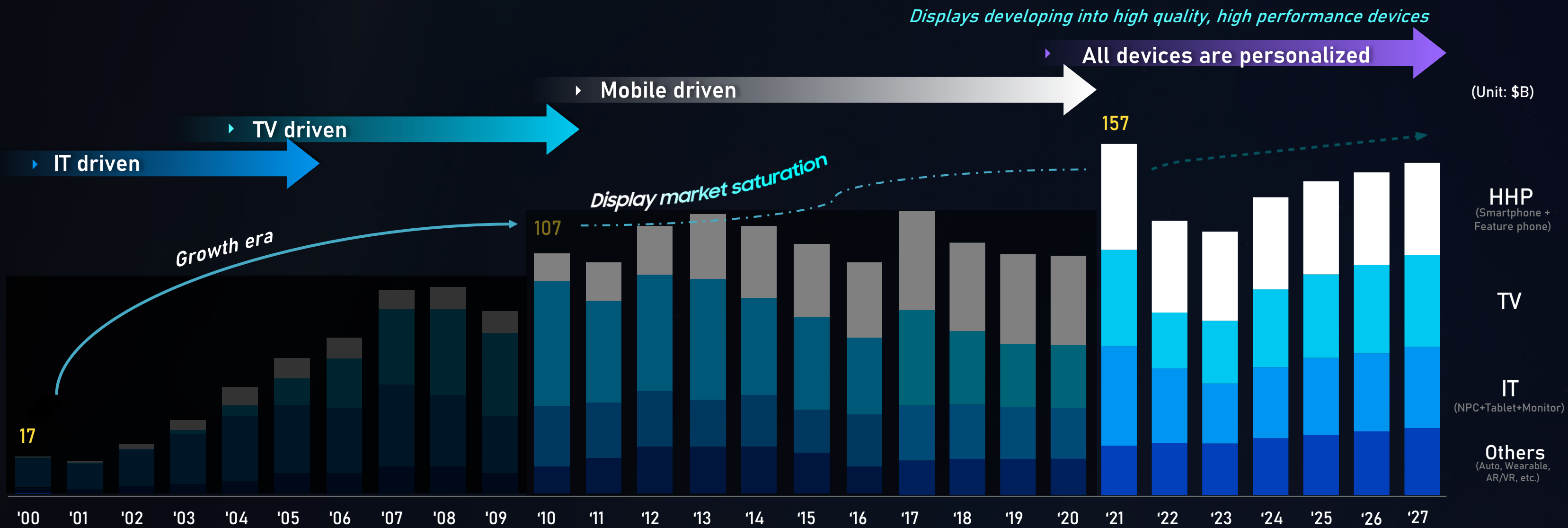
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# DISPLAY MARKET

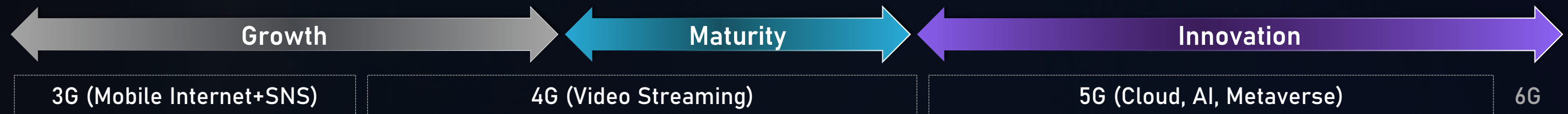
## AI accelerates device personalization



\*Source: Omdia

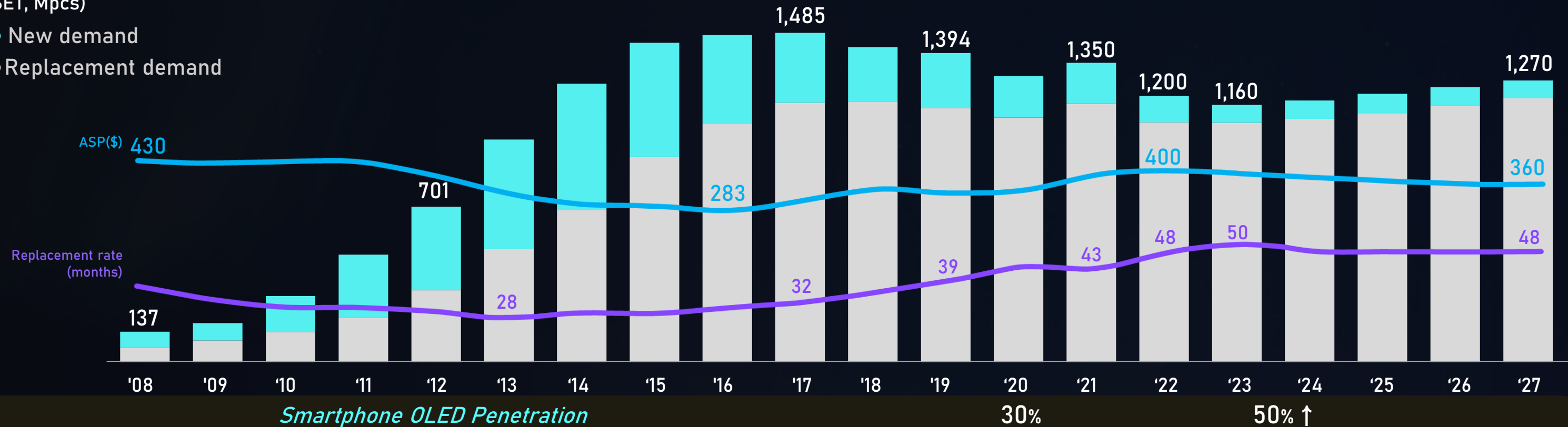
# SMARTPHONE MARKET

Continue to advance the performance and form-factor



(SET, Mpcs)

- New demand
- Replacement demand



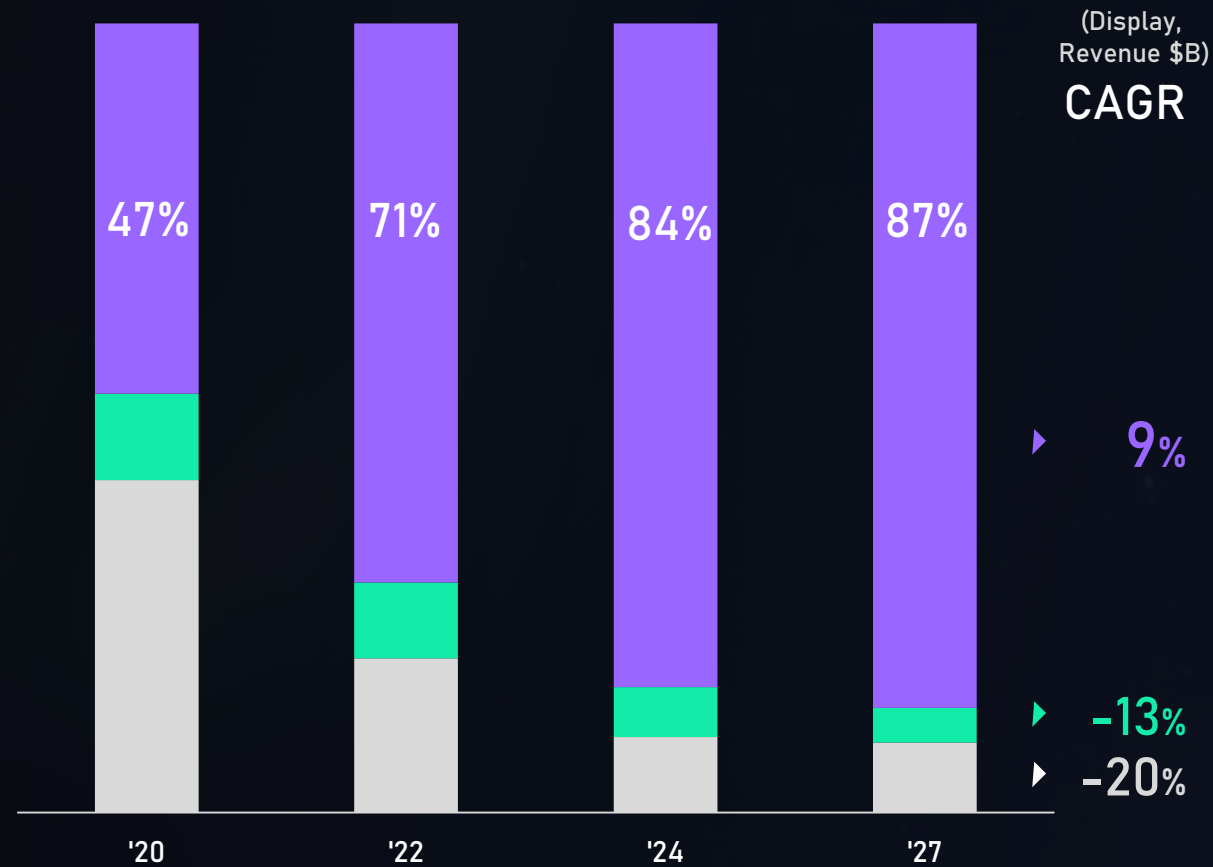
(Source : IDC, SA, Omdia)



# FLEXIBLE BECOMES MAINSTREAM

## More OLED, Various Form-Factor in Smartphone

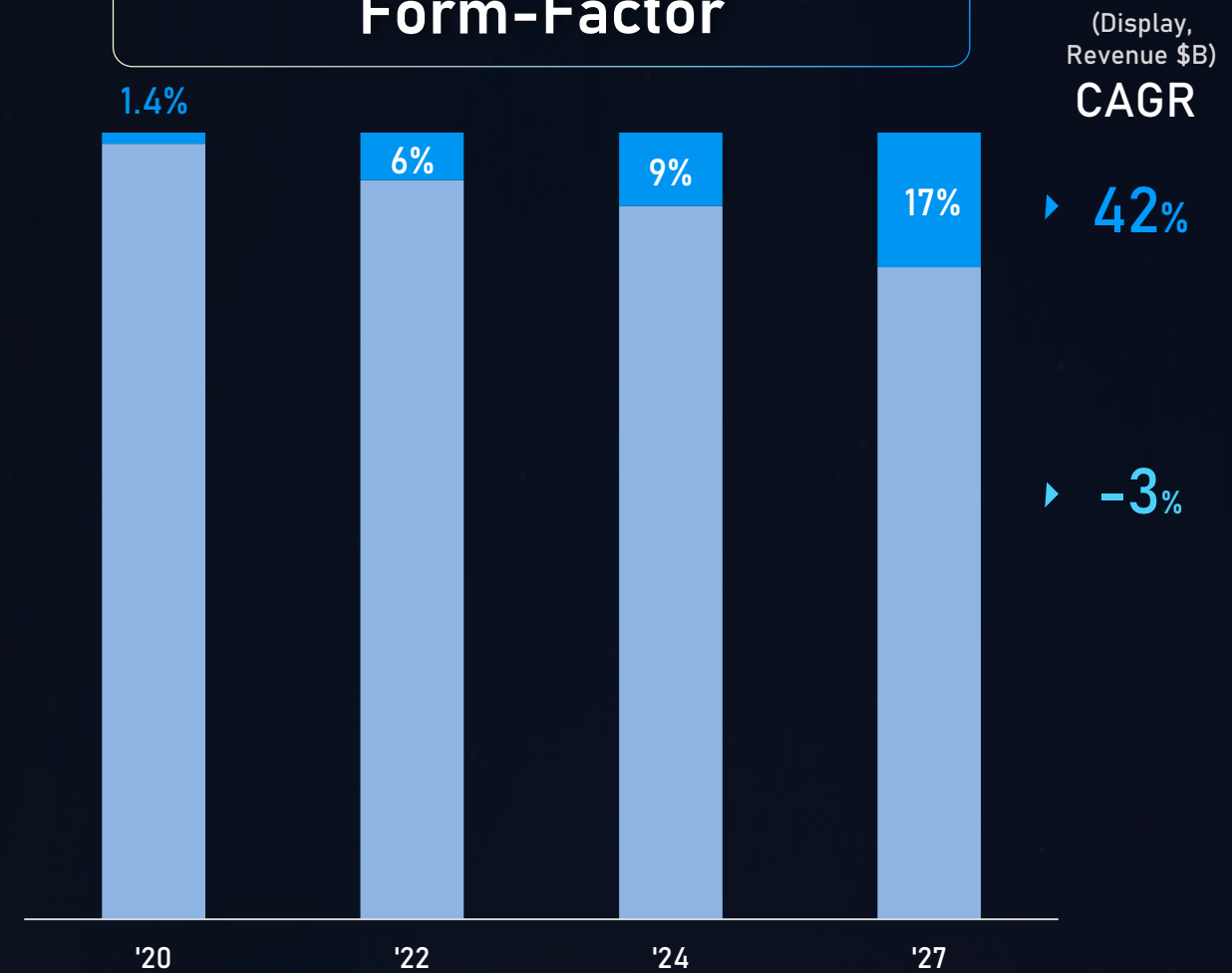
Tech



● LCD ● Rigid OLED ● Flexible OLED

\*Source: Omdia

Form-Factor



● Standard ● Foldable

\*Source: Omdia

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# SUPERIOR TECHNOLOGY LEADERSHIP

Diamond Pixel

Eco<sup>2</sup> OLED

QD OLED

Samsung Diamond Pixel™

Eco<sup>2</sup> OLED™

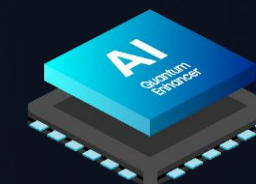
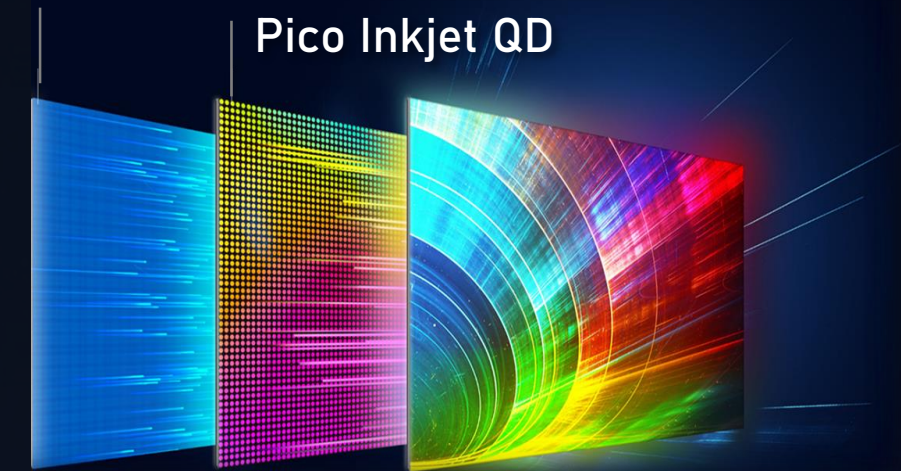
Leap in Technology



**E**fficient power  
**C**onsumption  
+  
**E**co friendly  
**C**omponent

Hyper Efficient EL

Pico Inkjet QD



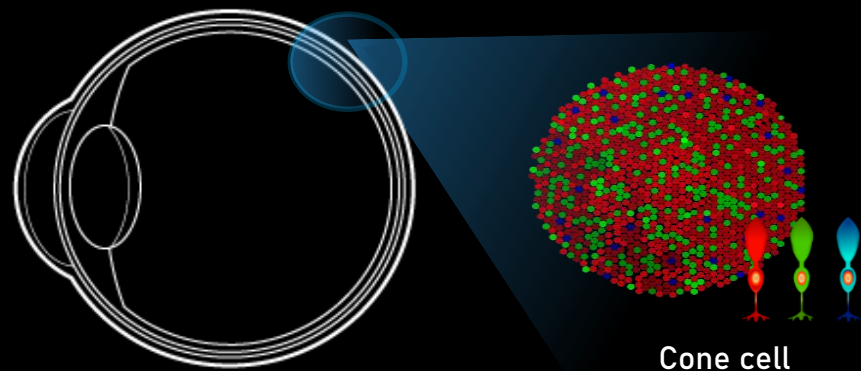
Quantum Enhancer™

# DIAMOND PIXEL

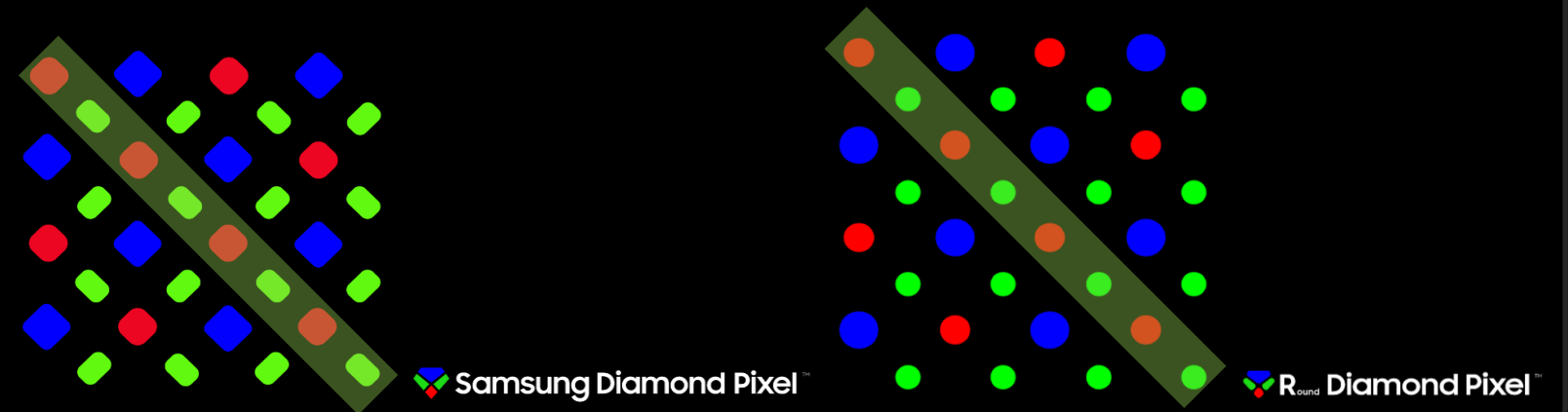
A structure like human eyes,  
optimized for straight and diagonal shape expression

## Human eye structure

"Human eyes are more sensitive to Green"



Pixel Structure



Diamond Pixel

Others



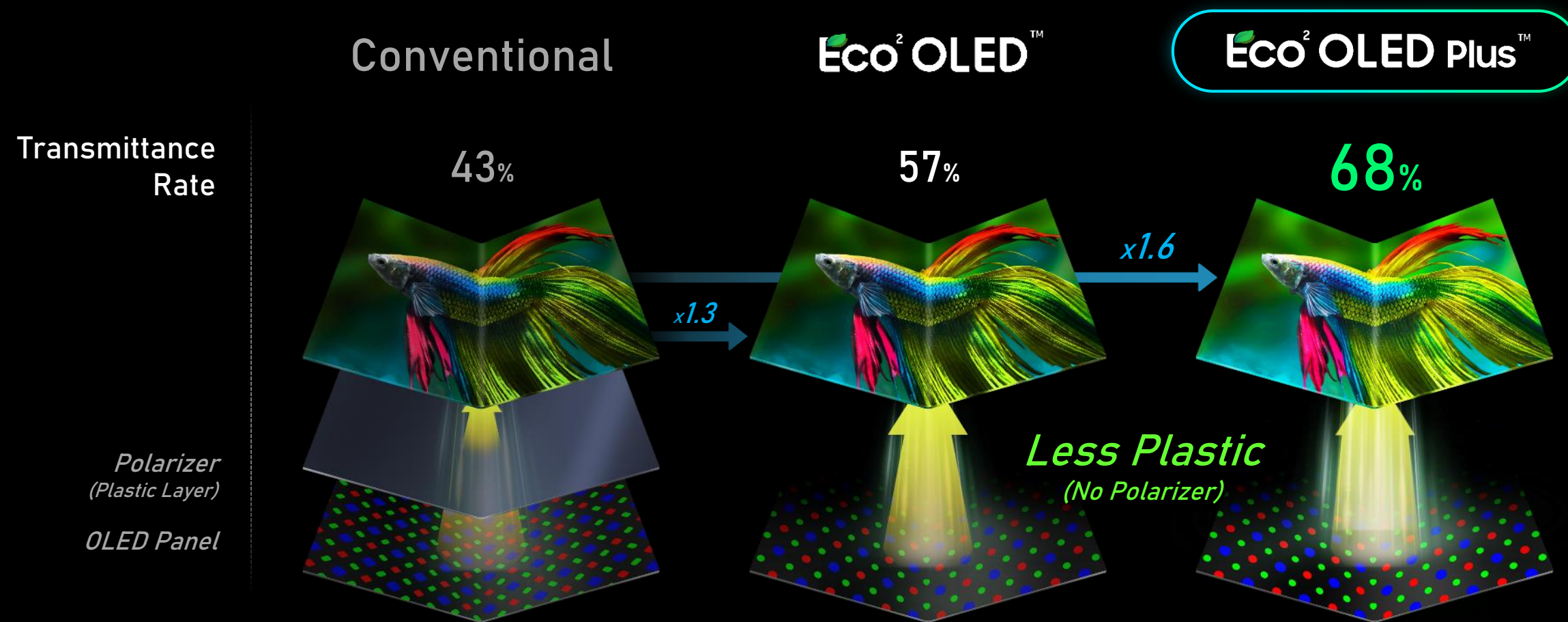
# ECO<sup>2</sup> OLED : COLOR

Eco<sup>2</sup> OLED delivers the best color performance of any smartphone display (REC 2020, 91%)



# ECO<sup>2</sup> OLED : ENERGY EFFICIENCY

Eco<sup>2</sup> OLED promises high transmittance and energy efficiency with round diamond pixel



# ALL NEW QD-OLED

Brighter



3000nit (TV)

1000nit (Monitor)

This panel illustrates the brightness advantage of QD-OLED. It features two monitors. The top monitor, labeled '3000nit (TV)', displays a vibrant, close-up image of a red flower with a yellow arrow pointing upwards from it. The bottom monitor, labeled '1000nit (Monitor)', displays a scene from a game with a character in a dark, atmospheric setting. A yellow arrow points upwards from the bottom monitor to the top one, indicating the increase in brightness.

Stronger




Quantum Enhancer  
AI algorithm

~360 Hz (Monitor)

This panel highlights the 'Quantum Enhancer' AI algorithm. It features a central graphic of a glowing blue and purple chip with the text 'Quantum Enhancer AI algorithm'. To the right, it specifies '~360 Hz (Monitor)'. The background is a dark blue and purple circuit board pattern with glowing nodes.

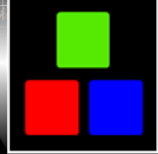
Sharper

Ultra-precise  
Pico Inkjet Process



140ppi

Pixel size reduced by 30%



This panel emphasizes the sharpness of the display. It features the text 'Ultra-precise Pico Inkjet Process' at the top. Below is a photograph of a man in a dark coat, overlaid with a fine grid to demonstrate high resolution. The text '140ppi' is placed over the grid. At the bottom, it states 'Pixel size reduced by 30%' next to a small color calibration chart with red, green, and blue squares.

# QD-OLED : CONTINUE TO IMPRESS

## Consumers

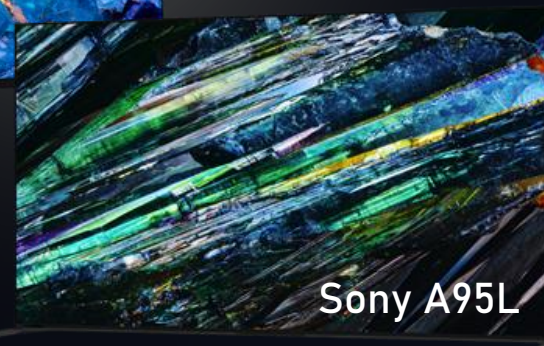
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The 8 Best TVs – Spring 2024



Samsung S90C



Sony A95L

## Content Creators

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2024 Product of the Year Awards

## Display Tech

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2024 Display Application of the Year





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# PLANET LOVING : GLASS TO SAND

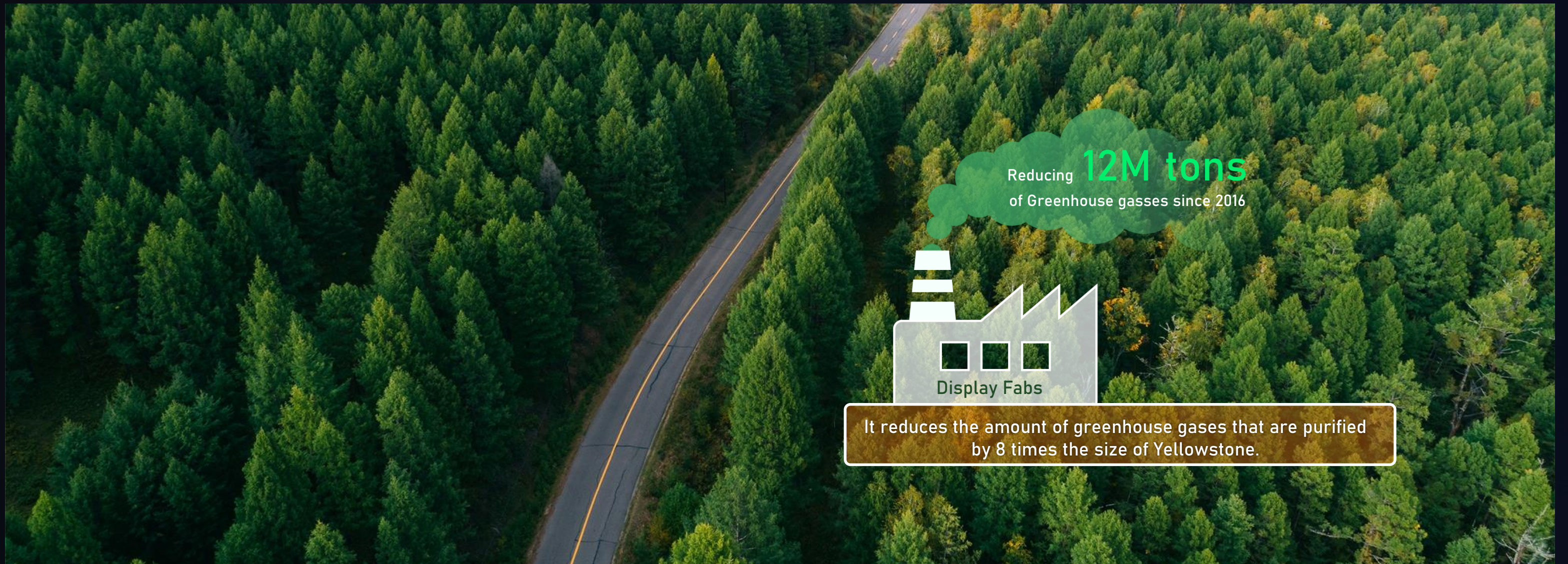
Samsung Display protects sand by recycling glass



# PLANET LOVING : REDUCING GHG

Samsung Display has been striving to reduce GHG since 2016

\* GHG : Greenhouse Gas



Reducing **12M tons**  
of Greenhouse gasses since 2016

Display Fabs

It reduces the amount of greenhouse gases that are purified by 8 times the size of Yellowstone.

# PLANET LOVING : UPCYCLED PLASTIC

## Defective plastic shipping trays are recycled into new trays



# PEOPLE CARING : EYE CARE DISPLAY

Less bluelight emission makes your eye comfortable

## Bluelight Filtering

Sensing only the Harmful Bluelight Spectrum (415nm~455nm)



**Eye Care Display**

SGS PERFORMANCE TESTED

OLED  
powered by Samsung

**Eye Care Display**

SGS PERFORMANCE TESTED

Samsung OLED

Dark mode  
Harmful Blue light reduced more than **78%**