

## **The Large-Area OLED Wave Has Arrived**

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Through the history of the display industry, we see a repeating pattern of display technology substitution, new and better display technologies replace the incumbents.

We are once again at an inflection point in the evolution of display technologies. In mobile, OLED is winning the battle versus LCDs and all new fab investments are OLED. Now the focus is on enabling more advanced OLED technologies (like foldable) even as flexible OLED replaces rigid OLED and high-end LCD. In large area displays like IT and TV, OLED is also emerging to challenge LCD's dominance, as LCD makers try to defend their market position with extending technologies like mini-LED backlights. Ultimately, we expect OLED to overtake LCD in large area displays (first in IT, then in TV), as well as in mobile, in what we call the "OLED Wave". This inflection will play out over the next decade or more, until even more advanced displays like micro-LED reach sufficient maturity.

Whichever technologies ultimately win adoption, Applied Materials will be a key enabler in partnership with our customers throughout the world. Advanced displays need advanced backplane processes, with more layers and more challenging specifications. Our integrated materials solutions (IMS) are optimized for LTPS, MOx, LTPO, in-cell/on-cell touch, and more. We are excited to work with customers and partners to help bring new and superior displays to the market faster, with higher yield and lower cost.