Global shipments of large-size LCD panels (7 inches and greater) will continue to contract in 2017, registering an annual decline of 2.4% to around 725 million units. The fast-growing, large-size TV category is poised for even faster growth with waves of Gen 10.5 capacity coming on-line in the next several years from multiple suppliers. At 2,940 mm x 3,370 mm, Gen 10.5 is the largest LCD glass substrate available, efficiently enabling the manufacture of 65- and 75-inch TV panels. These large sizes will drive higher performance in resolution, color, contrast, brightness, viewing angle and other performance metrics.

In recent years, LG Display has produced TV-sized OLED panels for its TVs, and most of the company's 2016 revenue came from TFT-LCD panels as only 10 percent of the thereof came from OLED units. However, by 2020, the company expects the profit ratio between the two to be equal. LG isn't the only manufacturer producing OLED TVs, as companies such as Philips, Sony, Panasonic, the Turkey-based Vestel, China-based Skyworth, Konka, and Changhong all launched OLED TV products in the past. Hence global TV OLED panel shipments have increased from 160,000 units in 2014 to 900,000 in 2016 with the trend expected to continue well into 2017. As for smartphone OLED panels, Samsung continues to be the dominant supplier in the small and medium OLED panel market, but other players like Chinese company BOE Technology, Shanghai-based EverDisplay Optronics, Kunshan Govationox Optoelectronics, Tianma Micro-electronics, and Truly Opto-Electronics are all expected to ramp up their OLED production in the coming years.

In 2018, the adoption of OLED panels in smartphones will surpass that of TFT-LCDs for the first time ever. By next year, 58 percent of smartphone display shipments will be OLED.

OLED smartphone panel production has been on the rise for the past few years. In 2014, OLED displays amounted to only 27 percent of screens used in handsets, while the remaining panels were traditional LCDs. Fast forward to 2017, and OLED smartphone displays are expected to exceed 40 percent market share thanks to Apple which plans to use the technology in its future 2017 iPhone products. Earlier this month it was reported Apple placed an order for 70 million curved OLED displays to be used in the iPhone 8, all of which will be manufactured by Samsung Display. Google has also taken an interest in curved OLED panels and according to industry sources is currently in talks with LG Display for a partnership that could bring curved OLED displays to its next-generation Pixel smartphone. Other Chinese smartphone makers including Vivo, OPPO, Lenovo and Huawei are expected to incorporate OLED technology into their future flagship smartphones. Seeing demand is on the rise, LG Display has recently taken the decision to expand OLED panel production for smartphones and tablets.
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