



# Global and China Organic Light-Emitting Diode (OLED) Industry Report, 2016-2020

Jun. 2016

## **STUDY GOAL AND OBJECTIVES**

This report provides the industry executives with strategically significant competitor information, analysis, insight and projection on the competitive pattern and key companies in the industry, crucial to the development and implementation of effective business, marketing and R&D programs.

## **REPORT OBJECTIVES**

- ◆ To establish a comprehensive, factual, annually updated and cost-effective information base on market size, competition patterns, market segments, goals and strategies of the leading players in the market, reviews and forecasts.
- ◆ To assist potential market entrants in evaluating prospective acquisition and joint venture candidates.
- ◆ To complement the organizations' internal competitor information gathering efforts with strategic analysis, data interpretation and insight.
- ◆ To suggest for concerned investors in line with the current development of this industry as well as the development tendency.
- ◆ To help company to succeed in a competitive market, and

## **METHODOLOGY**

Both primary and secondary research methodologies were used in preparing this study. Initially, a comprehensive and exhaustive search of the literature on this industry was conducted. These sources included related books and journals, trade literature, marketing literature, other product/promotional literature, annual reports, security analyst reports, and other publications. Subsequently, telephone interviews or email correspondence was conducted with marketing executives etc. Other sources included related magazines, academics, and consulting companies.

## **INFORMATION SOURCES**

The primary information sources include Company Reports, and National Bureau of Statistics of China etc.

## Abstract

The OLED market has been developing rapidly worldwide over the recent years, and its market size reached USD13 billion in 2015. With technology and capacity construction, OLED (from small-sized panels about 5-inch) finds fast growing application and is anticipated to substitute for LCD. Once Apple starts to apply OLED panels in iPhone, the demonstration effect will be brought and market demand will be further spurred. It is expected that, till 2020, the global OLED market size will be up to USD33.1 billion, presenting an AAGR of about 20%.

By application, mobile phone is the largest applied market for OLED, and over 76% of OLED panels were applied in mobile phone field in 2015. In future, OLED will get increasingly used in emerging domains such as wearable device, TV, illumination, VR and automobile.

Currently, the world's OLED panel manufacturers are mainly concentrated in South Korea – Samsung Display and LG Display, among which the former focuses on medium and small sizes which are chiefly applied in mobile phone, while the latter gives priority to large-sized products primarily for TV. The two companies are now enlarging their production capacity.

During 2015-2017, Samsung Display will make total investments of USD3.6 billion to establish the novel OLED panel production line in South Korea, mainly involving in medium and small-sized OLED display screens which are still targeted at consumer electronics like smart phone. In 2016-2017, Samsung Display will lavish USD7.4 billion into the production equipment for Apple-used curved OLED display screen. As scheduled, the capacity of Samsung Display will be expanded to 30,000-45,000 substrates in 2016 and to 45,000 substrates in 2017.

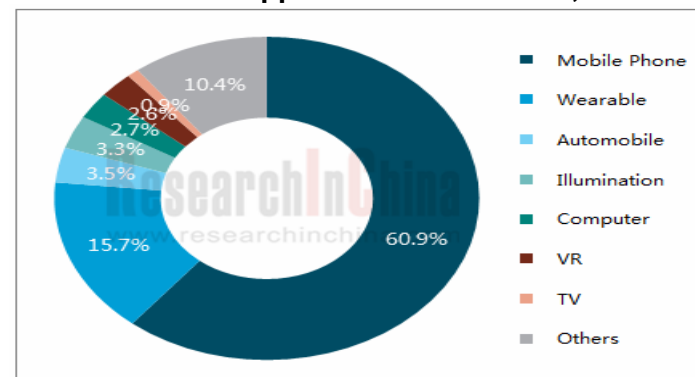
LG Display is primarily focused on OLED TV and OLED illumination at present. In September 2014, LG Display launched the world's first 4K curved OLED TV. At the end of 2015, LG Display took over all OLED illumination business of LG Chem. In July 2015, LG Display announced to invest KRW1.05 trillion to newly establish a 6-generation flexible OLED production line (code: E5) in Gumi Plant, Gyeongsang, South Korea. The monthly planned capacity of this production line is up to 7,500 pcs (be subject to glass substrates which have been put into), and it plans to realize mass-production in the first half of 2017.

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In China, companies like Everdisplay/Optronic, BOE, Tianma Micro-electronics, and Visionox are tapping into the OLED field.

- Everdisplay Optronic will succeed in developing flexible AMOLED display screen in 2017, foldable products in 2019, and curly products in 2020.
- On November 21, 2015, BOE's 5.5th-generation AMOLED production line was put into production in Ordos, Inner Mongolia, which is not only Chinese Mainland's first 5.5th-generation AMOLED production line but also the world's second 5.5th-generation AMOLED production line behind Samsung. In 2016, BOE will start the Chengdu-based 6th-generation LTPS/AMOLED production line project and will add the investment of RMB24.5 billion to produce AMOLED display products, mainly targeting at medium and small-sized high-end display markets.
- Tianma Micro-electronics began to construct China's first AM-OLED pilot line in Shanghai in 2010 and has produced many models of samples. Tianma plans to newly build a 5.5th-generation production line and set up three independent OLED production lines.
- In May 2015, the 5.5-inch AMOLED product of Visionox was launched. On the Auto China 2016, the concept vehicle Haval HB-02 of Great Wall Motor is equipped with Visionox' OLED display screen system, which is the first publicized show of AMOLED display screen used for in-vehicle system in China.

## OLED Applications Worldwide, 2020



Source: ResearchInChina

Global and China Organic Light-Emitting Diode (OLED) Industry Report, 2016-2020 by ResearchInChina highlights the following:

- Global OLED market size, shipment, capacity, competitive landscape during 2016-2020;
- Development of downstream applications such as mobile phone, TV, wearable device, PC, VR, illumination, auto display, and the demand for OLED during 2016-2020;
- Supply of OLED upstream material market;
- Development of global and Chinese OLED companies, covering operation, OLED capacity construction, investment plans, among others.

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