For Immediate Release:

“OLED Lighting will reach a $1.7B market opportunity by 2020” announces Yole Développement

“OLED for Lighting”, a report from Yole Développement

Lyons, France – October 31, 2012: So far, OLED revenue has been driven mainly by display applications (smartphones…) but the industry is now targeting the lighting market based on the technology specificities in terms of design and efficiency. Yole Développement is pleased to announce today its new report “OLED for Lighting” which presents all OLED Lighting applications and associated market metrics for the period 2012-2020, and a deep analysis of OLED technology and OLED lighting industry...

OLED industry is just entering the lighting market

On this new battleground, OLED will have to compete with LED technology which has already paved the way with a revolution in Solid State Lighting (SSL) that has drawn attention away from OLED over the last 10 years. Added to that, the high cost of OLED technology will not make mass market penetration easier and current low efficacy could slow its adoption.

OLEDs will develop slowly in the lighting market (automotive and general lighting) and attract mainly niche applications (specialty and high-end lighting), differentiating through design possibilities. To access traditional market segments (commercial lighting, office lighting…), OLED technology will have to find a spark, as well as combine enough different niche markets to achieve the economies of scale that will decrease costs. In Yole Développement estimation, this should be triggered by 2014 with the use of larger substrates and better process control.
“OLED lighting panels will reach a market size of nearly $2.8M in 2012 and will peak to nearly $1.7B by 2020”, estimates Pars Mukish, Technology & Market Analyst, LED & OLED at Yole Développement. Growth will be driven mainly by general lighting applications, representing more than 70% of the overall OLED Lighting Business in 2020.

Yole Développement report presents all OLED Lighting applications and associated market metrics for the period 2012-2020, providing details about drivers & challenges, volume and market size per application...

**Which technology approaches can drive OLED into mass production?**

As for any emerging technology, a large variety of materials and OLED structures are used in production or tested. Moreover, alternatives to existing materials are still actively researched in order to improve the light performance, lifetime, and decrease manufacturing costs. Although the uncertainty about the future winning material approach between small-molecule OLED materials and polymer materials remains, polymers continue to struggle to demonstrate the ability to turn their cost and performance potential into an industrial reality.

Rigid glass maintains its exclusivity as a substrate material in OLED lighting panel production. However, progress has been made in the development of techniques, such as roll-to-roll processing, flexible ultra-thin glass and encapsulation solutions, which will enable the progressive penetration of flexible OLED panels into the lighting market.

The wide variety of technology approaches provides opportunity for numerous players involved in OLED research & development activities. However, the identification of winning technology approaches and the precise identification of the corresponding time-to-market are essential for the successful development of the OLED lighting business.

Yole Développement experts propose you to discover a deep analysis of OLED technology, OLED manufacturing and associated roadmaps, providing details about the different OLED structures, requirements for each layer, materials used, different manufacturing techniques and associated equipment, manufacturing costs...

**The rise of OLED lighting will depend on strategies of OLED panels manufacturers**

“To fully compete with LED technology and obtain the full benefits of OLEDs at a reasonable cost, new business models are mandatory as the traditional lighting industry will be reluctant to integrate new technology as it could eat away at margins: OLED cost directly impacts the cost of OLED-based luminaires”, explains Milan Rosina, Technology & Market Analyst, OLED & Photovoltaics at Yole Développement. Added to that, these players will also have to integrate technology for which they have no know-how and which is outside of their expertise. So the question is: will these players be ready to accept decreases in revenue and increases in production difficulty simply to aid the deployment of a new technology? The logical answer is no.

For that reason, development of OLED technology in the lighting market will be difficult and will force actors at the bottom of the supply chain to realize vertical integration in order to push the technology on the market. But accessing distribution channels will represent a big challenge for those players who will have to develop new approaches to sell their lighting products. The rise of OLED lighting will therefore depend on the right merger of the emerging OLED industry with the traditional
lighting industry. Moreover, for General Lighting, the main challenge for OLEDs will be to identify the “spark” market that will allow the technology to develop economies of scale and to create a marketing window conveying advantages and possibilities of the technology toward consumers.

Yole Développement report presents an analysis of OLED lighting industry, providing details about supply chain, main players, collaborations...

About the report “OLED for Lighting”

- Authors:

  Pars MUKISH holds a master degree in Materials Science & Polymers and a master degree in Innovation & Technology Management (EM Lyon – France). He works at Yole Développement as Market and Technology Analyst in the fields of LED, Lighting Technologies, Compound Semiconductors and OLEDs to carry out technical, economic and marketing analysis. Previously, he has worked as Marketing & Techno-Economic Analyst at the CEA (French Research Center).

  Milan ROSINA holds a PhD degree from the National Polytechnical Institute in Grenoble, France. After a three-year postdoc at Fraunhofer Institute, Germany, he worked at the CEA-LETI laboratory, France and at the Research and Innovation Center of GDF SUEZ, France. He has more than 12 years scientific and industrial experience in the field of semiconductors, LEDs, solar cells and nanotechnology and is the co-author of two patents in the field of solar cell processing. He works at Yole Développement as Market & Technology Analyst in the fields of photovoltaics, LEDs, OLEDs and nanotechnology.

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- Companies cited in the report:


Beginning in 1998 with Yole Développement, we have grown to become a group of companies providing market research, technology analysis, strategy consulting, media in addition to finance services. With a solid focus on emerging applications using silicon and/or micro manufacturing, Yole Développement group has expanded to include more than 50 associates worldwide covering MEMS, Microfluidics & Medical, Advanced Packaging, Compound Semiconductors, Power Electronics, LED, and Photovoltaics. The group supports companies, investors and R&D organizations worldwide to help them understand markets and follow technology trends to develop their business.
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CONTACTS
For more information about :
• Services : Jean-Christophe Eloy (eloy@yole.fr)
• Reports: David Jourdan (jourdan@yole.fr)
• Media : Sandrine Leroy (leroy@yole.fr)