

TOWARDS GREEN ELECTRONICS IN GERMANY & EUROPE



Ed van den Kieboom

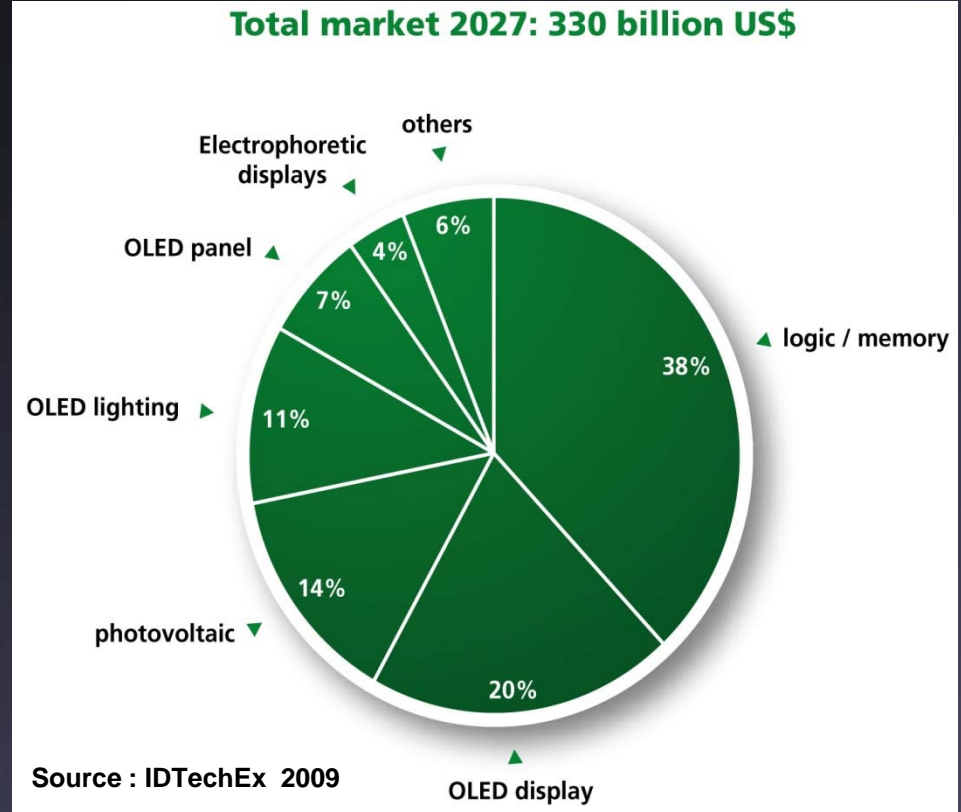
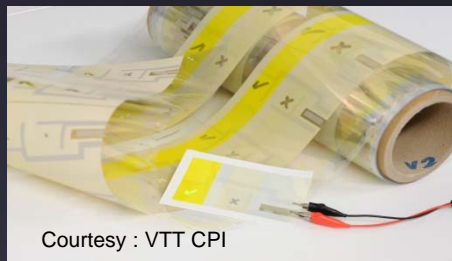
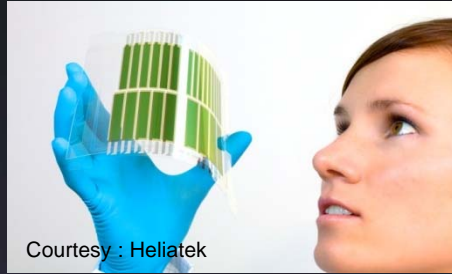
Secretary OLAE Governance Board

Workshop Photonik 2020, Berlin , March 23, 2010



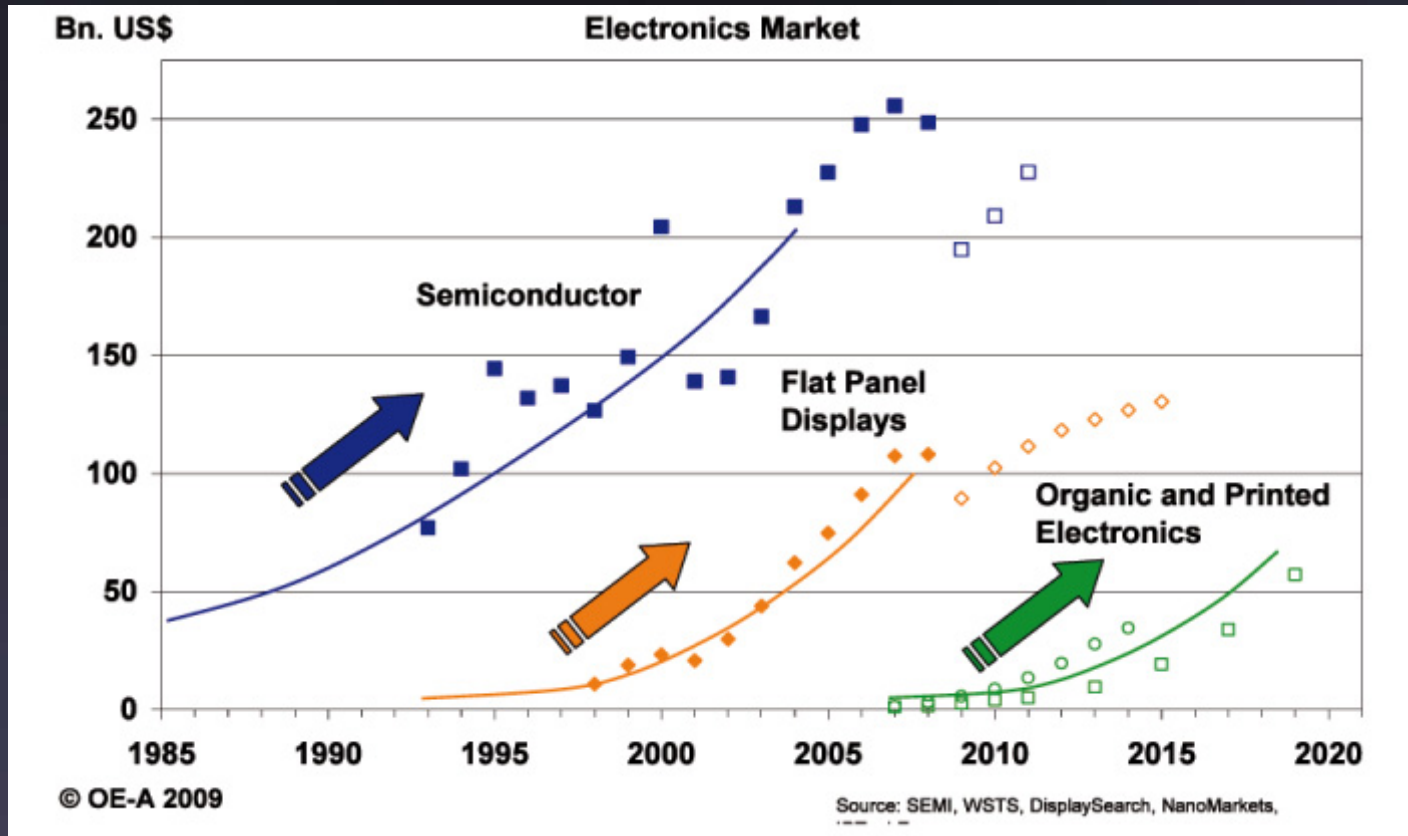
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What is Organic & Large Area Electronics



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OLAE Global Roadmap



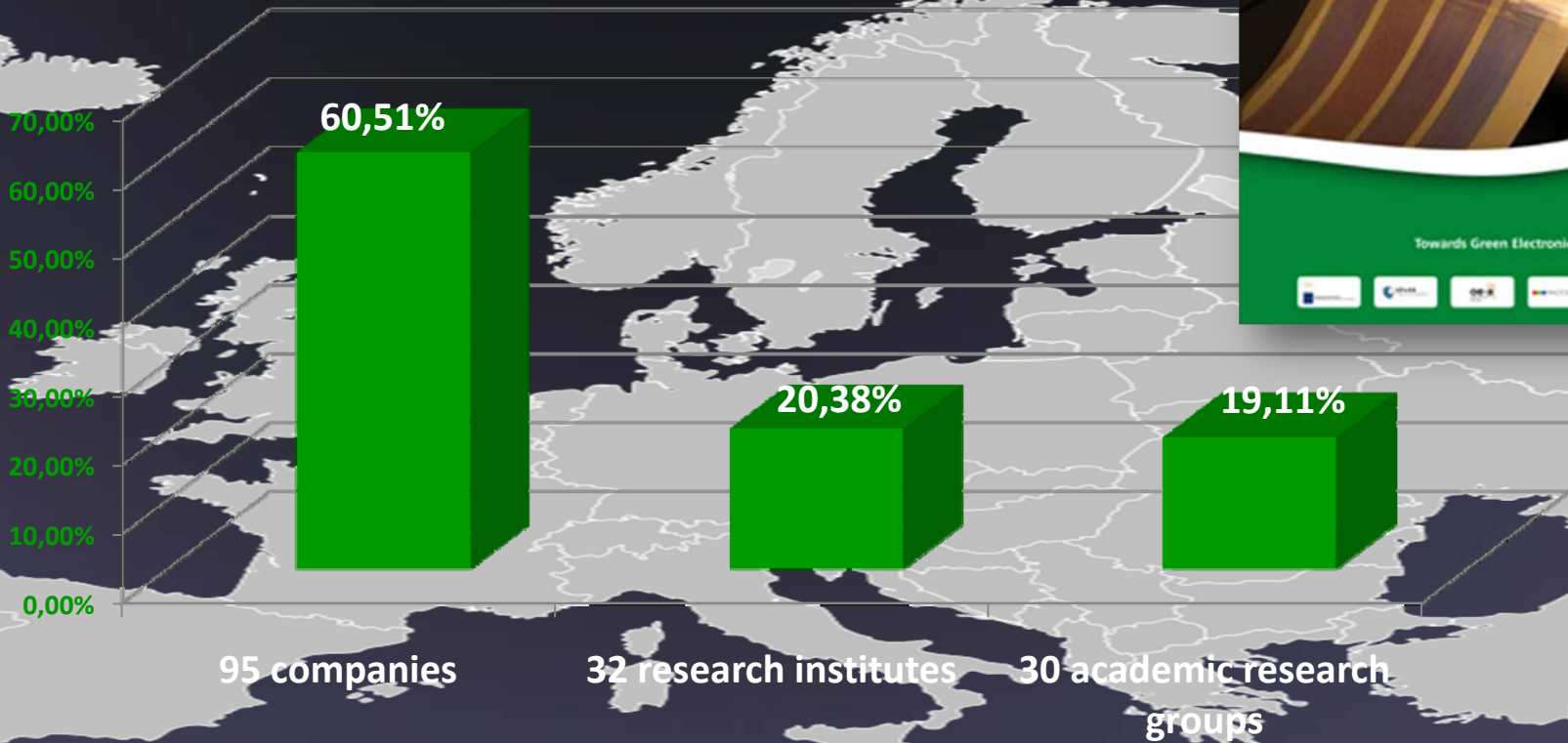
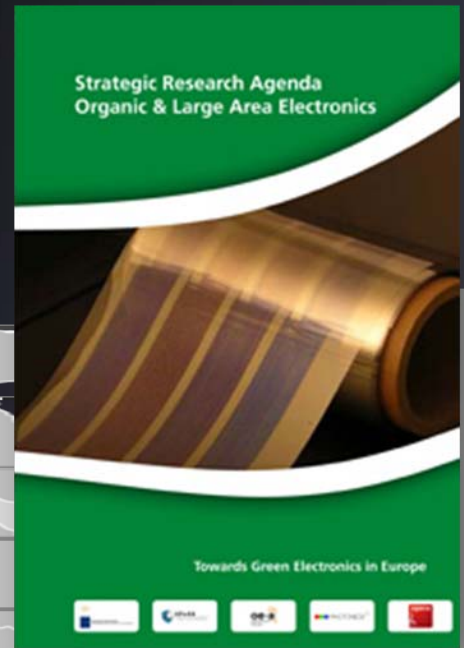
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Why a coherent strategy for OLAE is needed

- a general lack of a coherent and long-term strategy for OLAE in Europe
- a fragmentation, duplication and discontinuity of research efforts Europe is threatening
- limited coordination of European and national OLAE public funding activities
- shortcomings in the ability to translate OLAE research results into product- and process-innovation
- research and innovation hindered by regulatory framework conditions.



EU OLAE Strategic Research Agenda Stakeholders input



EUROPE'S OLAE SWOT

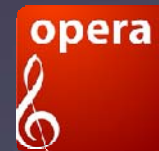
OLAE SWOT for Europe

- ▶ Already in possession of materials and production machinery
- ▶ Huge European market

- ▶ Lack of start-ups and entrepreneurs with clear view from research to manufacturing
- ▶ Committed giants are needed

- ▶ Formidable research on OLEDs, printed RFIDs and transistors.
- ▶ Field of applications steadily growing

- ▶ European market will be taken over by foreign manufacturers
- ▶ External companies will benefit from the research and investment done in Europe



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Key Recommendations for EU OLAE SRA Implementation I

- **Coordinate EU and national member state OLAE R&D programmes, plus R&D collaboration beyond Europe**
- **Nurture the emergence of an European OLAE industry jointly through coordinated innovative, assertive and challenging strategies, e.g. PPP's, lead markets, clusters, etc.**
- **EU to take the lead and to coordinate early establishment and developing of standards for new OLAE products**



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Key Recommendations for EU OLAE SRA Implementation II

- **Coordinate the establishment of dedicated education & training schemes to fit the demand for OLAE competences**
- **Increase the EU R&D funding budget for OLAE in proportion to huge market expectations and establish new ways to access capital**
- **Create momentum e.g. by integrating OLAE interests in European Technology Platform Photonics²¹**

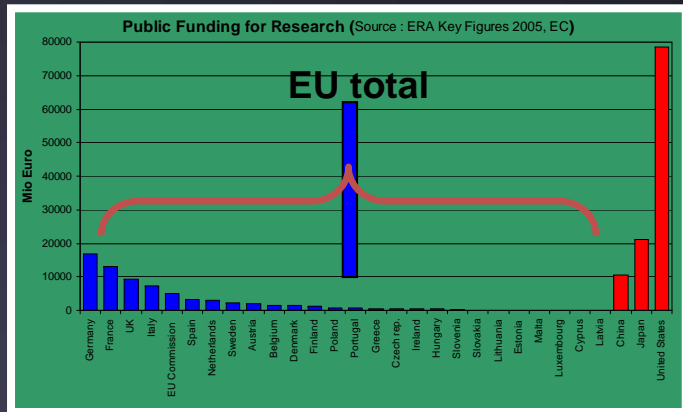


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Status OLAE in Germany

Impact of OLAE R&D :

- Leading position in fundamental R&D for OLED's in Europe
- Very good progress in the BMBF supported R&D projects for OLED's and OPV
- BMBF awarding of Heidelberg's OLAE "Spitzencluster"
- World's first mass-production of OLAE E-reader started at Plastic Logic in Dresden



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Key Recommendations for Organic Electronics in Germany

- OLAE cluster-approach with pilot production centers, to fill the gap between R&D&E and commercialization
- Promotion of establishing a German OLAE Industry, e.g. by initiatives to focus on lead markets and to involve public procurement
- OLAE partnerships and collaboration within Germany e.g. between OLAE competence centres such as Organic Electronics Saxony und InnovationLab Heidelberg should be promoted and coordination with other European OLAE clusters
- Existing OLAE competence centers should be reinforced, and should be the gravitation points for applied as well as for fundamental OLAE Research



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Request for continuation of the support for OLAE in Germany

- Continuation of innovation alliances among German government , science & industry for all topical areas of OLAE
- Increasing the budget for public funded OLAE R&D&E in Germany in proportion with the huge global market projections
- Establishing a single point of contact for OLAE strategy issues at the German authorities [BMBF]



Courtesy : BMBF OLED Initiative



Courtesy : BMBF OPV Initiative

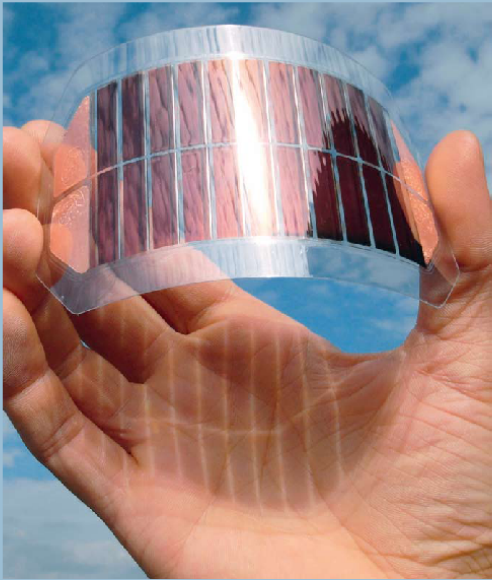


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Together in photonics & organic electronics

STRATEGISCHE FORSCHUNGSAGENDA FÜR
ORGANISCHE UND GROSSFLÄCHIGE ELEKTRONIK

FÜR GRÜNE ELEKTRONIK
AUS DEUTSCHLAND



PHOTONIK2020

Thank you for your attention



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