



Printed Electronics Helix

Launch Event, September 21, 2023

How can innovation support the (sustainable) value chain?

» Dr. Klaus Hecker, Managing Director, OE-A

A working group within





OE-A – Global industry association for organic and printed electronics

Driven by more than 200 international member companies & institutes from Europe, America, Asia and Africa

Primary activities include:

- » Working Group Meetings & Networking Events
- » Market & Technology Information
- » Advocacy
- » Demonstrators
- » LOPEC: Conference & Exhibition

www.oe-a.org www.lopec.com

OE-A members represent the entire value chain of organic and printed electronics:

- » Component & Material Suppliers
- » Equipment & Tool Suppliers
- » Device Manufacturers
- » Producers/System Integrators
- » End-Users
- » Universities & R&D Institutes







Working Groups



- » Roadmap
- OE-A Competition
- » Hybrid Systems
- » Sustainability
- » Encapsulation
- » Education
- Women in PE
- » Marketing

mage source: Messe Münche

LOPEC 2024, March 5-7 ICM Munich, Germany

The central marketplace for Flexible and Printed Electronics, in cooperation with Messe Munich

- » 2,500+ attendees
- » 170+ international exhibitors
- » 180+ presentations

Exhibition

- » Largest industry exhibition in the field
- » Innovation showcase

Conference

- » Business, Technical, Scientific Conference
- » Pre-conference seminars
- » Start-up Forum
- » Call for papers: open Sept. 7-29, 2023

10% discount for OE-A members





www.lopec.com



Production

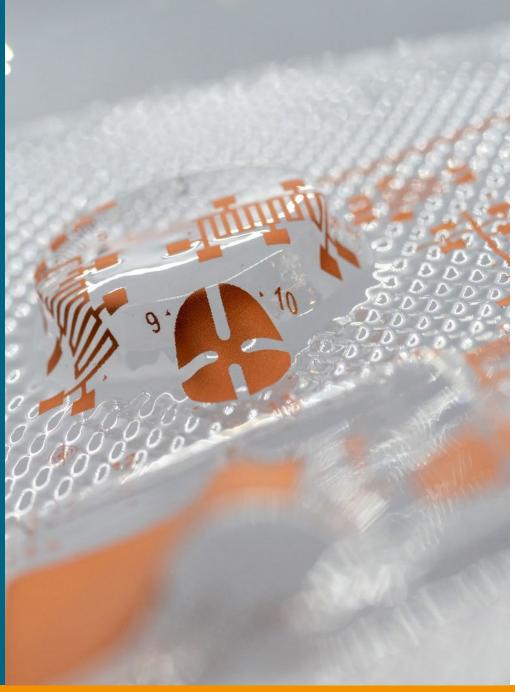


Production

New technological approaches in production are the basis for significantly increasing energy and resource efficiency along the value chain.

Printing, as an additive process and other production technologies:

- » Reduced energy consumption
- » Low temperature process
- » No vacuum
- » No (high class) cleanroom

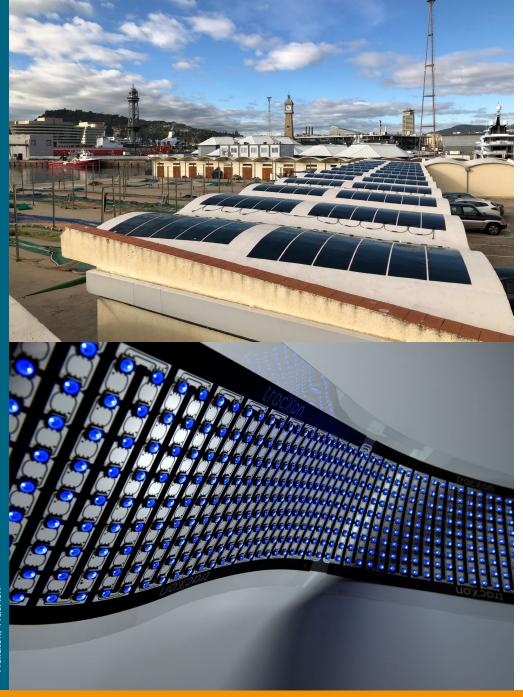


Materials



Materials

- » Total freedom of design
- » Simple structure / device design-> less material
- » No hazardous materials
- » No hazardous process materials



Devices and Products



Devices and Products

Reduced energy consumption during usage

- » Leightweight
- » Customized shape, size, capacity
- » Revolutionizing HMI
 - less material, less weight, increase life time
- » Energy production with short energy payback time (OPV)

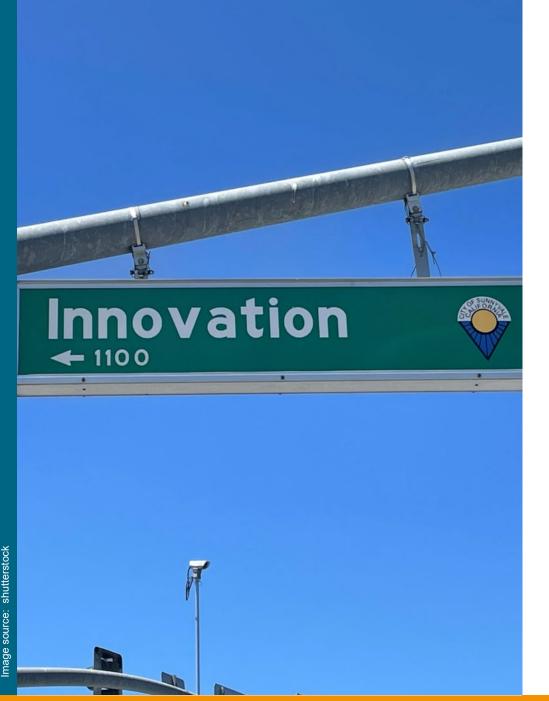
Circularity / End-of-Life / Recycling



Circularity / End-of Live / Recycling

Printing plus related advanced processing enable broader use of recycled or eco-friendly materials to support product lifecycle circularity.

- » No hazardous substances in PE products
- » Recycable
 - in some cases even biodegradable or compostable
- » Printed RFID / NFC labels to track products, provide information on built in materials, "history", to support recycling & circularity
 - e.g tires, packages
 - -> Concepts for circularity in development
 - Optimized logistics and cold chains ,
 - -> e.g., reduced food waste





Thank you!



Dr. Klaus Hecker

Managing Director
OE-A – A working group within VDMA
+49 69 6603-1336
klaus.hecker@oe-a.org
www.oe-a.org
Frankfurt, Germany

www.oe-a.org/events

www.oe-a.org/roadmap







