

# Power Modern Life Automotive



The automotive industry is seeking to decrease fuel consumption at the same time as maintaining product aesthetics. OPV can be invisibly integrated into vehicles **to generate electricity and improve the individual CO<sub>2</sub> balance**. In contrast to typical inorganic silicon-based cells OPV laminates have a flexible structure and can withstand any ambient conditions. Thanks to the Freedom of Design of OPV, it can be adapted to almost any surface in the car's interior or exterior. An organic PV coating which covers the entire car is conceivable.

- COMPANY:**
  - OPVIUS GmbH, founded 2016 in Germany
  - HQ/R&D site: Nuremberg; OPV factory: Kitzingen
- EMPLOYEES:**
  - 25 team members (Q2 '16)
- BUSINESS AREA:**
  - Energy technology, organic electronics
- TARGET GROUP:**
  - Automotive engineers and designers
- REFERENCES:**
  - OPV powered SolarTrees at German Pavilion at EXPO'15
  - OPV sail in shape of African continent at African Union Peace and Security Building in Addis Ababa

## KEY OPV ADVANTAGES:

Transparent, invisible  
**SOLAR POWER**

Ambient Light  
**ENERGY**

Full integrable  
**TECHNOLOGY**

Low Raw Material  
**CONSUMPTION**

## CORE TECHNOLOGY:

- OPV can be applied to almost any material
- OPV can alternate in shape, color and transparency, to make it invisible to observers
- OPV offers reliable energy yields also under diffuse and low-light conditions
- OPV shows a stable temperature behavior ideal for hot climate applications in car interior

## APPLICATIONS:

- Car dashboards and sun-blinds
- Car windows
- Car exterior shell
- Truck wind deflector
- Small independent electronic items



*In addition to the car power supply in the electrical systems of future cars, OPV can generate necessary power itself.*

## ADDED VALUE TO AUTOMOTIVE INDUSTRY:

- + **OPV tech improves eco-balance of a vehicle**
  - > Manufacturer can benefit from a better CO<sub>2</sub> rating

- + **OPV-powered elements can supply themselves**
  - > Independent operation, no connection to car supply system needed

- + **OPV powered elements can charge main car battery**
  - > Particularly interesting for electric cars