

# Key Enabling Technology Photonics Opportunities for Smart Regions

Vienna, 28<sup>th</sup> February 2017 Bundesländerdialog BMWFW



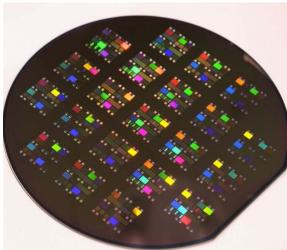


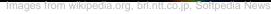
## What is Photonics?

- Is the science on photon effects (e.g. light)
- Photonics bears the same relationship to light and photons as electronics does to electricity and electrons
- Is a Key Enabling Technology (KET)













## What does Photonics enable?

- Energy efficient lighting
- Renewable energy
- Consumer electronics
- Modern Medtech
- Flexible and efficient production
- High speed communication



www.photonics-austria.at

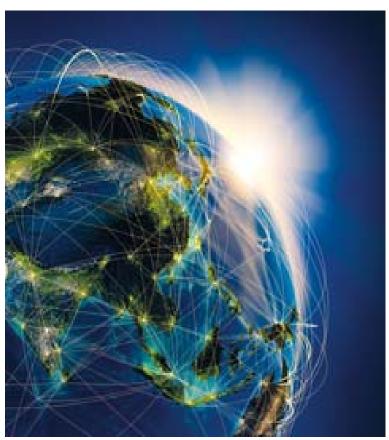


Image from electrooptics.com

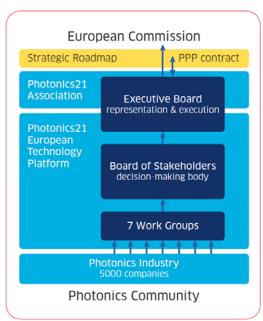




## ETP Photonics21

- Photonics is a dedicated European KET for the 21<sup>st</sup> century
- ETP → Photonics21
- More than 2500 Members
- Active regional clusters and platforms
- Works together with EPIC









# Photonics Austria

- Platform for the promotion of photonics in the fields of:
  - » Economy
  - » Science
  - » Education
- Exchange between industry, research and teaching
- Established 2011by an initiative of bmvit
- Currently > 30 members









# Members and Partners overview of Photonics Austria

















































virtual reality und visualisierung









# Active in European Projects Horizon 2020

#### EuroPho21



» Coordinates the European Technology Platform Photonics21

#### Photonics 4All

- Discover the Power of Light
  - » is a European Outreach project to promote photonics and light based technologies to young people, entrepreneurs and the general public across the EU

#### RESPICE SME

» Promotes European SMEs in the field of Photonics







# Strategic Support: Photonics KET

- On European level photonics is supported in the frame of the H2020 program (ICT)
- Transnational Co-Fund Photonic Sensing coordinated by FFG (10 regions / nations)
- Currently 12 regions with Photonics KET S3 specialisation
  - » Not over-represented until now
  - » Opportunity for Smart Specialisation







# Austria: A Photonics region?

- Strong Photonics competencies in Austria
- Proposed S3 specialisation in Austria:
  - » Photonics KET for industrial modernisation
- Option for sub-specialization in individual Austrian regions
  - » Photonics 4 Sustainable Energy
  - » Photonics 4 Industry 4.0









# Austria: A Photonics region!

- Development of a clear strategy on smart regional specialisation based on Photonics KET → Industrial modernisation
  - » Education (modern ICT, Green Photonics, smart laser production, ...)
  - » Shared infrastructure for modern process development (SME support)
  - » European support for infrastructure investments on pilot production lines
- Strategic cooperation with partner regions (e.g. Baden-Württemberg, Swiss Photonics, Photon Delta, ...)







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