



To prepare and foster a common understanding and consensus for future actions in Europe focusing on multi-KETs pilot lines

Multi-Key Enabling Technologies PILOT LINES

Introduction to the project

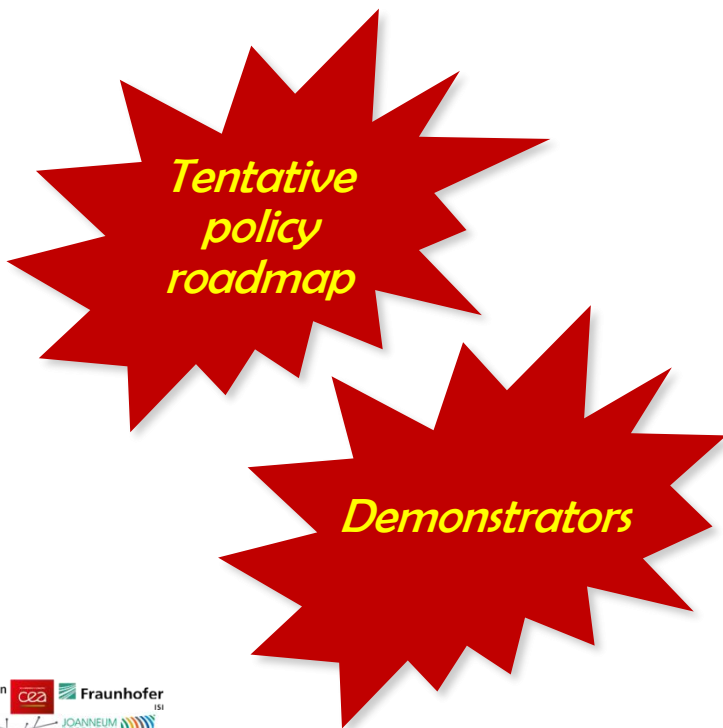
Ruud Baartmans (TNO)
Brussels, 22 January 2015



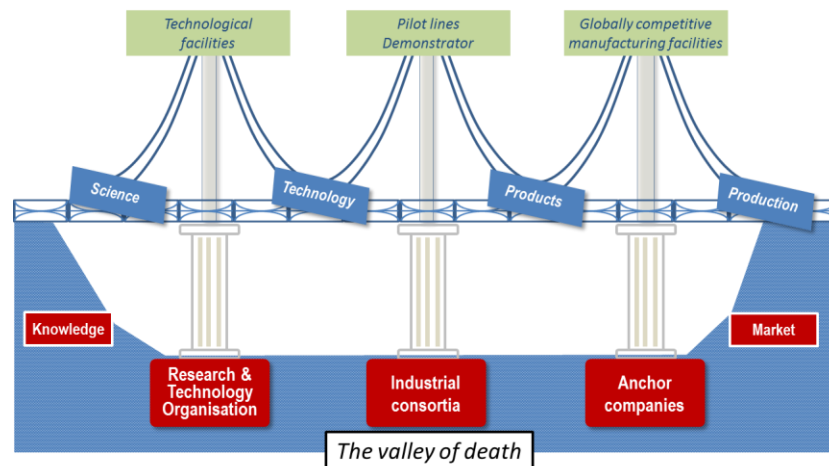


Objective of the mKPL study

To prepare and foster a common **understanding and consensus** for **future actions** in Europe focusing on **multi-KETs pilot lines**



Combination of **2 Key Enabling Technologies** In a **high-tech manufacturing environment**



6 Key Enabling Technologies

Advanced manufacturing systems

Nano-
technologies

Micro and
nanoelectronics

Biotechnology

Photonics

Advanced
materials

- Knowledge-intensive
- High R&D intensity
- Rapid innovation cycles
- High capital expenditure
- Highly-skilled employment

About the project

- **2-year project for EC DG-ENTR: 2013-2014**
- **Phase 1 objective:**
 - *Assessment state-of-play of KET strategies and policies*
- **Phase 2 objectives:**
 - *In-depth assessment of drivers and barriers*
 - *Demonstration of pilot production with workshops and training materials on KETs Pilot production*
 - *Recommendations and tentative policy roadmap*

Consortium of 12 organisations



Activities phase 1: Assessment state-of-play of KET strategies and policies

- 21 country studies (including EU)
- Over 200 interviews with experts (policy, industrial)
- 3 workshops with external experts
- Online survey (680 respondents)
- Legal assessment
- Green paper
- Mid-term conference

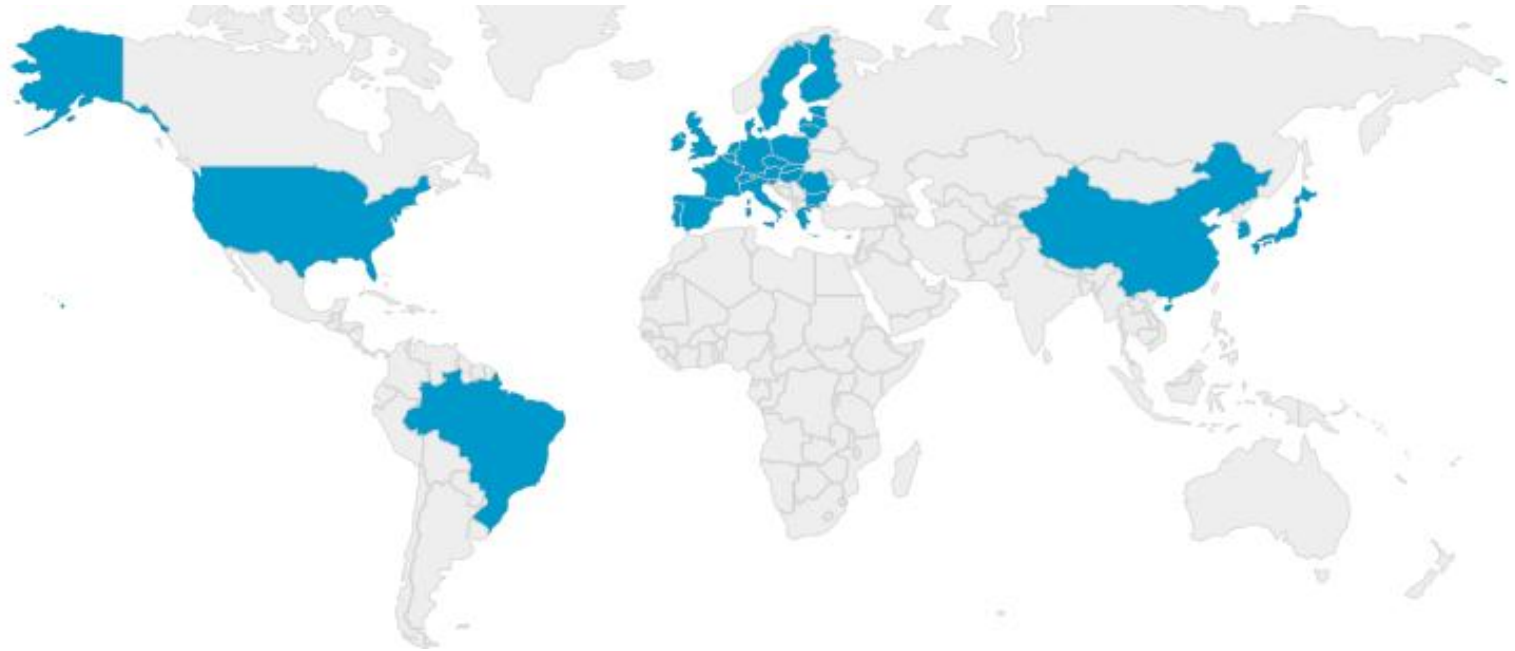
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Country studies (1/2)



- Austria
- Belgium
- Finland
- France
- Germany
- Italy
- Ireland
- Netherlands
- Poland
- Portugal
- United Kingdom
- Spain
- Switzerland
- Slovenia
- Sweden

Country studies (2/2)



- Brazil
- China
- European Union
- Japan
- South Korea
- United States

Workshops with external experts



Activities phase 2

- **Tender and selection process: final selection of 4 demonstrators by EC**
- **Assessment 4 demonstrators**
- **1 workshop with external experts**
- **Demonstrator workshops (Sept-Oct 2014)**
- **Preparation summary papers and final report**

Phase 2: Tender process demonstrators

- **Call for proposals**

- *26 responses to Call for expression of interest*



- *10 selected for proposals*



- *4 selected as demonstrators by EC*

Phase 2: Selection criteria demonstrators

- Addressing multi-KETs
- Focus on pilot production
- EU based
- Access to eco-system, coverage value chain
- Industry involvement
- Mature activity
- Disclosure of data
- Availability of capacity

Selected by
**the European
Commission**
as a mKPL
Demonstrator

★ ★ ★ ★ ★
★ mKETs ★ Pilot Lines
★ ★ ★ ★ ★

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Acreo (SE): Printed electronics pilot line

- Not-for-profit shared facility
- Development, prototyping and pilot production in the Printed Electronics Arena
- Strong industrial participation
- Started in 2008



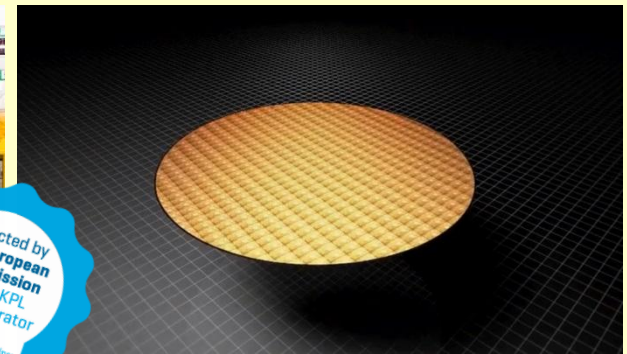
BBEPP (BE): Bio-based processes pilot plant

- Independent industrial biotech shared facility
- Process development and optimization, scale-up, custom manufacturing, start-up assistance and fine-tuning of existing processes
- Fully operational since 2012



Infineon (AT): Electronic power devices on 300mm wafer based pilot production

- Large enterprise
- Industry owned pilot production
- Strong innovation network
- Electronic power devices on 300mm wafer based pilot production



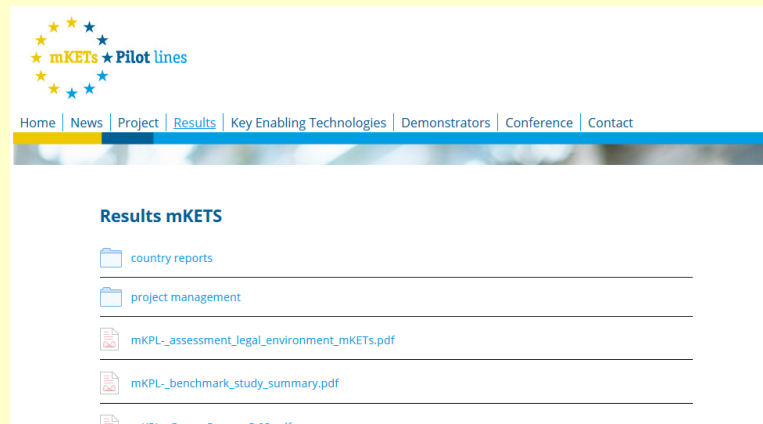
Sofradir (FR): Pilot line for cooled infrared detectors

- Intermediate sized enterprise
- Industry owned pilot line
- Development and production of cooled infrared detectors



Results phase 2 to be published

- Summary papers
- Demonstrator assessment reports
- Final report incl. tentative policy roadmap



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Thank you

Join us:

Contact: ruud.baartmans@tno.nl

LinkedIn: mKETs Pilot lines group

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