

EPPL Research Project

Enhanced Power Pilot Line

Infineon Technologies Austria AG;
Infineon Technologies Dresden GmbH

ENIAC PO Proposal

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- Work Area: EQUIPMENT, MATERIALS, AND MANUFACTURING (Main Area - Enabling Area)
 - Grand Challenge 2 "More than Moore"
 - Grand Challenge 3 "Manufacturing"

- Work Area: ENERGY EFFICIENCY (Application Area)
 - Grand Challenge 3 "Reduction of Energy Consumption"

- Other supported WA's
 - Work Area: SEMICONDUCTOR PROCESS AND INTEGRATION (Enabling Area)
 - Grand Challenge 1 "Know-how on Advanced and Emerging Semiconductor Processes"
 - Grand Challenge 2 "Competitiveness through Semiconductor Process Differentiation"
 - Work Area: AUTOMOTIVE AND TRANSPORT (Application Area)
 - Grand Challenge 1 "Intelligent Electric Vehicle"

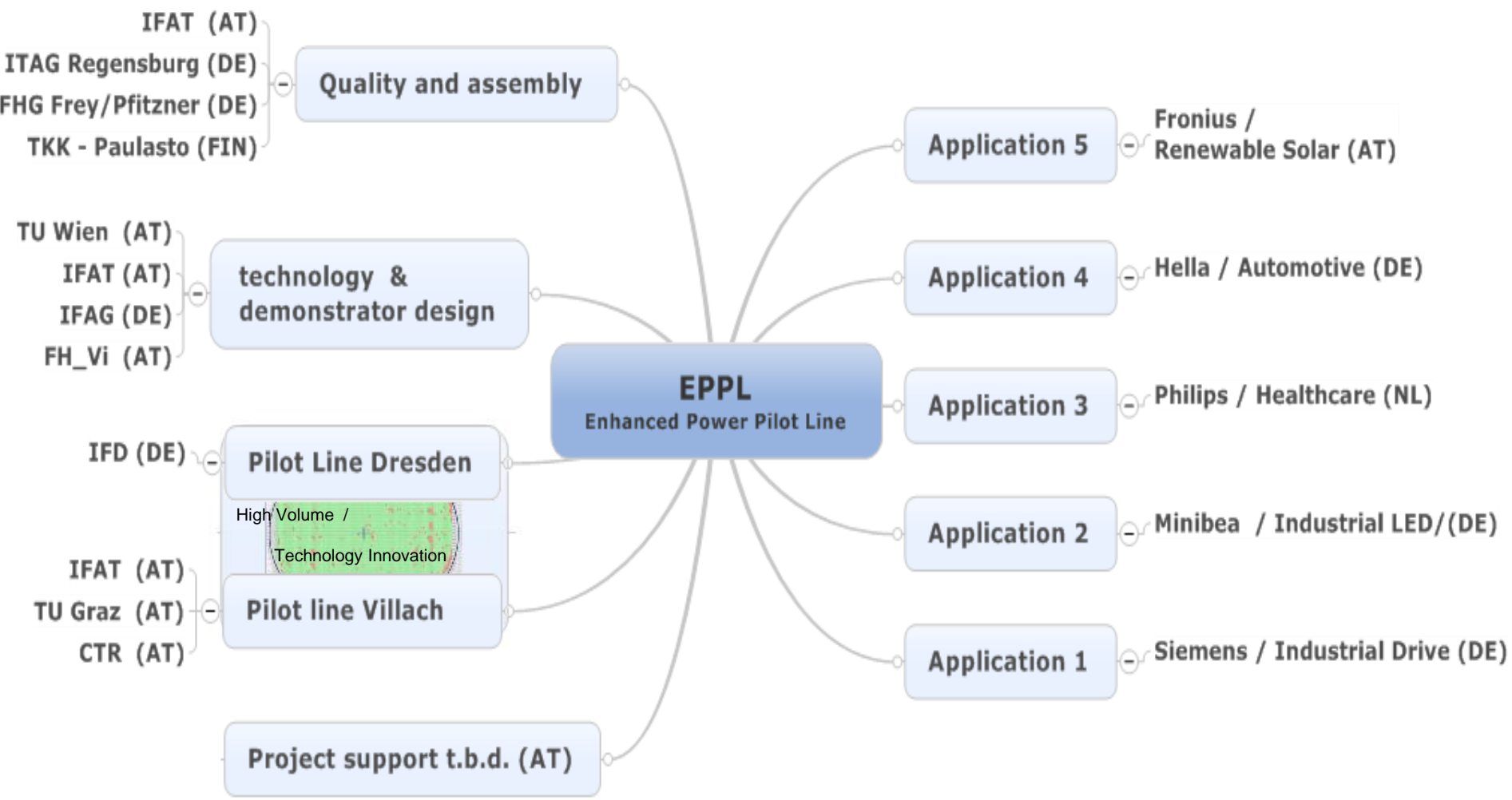
EPPL

Enhanced Power Pilot Line



- **Project scope:** research on enhanced, next generation, processes technologies dedicated to energy efficient power applications, based on silicon 300mm wafer diameter.
 - Elaborate application requirements,
 - Derive quality requirement profile,
 - research on new technology solutions based on enhanced 300mm process base
 - Demonstrate production in pilot line,
 - ... up to demonstrator qualification
- **Funding schema:** ENIAC Call 6 2012, pilot line
- **Dual step** application procedure + EoI Phase
- **Cooperative project**, EoI submitted on 2012/01/19
- **Project runtime:** start 4/2013, 36 months
- **Funding scheme:** 1/3 EU; 2/3 National; max 50% (?) in total for LE - for funding rates national rules applies

EPPL Project Design

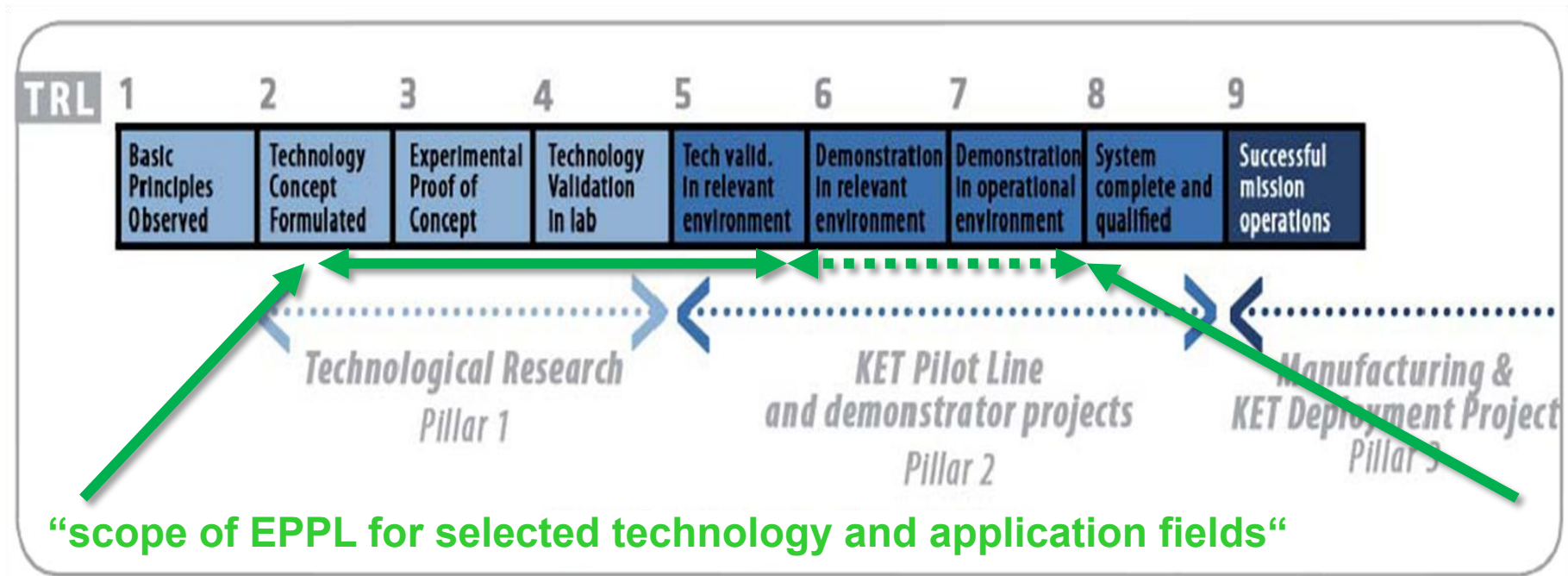


EPPL Enhanced Power Pilot Line - Focus



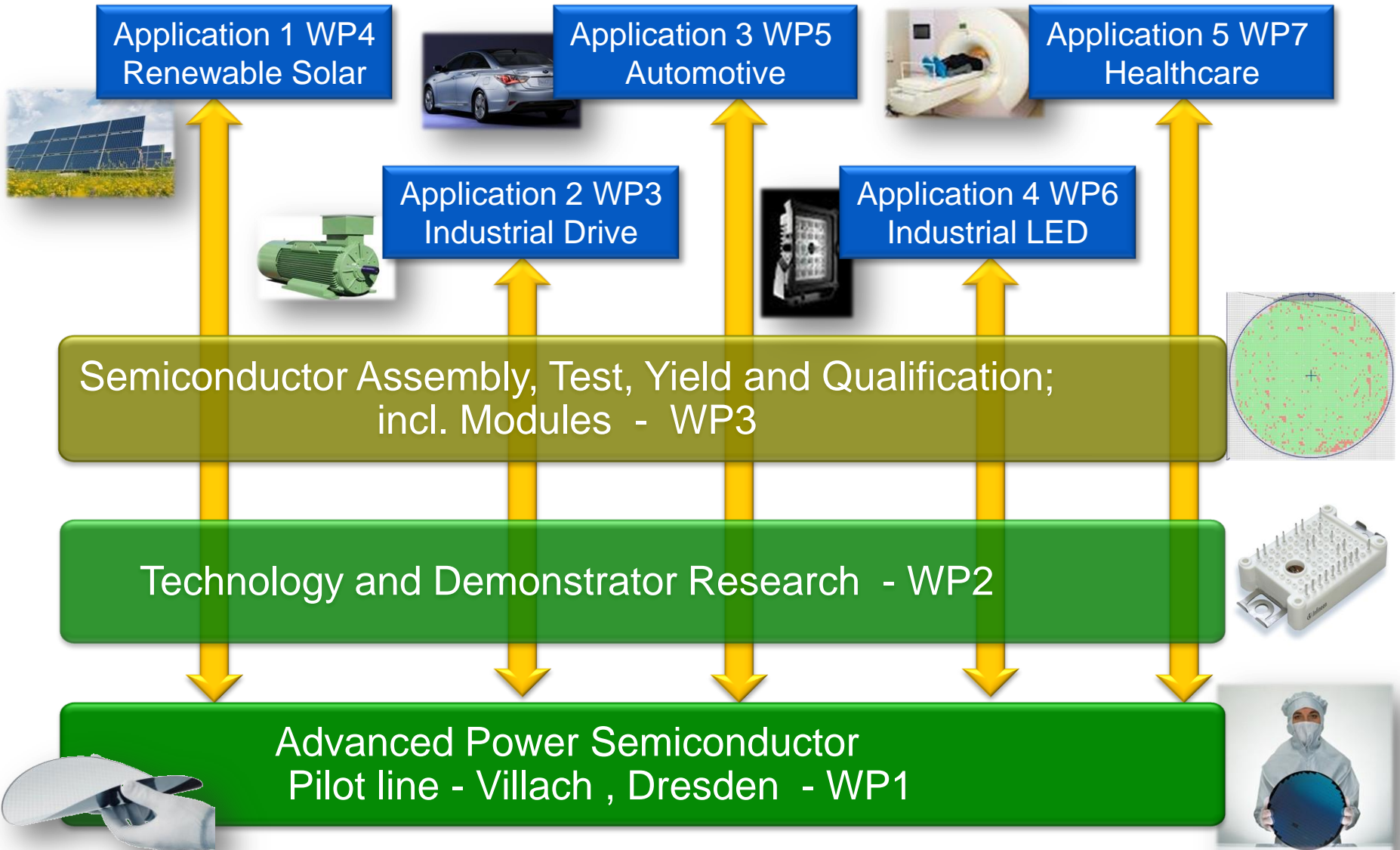
- Enhance the core competencies of European companies in the technology development for power semiconductors as well as the ability for production at competitive cost in Europe, supporting EU KET (Key Enabling Technology) initiative.
- Achieve best-in-class power semiconductor technologies addressing advanced, energy efficient applications for industrial and mobility applications
- Develop a pilot line for early prototypes of enhanced power semiconductor devices.
- Strengthen European industry by providing access to early innovations in power semiconductor product developments out of European pilot line to enhance their market position in energy efficient solutions.
- Exploring 300mm manufacturing capabilities will further improve European competitiveness and autonomy

EPPL - Pilot line for selected technology and application fields



Source: High level group on key enabling technologies; Final Report

EPPL Value Chain– Application drives innovation





ENERGY EFFICIENCY MOBILITY SECURITY

Innovative semiconductor solutions for energy efficiency, mobility and security.

