



ECSEL JU

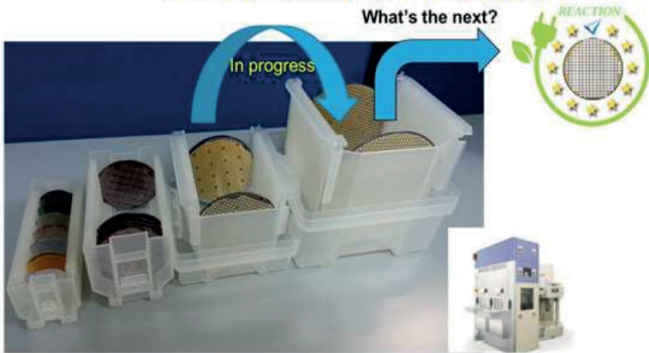
Project Title: first and euRoPEn SiC eigTh Inches pilOt line "REACTION"

Main Goal: REACTION will push through the first worldwide 200mm Silicon Carbide (SiC) Pilot Line Facility for Power technology addressing mass-market applications like smart energy, smart mobility and industrial. The Project strength is the complete Pilot Line value chain implementation generated by integrating and optimizing partnerships in the fields of SiC equipment developers, SiC process technologists, RTOs and end users. This will lead to the improvement in productivity, competitiveness and affordability of the next generation of SiC devices and system solutions starting from 6" (inches) substrates and moving forward to 8" substrates.

WW SiC facilities are today still far from 8" implementation



ST SiC Wafer size Evolution

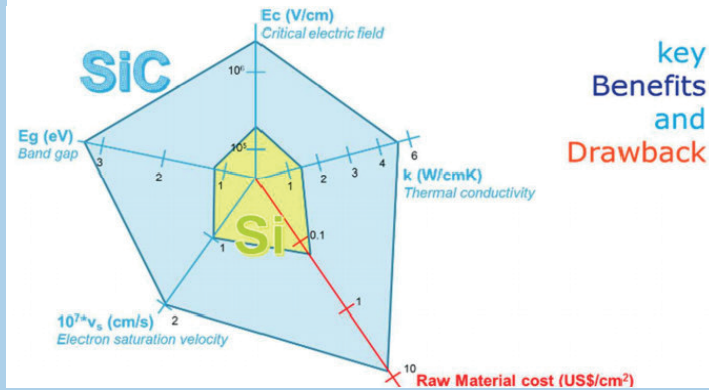


2003 - 2" line startup 2006 - 3" line startup 2011 - 4" line startup 2016 - 6" line startup



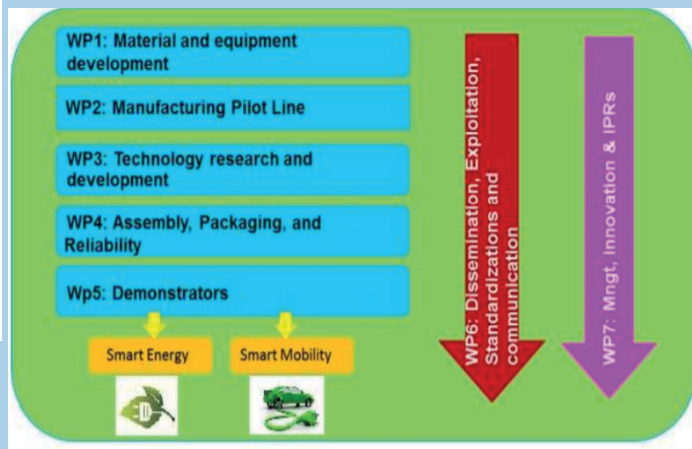
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Silicon (Si) vs Silicon Carbide (SiC) comparison



key Benefits and Drawback

Project Work Plan



PROJECT PARTNERS

- 1 STMICROELECTRONICS SRL (IT)
- 2 CONSORZIO NAZIONALE INTERUNIVERSITARIO PER LA NANOELETRONICA (IT)
- 3 L.P.E. SPA (IT)
- 4 UNIVERSITA DEGLI STUDI DI PALERMO (IT)
- 5 CONSIGLIO NAZIONALE DELLE RICERCHE (IT)
- 6 Evatec AG (CH)
- 7 HQ-Dielectrics GmbH (DE)
- 8 JSR MICRO NV Belgium (BE)
- 9 MITTUNIVERSITETET Sweden (SE)
- 10 Elforest AB Sweden (SE)
- 11 EV GROUP E. THALLNER GMBH (AT)
- 12 UNIVERSITATEA POLITEHNICA DIN BUCURESTI (RO)
- 13 NANO DESIGN SRO (SK)
- 14 SLOVENSKA TECHNICKA UNIVERZITA V BRATISLAVE (SK)
- 15 LAM RESEARCH SAS (FR)
- 16 Italeaf UK Limited (UK)
- 17 centrotherm international AG (DE)
- 18 INSTYTUT TECHNOLOGII ELEKTRONOWEJ (PL)
- 19 DISCO HI-TEC EUROPE GMBH (DE)
- 20 II-VI DEUTSCHLAND GMBH (DE)
- 21 FOR OPTIMAL RENEWABLE ENERGY SYSTEMS SL (ES)
- 22 UNIVERSIDAD DE ZARAGOZA (ES)
- 23 APPLIED MATERIALS ISRAEL LTD (IL)
- 24 DACPOL SP. Z O.O. (PL)
- 25 IKERLAN SCL (ES)
- 26 APPLIED MATERIALS IRELAND LIMITED (IE)
- 27 Applied Materials GmbH (DE)

Programme: H2020-EU.2.1.1.7 ECSEL
 Call: H2020-ECSEL-2017-1-IA-two-stage (H2020-ECSEL-2017-1-IA-two-stage)
 Type of action: ECSEL-IA (ECSEL Innovation Action)
 Topic: ECSEL-2017-1
 Proposal number: 783158-2 Grant agreement ID: 783158
 Start date: 1 November 2018 End date: 30 April 2022
 Project Budget: € 49.767.672,50 Budget Unical: 325.000
 EU Contribution: € 10 401 952,25
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