

### **Outlook ERIGrid 2.0**

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(AIT Energy/Coordinator ERIGrid 2.0)

Virtual ERIGrid Final Conference April 1, 2020

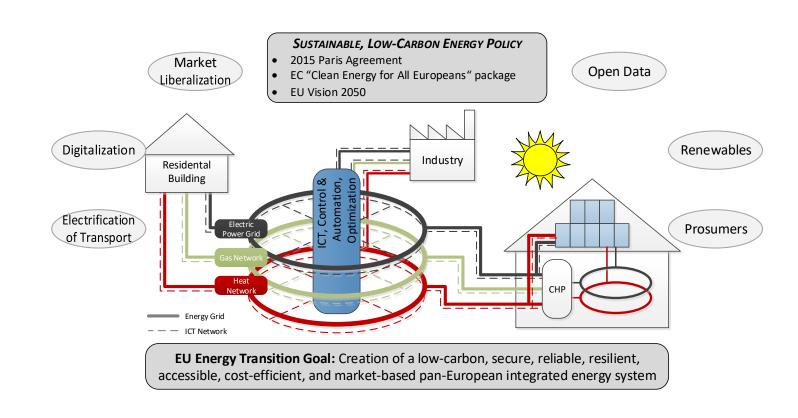




## Background and Motivation



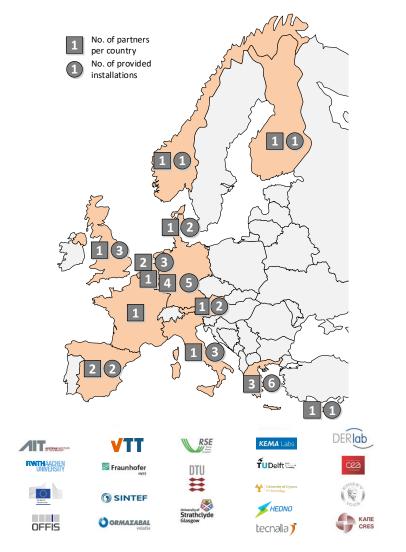
- Major trends
  - Low-carbon energy policy
  - Energy transition
  - Integration of different power and energy systems areas
- Future needs
  - Extended and advanced research infrastructures
  - Improved development and testing tools
  - Well educated researchers and engineers



## European Smart Grids and Smart Energy Systems RI



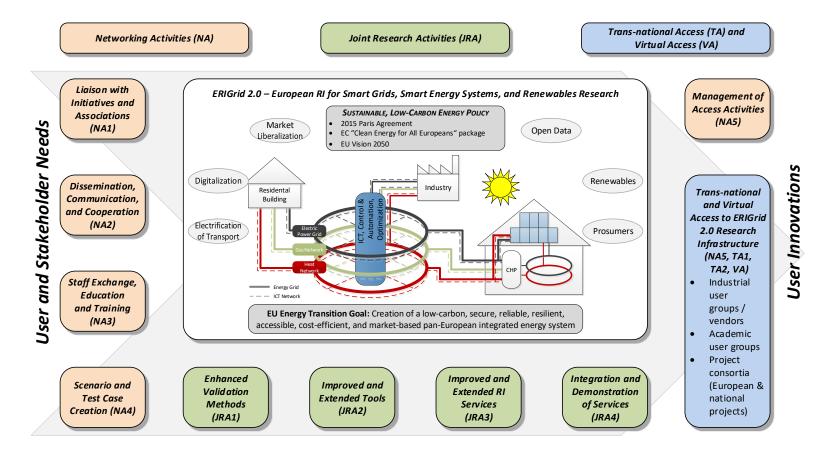
- Integrated Research Infrastructure (RI) for developing and validating smart grids and smart energy systems
- Funding information
  - H2020 Call "INFRAIA-01-2018-2019"
     Integrating Activities for Advanced Communities
  - Research and Innovation Actions (RIA)
- 20 partners from 13 European countries
- Provision of 21 first calls smart grid and smart energy systems RI
- 10 Mio Euro funding from the European Commission (~900 person months)



# European Smart Grids and Smart Energy Systems RI



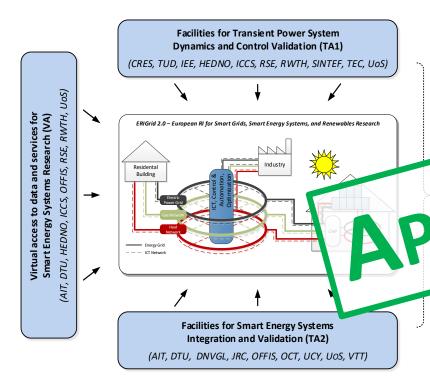
Overview and approach



## Free Access to Leading Smart Energy Systems RI



Every 3-4 months calls for TA user project proposals (see <u>erigrid2.eu</u>)



R&D Topics	Provided Services to External Users fostering Innovation
Intelligent components	Inverter tests (component, integration)     Storage, charging devices test (component, integration)
Development of new network components	Test of new component concepts     Validation of advanced control semost for components     Power-to-heat an awer-to-gas components
aut omation	Validation of controller implementation and a tegr Validation of symmuto tion processes Test of SCC and term a telographs and stegralic
imus ori Le calido en Lesimulatio Lestime Simulation, HIL)	Osimulation ests (a marid a maximication etwork     Osimulation ests power grid ⇔ components ⇔ mmunication network     Co-simulation with heat nepresent the maximum of the maxi
Advanced and new applications	<ul> <li>Local energy community approaches</li> <li>Smart buildings</li> <li>Interoperability testing</li> <li></li> </ul>









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