## "Graphene and 2D Materials" EUREKA Cluster: Fostering European Competitiveness

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The "Graphene & 2D Materials" EUREKA cluster is defined as a complementary enabling and accelerator instrument in the European scene, fully piloted by industries to further take graphene from the mature developed research at academic laboratories into the European society in the space of 5 years, boosting economic growth, jobs creation and international leadership and investment attractiveness. This cluster will help Europe having a more dominant position in graphene patenting, will deploy the proper winning industrial strategies worldwide to gain competitiveness, and will ensure that for all promising industrial sectors of technology innovation, a fully integrated EU-value chain is established, integrating into consortia the relevant actors from low to high Technology Readiness Levels (TRL).

The cluster will clarify the differentiating potential in all sectors where EU-industries is strong and could further gain competitiveness and will develop proper incentives towards the achievement of EUleadership in the fields of graphene graphene-driven commercialization and technology improvement. The cluster will elaborate and foster industrially-driven innovation strategies, that will advantage of the existing excellent science and transnational platforms in Europe (national Graphene-Flagship, networks. etc.), and will focus on solving current challenges which are limiting the time to market and business growth of graphenerelated EU companies.

Graphene has a huge potential to impact established industrial sectors, building new

emerging industries and niche segments creatina and economic value. "Graphene and 2D Materials" Strategic Research Agenda currently targets 7 interlinked priority R&D areas for Europe. These areas are (1) Standardization, (2) Production and Scalability, (3) Composites, (4) Energy, (5) Biosensors and Health, (6) Optoelectronics and Electronic Devices; (7) **Functional** coatinas. Currently, 243 Institutions from 27 countries (among them 154 companies) expressed interest in joining the Cluster...