

## Latest outcomes from Value4Nano project!

[Value4Nano](#) team continues working at developing an **Implementation Roadmap of four strategic Value Chains (VC) and their target products**, which will include business modeling and planning for a set of pilot lines and will involve strategic industry and other stakeholders.

We count with the invaluable assistance of a number of experts, which met again on 12<sup>th</sup> November in Brussels under the 2<sup>nd</sup> Value Chain workshop. In parallel, the 2<sup>nd</sup> Horizontal Working Group meeting was held, with the attendance of experts in non-technical issues, such as standardization, communication, education, networking, technology transfer and regulation.

During these meetings, the **progress on Value4Nano roadmapping activity** was presented, including the **list of selected pilot lines**; the **preliminary Value Chain roadmaps** were discussed, including both technical and non-technical cross-cutting actions, and a **business modeling and planning** for the selected pilot lines was started.

During the next months, Value Chain experts and Horizontal Working Group members will be asked to complete the action lists and to contribute on business plans for the pilot lines.

The preliminary **Implementation Roadmap** of Value Chains and related pilot lines is **expected to be released by March, 2015**. Meanwhile, all the **outcomes** of Value4Nano project are available [here](#).



## Almost 500 people attended the NANO futures H2020 brokerage event

The brokerage event for Nanotechnologies, Advanced Materials, Biotechnology and Advanced Manufacturing and Processing, organized by [NANO futures](#) platform and [Value4Nano](#) project with the collaboration of the European Platforms [EUMAT](#) and [MANUFUTURE](#), was held on 13<sup>th</sup> November in Brussels and opened by Clara de la Torre, Director of European Commission DG Research & Innovation.



To facilitate contacts among the nearly **500 attendees**, 32 booths dedicated to the NMPB specific topics, including PPPs (Factory of Future, Energy Efficient Buildings and Spire) were installed. There, detailed information about these topics was shown and more than **800 requests and offers** were posted. Also, more than **80 project ideas** were submitted to be presented during the event, from which a total of 50 were selected.

All this information is [open and available](#) for all the attendees, and a **powerful tool** to facilitate finding the right partner for their next H2020 proposals is at their disposal [here](#).

## New NANOfutures lighthouses in Chile, Colombia and Costa Rica

NANOfutures lighthouses are a very important part of its structure. Each lighthouse acts as a clear connection helping to translate activities and actions to their country and also letting NANOfutures know what's going on at regional and national level.

Since last June, NANOfutures has three more lighthouses: Luis Velásquez, Álvaro Duarte and Ricardo Alvarado, representing Chile, Colombia and Costa Rica. In total, 24 countries are already represented (you can check the full list [here](#)).

## NanoEIS project concludes that University teaching does not match job skill demands in the nanotechnology industry

The introduction of nano-enabled products into a multitude of markets has led to a **demand for a highly qualified workforce** in industries producing or using nanomaterials. Universities have responded by setting up curricula on nanotechnology or other nanosciences at the level of bachelor, master and PhD studies.

The ongoing FP7 supporting action [NanoEIS](#) investigates contents of existing study offers, practices for establishing links between universities and industries with respect to teaching, and the job skills that are in demand in the nanotechnology industry.

The results show that **the match between curricula contents and job skill demands is poor**. University studies mostly put a strong emphasis on traditional, research-driven subjects like characterization, metrology, nanoelectronics, nanostructures and composites. The nanotechnology industry, on the other hand, identifies health and safety issues as the most important area where recruitment is expected both now and in five years.

Health and safety appear to be low priorities in university training, and regulation/standardization as well as environment/disposal/recycling get even less attention, despite being rated as highly important job skills for recruitment by industry.

NanoEIS suggests that industry gets more involved with education programs, to **ensure that the competences** required in the field **are fully covered by university curricula**. The results of these studies can be downloaded from the [project homepage](#).

The research leading to these results has received funding from the European Union Seventh Framework Programme (FP7/2007-2013) under grant agreement n° 319054.



## Meet NANOfutures at EuroNanoForum 2015!



The [7<sup>th</sup> EuroNanoForum](#) is Europe's largest networking conference on nanotechnologies and advanced materials science, innovations and business.

It will be showcasing the strength of integrating nanotechnologies and advanced materials with the other key enabling technologies, within the new approach of Horizon 2020 in its drive for competitiveness. ENF 2015 is organized as a part of the Latvian presidency of the Council of the European Union.

The conference programme includes plenaries, sessions and workshops with over 150 international high-level speakers, widely covering the areas of nanotechnologies and advanced materials. **Provisional plenary themes** include industrial **nanotechnologies and advanced materials** in support of **European re-industrialisation, socio-economic trends and innovation demands** on nanotechnologies and advanced materials, infrastructures and framework conditions for **rapid deployment of nanotechnologies**, and winning the competition: **success stories and lessons learned**.

Currently, calls for the [FutureFlash! Best Projects](#) and for [Oral and Poster presentation](#) are open. More information will come soon; meanwhile, be aware of the latest news via [EuroNanoForum 2015 newsletter](#).



## Coming events

### [Nano tech 2015 - The 14<sup>th</sup> International Nanotechnology & Exhibition](#)

January 28-30, 2015  
Tokyo (Japan)

### [nanoPT 2015 - Nanoscience and Nanotechnology International Conference](#)

February 11-13, 2015  
Porto (Portugal)

### [SUN-SNO-GUIDENANO Sustainable Nanotechnology Conference 2015](#)

March 9-11, 2015  
Mestre (Italy)

### [EU-U.S.: Bridging NanoEHS Research Efforts joint workshop](#)

March 12-13, 2015  
Venice (Italy)

### [COST MP1105 Scientific Workshop - Advances in the synthesis and characterization of nanomaterials for flame retardant applications"](#)

March 26-27, 2015  
Bucharest (Romania)

### [BioNanoMed 2015 - 6<sup>th</sup> International Congress Nanotechnology in Medicine & Biology](#)

April 8-10, 2015  
Graz (Austria)

### [NANOENERGY 2015 - International Conference on Nanotechnology, Nanomaterials & Thin Films for Energy Application](#)

June 1-3, 2015  
Manchester (UK)

## EU KNIGHTS finalizes with excellent results

[EU KNIGHTS Coordination and Support Action](#) funded by the European Commission under the 7<sup>th</sup> Framework Program (EU KETs - Supported innovative industry for high growth and sustainable globalization), has concluded its activities at the end of November 2014. The project was integrated in the NMP program, and aimed, during its 18 months lifetime, to **understand how the strategic integration of Key Enable Technologies (KETs) empowers the presence of new innovative products on the market.**

To achieve this goal, more than 250 comprehensive interviews were conducted with stakeholders coming from industry, academy and research, through a questionnaire thoroughly built and based upon international and European studies from the literature. Real cases, success cases but also failure cases of innovative products that did not succeed in crossing the "valley of death" between the knowledge and the market, were analyzed to detect the best practices, highlighting barriers and identifying appropriate business models or strategies to stimulate innovation.

The project Questionnaire's results were corroborated by more than 100 participants on several sectorial workshops organized all along Europe. The interview and workshop process explored not only Technology and Manufacturing issues but also other domains, sometimes put aside, as Economy and Marketing, Organization and Investment, Cultural and Societal.

The accurate analysis of all these results allowed **devising a set of recommendations** addressed to Industry, Clusters, ETPs and policy makers, to enable a successful integration of KETs in European products and process, as well as providing an overview of potential success factors for innovation driven by the integration of new technologies.



## FutureNanoNeeds: shaping the next generation of nanomaterials

**Rapidly developing markets** such as green construction, energy harvesting and storage, advanced materials for aerospace, electronics, medical implants and environmental remediation are **potential key application targets for nanomaterials**. There, nanotechnology has the potential to make **qualitative improvements** or indeed even to **enable the technology**. Impacts range from increased efficiency of energy harvesting or storage batteries, to radical improvements in mechanical properties for construction materials. In addition, concerns of these markets such as scarcity of materials, cost, security of supply, and negative environmental impact of older products could also be addressed by new nano-enabled materials (e.g. lighter aircraft use less fuel).

The overarching aim of the [FutureNanoNeeds project](#) is to develop a novel framework to **enable naming, classification, hazard and environmental impact assessment** of the next generation nanomaterials prior to their widespread industrial use.

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