

In **IZADI-NANO2INDUSTRY** conventional materials and injection moulding, casting and coating manufacturing processes will be improved by nanotechnology and will be combined to enable industrial scale production of new performance-enhanced components.

**IZADI-NANO2INDUSTRY** is built on and harvests the results of previous research projects, which include Plast4Future (FP7 FoF), EFEVE (FP7 FoF) OFIENGINE (FP6 SUSTDEV) and EXTREMAT (FP6-IP) all in TRL 5.

The project will establish the value chain for nanomaterial enabled improved performance products, and finally will validate the technologies through three components in industrial environment (TRL 7).

Technologies and strategies based on nano-reinforced materials; nanotextured surfaces and nanostructured-coatings that have been developed in the frame of these previous FP6 and FP7 projects will be further implemented in real manufacturing production plants.



### PROJECT DETAILS

**Total Cost**  
EUR 7 468 976,25

**EU contribution**  
EUR 6 027 653

**Coordinated in**  
Spain

**Topic(s)**  
NMP-02-2015 – Integration of novel nano materials into existing production lines

**Call for proposal**  
H2020-NMP-PILOTS-2015

**Funding scheme**  
IA – Innovation action

## THE CHALLENGE



The challenge of **IZADI-NANO2INDUSTRY** project is to contribute to overcome the barriers that nano-materials are currently facing to get introduced in the market.

For that, and based on the promising results obtained in previous projects, three strategies have been selected to be further implemented in real component manufacturing production plants: master-batches for thermoplastics (ESTCRATCH pilot), master-pellets for metals (HARDcast pilot) and nanostructured powders for metallic coatings (TRIBOnano pilot).

Technology	Requirements	Sector	IZADI-NANO2INDUSTRY		
			Demo	Pilot (TRL7)	Pilot location
Nano-reinforced thermoplastic + Nanotextured surfaces	Anti-scratch and aesthetic properties	Automotive	B-pillar	ESTCRATCH (Injection moulding)	Basque Country (Spain)
Nano-reinforced metal castings	Hardness, resistance temperature	Construction Agricultural machinery	Swash plate	HARDcast (Gravity casting)	Lombardy Region (Italy)
Nano-structured coatings	Wear	Construction Agricultural machinery	Valve plate	TRIBOnano (Coating by solid state deposition)	Emilia-Romagna Region (Italy)

[www.izadinano2industry.eu](http://www.izadinano2industry.eu)

## CONSORTIUM



## CONTACT



**Cristina Elizetxea Ezeiza**  
cristina.elizetxea@tecnalia.com

**Maider Garcia De Cortazar**  
maider.garciadecortazar@tecnalia.com



**Ane Irazustabarrena Murgiondo**  
ane.irazustabarrena@tecnalia.com

**Isella Vicini**  
isella.vicini@warrantgroup.it



**Elena Melotti**  
elena.melotti@warrantgroup.it

