

# IZADI-NANO2INDUSTRY: an H2020 project to impulse the uptake of nanotechnology based solutions

## Speakers

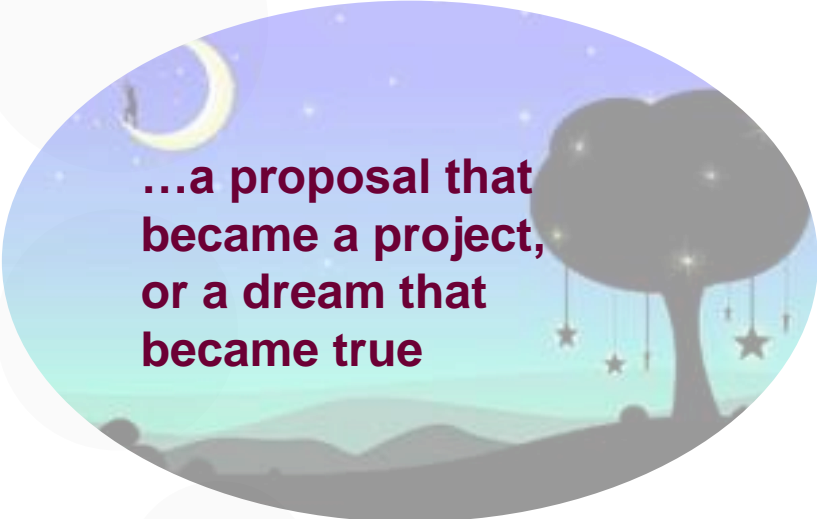
- Cristina Elizetxea, TECNALIA
- Maider Garcia de Cortazar, TECNALIA

*19th EuroSciCon Conference on Nanotechnology and Smart Materials*

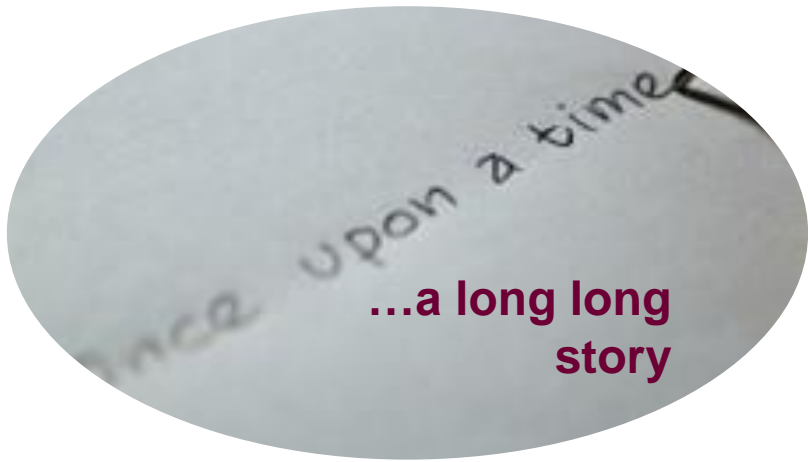
*“Nanotechnology based solutions for enhanced products and  
processes in existing industrial manufacturing plants”*

*Workshop*


# IZADI-NANO2INDUSTRY is...



...a proposal that  
became a project,  
or a dream that  
became true



...a long long  
story



...a challenge  
on which more than 120  
people have bet

# ... a Proposal that Became a Project, or a Dream that Became True

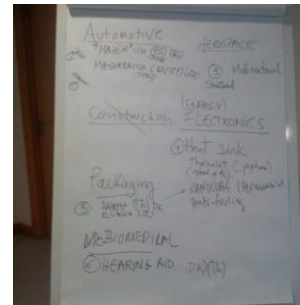
**Preparation of the project proposal**  
November 2014 – March 2015

**Publication Date**  
22<sup>nd</sup> October 2014

**Call**  
H2020-NMP-PILOTS-2015

**Topic**  
NMP-02-2015-Integration of novel nano materials into existing production lines

**Funding scheme**  
IA - Innovation action



**Start date of the project**  
01<sup>st</sup> November 2015

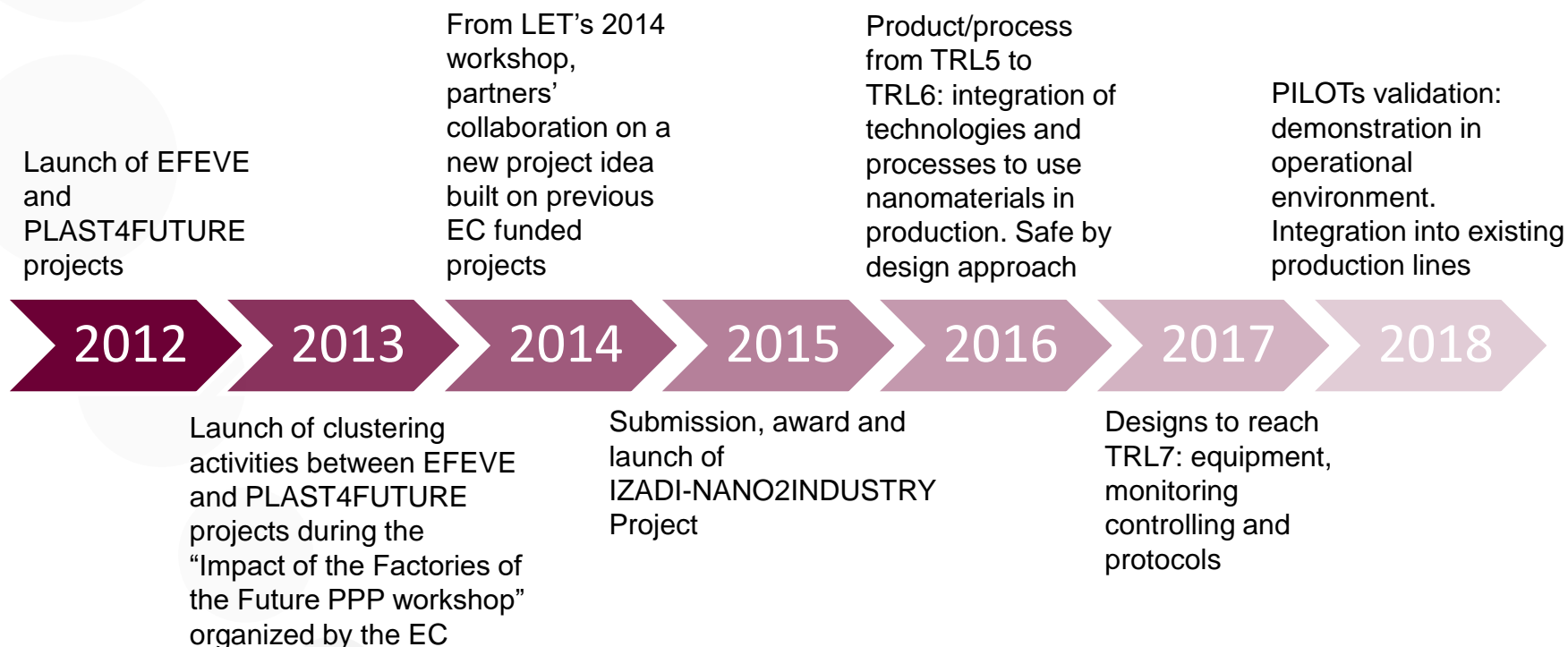
**Project Title**  
Injection moulding, casting and coating  
PILOTS for the production of improved components with nano materials for automotive, construction and agricultural machinery



# IZADI-NANO2INDUSTRY is .... a long long story

Harvesting on the results of previous EU funded projects...

...to impulse the uptake of nanotechnology based solutions



# ... a Challenge on Which More Than 120 People Have Bet

122 people involved,  
including researchers and not

working at 3 RTOs and 10 industries

distributed in 5 different  
European Member States  
(ES, IT, DK, FR, RO)

who have been collaborating  
for 1068 days ...and 27 still to come!



# IZADI-NANO2INDUSTRY



[Project Video](#)

# IZADI-NANO2INDUSTRY

## Main Objective

Contributing to overcome the barriers that nano-materials are currently facing to get introduced in the market through three innovative PILOTS that manufacture new performance-enhanced components for the construction and agricultural machinery sector and the automotive one



# IZADI-NANO2INDUSTRY

## Strategy

- “*Safe by Design*” approach
- Innovative technologies based on **nanotextured surfaces, nano-reinforced materials, and nanostructured-coatings**
  - ✓ **ESTCRATCH PILOT**: Innovative Injection Moulding Process for Nano-Reinforced and Nanotextured Plastic Surfaces
  - ✓ **HARDCAST PILOT**: New Gravity Casting Process for Nano-Reinforced Metal Parts
  - ✓ **TRIBONANO PILOT**: Thermal Spray Technology for Nanostructured Coatings by Solid State Deposition
- New **added-value products and solutions** to be proposed to the European Automotive, Construction and Agricultural Machinery sectors.



# ESTCRATCH Pilot

Improved materials  
and innovative injection moulding process  
for more performing and aesthetics  
enhanced PMMA plastic parts

**Selected  
Component:**  
B-pillar  
Automotive part



## Nano-improved PMMA producer

Cristina Elizetxea  
cristina.elizetxea@tecnalia.com



## Nano-improved PMMA Producer

Zina Vuluga  
zvuluga@icechim.ro



## Designer of Plasmonic Colors

Anders Kristensen  
Anders.kristensen@nanotech.dtu.dk



## Developer of the Nanotexturing of the Inserts and designer of diffractive gratings

Alicia Johansson  
alicia@nilt.com



## Early Adopter

Mario Ordonez  
marord@mtc.maier.es



## PVD coating and nanostructuring

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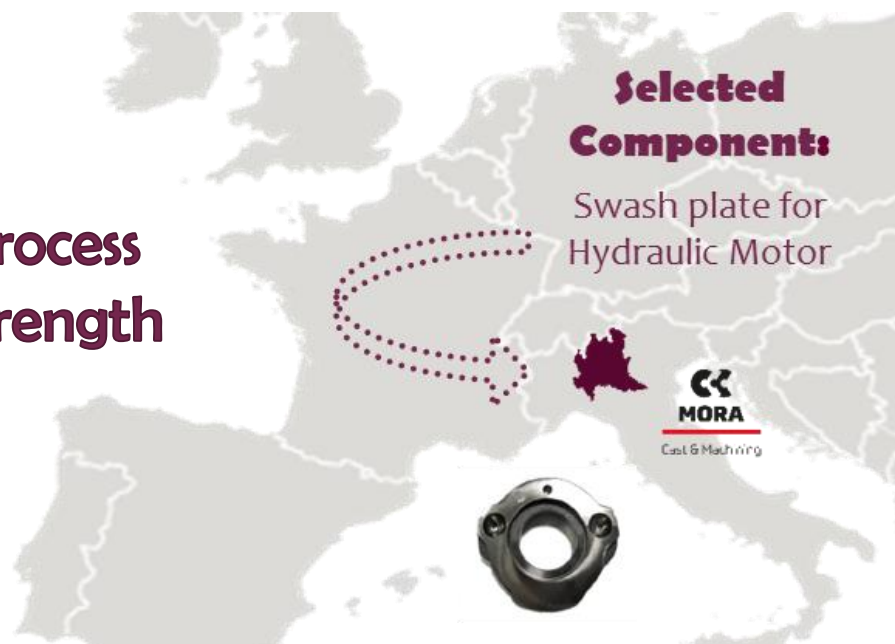
## Insert Developer

Renè Hansen  
rh@michaellundbech.dk



# HARDCAST Pilot

**Nano-improved materials  
and suitable industrial casting process  
for metal parts with enhanced strength  
and hardness properties**



## **Nanostructured Powders Producer**

Delphine Maury  
maury@mariontechnologies.com



## **Technology Provider**

Pedro Egizabal  
Pedro.egizabal@tecnalia.com



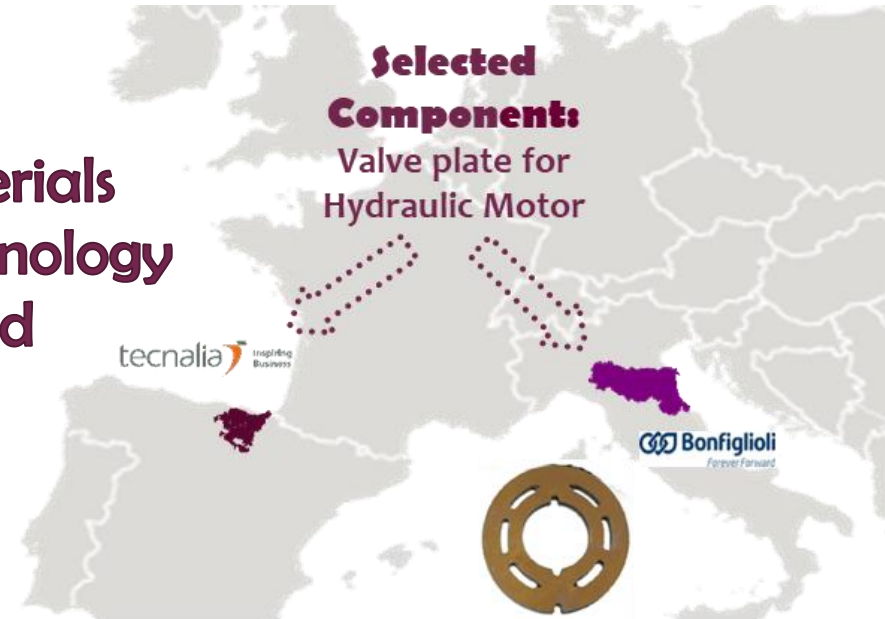
## **Early Adopter**

Pier Angelo Casella  
pacasella@fonderiemoragavardo.it



# TRIBONANO Pilot

**Nanocermet micropowder materials  
and innovative spray coating technology  
for metal parts with improved  
wear resistance**



## **Nanostructured Powders Producer**

Delphine Maury  
maury@mariontechnologies.com



## **Technology Provider**

Ignacio Fagoaga  
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## **Early Adopter**

Riccardo Borghini  
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# IZADI-NANO2INDUSTRY

## Contacts

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**For more info:** [www.izadinano2industry.eu](http://www.izadinano2industry.eu)

