

Una manera de hacer Europa



BUENAS PRÁCTICAS
Actuaciones Cofinanciadas

The aid scheme for 2018 aimed at improving business competitiveness through support for Business Clusters of Innovation (AAEII) in the Community of Castilla y León, personalised in the Castilla y León Capital Goods Cluster (CBECYL)

Directorate General for Economic Policy and Competitiveness

**Programa Operativo
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Good Practise of the Directorate General for Economic Policy and Competitiveness, of the aid scheme for 2018 aimed at improving business competitiveness through support for Business Clusters of Innovation (AAEEII) in the Community of Castilla y León, personalised in the Castilla y León Capital Goods Cluster (CBECYL)

In 2018, the Directorate General for Economic Policy and Competitiveness (formerly the Directorate General for Industry) has announced an aid scheme intended for clusters in the Autonomous Community of Castilla y León, aimed at encouraging cooperation between companies, innovation agents and knowledge entities to improve competitiveness in the Castilla y León business sector.

In the 2018 call, the project selected as good practise is the project carried out by the Castilla y León Capital Goods Cluster (CBECYL) entitled “ASTRAL Feasibility Study: Sustainable alternatives to surface treatments in the Castilla y León capital goods industry”.

The purpose of the project was to analyse the main critical processes of surface treatments and coatings that are present in the Castilla y León capital goods industry, and the study of alternatives to these processes that represent an environmental and health improvement.

The surface treatments provide different properties such as hardness, colour, resistance to wear and tear or corrosion and provide added value to the consumer good. However, work is currently underway to control, limit and even restrict the use of some of the products. For example, there is a significant presence of solvent-based paint in the industry and, as far as possible, an attempt should be made to reverse this situation and promote water-soluble paints. There are also two processes with greater environmental impact than the rest: chrome plating and galvanising. The use of chromium is controlled and will soon be banned, given its irritant and carcinogenic nature, and it also causes environmental problems due to spills. This makes it necessary to introduce possible substitutes at all levels.

The project has analysed the situation of the main critical processes in a group of companies in the Castilla y León Capital Goods Cluster, and has proposed different solutions or technological alternatives to these processes that have a greater environmental and health impact. Finally, different possible technological partners have been presented to apply these alternatives and an attempt has been made to make visible the existence of possible financing routes. The results have been presented to all the companies in the Cluster, to inform them of the processes that have been analysed, the available alternatives and the main conclusions, to make them all aware of the results, the tools and to allow them to identify possible manufacturing alternatives to processes that may be critical within their workflow.

The cost of the ASTRAL project amounts to 24,500 euros, and the ERDF aid amounts to 12,250 euros.

This project has enabled the Castilla y León Capital Goods Cluster to directly involve 5 companies in the sector and has identified, transferred and disseminated good practises in the field of the most critical surface treatments because of their environmental and health impact on the 34 members that make up the cluster. This co-financed action is therefore considered to have a very positive impact on this sphere of activity in terms of improving production and contributing to the reduction of pollutants.

This co-financed action is considered a Good Practise because it meets the following criteria:

- 1. The action has been adequately disseminated to beneficiaries, potential beneficiaries and the general public.**

The Castilla y León Capital Goods Cluster (CBECYL) has published on its web page the information related to this subsidised project:

<https://www.cbeycl.com/cbeycl-obtiene-dos-proyectos-en-la-convocatoria-para-las-aaeeii-de-la-direccion-general-de-industria/>

CBECyL obtiene dos proyectos en la convocatoria para las AAEII de la Dirección General de Industria



Una vez resultada la convocatoria para la mejora de la competitividad y en apoyo a las Agrupaciones Empresariales Innovadoras que impulsa la Consejería de Economía y Hacienda a través de la Dirección General de Industria de la Junta de Castilla y León, CBECyL y sus socios han obtenido los siguientes proyectos que apoyarán el impulso y competitividad de los mismos:

1. Proyecto ASTRAL:

Estudio de Viabilidad: Alternativas Sostenibles a Tratamientos superficiales en la industria de Bienes de Equipo de Castilla y León (ASTRAL).

Los objetivos fundamentales del proyecto son los siguientes:

- Estudio de los procesos de tratamiento superficial actuales realizados dentro de las empresas de CBECyL.
- Análisis de las posibles alternativas sostenibles que supongan un menor impacto medioambiental y de salud para las personas expuestas.
- Identificación de posibles socios tecnológicos, tanto a nivel regional como nacional o internacional para desarrollar acuerdos tecnológicos de colaboración.
- Identificación de vías de colaboración, financiación para lanzar posibles proyectos de I+D que permitan a las empresas de CBECyL implantar en un corto plazo de tiempo las tecnologías.

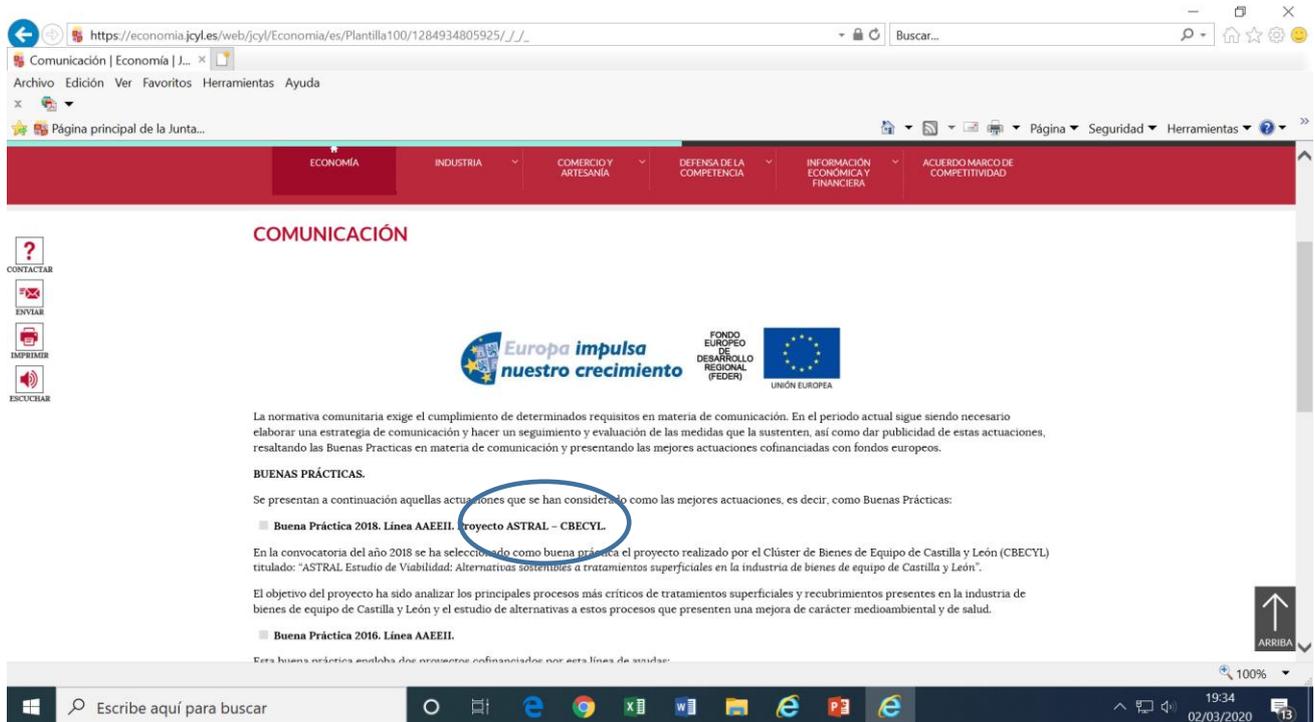
Throughout the project's implementation, the Castilla y León Capital Goods Cluster (CBECYL) has made it clear though informative posters that the action was financed by the ERDF:



The Castilla y León Capital Goods Cluster (CBECYL) has also presented the project's results to the companies in the framework of its 2018 General Assembly in November.



The Directorate General for Economic Policy and Competitiveness disseminates this project through its website:



In addition, as the body granting this aid, it has disseminated this action among other beneficiaries of the subsidy scheme, in order to publicise this project as good practise. Specifically, by holding a meeting with all the Business Clusters of Innovation in the region, where one of the points to be discussed was the presentation of this project as a good practise within the cluster aid scheme or Business Clusters of Innovation for 2018.

At this meeting the cluster's representative presented to the rest of attendees what the project has consisted in, how they had involved the different companies to participate, how the activities carried out by the companies directly involved in the project had been made known to the rest of the partners in the cluster, and what results had been obtained and how they had been disseminated.



2. The actions incorporate innovative elements.

The manufacturing processes in the industry usually involve different surface and/or coating treatments that allow obtaining consumer goods as intermediate or final products for use in industrial, domestic or commercial environments. Through the "ASTRAL Project", an attempt has been made to identify the most critical surface treatment and coating processes carried out in a group of companies of the Castilla y León Capital Goods Cluster (CBECYL), taking into account that many of them are essential processes for the correct operation of the company.

The search for substitutes or alternatives to products or components currently used in response to documented health risks to workers and their environmental impact is not as simple as switching from one treatment to another. In many supply chains this is a priority issue and an area of work that requires significant research, development and innovation.

In the "ASTRAL Project", based on the analysis carried out, different alternatives to the types of treatments with the greatest impact were specified: chrome plating (process of incorporating a layer of chrome into a metal or plastic object to provide corrosion resistance, for example), nitriding (process of incorporating nitrogen into the steel surface to increase the surface hardness of the parts), galvanising (process of covering a metal with another) and painting.

Some of the proposed technologies are well established in other industrial sectors such as aeronautics, the automotive and the oil sector. The challenge is to manage to reduce the cost so that these processes can be viable in industrial activities with less added value, managing to equal or improve the features provided by the current production processes, with the aim of being able to replace these treatments with other healthier ones with less environmental impact.

3. Adaptation of the results obtained to the established objectives:

The "ASTRAL Project" aimed to carry out a feasibility study of the alternatives to critical types of surface treatment (traditionally chrome plating and galvanising treatments) within the manufacturing process in the Castilla y León Capital Goods Sector, assessing an alternative to these processes, potential partners and channels for cooperation to start up Research and Development projects that will allow companies to implement these new processes and technologies in the short or medium term.

The "ASTRAL Project" has achieved these objectives, generating positive impacts on the value chain of the Capital Goods Sector and contributing to improve its positioning, by promoting an internal reflection process in the companies on the challenge of finding new alternative treatments to those currently in place, moving towards a more sustainable industry. To help find new technological solutions, potential technology providers and partners have been identified, and possible ways of finding funding have been proposed.

In addition, it should be noted that potential R&D projects have emerged in relation to this problem and the search for and implementation of possible solutions.

4. Contribution to the resolution of a problem or weakness detected in the territorial scope of implementation.

Surface treatment is key to many markets and spheres of activity. Many of these processes involve problems with an environmental impact or risk to the worker's health: the use of acids, solvents and carcinogens is a problem both in terms of waste and in terms of hazards when developing these treatments.

To control, limit and even restrict some of the products, there are currently several European directives aimed at improving human health and environmental protection from the risks involved in manufacturing, marketing and using chemical substances and mixtures.

The "ASTRAL Project" has been limited to the study of the Castilla y León Capital Goods sector and has analysed the surface and coating treatments with the greatest impact on a group of companies in the sector. These changes in production processes can be difficult, especially in small companies, as they require identifying and implementing technological changes. Based on the analysis carried out, different alternatives were specified, seeking to obtain more sustainable processes.

5. High coverage of the target population.

The population targeted by the project is the regional industrial fabric or group of companies of Castilla y León that may be affected by the analysed problem, i.e. companies that carry out surface and coating treatment processes that may have a harmful health and environmental impact.

Although only companies from the Castilla y León Capital Goods Cluster have been considered, this is a problem that may affect other industrial sectors as recipients of the products which may be interested in the solutions detected. In the sector, demands for better performances while reducing costs are constantly increasing, and so is the need to assess the health and environments risks of all the substances that can be used in production processes, in an attempt to find more sustainable solutions.

6. Consideration of the cross-cutting equal opportunities and non-discrimination criteria, in addition to social responsibility and environmental sustainability.

Equal opportunity, non-discrimination and environmental sustainability criteria are considered in this aid scheme.

With regard to equal opportunities and non-discrimination, integration of people with disabilities in the labour market is valued as a criterion, and on the other hand, information on the gender perspective is required in the project application, specifically on the number of men and women participating in the clusters.

On the other hand, in case of a tie in the score of different projects, the applicants who prove a higher percentage of disabled workers will be valued first, and applications with greater contribution to environmental sustainability will be valued second.

With regard to the principle of social responsibility and environmental sustainability, applications for aid must state whether the action for which support is requested has a zero/favourable/unfavourable environmental impact and the justification for this.

The "ASTRAL Project" significantly contributes to the field of social and environmental responsibility, since it seeks to redefine manufacturing processes and to reduce the alternatives' risks for the health of workers and the environment.

This project seeks to modify current processes and techniques in the analysed industrial activities through the work of the Cluster and cooperative work to achieve greater environmental sustainability. These changes are technically very complex and also costly and require integrating environmental sustainability and social responsibility into decision-making processes.

7. Synergies with other policies or public intervention instruments

In Castilla y León, the Regional Government has promoted the development and consolidation of Business Clusters of Innovation, and this has been included in the Regional Strategy for Research and Innovation for the Smart Specialisation of Castilla y León, which establishes that cluster-type groupings are an important tool due to their capacity to develop cooperative and innovative projects with high added value.

Clusters are considered essential because they allow the transfer of knowledge between the different agents linked to innovation and the business fabric, which is particularly relevant for small and medium-sized enterprises that lack sufficient resources.

Similarly, the Castilla y León Third Framework Agreement for Competitiveness and Industrial Innovation, signed by the Regional Government with the Economic and Social Agents, has established the importance of promoting the search for common interests among companies that can lead to strategic alliances, promoting cooperative innovation and marketing projects among the companies that are part of each Business Clusters of Innovation and inter-cluster projects.

Likewise, the aid included in this action converges with and is complemented by the cluster support actions carried out by the current Ministry of Industry, Trade and Tourism, which has an aid scheme for Business Clusters of Innovations that can be applied for by the Business Clusters of Innovation that are registered in the Registry of Business Clusters of said Ministry.

On the other hand, sustainable development and action against climate change are an essential part of the political agenda of the European Union, of Spain and also of Castilla y León.

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