

ACTION PLAN

Building regional
resilience to
industrial structural
change



Spanish Partner
Project Partner: Business Innovation
Centre of Cartagena - CEEIC



Managing Authority
Regional Government of Murcia

Writing team
José Carlos García, Director of Business Development and European funds (CEEIC)
Víctor García, Projects Technician (CEEIC)
Consuelo García, Director of European Cooperation (EuroVértice)



@FOUNDATION_EU

CONTENT

GENERAL INFORMATION	2
INTRODUCTION	4
POLICY CONTEXT	6
BACKGROUND OF THIS ACTION PLAN.....	8
ANALYSIS OF THE REGIONAL CONTEXT	8
THE CURRENT SOCIO-ECONOMY CONTEXT AND THE EXPERIENCE OF CEEIC IN THE LOCAL ECOSYSTEM HAS BEEN A KEY FACTOR TO DECIDE THE BEST PRACTICE FROM FOUNDATION TO BE TRANSFERRED INTO CARTAGENA AREA.	9
LEARNING PROCESS FROM THE FOUNDATION PROJECT.....	9
LEARNING PROCESS FROM TRANSNATIONAL LEVEL	9
LEARNING PROCESS FROM REGIONAL LEVEL	10
<i>Best Practices identified in FOUNDATION project.....</i>	<i>11</i>
<i>Good practice: Innovation Center for Research and Education (RIC)</i>	<i>14</i>
<i>SMARTI4 Programme CEEIC</i>	<i>15</i>
ACTIONS ENVISAGED	20
ACTION 1: PREMIUM VERSION OF THE SMART I4.0 TRAINING PROGRAM	20
<i>Action 1.1 Identification, selection and confirmation of participation from the industrial companies and/or corporates from the local ecosystem.</i>	<i>20</i>
<i>Action 1.2 Preparation and elaboration of the premium version of the Smart I4.0 training program: planification of the action, identification and participation of relevant speakers (mentors), elaboration of the didactic guide and pertinent material accordingly. The mentors are digital enablers incubated in CEEIC, but will also include top experts from the digital catalogue of digital enablers of INFO (the Regional Development Agency of the Region of Murcia).</i>	<i>20</i>
<i>Action 1.3 Creation of a corporate visual identity and launching of the program through website, social media channels, emails and communication materials.....</i>	<i>20</i>
<i>Action 1.4 Meetings with educational centres to identify and segment the participants (unemployed people, recent graduates, employees) to whom the program will be addressed to and final selection.</i>	<i>20</i>
<i>Action 1.5 Awareness-raising and organization of promotion activities about the premium version of the program and its success stories through talks and presentations. Dissemination actions by the educational centres such as professional training centres, high schools, universities, etc.</i>	<i>20</i>
<i>Action 1.6 Setup of a monitoring commission to do a proper follow-up on the program and its implementation carrying out follow-up actions and dialogue with industrial managers and mentors.</i>	<i>20</i>
<i>Action 1.7 Organization of follow-up meetings with the participants to check on the collaboration between start-ups and the Repsol centre in Madrid for instance.....</i>	<i>20</i>
<i>Action 1.8 Evaluation of the 4.0 business models and follow-up.....</i>	<i>20</i>
<i>Action 1.9 Assessment of the premium version of the Smart I4.0 training program and follow-up.</i>	<i>20</i>
<i>Players involved</i>	<i>21</i>
<i>Timeframe.....</i>	<i>22</i>
<i>Costs</i>	<i>22</i>
<i>Funding sources:.....</i>	<i>23</i>
<i>Endorsement Letter INFO</i>	<i>¡Error! Marcador no definido.</i>
SIGNATURES	24



General information

Project: FOUNDATION: “Building Regional Resilience to Industrial Structural Change”

Partner organisation: The European Business and Innovation Centre of Cartagena (CEEIC)

Country: Spain

NUTS2 region: Region of Murcia, Cartagena

Contact person: José Carlos García

Email address: jc.garcia@ceeic.com

Phone number: +34 968 52 10 17

<https://www.interregeurope.eu/foundation/>



1



Introduction

1. Introduction

The objective of this document is to define the roadmap of the action plan of the European Business and Innovation Centre of Cartagena – CEEIC within the FOUNDATION Interreg Europe Project with reference number PGI05992 whose aim is to improve policy instruments supporting SMEs' capacity to build regional resilience to industrial structural change.

The FOUNDATION project aims at developing a framework and roadmap for anticipated structural change so industry players, business support organisations and policy makers understand how their ecosystems work when facing industrial closures, job losses and uncertainty in order to develop economic resilience through collaboration.

The project consortium is composed of 9 regions from 9 European countries that possess distinct levels of resilience to industrial structural changes. The project fostered interregional learning and capacity building through the organization of various workshops, seminars, study visits and learning events amongst the partnership. Thanks to this learning process, project partners identified, exchanged and shared good practices to prepare and plan adapted actions plans to their regions in order to integrate the lessons learned from the project in regional policy programmes to enhance them.

2

Policy context



2. Policy context

In the framework of the FOUNDATION project, CEEIC aims at impacting the European Regional Development Fund (ERDF) Operational Programme of Murcia Region 2014-2020 under the 'Investment For Growth And Jobs' goal.

The action envisaged in this action plan is to enhance the strategic goal 3.1.2; "Creation of new enterprises and business incubators, in particular by improving the access to financing and to advanced support services" that is framed at the investment priority 03a. Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators located in the priority axis 03, Enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector (for the EAFRD) and the fisheries and aquaculture sector (for the EMFF).

Consequently, the current action plan will have a positive **impact in the Operational Programme of Murcia Region 2014-2020** under the 'Investment For Growth And Jobs' goal **through the implementation of a new project** inspired in a good practice from another project partner during the interregional learning phase.

European Regional Development Fund (ERDF) Operational Programme of Murcia Region 2014-2020

Priority Axis 03:

Enhancing the competitiveness of small and medium-sized enterprises, the agricultural sector (for the EAFRD) and the fisheries and aquaculture sector (for the EMFF)

Investment priority 03a:

Promoting entrepreneurship, in particular by facilitating the economic exploitation of new ideas and fostering the creation of new firms, including through business incubators

strategic goal 3.1.2. Creation of new enterprises and business incubator, in particular improving the access to financing and to advanced support services

- intervention 22.5 Promote access to resources for the incubation and development of business projects and the exchange of entrepreneurial talent, especially EIBT and RIS3 sectors.

PLAN

- Research

Learning

novation

3

Background
of this
Action Plan



3. Background of this Action Plan

Thanks to the interregional learning and capacity building process that took place during the implementation of the FOUNDATION project, CEEIC was able to define and elaborate this action plan to enhance the aforementioned policy instrument via the creation and execution of a project based on a good practice selected for its relevance to the regional context of the Region of Murcia to better respond to industrial structural changes.

Analysis of the regional context

In the framework of the FOUNDATION project, the Business Innovation Centre of Cartagena (CEEIC) is the Spanish partner representing the Region of Murcia, specifically the ecosystem of Cartagena.

The main economic area in Cartagena is linked with agriculture, which is developed in the areas of the Campo de Cartagena region, comprised by the county councils located north of the municipal area and the neighbouring municipalities. The fishing sector is to be mentioned like in the neighbourhoods of Santa Lucía even though its presence is not as prominent as it previously was.

Shipbuilding also has a long tradition, linked to the city since the creation of the Cartagena Arsenal in the 18th century. Currently the Navantia company, whose mission is to build military ships, perpetuates this economic activity in Cartagena.

Nevertheless, if there is a predominant sector in Cartagena's industry to be emphasized, it is that of energy companies. The Escombreras valley is home of several energy production and transformation companies, such as Repsol or Enagas. In April 2012, the Escombreras refinery was expanded and represents the largest industrial investment in the history of Spain.

Within the scope of industry, the company SABIC's plastics manufacturing complex is also noteworthy due to its volume.

In recent years, the tertiary sector, fundamentally linked to tourism, reached a notable development. Together with the hospitality companies of both the city and the beaches of Cartagena, the Puerto de Culturas organization was created to promote this sector since it has a growing presence in the economic life of Cartagena.

However, since the emergence of the Covid-19 pandemic, the socioeconomic situation in the Region of Murcia has changed dramatically. According to the data published by the Economic and Social Council of the Region of Murcia, the Region faces an unprecedented crisis situation as a consequence of the coronavirus disease and the exceptional measures taken. The global pandemic has caused an economic and social crisis of similar levels to previous times of war, with effects at mid-term.

Consequently, to improve the current situation in the Region of Murcia and to strengthen the region as an investment destination, it was pointed that measures to support the stimulus and recovery should be adopted reinforcing those areas in which the Region of Murcia already possesses a competitive advantage over other territories and finding new areas of opportunity to make Murcia a more attractive destination for companies and investors.

Therefore, taking into account the European and Spanish National framework, the business sector of the Region of Murcia will invest in digitalisation, innovation, clean and more efficient use of energies in order to become more competitive as it becomes greener, more circular and resilient.

In this sense, a set of actions were identified according to the following 4 axes: Participatory Governances, Business Growth, Sustainability and Socio-Economic Inclusion in order to improve the resilience of the Region to face industrial structural change.

This development should be based on knowledge and innovation in strategic areas, public and private cooperation and stable support for innovation. To achieve this vision for Murcia, seven overall objectives have been defined:

- Stimulate creation and knowledge transfer;
- Reinforce entrepreneurship and companies' creation by valuing knowledge;
- Promote qualification and specialisation of human resources;
- Support economic and knowledge related capacities of Murcia region and its incorporation in the global economy;
- Promote cooperative and multi-disciplinary R&D&I among all public and private agents;
- Stimulate creation and network participation;
- Encourage innovative culture and social innovation.

The current socio-economy context and the experience of CEEIC in the local ecosystem has been a key factor to decide the best practice from Foundation to be transferred into Cartagena area.

Learning process from the FOUNDATION Project

Learning process from interregionallevel

During the transnational learning phase of the project, several activities were carried out by the partnership in order to exchange information and better know best practices from other regions. The interregional learning phase started with an analysis of partners' local situations to elaborate regional ecosystem case study with the objective of improving the innovation ecosystems through understanding of the existing challenges and gap from SME birth, development and growth. Then, partners organized and assisted to various workshops, study visits, seminars and stakeholders' meetings to generate solid interaction between key stakeholders to ensure sustainable SME competitiveness and growth. During those activities, project

partners identified and shared with the whole consortium valuable experience and best practices from their respective regional ecosystem. Thanks to the aforementioned activities and learning process, partners went on to review and identify the most relevant best practices validated by the project in a perspective of transfer and adaptation to draw up well-grounded regional action plans. The outcome of these action plans is to develop effective policies to build greater regional resilience to industrial structural change.

The interregional learning process was set up with a combination of the following activities:

- Partners of the project have participated in the following 4 Interregional Thematic Workshops:
 - “Economic Regional Resilience and Regional Adaptation” that took place in Manchester in February 2020;
 - “Academia and Economic Resilience: What Role do Academics Play” that happened online in May 2021;
 - “Policy Support for Industrial Resilience celebrated” online in June 2020;
 - “The Role of the Individual Economic Resilience” that took place online in October 2020.
- Beside the aforementioned 4 thematic workshops, partners participated as well in 4 seminars to open debate of the project and its problematic to a larger audience:
 - “Regional Resilience in Europe: The Role of Industry Structure in Determining Resilience” that happened in Hungary in January 2021;
 - “Industry Clusters and Resilience that was celebrated in Austria in September 2021;
 - “Planning for Structural Change – An SME Analysis of the Pyhäsalmi Mining Services Cluster” that took place in Finland in June 2021;
 - “What Builds a Resilient Region: Policies and Strategies” that was organized in Lithuania in February 2022.

Due to Covid-19, most of the project activities had to become virtual and all participants built a close and effective partnership that eased all project activities creating a solid base for the exchange of knowledge and know-how.

Learning process from regional level

In order to transfer the learning process and skills acquired at transnational level, CEEIC set up a Local Action Group (LAG) composed by key regional stakeholders representing the industrial ecosystem of Cartagena. The LAG members were mobilised and deeply involved from the beginning of the project implementation. The goal of the group was to exchange on the knowledge and competences from the transnational level, but also to provide CEEIC with their experience and insight to ensure the sustainability of the action plan. The LAG from Cartagena met on 5 occasions during the first phase of the project

implementation, where key aspects of the project were talked through with the enriching interventions of stakeholders on the positive impact the good practices could make on the regional way of processing industrial structural change.

The LAG group was composed of the main actors in the local ecosystem of Cartagena; The Regional Federation of Metal Entrepreneurs (FREMM), the ICT Technological Centre (CENTIC), the Business Organization from Cartagena (COEC) and the Regional Development Agency of Murcia (INFO) were present at the encounter, that gathered a total of 10 people, the Polytechnic University of Cartagena (UPCT), Mecánicas Bolea company, the Local Development and Employment Agency of Cartagena (ADLE), the Regional Public Employment and Training Service (SEF), among others.

Furthermore, the LAG members participated in the design of the current Action Plan as well as in the dissemination activities of the project.

Best Practices identified in FOUNDATION project

As previously mentioned, one of the main objectives of the interregional learning process was focused on the identification of valuable best practices (BPs) and experiences. Throughout the project implementation and the various workshops, study visits and seminars that were organized for and by partner institutions, the following best practices were identified and validated by the FOUNDATION project:

Country	Name of the BP	Brief description
Ireland	Regional Enterprise Plans REPs	The (REPs) were designed by DBEI to ensure each Irish region can play its part in developing a national resilient enterprise and economic base.
	New Frontiers Programme –Rubicon	New Frontiers is an Irish Programme that trains entrepreneurs and accelerates new businesses with strong employment/growth potential.
	Student Inc. Supporting Student Entrepreneurs	Student Inc. is a co-ordinated, accredited programme supporting student entrepreneurs to develop business ideas or grow their existing businesses in Ireland & to produce more entrepreneurial graduates.
United Kingdom	GC Business Growth Hub	HereforBusiness: PPE -personal protective equipment sourcing and manufacture; Employ GM; Supply porta; Webinars; 24/7 opening hours; Grants administration for local authorities; Weekly business membership group meeting.
	Stronger Together - How Greater Manchester businesses worked together at a time of crisis	Manchester Inward Investment Agency, ('MIDAS') led a Greater Manchester task force sourcing PPE (personal protective equipment) for local authorities including the National Health Service (NHS) and the Greater Manchester Combined Authority (GMCA).

Finland	Peer networked enterprise incubator Yritystakomo (eng. enterprise smithy)	Peer networked enterprise incubator 'Yritystakomo' aims at connecting locally the unemployed professionals to develop, share and peer-assess new business ideas together with facilitator.
	Rural SME internationalisation model	Rural SME internationalisation operations model lowers the thresholds to internationalisation to rural companies by peer network and shared marketing.
	MicroENTRE® Growth Network	<p>The MicroENTRE® Growth Network provides evidence-based research knowledge on micro entrepreneurship, operational business environment and entrepreneurial culture. It also delivers research-based expertise on research, development and education to promote growth and internationalization of micro-enterprises (since 2011)</p> <p>It offers research-based online education on micro-entrepreneurship (since 2020).</p>
Lithuania	Industry 4 Panevezys	This programme is the initiative that incorporates different activities aimed at the development of the Industry 4.0 in the region of Panevėžys.
	No Quarantine on the Internet	No Quarantine on the Internet was set up to help Lithuanian SMEs surviving and being successful on Internet.
Poland	ProtoLab within Podkarpackie Innovation Center	ProtoLAB is a creative space for prototyping and verification of ideas, in which science connects with business, passion becomes work, and ideas turn into business.
	Podkarpackie vs Coronavirus	Podkarpackie vs Coronavirus initiative loans and grants for SMEs during Covid-19 times.
Hungary	HGC Academy	The goal of the HGC program was to strengthen and extend the Hungarian-owned medium-sized enterprise group.
	Szombathely ReStart	Szombathely ReStart is a local program that uses a holistic approach to respect social inclusions while maintaining sustainable competitiveness for the broad ecosystem. The program was developed to reinforce adaptation to the post-Covid era.
	Story of a local company in logistics	Galambos Logistic Ltd. Initiative made a single-member family business become the region's leading logistics group through flexible adaptation to the economic environment.
Italy	Reggiane Innovation Park	The Reggiane Innovation Park represents a territorial hub for industrial research and technological transfer, designed to increase the economic regional resilience by anticipating innovation and attracting enterprises, talents and investments.

	Engaging with Start-ups to Enhance Corporate Innovation	Engaging with Start-ups to Enhance Corporate Innovation is an integrated public/private local strategy from Research to the Market (Entrepreneurs) as a network.
	Workers Buy Out (WBO)	The Workers Buy Out (WBO) is an innovative instrument used when workers acquire ownership and control of a company which is facing closure. In case of crisis or generational turnover, employees can try to save companies by creating a cooperative, thereby keeping their jobs and ensuring that the know-how acquired over years of employment is not wasted.
Spain	Mecánicas Bolea	Mecanicas Bolea carried out actions to increase economic resilience on the bases of an example of an automotive industry company.
Austria	RIC – Innovation Center for Research and Education	The RIC provides education and training programs for all people (starting at the kindergarten up to adults) which are interested in production methods and processes of the future (Industry 4.0 / digitalisation / lot size one) as well as in the development and improvement of sustainable powertrain systems.
	Clusterlandand COVID-19 –What we do in Upper Austria in times of despair	Clusterlandand COVID-19 initiative was created to respond to the COVID-19 crisis by setting up a task force helpline to serve most of the region's companies in order to gain liquidity and gain access to government programs.
	AGS ENGINEERING – flexibility and resilience in times of crisis	AGS ENGINEERING initiative was base on the idea to share employees to other companies in time of crisis in order to ensure other businesses' continuity and their staff employment.

From the 22 good practices presented within the project, CEEIC selected various cases that could be transferred to its local ecosystem in order to increase and improve Cartagena's resilience to industrial structural changes. As a matter of fact, CEEIC was specifically interested in the following good practices:

- Szombathely ReStart – Hungary;
- Peer networked enterprise incubator Yritystakomo (eng. enterprise smithy) – Finland;
- MicroENTRE® Growth Network – Finland;
- RIC – Innovation Center for Research and Education – Upper Austria;
- Regional Enterprise Plans REPs – Ireland;
- Workers Buy Out- Italy.

After careful consideration and with the assistance of key local stakeholders, CEEIC focused on the identification of the best practice(s) that could respond most relevantly to its local ecosystem's context.

Considering the learning process at transnational, regional, organisational and individual levels, and taking into consideration all transferable elements from the 22 good practices identified and validated by the FOUNDATION project, **CEEIC, with the support of its LAG, decided to transfer distinct aspects of the best practice of Innovation Center for Research and Education (RIC) from Austria**

Good practice: Innovation Center for Research and Education (RIC)

During the first workshop of the project that took place on February 2020 in Manchester, several good practices were presented, including one from the Innovation Center for Research and Education (RIC) from Upper Austria.

RIC's good practice emerged from a regional problematic lying in shrinking population in the working age, people living in bigger cities, a decreased interest in working in technical sectors and the innovative changes in technologies. To tackle the situation, the community represented by key players began reflecting on how the region could become more resilient and keep its people in the region to improve their educative, qualificative and innovative skills and experience.

RIC focuses on improving education, qualification and innovation by providing training-, workshop- and seminar-rooms with state-of-the-art equipment as well as training programs in the field of the production of the future to a wide audience (from kindergarten to adults). The courses are available and addressed to all participants interested in the development of methods and processes of the future such as the Industry 4.0, digitalisation and Lot Size 1 for instance as well as the development and enhancement of sustainable powertrain systems. RIC is a key asset in the Austrian region by being a place that develops cutting-edge solutions and created new skills sets to overcome the challenges of the future for the economy and industrial sector and by its continuous collaboration with regional experts and actors from the industry and academic community.

The good practice is defined as a success story since RIC programme is open to each and everyone intrigued in new technologies. Moreover, by its proximity to local leading companies and by its close collaboration with all regional education partners, from kindergarten to universities; the exchange of know-how amongst players from the economic sector and scientific sector is well guaranteed. RIC's activities are contributing to the enhancement of work standards and competences' quality, but also to the creation of jobs' opportunities in the area.

This good practice offers learning and transferability elements to the partnership. Indeed, "Lot Size 1" in the Industry 4.0 aims at producing and delivering customized products meeting customers' expectations and requirements so as to offer the best customer service possible with all value-added processes through smart networking. Furthermore, RIC constant collaboration with key stakeholders such as universities; technical

and vocational centres, institutes and organisation; independent experts, researchers and knowledge carriers guarantees a high level of skills and know-how to upscale individuals' competencies in the region.

Due to the current situation in the Region of Murcia in pandemic times, and the similarity of development goals between the regional expectations for the future and the RIC's good practice objective and context, **CEEIC decided to choose certain elements from this above-mentioned Austrian good practice in order to build back better the Industry 4.0 within the Region** (the design and development of high quality and cutting-edge industry 4.0 training programmes through the coordination methodology among the main regional stakeholders (education, qualification and innovation); the involvement of companies, mainly corporates, from the industry sector in the design of the training programmes; training programmes will be also addressed to employed people in the industry sector; the exchange of know-how among players from the economic sector and scientific sector (involvement of academia – higher education and VET centres – and companies; training programmes will be more adapted to cover the needs of the industry sector. . As a matter of fact, the Covid-19 crisis left a lot of people without employment and/or skilled staff members without access to cutting edge experience and know-how about innovation in the industrial sector. The transfer from this good practice to a local project entitled Smart I4.0 would pave the way to respond better to the actual business reality by resolving and enhancing the grave situation in which Cartagena's ecosystem is in as a consequence of the Covid-19 crisis. Furthermore, the transferability of RIC's good practise to this project would **improve the current version of Smart I4.0** ensuring greater results and a positive impact on Cartagena area.

SMARTI4 Programme CEEIC

The Smart I4.0 Connect project, subsidized by FEDER Funds, was created in 2018 to develop innovative methodologies for successful entrepreneurship in the field of Industry 4.0.

The initiative was designed to tackle the high level of unemployment in the Region of Murcia that had serious social consequences for the future of the population and limited the growth of the regional economy.

Thanks to the globalized and changing economy, business opportunities and new sources of employment are multiplying and in constant transformation to a new business reality. New technological developments and the internet of things are giving way to the so-called fourth industrial revolution and the emergence of technology 4.0. Industry and services must address these opportunities to be competitive.

The Region of Murcia is committed to Industry 4.0 by promoting it in the regional Smart Specialization Strategy (RIS3Mur). This change in the production model required adapting the professional profiles and skills of the unemployed population.

The main objective of the project was to promote entrepreneurship and self-employment for the unemployed population based on the knowledge of innovative methodologies that improve their employability in digital sectors. To this end, several training itineraries adapted to entrepreneurship in the digital era were

organized, where unemployed people were being recycled towards the opportunities derived from 4.0 technology.

However, the **Smart I4.0 Connect Project** encountered several challenges that the good practice from RIC could respond to and thus enhance greatly in order to **develop a better version of the current project and upscale it at regional level**. Consequently, **CEEIC decided to review its project and transfer some of the key aspects of the good practice from the Innovation Centre for Research and Education (RIC)**.

One of the main points in need of improvement that was highlighted is that the program was previously solely addressed to unemployed personnel with a technical profile. As showed in the RIC practice, the project will now be directed to a wider audience including also companies' employees. The training program will thus reach a greater audience in order to train all technical profiles, both of employed and unemployed people, to be ready and adequately skilled for the Industry 4.0. Moreover, including employees will also enhance companies' internal processes and workforce knowledge and know-how.

Another key point that was outlined was the substantial inclusion and participation of corporate actors from the local ecosystem so as to take into consideration their specific needs at business level that should be met and that would be required from workers. But also to generate a greater and active listening and intervention from the industrial side and exchange with the technical profiles (employed and unemployed) from the local ecosystem. The business participation would offer employees and unemployed people to get a vertical focus of the corporate world in which they would like to work. The direct involvement from local businesses will ensure the effective communication of their specific needs so that Smart I4.0 participants are adequately prepared to respond to the demands of the local 4.0 industry in a cutting-edge manner, making the region pioneer in this regard and more competitive. For instance, with the incorporation of Repsol, a large Spanish energy and petrochemical company, to the project; the technical profiles will be trained in accordance to the necessary skills and know-how required by the sector and aligned with the innovation of the Industry 4.0. It is also foreseen that other large companies such as Mecánicas Bolea from the industrial park of Cartagena will take part in the project and thus contribute to the identification of demanded requisites to work within the sector and to fulfil them through the adequate training of unemployed people and workers. This action will interconnect the businesses, the employees and unemployed people with a technical profile, creating an active dialogue and synergy about their specific needs. Activities that will take place will be presentations on behalf of the companies on the needs of digital skills in the industry and visit to companies' premises to learn about their industrial processes in situ. Another activity would be a visit to the Repsol "Technology Lab" in Madrid, an avant-garde private R&D centre that works on open innovation launching challenges that the company faces and to which start-ups respond to. It is also based on networking alliances with technology centres, companies and universities around the world, whose objective is to provide sustainable solutions to achieve a business with fewer emissions, more efficient and competitive.

In addition, a greater focus on entrepreneurship and intra-entrepreneurship will be an added asset to the Smart I4.0 project. The program already included in a way the entrepreneurship aspect for participants but did not offer to exchange and embrace participants' skills, knowledge and input; and what they can bring to companies. Participants will be able to share and provide their contribution and point of view to companies after visiting their premises (industrial plants and production processes) in order to improve businesses' internal processes. In this sense, creating a new collaboration with Repsol's open innovation R&D department in Madrid, which is the part of the corporate that focuses on training and R&D digital skills for Industry 4.0, would offer the opportunity to get more insight on how they embrace and incorporate recently graduated and young entrepreneurs' contribution to their processes.

Thanks to the transfer of key elements from the good practice from the Innovation Center for Research and Education (RIC) to the Smart I4.0 project, the program will result in the following improvements:

- Adapted and enhanced the training program offered for the technical profiles to respond adequately to the needs of the market. The training program will be more transversal and generic. The technical profiles will thus be more prepared for the competitive labour market and address better the innovation and expectations of the Industry 4.0;
- Better synergy, involvement and commitment from all key actors from the regional ecosystem such as companies; universities; technical and vocational centres, institutes and organisation; independent experts, researchers and knowledge carriers guarantees a high level of skills and know-how to upscale individuals' competencies in the region. A monitoring commission will be created with the participation of the main actors to ensure the coordination of all stakeholders
- Better transferability and replication of the Smart I4.0 training program to other local and regional ecosystems. This programme will be adapted to be replicated in other training institutions participating in the programme, like UPCT or any other VET training centre from the area of Cartagena and, at internal level, part of the training programme could be replicated within corporates;
- Better sustainability on the longer term since all key aspects of the program, needs of the industrial sector, key actors from the local ecosystem and participants' input will be taken into consideration;
- Achievement of greater results and consequently a bigger positive impact of Smart I4.0 project at local and regional levels and, therefore, a greater impact in the policy instrument addressed. Taking into account that in the new Smart I4.0 training programme, the main regional stakeholders (from academia and business sector) will be deeply involved and coordinated and that training programmes will be designed to cover the needs of the industry sector, as a result, there will be a group of young people highly trained to work directly in industry 4.0 sector or create their own startup to provide services to the corporates (more and better jobs will be created);
- Building back better from Covid-19 crisis and improving the current situation in the Region of Murcia by strengthening the region as an investment destination. The Smart I4.0 program will support the

stimulus and recovery of the local ecosystem by reinforcing those areas in which the Region of Murcia already possesses a competitive advantage over other territories and finding new areas of opportunity to make Murcia a more attractive destination for companies and investors.

4

**Actions
envisaged**



Actions envisaged

ACTION 1: Premium version of the Smart I4.0 training program

In order to produce the aforementioned improvements of the Smart I4.0 thanks to the lessons learnt from the RIC best practice, it will be necessary to implement the following steps:

Action 1.1 Identification, selection and confirmation of participation from the industrial companies and/or corporates from the local ecosystem.

Action 1.2 Preparation and elaboration of the premium version of the Smart I4.0 training program: planification of the action, identification and participation of relevant speakers (mentors), elaboration of the didactic guide and pertinent material accordingly. The mentors are digital enablers incubated in CEEIC but will also include top experts from the digital catalogue of digital enablers of INFO (the Regional Development Agency of the Region of Murcia).

Action 1.3 Creation of a corporate visual identity and launching of the program through website, social media channels, emails and communication materials.

Action 1.4 Meetings with educational centres to identify and segment the participants (unemployed people, recent graduates, employees) to whom the program will be addressed to and final selection.

Action 1.5 Awareness-raising and organization of promotion activities about the premium version of the program and its success stories through talks and presentations. Dissemination actions by the educational centres such as professional training centres, high schools, universities, etc.

Action 1.6 Setup of a monitoring commission to do a proper follow-up on the program and its implementation carrying out follow-up actions and dialogue with industrial managers and mentors.

Action 1.7 Organization of follow-up meetings with the participants to check on the collaboration between start-ups and the Repsol centre in Madrid for instance.

Action 1.8 Evaluation of the 4.0 business models and follow-up.

Action 1.9 Assessment of the premium version of the Smart I4.0 training program and follow-up.

Players involved

- **CEEIC**: it will manage and monitor the general implementation of the action plan;
- **The Regional Federation of Metal Entrepreneurs (FREMM), The Association of Industrial and Naval Maintenance Companies of the Murcia Region (AEMIN), The ICT Technological Centre (CENTIC), The ICT Technological Centre (CENTIC)**: they will support and advise on the implementation of the action; and help with the dissemination of the action plan's activities. Moreover, it will provide its expertise and input where need be;
- **Mecánicas Bolea company**: it will support and advise on the implementation of the action, especially ensuring that the design of the training program fits with the industrial sector needs; and help with the dissemination of the action plan's activities. Moreover, it will provide its expertise and input where need be and raise awareness among the business sector;
- **The Local Development and Employment Agency of Cartagena (ADLE)**: it will support and advise on the implementation of the action; and help with the dissemination of the action plan's activities. It will also provide its expertise and input where need be and raise awareness among its audience;
- **The Regional Public Employment and Training Service (SEF)**: to promote and advise on the implementation of the action. Moreover, this actor possesses a direct contact with the business sector and will help raising awareness among this sector at local level. SEF will also support the communication and dissemination of the action;
- **The Regional Development Agency of the Region of Murcia (INFO)**: it will be the funding body and promoter of activities at regional and national levels. Moreover, it will help with the dissemination of the action plan's activities and provide its expertise and input where need be;
- **The Polytechnic University of Cartagena (UPCT) and other academic institutions and training centres** from the local ecosystem: they will support the implementation of the action plan by raising awareness on the project and by recruiting potential students and recent graduates to participate in the Smart I4.0 Program. Furthermore, they will help disseminating the action plan's activities and raising awareness among the academic body.

- **Repsol and other companies** of the industrial sector from the region: they will support and advise on the implementation of the action. They will also provide their expertise and input where need be; and offer the opportunity to visit their premisses and learn from their processes. Furthermore, they will help disseminating the action plan's activities and raising awareness among the business sector.

Timeframe

ACTION 1	2022						2023						
	JL	A	S	O	N	D	J	F	M	A	M	J	JL
Identification, selection and participation of industrial companies													
Preparation and elaboration of the premium version of the Smart I4.0 training program													
Creation of a corporate visual identity and launching of the program													
Meetings with educational centres to identify and select participants													
Awareness-raising and organization of promotion activities													
Setup of a monitoring commission													
Organization of follow-up meetings with the participants													
Evaluation of the 4.0 business models													
Assessment of the premium version of the Smart I4.0 training program													

Costs

ACTION 1. Premium version of the Smart I4.0 training program	COST
Identification, selection and participation of industrial companies	2000
Preparation and elaboration of the premium version of the Smart I4.0 training program	3000

Creation of a corporate visual identity and launching of the program	1000
Meetings with educational centres to identify and select participants	2000
Awareness-raising and organization of promotion activities	2000
Setup of a monitoring commission	2000
Organization of follow-up meetings with the participants	3000
Evaluation of the 4.0 business models	4000
Assessment of the premium version of the Smart I4.0 training program	5500
TOTAL	24500€

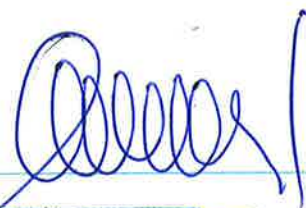
Funding sources:

The Regional Operational Programme of the Region of Murcia 2014-2020.

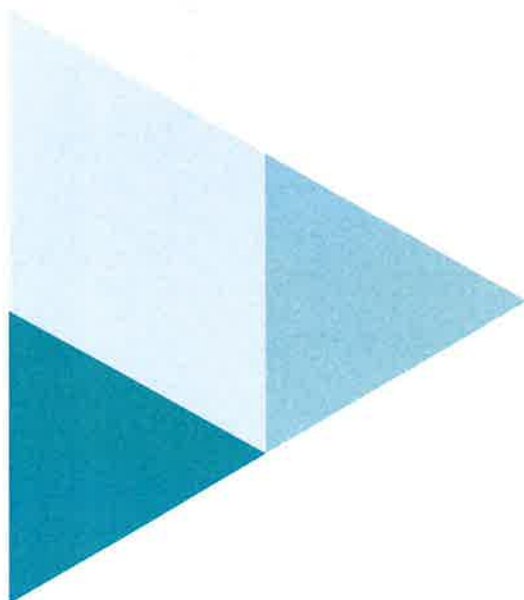
Signatures

Date: June 30th, 2022

Signature: Ángel Martínez-Conde García – Director CEEIC



Stamp of the organisation (if available):



ACTION PLAN

Building regional
resilience to
industrial structural
change

Spanish Partner

Project Partner: Business Innovation
Centre of Cartagena - CEEIC



Managing Authority

Regional Government of Murcia

Writing team

José Carlos García, Director of Business Development and European funds (CEEIC)

Víctor García, Projects Technician (CEEIC)

Consuelo García, Director of European Cooperation (EuroVértice)



@FOUNDATION_EU