

# 5 Overview of the High Impact Actions

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This chapter presents an overview of the ten High Impact Actions (HIAs) carried out as part of the European Commission-OECD pilot action on Regions in Industrial Transition. For each pilot region and country, the chapter presents the main industrial transition challenges, the corresponding HIA undertaken, its governance and management, its impact on overcoming industrial transition challenges, the experimental angle, scalability potential and, finally, policy lessons learned.

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## Introduction

This chapter is dedicated to the specifics of each High Impact Action (HIA). It is divided into two sections. The first section is a table summarising the HIAs approved by the European Commission. The second is a summary of findings from each of the ten HIAs studied in this project. These summaries offer information on the industrial transition challenges faced by each region or country, the action itself, its governance and implementation mechanisms, the results of the action to date and lessons learned.

Both parts are useful for policy makers as a means to understand how a set of regions and countries addressed some of the challenges associated with industrial transition through an experimental approach to governance and policy measures. It should be noted that the experimental approach can be subjective: what one region may never have done in the past and was experimental in its own regional context (e.g. direct dialogue with stakeholders on matters of industrial transition) may not be experimental in another region. However, in all cases, the HIAs yielded clear insights into what can work to advance industrial transition aims for the teams that were managing them.

## Section 1: HIA summary

**Table 5.1. Summary of HIAs approved for the pilot regions and countries**

Pilot region or country	Main industrial transition challenge addressed by the HIA	HIA title	Key instruments of the HIA	Potential for scale-up/ replicability
Cantabria (Spain)	Inclusive growth	Cantabria High Impact Initiative for Industrial Transition: Social Inclusion in the Primary Industries	<ul style="list-style-type: none"> <li>Support for renewable energy, digitalisation and social inclusion.</li> <li>Stakeholder interviews, seminars and co-operation with rural businesses.</li> <li>Funding, expert support and stakeholder mobilisation to build capacity in energy efficiency, innovation and rural development.</li> </ul>	<ul style="list-style-type: none"> <li>High potential for replication in other sectors through diffusion activities.</li> <li>Scaling out to other sectors depends on building new partnerships.</li> </ul>
	Broadening and diffusing innovation			
Centre-Val de Loire (France)	Preparing for the jobs of the future	SME Executive Recruitments and Skills Competence Audits and Regional Attractiveness Strategy	<ul style="list-style-type: none"> <li>Actor mapping to strengthen regional attractiveness.</li> <li>Regional workshops, company audits, participation in a recruitment fair.</li> </ul>	<ul style="list-style-type: none"> <li>HIA was implemented through a number of steps, including offering support for rural areas, reviewing the audit process, providing talent attraction workshops and better understanding candidate expectations.</li> </ul>
East and North Finland (Finland)	Just transition: Transition to a circular economy	Cross-regional Voucher System to Stimulate Digitisation and Circular Economy in the Tree, Wood and Timber Value Chain	<ul style="list-style-type: none"> <li>Innovation vouchers to small and medium-sized enterprises (SMEs) for projects with a higher level of technology readiness.</li> </ul>	<ul style="list-style-type: none"> <li>ELY Centres can now directly finance SMEs that deal with higher technology readiness level projects, which they were not doing before.</li> <li>Long-term collaboration among East and North Finland seven sub-regions will continue in the project Smart Specialisation in East and North Finland 2022-2027 (ELMO II).</li> </ul>
	Digital transition			

Pilot region or country	Main industrial transition challenge addressed by the HIA	HIA title	Key instruments of the HIA	Potential for scale-up/ replicability
Grand Est (France)	Just transition: Transition to low-carbon economy	Interdisciplinary innovation hub for low-carbon energies for the automobile industry	<ul style="list-style-type: none"> <li>Promoting projects to create sustainable, attractive and competitive industrial areas through the establishment of the Business Parks of the Future (ZAF) concept.</li> <li>The ZAF concept defines principles of land neutrality, sustainability, local dynamism, human centricity and connectivity.</li> </ul>	<ul style="list-style-type: none"> <li>The HIA can be scaled up by replicating successful experiments from the project in other zones, focusing on different industrial sectors per zone.</li> <li>Feedback and good practices will be shared among stakeholders to ensure effective replication.</li> </ul>
	Broadening and diffusing innovation			
Greater Manchester (United Kingdom)	Inclusive growth	Good Employment Charter	<ul style="list-style-type: none"> <li>Voluntary membership and assessment scheme that seeks to improve employment standards across the region.</li> </ul>	<ul style="list-style-type: none"> <li>The charter concept shows particular promise, given that a growing number of Combined Authorities across the UK are already developing comparable initiatives.</li> <li>Could be applicable to European (EU) member state regions as well.</li> </ul>
	Jobs of the future and skills			
Hauts-de-France (France)	Preparing for the jobs of the future	Accelerating the digital transition of traditional industrial companies in Hauts-de-France	<ul style="list-style-type: none"> <li>Company presentations.</li> <li>Digital diagnostic support and coaching and mentoring for traditional SMEs.</li> </ul>	<ul style="list-style-type: none"> <li>The HIA pilot action allowed the region to build specific tools, identify good practices and form partnerships that can help promote the development of the 2021-27 S3.</li> </ul>
	Digital transition			
	Support to small and medium-sized enterprises (SMEs)			
Lithuania	Just transition: Transition to a circular economy	Roadmap for Lithuania's Industrial Transition to a Circular Economy	<ul style="list-style-type: none"> <li>Develop a sectoral circular economy roadmap through a multi-stakeholder, co-creation approach.</li> </ul>	<ul style="list-style-type: none"> <li>The HIA can be scaled up by using the roadmap and action plan established to promote the circular economy.</li> <li>The lessons learned from this HIA can guide future policy developments and industrial transitions.</li> </ul>
North Middle Sweden (Sweden)	Broadening and diffusing innovation	Energy and resource efficient low carbon society transition lab and seed fund	<ul style="list-style-type: none"> <li>Collaborative workshops promoted knowledge sharing, learning and network building around the challenge of the region's low-carbon transition.</li> <li>A seed fund financially supported collaborative projects focused on advancing a low-carbon future industrial transition.</li> </ul>	<ul style="list-style-type: none"> <li>The challenge lab concept is scalable and applicable to any industrial transition challenge.</li> <li>Its regional approach fosters trust and collective purpose, making it particularly relevant for S3s.</li> <li>The model could also be successfully applied at the national level to various industrial transition challenges.</li> </ul>
	Just transition: Transition to a low-carbon and circular economy			
Slovenia	Broadening and diffusing innovation	Slovenian Pilot for an Industry 4.0 Transformative Mechanism	<ul style="list-style-type: none"> <li>Innovation voucher scheme to support SMEs in their efforts to innovate in the field of Industry 4.0.</li> <li>Collaborative Industry 4.0 projects through stakeholder engagement to bridge the gap between research and practical application in industry.</li> </ul>	<ul style="list-style-type: none"> <li>The HIA is scalable by establishing physical centres that foster Industry 4.0 collaboration and through partnerships with innovation agencies to support SMEs.</li> <li>Appropriate performance frameworks that bridge public and private sector perspectives can also contribute to the concept's successful</li> </ul>

Pilot region or country	Main industrial transition challenge addressed by the HIA	HIA title	Key instruments of the HIA	Potential for scale-up/ replicability
Wallonia (Belgium)	Just transition: Transition to a circular economy	Piloting a challenge-based approach for SMEs support – Plastics Go Green and Circular	<ul style="list-style-type: none"> <li>Challenge-based approach consisting of two calls for circular economy projects applied to the plastics industry.</li> <li>Lump sum grants of EUR 15 000 as well as support, advice and mentoring for companies with selected project proposals that address the identified challenges in the plastics sector.</li> </ul>	<p>expansion.</p> <ul style="list-style-type: none"> <li>The HIA's challenge-based approach can be scaled up to address broader industrial transition issues, such as the digital divide, stimulate the engagement of regional actors and foster a more integrated innovation ecosystem.</li> </ul>

## Section 2: HIAs overviews and lessons learned

### ***Cantabria (Spain): Social inclusion in the primary industries***

#### *Industrial transition challenges in Cantabria*

Cantabria is a region located on Spain's northern coast. Its economy has been historically based on agriculture, fishing and small-scale industry. Cantabria's agri-food sector represents about 20% of the region's total industrial gross domestic product (GDP) and employment. It consists of 390 companies, most of which are SMEs with 10 to 249 employees or micro-enterprises with fewer than 10 employees. The region's agri-food industry has been traditionally based on artisanal production methods and has faced several challenges in recent years, including the need to adapt to digitalisation and address the climate crisis.

Cantabria faces a number of challenges that affect its industrial transition capacity. These include its lack of an innovation culture, the lack of business awareness of benefits from the green and digital transitions, a green and digital skills shortage, a small and potentially shrinking workforce and the weak capacity of smaller companies to engage with potential innovation funding sources due to limited knowledge and resources.

#### *Cantabria's HIA*

Cantabria's HIA was designed to address large societal challenges, such as climate change and digitalisation, by promoting societal innovation. It focused specifically on building demand for and supporting the use of renewable energy, digitalisation technologies and promoting social inclusion in the agri-food sector. The HIA supported three different but complementary projects (Kibus, Solabria and Teican). These projects reached about 20 local companies, all in rural areas. They were struggling to retain workers, had workforce-intensive production processes and staff that required upskilling.

The HIA helped these small, traditional agri-food companies address cost-related obstacles associated with the green and digital transitions. It also helped build awareness of the benefits associated with such transitions and the relative level of skills necessary. By supporting small businesses in isolated rural areas, the HIA not only contributed to generating social inclusion in these areas but also helped firms mitigate the risk of being left behind in the industrial transition.

### *Governance and management of the HIA*

Day-to-day implementation of the HIA was the responsibility of the Innovation Directorate. The financial support associated with the HIA allowed Cantabria to hire a dedicated project co-ordinator who was able to mobilise the stakeholders, co-ordinate the project, identify opportunities and bring various parties together to maintain dialogue among various stakeholders.

In order to select the Kibus, Solabria and Teican projects and develop the repository of Cantabrian agri-food companies, the Innovation Directorate hired a Cantabrian agri-food sector expert through a public call. The expert and the Innovation Directorate approached 100 companies with a questionnaire and interviewed 47 in person. Three final companies were selected – Kibus, Solabria and Teican – and each received up to a maximum of EUR 40 000 to carry out their pilot projects.

The Innovation Directorate mobilised and consulted many regional and local stakeholders around innovation, sustainability, rural development and digitalisation. It communicated about the HIA initiative and consulted as many stakeholders as possible through seminars, workshops, media interviews and social networks.

### *Results of the HIA and impact on industrial transition*

The HIA addressed some of Cantabria's industrial transition challenges through concrete actions. First, it supported small businesses in isolated rural areas at higher risk of being left behind in the industrial transition. For example, the energy efficiency improvements introduced by Solabria and Teican for small agri-food businesses helped to reduce costs and increase competitiveness. Second, the HIA helped to strengthen Cantabria's innovation ecosystem by fostering stakeholder collaboration. In particular, the interviews conducted to assemble the repository of agri-food companies enabled the team to identify potential synergies or complementarities among companies or activities and the Innovation Directorate then highlighted these to companies.

Third, the HIA addressed the lack of awareness among small, traditional agri-food companies of the potential benefits of the renewable energy and digital transitions, as well as related skill needs. For example, the Solabria and Teican projects trained small agri-food company employees in energy efficiency and renewable use and increased their awareness of the environmental impact of their businesses. Fourth and finally, the HIA helped small companies with administrative processes, which are usually bottlenecks to obtaining funds to innovate. In particular, Solabria, Teican and the Cantabrian Rural Development Network helped explain the HIA to Sidra Somarroza and other supported companies, helped with the writing of project proposals and the paperwork.

### *The HIA's challenges, experimental approach and scalability*

In addition to COVID-19, a key implementation challenge facing Cantabria's HIA was the initial reluctance of rural businesses to participate in the initiative. The HIA's experimental approach helped to overcome this issue. To gain the trust and support of small rural companies, the Innovation Directorate tested a new model of stakeholder engagement by conducting interviews to assemble the repository of agri-food companies. The face-to-face interaction and interest in the work and challenges of these businesses expressed by the Innovation Directorate during interviews were key in generating interest and support for the HIA among the companies.

With regards to continuity and scalability, the Innovation Directorate would like to further advance industrial transition support in Cantabria as a result of the policy lessons generated by the HIA. Four concrete lines of follow-up work are envisaged. They include identifying new ideas on how to address industrial transition challenges, supporting other pilot projects like those of the HIA in all five sectoral priorities of Cantabria's 2021-27 S3, developing a formal monitoring and evaluation system to track pilot actions' progress and impact, as well as strengthening the innovation ecosystem in rural areas.

### *Lessons learned from the HIA*

The HIA's implementation also generated valuable policy lessons, including the following:

- Appointing a dedicated staff member with expertise in the targeted transition sector is a contributing factor to success.
- Using a variety of mechanisms to foster an innovation culture may be required.
- Additional policy levers could increase company awareness of innovation, renewable energies and digitalisation benefits (e.g. information and outreach campaigns, additional financial incentives and support, and corresponding capacity building and training programmes).
- An institutional co-ordinator is required to establish and maintain the necessary cross-sector collaboration.
- Limiting administrative burdens and simplifying administrative procedures can attract more participants to industrial transition initiatives.

Link to the case study online: [https://www.oecd.org/regional/governance/RIT\\_HIA\\_Cantabria.pdf](https://www.oecd.org/regional/governance/RIT_HIA_Cantabria.pdf)

### **Centre-Val de Loire (France): SME Executive Recruitment and Skills Competence Audits: Challenges experimentation approach**

#### *Industrial transition in Centre-Val de Loire*

Centre-Val de Loire is an industrial region in France, with industry accounting for 141 400 regional jobs in 5 500 companies and representing 22.4% of the region's private sector employment. The manufacturing industry accounted for almost 89% of all industrial employment, with 125 674 employees. The industrial fabric of the region is highly specialised in the pharmaceutical, rubber (plastics), metals processing and machinery and equipment sectors.

It is a significant challenge for many regions undergoing an industrial transition to ensure an appropriate skills base. In Centre-Val de Loire, the lack of skills is concentrated in higher-level management and administrative posts, which is linked to the limited ability of firms in the region to recruit such talent effectively. In 2019, a regional industrial employment survey by the French national employment agency found that 70% of roles were considered difficult to fill due to a lack of suitable candidates. The region faces another related industrial transition challenge: a lack of regional attractiveness (or ability to attract and retain businesses, investors and skilled workers). As such, Centre-Val de Loire's S3 includes a focus on strengthening skills to better integrate innovation into its economic fabric and to overcome the recruitment challenge facing industrial companies in the region.

#### *Centre-Val de Loire's HIA*

Centre-Val de Loire's HIA consisted of a four-step process to help SME managers improve their recruitment practices and improve the region's attractiveness to a young and highly skilled workforce. First, the Centre-Val de Loire region and its innovation agency Dev'Up mapped all sub-regional actors that could support territorial attractiveness. The latter also developed a series of actions to promote exchange on sub-regional initiatives aimed at supporting regional attractiveness. Second, Centre-Val de Loire and the French employment association APEC designed and hosted a regional workshop to reinforce collective awareness of recruitment strategies in industrial SMEs, to evaluate practices within these companies and to inspire innovative practices.

Third, APEC designed and implemented company audits for industrial SMEs, which assessed the recruitment, management and employee retention practices of participating companies. The objective of the audits was to develop better management practices to attract and retain talent. Fourth and finally,

Centre-Val de Loire participated in APEC's 2021 recruitment fair in Paris to attract talent to the region. During the fair, APEC presented 22 job offers from the region to over 1 500 candidates, while the region also organised a workshop at the fair on the benefits of working and living in the various territories of the Centre-Val de Loire region. This helped not only attract regional talent but also retain such individuals.

### *Governance and management of the HIA*

The HIA relied on several governance mechanisms that successfully supported its implementation and impact. First, strong co-operation between regional partners APEC and Dev'Up in their respective areas of expertise enabled the issues of recruitment to be addressed in a holistic manner. Second, the HIA mobilised a large number of regional stakeholders around recruitment and regional attractiveness through clusters and competitiveness poles, which were involved in identifying and contacting industrial SMEs in need of support. In addition, APEC fostered strong relationships with SME managers and interested candidates in the region through a personalised outreach approach.

Third, during and following the implementation of the HIA, APEC and the Centre-Val de Loire region collected a range of quantitative and qualitative data for the different activities, using a variety of techniques, in order to process and analyse them and use them for future actions. These included company audits to identify the skills needs of employers and data collection at the recruitment fair to build profiles of interested candidates and their expectations.

### *Results of the HIA and impact on Centre-Val de Loire's industrial transition*

The HIA successfully supported the industrial transition challenge of ensuring a skilled labour force and preparing for the jobs of the future. Doing so required the region to address difficulties in the recruitment and retention of qualified people, particularly experienced managers and administrators. In particular, the HIA stands out from previous actions of collective support and awareness-raising in industrial SMEs through the way that it provided individualised assistance to industrial SME managers coupled with regional attractiveness measures. This was a first for the region.

### *Policy experimentation, lessons learned and scalability of the HIA*

In terms of policy experimentation, the HIA tested an entirely new approach to industrial SME support in the spheres of recruitment and skills availability required to meet industrial transition challenges. To turn this objective into action, the Centre-Val de Loire regional government developed a strategy that provided targeted support to help attract highly qualified profiles. The strategy complemented previous approaches, which tended to offer more generic, one-way support, such as providing information about the region on its website.

Novel elements from the HIA included the regional attractiveness mapping, which was undertaken for the first time in the Centre-Val de Loire region and helped it to develop an overview of who is doing what in terms of supporting territorial development. They also included the workshop series "From recruiting to attracting talent", which included a workshop designed specifically for executive managers of industrial SMEs. It focused on the ways in which talent can be attracted, including by better understanding candidate expectations and how to improve employer branding to attract qualified candidates.

The HIA was also experimental in its approach to dealing with implementation challenges. For example, during implementation, APEC experimented with different ways of motivating industrial companies to take part in the audit. In a first attempt, it contacted many companies by email and received only 2 responses out of 285 outreach emails sent. APEC concluded that the email approach was not effective and turned to direct phone calls instead, which yielded significantly better results and helped secure a critical mass of businesses willing to participate in the company audits.

In terms of continuity and scalability, APEC took a series of steps to continue HIA activities, including supporting rural areas, reviewing the audit process, providing talent attraction workshops and better understanding candidate expectations.

The HIA also generated a series of policy lessons that may be instructive for policy makers looking to support industrial transition, including the following:

- A thorough and well-rounded strategy is necessary to ensure a skilled workforce.
- Supporting industrial transition and the future of jobs requires individualised support and awareness-raising coupled with regional attractiveness measures.
- Geographical location plays an important role in the attractiveness of industrial roles that need to be filled.
- A well-designed sequence of experimental policy actions, such as those taken in the HIA, can provide valuable information to support future industrial transition initiatives.

Link to the case study online: [https://www.oecd.org/regional/governance/RIT\\_HIA\\_Centre-Val\\_de\\_Loire.pdf](https://www.oecd.org/regional/governance/RIT_HIA_Centre-Val_de_Loire.pdf)

### ***East North Finland (Finland): Cross-regional voucher system to stimulate digitisation and circular economy in the tree, wood and timber value chain***

#### *Industrial transition in East and North Finland*

The East and North Finland (ENF) region is Finland's largest, covering almost 70% of the country's total territory. ENF is one of Finland's five NUTS 2 regions and is home to 1.3 million inhabitants, accounting for 23% of Finland's population. ENF is in the top 10% of the OECD's most sparsely populated regions – with 8.5 people per km<sup>2</sup>. It accounts for approximately 20% of Finland's GDP, which is proportional to its share of the national population. Industry is the region's largest sector, generating 35% of the total economic turnover. Micro-enterprises make up 96% of all ENF companies, 95.5% of which employ less than 5 people. However, due to their limited resources and lack of access to financing, micro-enterprises often face significant challenges in developing their innovation capabilities without external support.

The region currently faces a number of industrial transition challenges. First, there is a need to ensure a sustainable transition that benefits the environment and boosts the region's innovation potential. Applying technological solutions to environmental challenges, energy issues and the sustainable use of natural resources is a key challenge for the region. Second, there is a need to promote sustainable resource management at a regional level. Adopting measures that further support the region's industrial circular economy would be valuable in order to use natural resources in a sustainable and resource-efficient manner. Third, there is a need to improve digitalisation, innovative technologies and production processes. At the national level, only 8% of Finland's SMEs employ digital solutions, while in ENF, the figure is as low as 2-3%.

#### *Governance and management of the HIA*

Several elements underscored the bespoke governance and management approach of the HIA. In particular, the funding approach of the initiative was not aligned with Finnish national legislation, as regional councils are not permitted to finance business development under Finnish law. However, the HIA's voucher system presented an opportunity to experiment with a new funding model as the pilot programmes were directly funded by the European Commission's grant and did not rely on national funding or EU funding mechanisms that were channelled through Finland's government.



In addition, regional councils seized the stakeholder engagement opportunity provided by the HIA to bring together all seven HIA project beneficiaries through joint meetings to help them interact and present their interim findings. This engagement was important for the regional councils to identify the challenges and opportunities encountered by participating businesses and to build their own collaboration capacity. Both of these elements could be useful for future projects.

### *Results of the HIA and contribution to addressing industrial transition challenges*

The HIA supported ENF's industrial transition on a number of fronts. First, it managed to “reduce” the long physical distances between ENF sub-regions by strengthening the linkages among governments and enterprises and expanding stakeholder networks. Second, it focused on promoting projects with a higher level of technology readiness. In this way, the HIA implementation helped businesses to experiment and develop products that could be commercialised. Third, it helped project beneficiaries to experiment with new and digital solutions to advance the circular economy in the tree, wood and timber value chain.

Fourth, it helped to raise awareness about the green industrial transition, by promoting the adoption of circular economy practices and emphasising how the industrial sector can implement them as part of an industrial transition process. Fifth and finally, the HIA contributed to improving an understanding of certain regional development challenges facing ENF, such as a workforce deficit in strategic industries. The worker shortage is partly caused by the inability of employees to upskill and insufficient investment in business research and development (R&D), which is especially apparent in industrial SMEs.

While the HIA was deemed a success by stakeholders, there were several unforeseen obstacles, notably relating to: i) overcoming physical distance in collaboration; ii) implementing the HIA within existing administrative boundaries; iii) following up with SME beneficiaries after the HIA; and iv) aligning and co-ordinating funding mechanisms among national and regional funding strategies.

### *Scalability of the HIA and lessons learned*

The HIA constituted an experimental initiative in a number of ways. First, beneficiaries were required to form a consortium of at least one enterprise and one R&D organisation from different ENF sub-regions. This helped companies to extend their partner network, which could, in turn, lead to future cross-regional collaborations. Second, the initiative's funding model differed from Finnish national legislation, which does not allow regional councils to finance business development, with funding provided through a European Commission grant. Beneficiaries and regional councils welcomed this more direct funding model as it meant less time was spent on administrative processes.

In terms of the continuity and scalability of the HIA, it was a one-off opportunity, as the funding model that was tested is not mentioned in national government legislation on regional development. As a result, ENF cannot continue to fund these types of projects itself. While regional councils are still not permitted to finance companies, the Centres for Economic Development, Transport and the Environment (ELY Centres) can now provide direct funding to SMEs presenting higher technology readiness level projects, which they did not do before, at least not with this explicit focus. This was considered a positive outcome of the HIA.

In addition, long-term collaboration among ENF's seven sub-regions will continue in the project Smart Specialisation in East and North Finland 2022-2027 (ELMO II). The project aims to support the development of clusters in the ENF sub-regions to better understand the business community throughout ENF and to strengthen co-operation, especially within the ENF's S3 2019-23 framework. The project will produce an evaluation of the implementation and realisation of the East and North Finland in Industrial Transition Smart Specialisation Strategy 2019-2023.

The HIA also generated a number of valuable policy lessons, including the following:

- Greater innovation can be achieved through funding and integration.

- Public support to businesses aiming for higher technology readiness levels (TRLs) can make a difference.
- Building social capital to advance industrial transition should be encouraged.
- Regional government bodies can be effective enablers of innovation.
- Short-term funding may be more appropriate than long-term funding to diffuse innovation.

Link to the case study online: [https://www.oecd.org/regional/governance/RIT\\_HIA\\_East\\_North\\_Finland.pdf](https://www.oecd.org/regional/governance/RIT_HIA_East_North_Finland.pdf)

## **Grand Est (France): Interdisciplinary innovation hub for low-carbon energies for the automobile industry**

### *Industrial transition in Grand Est*

Industrial relocation is at the heart of economic recovery strategies at the national and regional levels in France. For the Grand Est region – which was created through a territorial reform in 2016 that merged the former regions of Alsace, Lorraine and Champagne-Ardenne into the single Grand Est region – this reform, combined with the emphasis on industrial relocation presents a major challenge in terms of securing land capacity to accommodate relocations. Lorraine has many former highly industrialised areas but, not only is land difficult to secure, these are frequently brownfield sites with pollution problems. Furthermore, laws advancing the ecological and low-carbon transitions are accelerating and often place limits on the redevelopment of brownfield sites. In Champagne-Ardenne, there is less industrial land capacity as the region did not host many industrial activities in the past. Meanwhile, Alsace has some high-quality sites and there is considerable pressure for land.

To support local authorities in their industrial relocation strategy, the *Banque des territoires* launched a national scheme to identify immediately available land to enable new industrial projects to be set up quickly. The Grand Est region developed a regional version of the *Banque des territoires* programme.

### *Grand Est's HIA*

Grand Est's HIA complements these two schemes, the industrial relocation strategy of the *Banque des territoires* and that of the region itself. The action's aim is to prepare the region's industrial estates for the needs and challenges of the future. It consists of a programme to identify innovative projects capable of meeting the current and future challenges facing industrial estates and to support project promoters and industrial estates in implementing these projects.

The HIAs set about to: i) provide the region's territories with a range of economic facilities tailored to the business needs of today and tomorrow; ii) speed up the transition to innovative solutions for industrial estates; and iii) enable existing businesses to prosper and also improve their environmental performance. It did so by creating and establishing the criteria for Business Parks of the Future (*Zones d'activités du futur*, ZAFs). A ZAF must have a neutral impact on the land, be exemplary in terms of sustainability, create a leverage effect and energise the region, place people at the heart of its operation and guarantee interfaces within the park and with its environment. This definition is accompanied by a tool to assess the current status of a zone and to support it in its future ambitions. The ZAF programme is currently supporting the development of its first demonstration project: a former textile industry site.

### *The experimental nature of the HIA*

The HIA tested a model for involving stakeholders through collaborative workshops. These workshops created a forum for expression and the social links necessary for this type of experimental project. It brought together a network of stakeholders around the project and ensured that the ZAF was supported by stakeholders that were aware of the issues the initiative was seeking to address and capable of

mobilising other stakeholders in the area. The name *Zones d'activités du futur* was co-developed with the stakeholders. The process also generated new encounters among the players involved.

### *Policy lessons from the HIA to drive forward industrial transition*

The ZAF programme is helping reverse the trend of de-industrialisation in the Grand Est region, strengthening industrial know-how and creating new, high-added-value activities while responding to ecological and climate challenges.

Dedicated funding, an agency and a project manager have been key to its success. The type of activities carried out through the HIA (e.g. collaborative workshops and the development of evaluation tools) requires human resources and expertise that regions and cities do not always have. The HIA involved players with solid expertise in the fields concerned, making it possible to obtain a robust method and results, as well as a consensus among the stakeholders. The participation of industrialists and other private players helps involve the private sector in ecological transition activities.

The intention is to continue with the ZAF programme and extend it. Eventually, those that have used the ZAF model will be able to share their feedback with other sites in order to test and replicate good practices throughout the region and, ideally, the country. This can help regions with business or industrial parks contribute to the aims of industrial transition, through its economic dimensions as well as its environmental ones.

Link to the case study online: [https://www.oecd.org/regional/governance/RIT\\_HIA\\_Grand\\_Est.pdf](https://www.oecd.org/regional/governance/RIT_HIA_Grand_Est.pdf)

## **Greater Manchester (UK): Good Employment Charter**

### *Industrial transition in Greater Manchester*

As a post-industrial territory that has been transitioning to a service-led economy, the Greater Manchester City Region faces a number of economic challenges. Regional productivity lags behind the United Kingdom (UK) national average, while regional employment is increasingly concentrated in a number of low-productivity, low-wage sectors. Research has identified a number of factors that may be contributing to this productivity deficit, including poor skills utilisation by local businesses as well as poor health outcomes in the region, both of which are linked to low employment standards.

The powers of regional governments, such as the Greater Manchester Combined Authority (GMCA) to solve these challenges are limited by the United Kingdom's assignment of subnational responsibilities. At the same time, however, regional multi-level governance arrangements do leave some room for experimental, subnational initiatives to support employment standards, productivity and wage levels.

### *The Greater Manchester Good Employment Charter*

The Greater Manchester Good Employment Charter is one such experimental initiative. The charter is a GMCA-funded voluntary membership and assessment scheme that seeks to improve employment standards across the region. It aims to proactively encourage local employers from all sectors to promote fair pay, good working conditions and inclusive career opportunities. At the core of charter-related activities is the charter document itself, which outlines seven principles of good employment to which employers in Greater Manchester should aspire, along with related criteria.

The charter and its criteria provide the basis for inner and outer tiers of voluntary association with its principles by employers, which are known as the Supporter and Member tiers. The tier of inner association – or closest association – with the charter is the membership tier. Charter Members consist of employers that have undergone a rigorous membership application process and have been assessed to be demonstrating excellent employment practices across all seven principles of the charter. The tier of outer

association with the charter is the supporter's tier. Charter Supporters consist of employers that have made a commitment to supporting the principles of the charter and are working towards membership but have not yet sufficiently improved their employment standards to be eligible for membership.

### *Governance and management of the charter*

There are a number of key elements that have underscored the charter's success. First, an extensive process of co-design and co-implementation involving stakeholders from a wide range of backgrounds has helped charter stakeholders to define a collective vision of good employment that is both ambitious and realistic for employers. This has encouraged small, medium and large organisations, including non-governmental organisations, from a wide range of sectors across Greater Manchester to involve themselves in its activities.

Second, a rigorous monitoring and evaluation system for Supporters has helped promote high employment standards in the Greater Manchester region. In addition to an extensive data-gathering process, where organisations must provide widespread evidence of their good employment practices, aspiring members are also assessed by the charter board, which draws on its extensive cross-sectoral expertise to evaluate an employer's application. This system has ensured that charter activities lead to tangible results rather than a box-ticking exercise. Third, the "carrot and stick" governance mechanisms associated with the charter have helped ensure employer engagement and adherence to the standards. Carrot mechanisms include the positive marketing that is associated with charter involvement and the linkage of the charter by GMCA with its criteria for public procurement tenders. Stick mechanisms, which are currently being implemented, will include the requirement for Supporters to consistently show they are improving their good employment practices or face expulsion from the charter.

### *Results of the charter and impact on industrial transition*

There are over 120 000 employees across the Greater Manchester City Region that currently work for a supporter or member organisation of the charter. Given that member organisations have met rigorous good employment criteria across each of the seven principles, while supporter organisations are required to regularly demonstrate that they are making progress in improving their organisational practices, this suggests the charter has led to a material improvement in the region's employment standards in a relatively short space of time.

The charter's success in encouraging companies across Greater Manchester to raise their employment standards is also helping to address industrial transition challenges in the region, such as a lack of skilled workers, the exclusion from the workforce of various groups and, by extension, low productivity. This is because a number of charter criteria (e.g. those focused on skills development or health-related work support) are not only valuable from an employee welfare standpoint but also have the added benefit of strengthening the region's economic competitiveness. Should the engagement of Greater Manchester employers with the charter continue to grow, these economic benefits will continue to increase as well.

### *Policy experimentation, lessons and scalability of the charter*

Given that combined authorities in England (United Kingdom) lack the legal authority to affect employment regulation, the charter represents an experimental attempt to improve employment standards and concurrently tackle industrial transition challenges by building societal consensus from the bottom up rather than relying on top-down legislative or regulatory avenues. As a voluntary initiative that requires only minimal financial support from the government, the charter also provides excellent value for money as a vehicle for improving employee welfare. The policy experimentation by the GMCA that led to the charter's creation and implementation has also generated a number of valuable insights.

First, while the charter has been very successful in engaging with organisations from different sectors overall, it has faced challenges in a minority of sectors that have a history of poor employment practices, notably hospitality and retail. The charter's success in penetrating other sectors with a historically poor track record of employment standards suggests that outreach may sometimes be more successfully achieved through business-to-business activities, rather than through the charter itself.

Second, encouraging a wider range of employers to engage with the charter will depend on strengthening incentives for involvement. Taking steps to more clearly outline the business case for charter engagement while popularising the charter more widely among employees in Greater Manchester are two areas where additional progress could create a strong inducement for organisational involvement.

Third, a small number of adjustments to charter implementation may be needed to improve its effectiveness. In particular, internal monitoring and evaluation activities need to be expanded to cover charter Members as well as Supporters in order to ensure that Members continue to serve as role models for good employment standards.

With regards to scalability, the charter concept shows particular promise at an EU regional level, given that a growing number of combined authorities across the United Kingdom are already developing comparable initiatives. At the same time, however, charter initiatives may meet greater success in regions where administrative boundaries are well aligned with economic needs, as this can help to forge multi-stakeholder consensus and facilitate engagement.

*Link to the case study online:*

[https://www.oecd.org/regional/governance/RIT\\_HIA\\_Greater\\_Manchester.pdf](https://www.oecd.org/regional/governance/RIT_HIA_Greater_Manchester.pdf)

### ***Hauts-de-France (France): Accelerate the digital transition of traditional industrial firms in Hauts-de-France***

#### *Industrial transition in Hauts-de-France*

The Hauts-de-France region in northern France is the third-largest region in France by population and the sixth-largest by GDP. The region has a long history of activity in traditional industrial sectors, such as coal mining, textiles and steel production. Yet the decline of these industries has affected regional employment and economic activity. Moreover, the region is heavily reliant on just a handful of industries, such as agribusiness, logistics and the automotive sector. This concentration makes the region vulnerable to economic shocks and highlights the need for diversification into new industries. In addition, the region's 9.8% unemployment rate is higher than the averages for France (7.9%), the European Union (7.7%) and the OECD area (6.2%). In some parts of the Hauts-de-France region, unemployment rates are as high as 16%.

While unemployment is one of the series of challenges that regions in industrial transition face, Hauts-de-France's faces others which, if addressed, could also have a positive influence on unemployment rates. First, according to the European Regional Innovation Scoreboard 2021, the region was ranked in the category of "moderate innovator", with a below-EU average performance on several indicators, including collaboration among innovative SMEs and lifelong learning.

Second, the region has a shortage of skilled workers, in particular in the fields of digital technology and advanced manufacturing. This limits the development of modern technologies and products that could support the growth of new industries and the transformation of existing ones. Third, the region has a limited number of "champion" enterprises, with only around 500 companies leading the way out of a total of 300 000.

### *Haut-de-France's HIA*

The HIA was designed to tackle several industrial transition challenges in the Hauts-de-France region. In particular, it aimed to support SMEs with potential for innovation. It also sought to support the digital transition of SMEs. Additionally, it aimed to strengthen the breadth and depth of public support to regional innovation. Several actions were developed in support of these goals.

First, the Hauts-de-France innovation and development agency, *Hauts-de-France Innovation Développement* (HDFID), sought to raise awareness of the HIA among SMEs that could benefit from its support. Through 15 HDFID presentations, 150 regional companies were made aware of the many benefits of digitalisation and digital transition, including improvements in productivity, profitability and job creation. Second, the HDFID provided diagnostic support to 50 SMEs on how to begin the transition to digital technology by developing a diagnostic tool that consisted of 100 questions. Third, following the diagnosis, the 50 SME managers and their teams received coaching to develop a strategy, objectives and an action plan for the digital transformation of their company's organisation, processes and tools.

### *Governance and management of the HIA*

Two main elements underscored the governance and management of the HIA. First, its focus on digitalisation to help generate a more sustainable and competitive economy, create new jobs, reduce territorial disparities and enhance innovation was well aligned with the Hauts-de-France region's S3. The HIA represents a concrete commitment to the S3 and a significant step forward in terms of creating more dynamic and attractive regional development. Second, to document the impact of the HIA, the HDFID established a series of steps to be taken with each company receiving support. These included the preparation of biannual reports by an expert within the agency in order to monitor progress and ensure that objectives were being met and the use of a customer relationship management (CRM) tool by the HDFID to monitor the pilot action. A final report produced in 2021, which offered a retrospective examination of the HIA's progress, served as a starting point to reflect on the pilot action's impact.

### *Policy experimentation, challenges encountered and scalability of the HIA*

The experimental nature of Hauts-de-France pilot action lies in its testing of new methods and tools to support digital transformation in traditional industries. The pilot action involved a series of tools that provided companies with diagnostic, coaching and support in areas such as digital strategy, cybersecurity and data management, among others. By providing companies from traditional manufacturing industries with the tools and knowledge they needed to adapt to the digital age, the initiative contributed to boosting their competitiveness and relevance in an increasingly digital world.

Several challenges were encountered during the implementation of the HIA. First, the COVID-19 pandemic affected recruitment and economic activities in the region. While the HIA in its initial form had foreseen the issuance of vouchers to participating SMEs to help them hire a transition manager, ultimately, no vouchers were issued owing to a lack of interest. Reasons for this included the challenging economic situation during the COVID-19 pandemic, which made it less attractive for SMEs to hire additional staff.

Second, many SMEs involved in the HIA had limited resources. Despite their willingness to adopt innovative practices, many of them could not afford to hire a dedicated digital technology specialist. The diagnostic and coaching services showed that many industrial SMEs did not intend to increase their workforce following the pandemic, making it difficult to deepen digital transition policies. Third, there were significant variations in personnel among the supported SMEs. The differences in company size and structure made it difficult to effectively diagnose and monitor their progress.

With regards to scalability and continuity, the HIA pilot action allowed the region to build specific tools, identify best practices and form partnerships that can help promote the development of the 2021-27 S3. Moving forward, the HDFID can rely on its expertise and the experience gained to expand its support and awareness-raising of the digital transition among traditional businesses.

#### *Policy lessons learned from the HIA*

The HIA's implementation also generated valuable policy lessons for advancing industrial transition, including the following:

- Flexibility in a digital strategy can better help SMEs succeed with industrial transition.
- Strong leadership is needed to shift the mindset of industrial SMEs towards embracing industrial transition and digitalisation.
- Non-financial incentives to support industrial transition can have a positive, long-term impact on the capacity and skills of a region's labour force.

Specifically, targeting the innovation ecosystem in rural and/or disadvantaged territories early on in a pilot policy or initiative design process could help policy makers better meet inclusivity and social cohesion aims.

Link to the case study online: [https://www.oecd.org/regional/governance/RIT\\_HIA\\_Hauts-de-France.pdf](https://www.oecd.org/regional/governance/RIT_HIA_Hauts-de-France.pdf)

### **Lithuania: Roadmap for Lithuania's industrial transition to a circular economy**

#### *Industrial transition in Lithuania*

Since regaining its independence from the Soviet Union in 1990, the Republic of Lithuania has undergone significant economic and social changes as it has shifted from a centrally planned economy to a market-based system. This industrial transition has not been without its challenges, which include limited innovation capacity, limited access to innovation funding and finance, insufficient investment in R&D, low labour productivity, a lack of skills and low circularity and resource productivity.

One way to leverage existing research and innovation opportunities is through investing in the circular economy, which holds strong potential for more knowledge-intensive production. The circular use of materials in Lithuania has remained close to 4% since 2010. It was 4.4% in 2020 – almost 3 times lower than the EU average of 12.8%, which would justify a more ambitious approach to developing a circular economy. In addition, Lithuania's resource productivity could be considerably improved.<sup>1</sup> Lithuania ranks 5<sup>th</sup> lowest in the European Union, with 1.3 purchasing power standards (PPS) generated per kg of material consumed in 2020, compared to the EU average of 2.2 PPS per kg.

#### *Lithuania's HIA*

Lithuania's HIA was designed to kickstart a shift towards a circular economy in industry by providing a comprehensive analysis of the circular economy potential of different industrial sectors and developing a dedicated circular economy roadmap. The Lithuanian approach stood out for its distinct specificity, with a deliberate emphasis on the industrial domain. By concentrating efforts on this focal area, the pilot action showcased a profound commitment to tackling environmental challenges and advancing sustainable practices within the industry. This tailored approach facilitated a more targeted strategy, allowing for the identification and implementation of sector-specific measures and solutions.

The circular economy roadmap focused on five demonstration sectors established through the circularity analysis of the Lithuanian industry: i) food and agriculture; ii) construction; iii) textile; iv) furniture and wood products; and v) plastic and packaging. The roadmap outlined policy measures that could support the

transition to a circular economy. In particular, these measures included institutional improvements, the development of circular economy business models and the training and education of professionals.

### *Governance and management of the HIA*

A number of elements led to the success of the HIA's implementation. First, the roadmap development relied on two complementary expert teams, one local and one international.

Second, the roadmap was developed based on an extensive co-creation process, with input provided from a broad range of different stakeholders in the public, private and non-governmental sectors through a roadmap co-ordination group. This helped to ensure that the professional backgrounds and interests of different groups were taken into account during the roadmap's drafting, while building a common contextual understanding among stakeholders. It also aligned top-down policy decisions with bottom-up proposals, helped to build new links between key players in the circular economy value chain and promoted a step change in the attitudes of key industries.

Third, an Industry 4.0 platform that was set up by the Ministry of Economy and Innovation provided important guidance and advice. The platform serves as an official mechanism to co-ordinate the collaborative efforts of businesses, academia and the public sector. Its primary objective is to enhance competitiveness and facilitate a seamless industrial transformation through constructive dialogue among social partners.

Fourth, monitoring and evaluation of the HIA's implementation progress was provided through a steering group. Regular HIA progress checks, in addition to any necessary corrective measures to improve implementation, were ensured through 21 steering group meetings that took place over the HIA's 15-month implementation period.

### *Results of the HIA and impact on Lithuania*

The HIA helped to address industrial transition challenges in a number of ways. First, it improved the overall understanding of the circular economy in Lithuania on a political level. Second, it raised awareness of the fact that specific policy levers and a comprehensive roadmap are necessary for the transition to the circular economy. Third, its bottom-up co-creation approach helped to encourage stakeholder participation, ownership and raise awareness of the circular economy. Fourth, the policy recommendations and action items that were derived through the bottom-up approach and endorsed through stakeholder discussions provided a valuable foundation for the Lithuanian government to promote the circular economy in the future. Fifth, the circular economy roadmap strengthened institutional capacity for the circular economy by disseminating knowledge, supporting co-operation with industry and providing financial mechanisms that enabled industry to take advantage of circular economy opportunities. Sixth and finally, strong industry involvement in the roadmap's extensive co-creation process led to significant stakeholder learning and industry ownership of the document.

### *Policy experimentation and lessons from the HIA*

The HIA constituted an experimental initiative in a number of ways. First, at the time the HIA was being prepared, there was little experience with a comprehensive strategy aimed at promoting the circular economy. The HIA not only developed a strategy for an entirely new policy area in Lithuania but also provided the Lithuanian government with an action plan and roadmap for how to implement the strategy. Second, the HIA's extensive co-creation process, based on systematic dialogue, was unprecedented for policy development in Lithuania and suited the experimental ambitions of the HIA.



The HIA's implementation also generated a number of valuable policy lessons, which are outlined in more detail below:

- Experimental policy approaches require high levels of political commitment and leadership to be successful.
- Policy roadmaps can be effective planning tools to advance the industrial transition in new policy areas.
- Involving stakeholders in the development of policy roadmaps can lead to more effective and sustainable policy implementation.
- Moving into new fields of policy development for industrial transition can encourage innovation.
- Bringing in international expertise can be a valuable asset in advancing industrial transition.

Link to the case study online: [https://www.oecd.org/regional/governance/RIT\\_HIA\\_Lithuania.pdf](https://www.oecd.org/regional/governance/RIT_HIA_Lithuania.pdf)

### **North Middle Sweden (Sweden): Energy and resource-efficient low-carbon society transition lab and seed fund**

#### *Industrial transition in North Middle Sweden*

North Middle Sweden is an industrial region with a manufacturing and extractive sector that accounts for a third of regional revenues and 50 000 regional jobs. At the same time, employment in regional manufacturing has been declining in recent years and the low-carbon transition is placing pressure on policy makers to identify ways to build a regional economy that is more environmentally sustainable. The region also faces other industrial transition challenges, including having a significantly lower skills base than the Swedish national average, which risks posing a threat to regional livelihoods and well-being.

In order to address industrial transition challenges (e.g. lower-than-average education and employment levels, limited innovation activity, a need to support the low-carbon transition and improve well-being outcomes, etc.) and ensure that livelihoods can be sustained and improved over time, regions need to draw on a strong innovation capacity so that they can identify and act upon opportunities for sectoral and/or cross-sectoral transformation. However, North Middle Sweden is less innovative than the national average owing to a series of challenges in its regional innovation ecosystem, including a lack of engagement from large companies and rigidity among stakeholders. To address these issues, more effective collaboration among a wide range of actors in the public, private and civil society sectors is needed.

#### *The North Middle Sweden Challenge Lab*

The North Middle Sweden Challenge Lab was a collaborative and experimental policy initiative designed to tackle industrial transition challenges by encouraging multi-sectoral innovation and systems-wide transformation. Four workshops aimed to create a space for participants to share knowledge and support whole-of-system learning and network building that could help resolve North Middle Sweden's low-carbon transition challenge. The organisers also set up a seed fund, which financially supported collaborative projects from across Middle North Sweden that targeted advancing an industrial transition focused on a low-carbon future.

#### *Governance and management of the challenge lab*

A pivotal element in the success of the challenge lab's design and implementation was the experimental, mission-based, methodological approach that it adopted. The approach sought to create a conducive space for social collaboration between relevant stakeholders on complex future challenges by deploying several established concepts. These included various visual metaphors to encourage stakeholders to think outside the box on systemwide challenges and solutions. They also included a backcasting exercise,

staggered across the four workshops, whereby participants first identified a desired future and then worked progressively backwards towards the identification of systems-wide solutions that could bring that future to fruition.

The challenge lab's implementation depended on the effective leadership and skills of workshop organisers and facilitators, and the involvement of relevant stakeholders from governmental and non-governmental sectors alike. In particular, the challenge lab's promise of linking hydrogen-related seed funding to the ideas that were set to be discussed in workshops provided a financial incentive for companies to engage in the process.

### *Results of the challenge lab and impact on North Middle Sweden's industrial transition*

The challenge lab has supported North Middle Sweden's industrial transition on a number of fronts. With regards to the challenge of transitioning to a low-carbon economy, challenge lab workshops helped build knowledge among regional stakeholders with regards to new ways in which hydrogen can play a greater role in the energy mix. The workshops also supported the creation of new networks or connections that can support industrial change in the hydrogen sector. However, the challenge lab's activities have not sought to tackle other industrial transition challenges facing North Middle Sweden, such as the regional skills deficit.

### *Policy experimentation, scalability and lessons learned from the challenge lab*

The challenge lab constituted an experimental initiative in a variety of ways. By orienting the workshops around a common mission that relates to delivering a better future, organisers encouraged a discussion on innovation possibilities that transcended traditional sectoral boundaries and constraints. Moreover, the experimental, pedagogically-sequenced structure of the workshops, which began in an ideal future and ended with a discussion of how concrete actions and next steps could support its achievement, encouraged a discussion of innovation solutions that was future-oriented and also grounded in practical realities. Furthermore, the linkage of mission-oriented, cross-sectoral innovation discussions with seed funding constituted an experimental attempt to turn mission-oriented ideas into tangible solutions.

The challenge lab's implementation also generated valuable policy lessons. First, the concept can serve as an important trust-building lever for regions in industrial transition. In particular, it supports the creation of cross-sectoral innovation networks, which can help stakeholders to establish collective visions for transformation needs and pathways. Second, and relatedly, the establishment of robust cross-sectoral innovation networks depends, in turn, on engaging stakeholders with sufficient knowledge and authority to make innovation-related decisions. Third, measuring the impact of regional innovation initiatives takes time. When monitoring and evaluation activities take place sufficiently far downstream of the initiative's implementation, they are more likely to be able to capture how the cross-pollination of ideas has led to tangible innovation-related outcomes. Fourth, funding mechanisms for regional innovation need to be sequenced in a way that maximises their impact. In particular, if funding is to be made available for multiple innovation initiatives that are collectively aimed at solving a single industrial transition challenge, organisers should plan for their implementation to be sequenced so that they complement one another. Fifth and finally, dedicated and skilled staff are essential to supporting policy experimentation. These employees need to effectively navigate the design, implementation, facilitation, and monitoring and evaluation of experimental initiatives and should be fully trained prior to the launch of an initiative in order to ensure optimal outcomes.

The challenge lab concept is highly scalable and can, in principle, be applied to any industrial transition challenge. It is particularly fruitful at a regional level because it connects stakeholders from a wide range of sectors that nevertheless share relatively close geographical proximity, which helps to build trust and a common purpose. This makes it particularly relevant in the context of smart specialisation, which builds on the assets and resources available to regions through a place-based approach. At the same time,

challenge lab activities could also be successful at the national level if the industrial transition challenge that needs to be tackled has a national-level resonance.

*Link to the case study online:*

[https://www.oecd.org/regional/governance/RIT\\_HIA\\_North\\_Middle\\_Sweden.pdf](https://www.oecd.org/regional/governance/RIT_HIA_North_Middle_Sweden.pdf)

## ***Slovenia: Slovenian Pilot for an Industry 4.0 Transformative Mechanism***

### *Industrial transition in Slovenia*

Industry is the largest sector in Slovenia, accounting for around 23% of total employment. The country has a strong industrial base, with many SMEs operating in various sectors, such as manufacturing, engineering and technology. Despite this, building innovation capacity in industrial SMEs remains an important industrial transition challenge for Slovenia.

One reason for this is the limited availability of funding. SMEs have limited resources to self-finance R&D activities, which are essential for innovation, and find it challenging to secure other sources of funding. This lack of funding makes it difficult for SMEs to invest in new technologies and equipment or hire qualified staff to drive innovation. In addition, innovation management is also a significant challenge. Many SMEs lack the experience and expertise needed to effectively manage innovation, which can hinder their ability to successfully innovate.

### *Overview of the HIA*

Slovenia's HIA was a first step in broadening the innovation base and building SME capacity for innovation and innovation diffusion. The expected result was a greater collaboration between industrial SMEs and service providers (especially universities) and piloting and demonstrating SME-generated innovations in Industry 4.0.

The HIA consisted of an innovation voucher system to support piloting and demonstrate innovations with high TRLs. It was a physical and virtual platform that brought together equipment, resources and expertise from a wide range of organisations specialised in Industry 4.0 development and deployment. Concretely, the HIA provided financial vouchers to five SMEs needing support to digitalise and automate production. To obtain the voucher, each SME had to partner with a research organisation to jointly develop an Industry 4.0 project under the guidance of an international expert.

### *Governance and management of the HIA*

Effective stakeholder engagement and interaction was the key governance and management variable that underpinned the HIA's implementation. The Slovenian toolmaker association TECOS held monthly meetings with all companies to offer the chance for participants to interact with their chosen service providers and external experts, as well as to present interim findings. In addition, they organised two meetings with representatives of the European Commission. These meetings and the regular catch-up calls among companies, service providers and international experts were essential to the successful implementation of the projects.

The meetings were useful in developing a community of shared practices in matters related to Industry 4.0. They also enabled stakeholders to make new contacts and identify synergies or complementarities that would aid the SME beneficiaries over the long term. Success was not necessarily measured by product development and commercialisation but by whether there was a possibility to extend or diffuse innovative activities among enterprises and research organisations.

### *Results of the HIA and impact on Slovenia*

The HIA has supported Slovenia's industrial transition on a number of fronts. First, it supported industrial SMEs in transforming their traditional production processes into modern production lines with the aim of improving the efficiency, productivity and carbon intensity of production. In this way, the HIA responded to the needs of industrial SMEs that had little ability to act on their own. Second, the HIA helped raise awareness of the need to focus on the green and digital transition as a driver of Slovenia's industrial transition and how the industrial sector can contribute to this effort. Third and finally, the HIA demonstrated that smart specialisation priorities should be defined based on partnerships involving the private sector, knowledge institutions, the state and other stakeholders.

### *The HIA's experimental nature, scalability and lessons learned*

Several aspects of the HIA were new and different from traditional Slovenian approaches to supporting funding and management schemes oriented towards innovation. In particular, funding calls for innovation support in Slovenia tend to suffer from a high level of administrative burden and a lack of flexibility when projects need adjustment. The HIA sought to overcome this by implementing the HIA via TECOS, which had more flexibility to design a less burdensome funding call because, as a non-governmental body, it was not obliged to follow the Ministry of Economic Development and Technology's funding rules.

In addition, TECOS assisted the Ministry of Economic Development and Technology in designing the call and was also responsible for assisting beneficiaries in implementing and documenting their projects. This helped fill a capacity innovation knowledge gap among SME beneficiaries who would not have been able to transform their production lines on their own. It also helped reduce the red tape associated with applying for public funds, making HIA participation more accessible. Having a non-governmental body with few bureaucratic structures responsible for implementing an innovation-oriented initiative was an experimental model that had not been applied before in Slovenia.

In terms of continuity and scalability, the HIA served as a pilot to test demand for a larger project on building physical demonstration centres as collaboration platforms between industry and academia for Industry 4.0 applications. Thus, it was designed with the notion of scaling up already in mind. These centres will provide the facilities and expertise necessary to enable industrial SMEs to experiment with new tools to develop new products at a lower cost and to gain access to experts. Moreover, these centres can provide a physical platform for SMEs, research institutions and experts to interact and establish new collaborations with a view to integrating and demonstrating innovative technologies for advanced manufacturing.

The HIA's implementation also generated valuable policy lessons, including the following:

- Partnering with non-governmental or other innovation bodies to implement innovation support programmes can help work through capacity gaps and implementation challenges.
- Designing performance measurement frameworks that account for inherent differences in public versus private sector measures of success can provide more comprehensive insight into advances in industrial transition.

Link to the case study online: [https://www.oecd.org/regional/governance/RIT\\_HIA\\_Slovenia.pdf](https://www.oecd.org/regional/governance/RIT_HIA_Slovenia.pdf)

## **Wallonia (Belgium): Piloting a challenge-based approach for SMEs support – Plastics Go Green and Circular**

### *Industrial transition in Wallonia*

As a result of the loss of competitiveness of several traditional industry sectors (notably steel, coal and machinery mineral sectors) since the 1950s, the Wallonia region in Belgium faces three main industrial transition challenges:

1. Reduced economic output and low labour productivity, as well as high levels of unemployment, jeopardising the region's competitiveness and placing it at risk of falling behind other European regions.
2. Innovation that is constrained by a narrow and technology-centred view of innovation and an ecosystem that could be better connected, limiting opportunities and reducing the pool of potential innovators, especially among smaller firms.
3. A need to support a green and digital transition with the adoption of new technologies and practices, while balancing the creation of quality jobs and the need to reintegrate the unemployed in the regional labour market.

The region of Wallonia aimed to address these challenges by focusing on environmental sustainability in its HIA. Regional policy makers in Wallonia sought to build a shared vision for and with local actors on how to tackle the specific challenge of plastic recycling. Through the HIA, the Walloon Directorate of Economic Policy has focused on connecting, developing and supporting the regional innovation and entrepreneurship ecosystem. The HIA's key findings informed the region's S3 renewal process. The findings were used to align the S3 with societal and industrial transition challenges and helped place significant emphasis on fostering strong collaboration among innovation stakeholders.

### *The HIA: The Plastics Go Green and Circular challenge*

Wallonia's HIA, the Plastics Go Green and Circular challenge, targeted commercialising new innovative services and products developed by start-ups and SMEs in the field of plastics circularity.

The HIA was structured around a challenge-based approach consisting of two calls for circular economy projects applied to the plastics industry. The first call focused on identifying relevant challenges. A communication campaign was organised to collect ideas from different types of stakeholders, including from the public and private sectors, civil society, etc., on plastics-related challenges that had yet to be resolved. The second call focused on project proposals addressing one or more of the identified challenges. For each of the 10 selected projects, lump sum grants of EUR 15 000 were awarded. The selected SMEs and start-ups also received advice and mentoring for implementing their projects.

### *Governance and management of the HIA*

The success of the HIA can be attributed to a combination of factors, with particular emphasis on two elements: the governance system and the effective involvement of regional stakeholders.

Regarding the governance system, the HIA was structured around three clearly defined governance levels: i) the strategic management level led by the Walloon Directorate of Economic Policy; ii) an implementation level managed by a consultancy firm, Möbius; and iii) a steering committee to oversee the projects and facilitate stakeholder involvement. This governance structure was praised by regional stakeholders as it defined clear roles and responsibilities for all actors involved in the HIA.

In terms of its management, the HIA relied a great deal on stakeholder engagement, not only to capture the stakeholders' needs but also to support the governance of the project. A diverse group of stakeholders were part of the steering committee, which ensured a more representative outcome to the governance

processes. In addition, a stakeholder community was established to support the implementation of the HIA. The stakeholder community was instrumental in communicating with all participants in the HIA, who were able to quickly access all relevant information about the HIA.

### *Results of the HIA and its impact on industrial transition*

The HIA addressed the challenges of industrial transition in Wallonia in the following ways:

- It contributed to enhancing Wallonia's economic competitiveness by encouraging SMEs and start-ups to innovate and adapt their operations to sustainability, specifically in the plastics sector.
- It fostered innovation and the spread of innovative practices in the field of plastics recycling in the region, promoting a collective problem-solving culture that contributed to the development of a sustainable regional ecosystem in the plastics industry. It also provided a forum for regional stakeholders to discuss the broader challenges of industrial transformation and innovation.
- It facilitated activities that promote a green and just transition by supporting companies in identifying sustainable pathways in the plastics market, recognising the potential economic benefits of plastics circularity and promoting the development of green and digital skills needed to implement such sustainable projects.

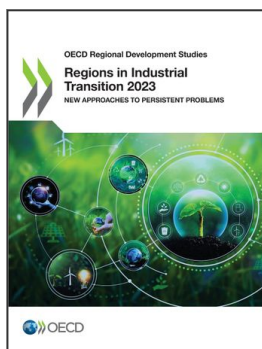
### *The influence of the HIA on Wallonia's S3*

The HIA helped to inform the design of Wallonia's 2021-27 S3 through experimentation. Lessons learned from the HIA on the clarity of governance arrangements, programme design through a challenge-based approach and the value of stakeholder engagement throughout the project cycle were applied to Wallonia's S3 renewal process. The Walloon Directorate of Economic Policy used the HIA's inclusive stakeholder engagement methodology as a model to implement a thorough revision of the S3, focusing on linking regional innovation to societal challenges and industrial transition. The renewal of the S3 also fostered a bottom-up approach to identifying regional innovation needs. The approach has effectively strengthened the involvement of academia, industry and civil society in the entrepreneurial discovery process, fostering collaboration and a holistic understanding of the region's innovation landscape.

Link to the case study online: [https://www.oecd.org/regional/governance/RIT\\_HIA\\_Wallonia.pdf](https://www.oecd.org/regional/governance/RIT_HIA_Wallonia.pdf)

## **Note**

<sup>1</sup> Resource productivity expresses how efficiently the economy uses material resources to produce wealth. Improving resource productivity can help to minimise negative impacts on the environment and reduce dependency on volatile raw material markets.



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