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About CFE

The Centre for Entrepreneurship, SMEs, Regions and Cities helps local, regional and national governments unleash the potential of entrepreneurs and small and medium-sized enterprises, promote inclusive and sustainable regions and cities, boost local job creation and implement sound tourism policies.

About this booklet

This document reproduces highlights from the Regions in Industrial Transition: Policies for People and Places report, which summarises key challenges and policy strategies for managing industrial transition. The report falls within the Programme of Work of the Regional Development Policy Committee of CFE.

The full book is accessible at


For more information: www.oecd.org/cfe

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Boosting innovation-led growth in regions in industrial transition

Regions in industrial transition have a comparatively strong potential to seize the chances offered by current megatrends to revive economic growth and productivity, but face challenges. Regions in industrial transition often have a strong legacy in manufacturing and sophisticated innovation activities in local core industries. Well-trained workers, established knowledge and strong social capital long characterised them as engines of growth and prosperity. At the same time, these regions can face specific challenges, notably where deindustrialisation has been associated with a lack of an appropriate skill base for future-oriented occupations and low levels of productivity outside traditional technology fields.

Successful industrial transition will depend on the ability of a region to foster “high-road competitiveness” strategies. Some regions experiencing industrial transition were once motors of growth and prosperity. Since the outsourcing of industrial production to emerging economies, these regions have been struggling to adapt. In other regions, industrial transition has left pockets of disadvantage in close proximity with areas of relative prosperity. In some regions, the challenge of industrial transition is compounded by shrinking employment in the primary sector or demographic change. Successful industrial transition will depend on the ability of these regions to foster innovation-led growth and ensure that the benefits from growth are widespread.

Achieving a just transition requires moving beyond traditional development policies towards those that maximise the potential of every region through a place-based approach. Doing so permits policymakers to consider the existing capabilities and legacies of regions in industrial transition, taking account of their specific characteristics. For these regions, substantial investment is needed in advanced manufacturing, skills, research, and innovation in order to reap the benefits of industrial change.

Managing industrial change
Regions in Industrial transition are diverse and have distinct needs

Regions undergoing industrial transition share a range of very specific, yet highly interconnected opportunities and challenges resulting from their legacy of manufacturing activity. These regions often possess strong capabilities and knowledge in important industries of today but need to re-orient these towards new and emerging activities for the industries of tomorrow. A key challenge for successful industrial transition is boosting the ability of regions and their industries to break out of locked-in paths of development by pursuing innovation, new technological pathways and industrial renewal.

Features of regions in industrial transition

Industrial transition can help some regions grow and cause others to fall behind. Industrial transition depends on many factors. Transition can be continuous or disruptive and can affect strong and weak regions and touches rural areas as much as urban areas. Industrial transition can result in different growth rates and structural adjustment pathways. Given the important role of maintaining institutional and social capital, local actors, stakeholder groups, civil society initiatives and promoters with a high level of personal commitment can play an essential role in industrial transition. In addition to firms, universities and intermediary organisations, civil society organisations that are involved in regional development projects as well as policymakers are important drivers of positive transition outcomes.

Industrial transition is place-based and time-specific. Industrial transition has unfolded differently across European and other OECD regions. This is due to the variations in the type and intensity of change regions experience, as well as the structures and the diverse profiles of those affected. Regionally specific approaches are important for the success of support measures, and framework conditions can differ markedly between places. When looking at industrial employment in Europe between 2000-2016 (Figure “Changes in manufacturing employment”), it becomes evident that industrial transition did not spread evenly. While some regions, notably in Eastern Europe, experienced growing shares in manufacturing, employment in manufacturing declined for the majority of Western European regions. The heavy reliance of these regions on traditional manufacturing was in some regions replaced by a demand for higher quality, service-oriented industrial production.
What are key policy challenges for regions in industrial transition?

- **The need to address technological change**: The significance of technological change as an integral part of the transition process has to be recognised in terms of identifying and addressing major technological lock-in and by seeking to engage and frame the investment choices around new and future-oriented activities.

- **The need to manage the risk of structural unemployment**: Transitions result in periods of structural unemployment. Early anticipation of these risks and the development of a range of (innovative) responses to restructuring in key sectors and the regional economy more broadly is important to alleviate the worst outcomes.

- **The capacity to steer transition towards positive structural change and economic growth**: Depending on the right policy mix and associated scale of investment, dynamic economic changes in regions in industrial transition can increase long-term productivity and economic growth, contributing to rising living standards and well-being.

- **The ability to balance different trade-offs and ensure a just transition**: Industrial transition means to balance economic, social and environmental and climate challenges to industrial transition. Considering the social aspect of the transition towards a climate-neutral economy is crucial for gaining social approval for the changes taking place.

- **The synergies with other policies**: Adjustment policies likely coincide with changes in broader economic models, such as the provision of support for recycling of factor resources, avoidance of market rigidities and restrictions, and the creation of the right framework conditions.
Preparation for the jobs of the future

Rapidly evolving technologies mean that labour markets in European and OECD regions will inevitably undergo major transformations in the coming years and decades. Firms and regions that do not keep up with the pace of innovation risk falling behind.

While seizing the opportunities of new technologies and business will lead to new growth paths, how to achieve this may not be self-evident. Regions that have experienced industrial decline or still base their current economic activity on traditional manufacturing or extractive industries are in a vulnerable position. Based on their capacities and accumulated knowledge in existing industries, companies in these regions have a strong potential to capture the benefits of the future of work. At the same time, the adoption and successful integration of new technologies and the development of new business models is constrained by significant and specific barriers that this type of region is facing. Regions in industrial transition often face a drastic decline in established job profiles due to the phasing out of traditional industries. In parallel, these regions are confronted with skills gaps in local labour markets when it comes to job profiles related to future technologies, such as professions in web-and app-enabled markets, machine learning skills and software developers.

Automation will critically affect local labour markets and regions in industrial transition in specific ways. Regions in industrial transition are likely to be part of those territories that are more, rather than less, affected by automation because they are often home to traditional manufacturing industries with a higher proportion of jobs that rely on routine tasks. This is likely to lead to more disruption than in other places.

Preparing for the future of work in regions in industrial transition requires a policy strategy that combines skills and employment policies with those that stimulate investment in new sources of employment and productivity growth. Tapping into new and emerging sources of growth and employment can help regions in industrial transition avoid being locked-in to old industries and help create job opportunities that increase productivity, wages and ultimately prosperity.
Challenges, opportunities and actions for regions in industrial transition in the future of work

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<thead>
<tr>
<th>Challenges</th>
<th>Opportunities</th>
<th>Actions</th>
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<tbody>
<tr>
<td>Lack of skilled workers in new and emerging activities</td>
<td>Improved responsiveness of training provision to market needs</td>
<td>✓ Skills mapping, workforce intelligent networks</td>
</tr>
<tr>
<td>Lack of skilled workers</td>
<td>Strengthened regional innovation ecosystem</td>
<td>✓ HR management trainings for SMEs, increased SME-university linkages</td>
</tr>
<tr>
<td>Lack of job opportunities for low- and middle skilled workers</td>
<td>Employment generation across affected groups and territories</td>
<td>✓ Dedicated training subsidies and vouchers, training leave allowances, tax incentives</td>
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<td></td>
<td>Connecting skills to jobs</td>
<td>✓ Re-designed local employment services</td>
</tr>
<tr>
<td>Limited investment in new sources of employment</td>
<td>Enhancing cross-industry innovation and access to global value chains</td>
<td>✓ Workplace Leadership Centres, ICT training and technology programmes</td>
</tr>
<tr>
<td>Lack of co-ordination and finance</td>
<td>Improving policy effectiveness and efficiency, stimulation of private sector engagement in training</td>
<td>✓ Increasing stakeholder participation in local skills ecosystems, better co-ordination arrangements, capacity-building initiatives</td>
</tr>
</tbody>
</table>

Key considerations for (better) policymaking

- **Engaging a broad range of local stakeholders in skills dialogue.** In the context of preparing for the future of work, actively engaging with stakeholders can help regions in industrial transition identify future skills needs and upcoming new business activities in the region by bringing in the resources and expertise of local employers, training associations, universities, VET providers and civil society. Successful skills dialogue among stakeholders requires that regional policymakers take an active leadership role.

- **Education and skills systems need to be inclusive.** Regions in industrial transition need to engage workers in training in order to ensure that firms have access to the skills necessary to stay competitive. In the context of rising skill demands, failing to engage these workers in training could translate into constantly higher rates of long-term unemployment.

- **Taking an integrated approach to local job creation requires investment.** Encouraging skills is important for job creation in regions in industrial transition. However, skills and education policies need to be complemented with investments in innovation, technology and business development. In order for new jobs to be created, businesses need access to resources, including skilled people, business networks, finance and space to start up and grow. This requires greater co-ordination between investment, innovation and labour market policies at a regional level.

**INDUSTRY AND SKILLS MAPPING IN WALLONIA**

In Wallonia, the Public Employment Service (PES) uses foresight analysis to identify local skills needs in specific sectors. The exercise helps to build up appropriate training offerings for Wallonia’s business clusters and to communicate the identified skill needs to relevant audiences. The analysis first classifies future occupations and associated core skills in eight sectors, supported by a panel of experts and a range of workshops. It then identifies a set of related or secondary skills that could subsequently arise from developing the sectors. The foresight analysis has proven essential by the chosen sectors and industries because they themselves often do not have the capacity or resources to undertake extensive study.
Regions in industrial transition have the potential to narrow gaps with the best-performing region in their country. By building on local assets and specific advantages, these regions can trace a pathway to sustainable growth. Leveraging broad-based innovation diffusion is a driver of success.

Regions in industrial transition often face large challenges in improving productivity, and even more so when they have insufficient institutional capacity, fragile industrial links or a low-skilled workforce. These regions may be unable to attract sufficient investment to encourage innovation, or commercial research structures and firms that could contribute to industrial modernisation. In many cases, although they may contain firms at the European or national technology frontier, there are significant problems in innovation diffusion and take-up in firms further away from the technological frontier. These latter firms may account for a large part of employment and output and are less resilient to shocks from international competition and technological change.

Broadening the understanding of innovation also creates new opportunities for excluded groups to become involved in the innovation process, to create new jobs and to grow incomes. For example, digitalisation and enhanced access to information technologies can open new paths for all entrepreneurs to become successful innovators. Well managed, this process can support greater industrial and territorial inclusiveness.

For successful industrial modernisation, it is essential that innovation-led regional development policies focus not only on cutting-edge frontier innovation but also on adopting processes or technologies that already exist elsewhere. Such a broader innovation policy should not be limited to the supply of research and development (R&D) or direct innovation support, but also strive to support education and capital investment that match the need of local industries, increasing their absorptive capacity and innovative capability. Public policy can stimulate the effective transfer of knowledge through labour mobility and collaborative networks, fostering knowledge circulation and interactive learning. Policies in this context can be platforms for knowledge diffusion and support better linkages between universities and industry.
Challenges, opportunities and actions for regions in industrial transition in broadening and diffusing innovation

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<tr>
<th>Challenges</th>
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<tbody>
<tr>
<td>Lack of holistic regional innovation systems</td>
<td>- Better strategic prioritisation of innovation-enhancing assets</td>
<td>✓ Innovation-friendly procurement</td>
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<td></td>
<td>- Strengthened innovation financing and better investment</td>
<td>✓ Public funding for knowledge exchange mechanisms</td>
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<tr>
<td></td>
<td>- Better monitoring and evaluation for better impact measurement</td>
<td>✓ Better monitoring and evaluation for better impact measurement</td>
</tr>
<tr>
<td>Lack of small business capability for innovation</td>
<td>- Enhancing digital competencies in firms</td>
<td>✓ Dedicated financial support and guidance and training (vouchers, events, webinars)</td>
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<td></td>
<td>- Supporting industrial modernisation</td>
<td>✓ Support for industrial clusters and cross-cluster fertilisation</td>
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<tr>
<td>Territorial disparities in innovation diffusion</td>
<td>- Reducing spatial gaps in well-being</td>
<td>✓ Linking GVCs to cluster policies</td>
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<tr>
<td></td>
<td>- Ensuring job opportunities across territories</td>
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Key considerations for (better) policymaking

- **Innovation policy needs to address dynamic and left-behind places simultaneously.** Regions in industrial transition need to ensure that the gains of innovation are widespread and are not concentrated in urban or metropolitan areas. Accomplishing this may mean ensuring that innovation policies do not focus on incumbent firms over new entries and pursuing territorial inclusiveness by addressing all entrepreneurs beyond those residing and operating in cities.

- **Be aware of risks – Innovation creates winners and losers.** In regions in industrial transition, technological change has tended to be skill-biased, favouring those with the highest skills, sometimes to the detriment of those with lower or medium-level skills. If there is no upskilling and retraining of those with lower skill sets, growing income inequality will likely be the result. Governments in regions in industrial transition must have a range of policies in place to seize the opportunities arising from innovation but also to manage some of its associated risks.

- **Do not create paper tigers – Test and adjust regional innovation strategies.** Innovation policies operate in a complex, dynamic and uncertain environment, where government action will not always get it right. A commitment to policy monitoring and evaluation, to experimentation and pilots, and to learning from experience in order to adjust policies over time, can help ensure that government action is efficient and reaches its objectives.

MONITORING AND EVALUATION OF INNOVATION IN THE BASQUE REGION

Spain’s Basque Country has been gradually implementing its monitoring and evaluation system. In 2012, it began monitoring and evaluating results by trying to unite different inputs and assess a programme’s contribution in terms of input, output and impact indicators. Resources and results are monitored, and companies are regularly surveyed to determine whether input indicators are clear and on expected output. Only after three years did the Basque regional authorities begin to ask for results and with this information, they then were able to begin measuring impact. While it is difficult to change the time dimension, it is possible to streamline the measurement approach. For example, the Basque system focuses on indicators to measure two specific objectives linked to their industrial and innovation policy: increasing employment and supporting internationalisation.
Supporting entrepreneurship and private sector engagement

Innovative entrepreneurship is a critical factor for regional industrial modernisation and a key tool for job creation, economic growth and innovation. New start-ups and entrepreneurial SMEs are leading actors.

The prevalence of start-ups is systematically and strongly related to local employment growth across and within regions. Regions in industrial transition need to support both start-up and scale-up development and entrepreneurship as well as innovation in large firms. Because these regions are often home to large and incumbent business in traditional and long-established industries, harnessing the entrepreneurial capacities and capabilities of employees in these firms can make an important contribution to industrial diversification. At the same time, these regions often face a decline in traditional activities that can be compensated by new economic activity arising from innovative start-ups and young firms. Such firms help transform traditional industrial activities and stimulate the emergence of new regional growth paths.

In order for innovative entrepreneurship to successfully diversify local economies, a range of barriers needs to be overcome in regions in industrial transition. Barriers include a weak entrepreneurship culture based on a long tradition of contract work in manufacturing, a lack of existing risk capital for innovative companies to scale up and underutilised knowledge networks. In addition, a lack of management experience and entrepreneurial skills, particularly among younger entrepreneurs, frequently pose barriers to entrepreneurship.

Scaling-up innovative entrepreneurship in regions in industrial transition requires a functioning regional innovation ecosystem that drives industrial modernisation through a combination of policies in the area of entrepreneurship, SME, innovation, education and science at the regional level. Local and regional authorities have therefore an important role in connecting, developing and supporting the regional innovation and entrepreneurship ecosystem through organising the mapping of available capacities and involving different stakeholder groups in a demand-driven and collaborative approach towards successful industrial transition.
### Challenges, opportunities and actions for regions in industrial transition in supporting entrepreneurship and private sector engagement

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<tr>
<th>Challenges</th>
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<tbody>
<tr>
<td>Limited access to finance</td>
<td>– Improved financial literacy among firms</td>
<td>✔️ Offering of alternative and non-bank sources of finance: crowdfunding, peer-to-peer lending, business angel networks, venture capital</td>
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<td>– Reduction in reliance on debt finance</td>
<td>✔️ Training and mentoring programmes</td>
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<tr>
<td>Limited access to skills and networks</td>
<td>– Better sales and export networks for local firms</td>
<td>✔️ Incubators and accelerators</td>
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<td></td>
<td>– More innovation in entrepreneurial activity</td>
<td>✔️ Networking and matchmaking events</td>
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<td>✔️ Provision of online platforms</td>
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<td>✔️ Support for entrepreneurial spin-offs, including through legislation and entrepreneurship training</td>
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<tr>
<td>Improving the entrepreneurship enabling environment</td>
<td>– Lowered transaction costs for entrepreneurs</td>
<td>✔️ Measurement of compliance costs and introduction of RIA</td>
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<tr>
<td></td>
<td>– Attractive entrepreneurship ecosystem</td>
<td>✔️ E-government services</td>
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<td></td>
<td></td>
<td>✔️ One-stop-shops and web portals</td>
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### Key considerations for (better) policymaking

- **Local decision-making is crucial.** Regional governments in regions in industrial transition need to contribute to a healthy environment for entrepreneurship by promoting an entrepreneurial culture and creating a level playing field for new start-ups vis-a-vis incumbents. In addition, the availability and quality of resources that entrepreneurs need (such as financing, premises, human resources) are often locally determined.

- **Industries, technologies, and generations change.** Businesses need to adapt to ongoing trends such as the rise of customer-centric business models, mobile solutions and digital footprints. Policy initiatives promoting entrepreneurship in regions in industrial transition – which often are home to traditional businesses with limited implementation capacity for new technologies and market demands – must take account of these ongoing changes and continuously review their financial and advice package in line with technological and societal developments.

- **Substitute density with networks in rural and remote areas.** Local SME and entrepreneurship policy in small and remote local areas may benefit from a combination of inward- and outward-looking policy strategies. One strategy is to compensate remoteness and a possible lack of resources by connecting local entrepreneurs to resources and strategic actors in larger cities or urban areas, for example through start-up boot camps, innovation hubs or similar activities.

### Entrepreneurship as a Pillar of Regional Development: Ben Franklin Technology Partners, Pennsylvania

Ben Franklin Technology Partners is a technology-based economic development programme in Pennsylvania, United States. It consists of four regional bodies that link young companies with funding, expertise, universities and other resources to fill gaps in the entrepreneurial system that may otherwise discourage entrepreneurialism. Ben Franklin Technology Partners helps young firms in a variety of ways: by making them more attractive to different kinds of investors, providing incubator space, creating networks with colleges and universities, and helping to develop and commercialise products. The impact of the programme has been striking. In 2017, there were 1,900 jobs created and 189 new companies formed thanks to the programme. Furthermore, third-party evaluation has shown that for every USD 1 invested in the programme, there is a return of an additional USD 3.60 in state tax revenues.
Transition towards a climate-neutral economy

Ensuring a just transition is fundamental to growth and well-being in regions in industrial transition. Public acceptability and the success of transition depends on a fair and transparent distribution of costs and benefits.

In the Paris Agreement, parties have agreed to a long-term goal to limit climate change to well below 2°C and make efforts towards 1.5°C. There is growing recognition that reaching a climate-neutral and more circular economy will require a paradigm shift. In other words, deep innovations in societal systems are needed to overcome persistent problems such as climate change and resource scarcity by means of profound changes to dominant structures, practices, technologies, policies and lifestyles.

The progressive phasing out of carbon-intensive industries will present particular challenges for regions in industrial transition because they are frequently characterised by weak economic diversification and firms operating in carbon-intensive sectors often count for a large share of employment. In such situations, ensuring a just transition requires achieving deep emission reductions while minimising the impact on workers and poorer households.

Promoting a just transition means combining climate action with public support in managing structural change in local economies and the impact on the local workforce. Policymakers need to pursue a dual strategy of supporting low-carbon investments while helping displaced workers at the same time. New opportunities for workers can be stimulated through investments in green technologies and green business opportunities. This helps firms in two ways. First, better environmental performance can improve the local competitiveness of existing firms. Second, promoting new technologies and business models can help upgrade and diversify the local economy, thereby re-orienting the regional knowledge base towards new activities. This is particularly important for regions in industrial transition that face the danger of being locked into existing industrial pathways due to the dominance of incumbent firms in old industries.
Challenges, opportunities and actions for regions in industrial transition in the transition to a climate-neutral economy

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<tr>
<th>Challenges</th>
<th>Opportunities</th>
<th>Actions</th>
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<tbody>
<tr>
<td>Creating job opportunities for the transition to the climate-neutral economy</td>
<td>– Reoriented investments towards energy and environmental goals</td>
<td>✓ Upskilling and retraining of displaced workers aligned with local labour market needs</td>
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<tr>
<td></td>
<td>– Progressive greening of existing industries</td>
<td>✓ Training on environmentally friendly production methods for existing workers</td>
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<tr>
<td>Lack of business opportunities for green innovations</td>
<td>– Emergence of new green businesses</td>
<td>✓ Regulatory simplifications and incentives</td>
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<td></td>
<td>– Stimulation of investment in green technologies</td>
<td>✓ Information-based tools (e.g. advise, certifications, ecolabels)</td>
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<td></td>
<td></td>
<td>✓ Economic incentives (grants, low-interest loans, tax incentives)</td>
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<tr>
<td>Reconciling the long-term strategic dimensions of a climate-neutral transition with short-term action</td>
<td>– Strengthened long-term vision on how to reduce carbon emissions</td>
<td>✓ Low-carbon objectives and measures</td>
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<td></td>
<td>– Better local leadership</td>
<td>✓ Co-operation and stakeholder alignment</td>
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<tr>
<td></td>
<td></td>
<td>✓ Phasing out of fossil subsidies</td>
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<td></td>
<td></td>
<td>✓ Structural policies</td>
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Key considerations for (better) policymaking

- **Balancing short-term trade-offs and long-term benefits is key for a just transition.** Certain economic sectors, firms and segments may strongly resist ambitious climate and other environmental policies. Without addressing such concerns head-on and devising possible solutions, regions in industrial transition cannot make sufficient progress on the implementation of green policies.

- **Resources need to be concentrated on areas with highest adjustment costs.** A “managed” transition provides sufficient degree of public support for areas with highest adjustment costs. For regions in industrial transition, this may require developing strategies to support the reorientation of existing industries in order to increase their efficiency and lessen dependence on fossil fuels and to invest in skills development.

- **The political economy aspects of the climate-neutral transition matter.** There is no one-size-fits-all solution and a successful transition will depend on a number of factors that are specific to a given region. Taking a political economy approach to the low-carbon transition at the regional level can help understand who wins, who loses, how and why.

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**THE ENERGY CLUSTER IN SAXONY, GERMANY**

The energy technology cluster Energy Saxony combines the competencies and expertise of 68 actors from industry, research and government to drive the sustainable development and commercialisation of new technologies in the energy, electro-mobility and digitalisation sectors. Financed in equal parts by the state of Saxony and industry, the cluster seeks to answer diverse issues arising from the low-carbon transition. These include the sourcing of hydrogen, building value chains from wind and solar energy to green hydrogen, as well as technical questions such as planning train lines that run on green hydrogen and how to replace fossil fuels in the agricultural sector. Currently, one of Saxony’s largest projects concerning the low-carbon transition is the shift from fossil fuels to renewable sources for energy production. The high density of research institutes and larger corporations in the region is an asset that this cluster seeks to harness for the transition.
Promoting inclusive growth for a just transition

Achieving a fair and inclusive transition requires that regions in industrial transition adopt an integrated territorial approach to well-being, balancing the divides between emerging and strong local innovation hubs and declining communities within a region.

Regions in industrial transition often have experienced sluggish growth, resulting in relatively limited increase in prosperity, and some have experienced prolonged periods of high unemployment. Left unaddressed, these challenges can weaken social cohesion, increase economic vulnerability and limit social mobility and equality of opportunities. Confronted with such territorial inequalities, regions in industrial transition must ensure an inclusive transition that helps lagging areas catch up with more dynamic ones and improves the quality of life in the territory. For all places, economic growth needs to translate into better living conditions for residents.

Industrial decline is often geographically concentrated and new jobs are not necessarily located in the same areas as the industries that are declining. Resulting decreases in competitiveness can be compounded if laid-off workers leave to look for employment elsewhere. The connected developments on regional demographics and fiscal capacity can potentially lead to a decline in public services, such as in education, health and social services.

The experience of some regions in industrial transition indicates that active labour market policies, such as increased flexibility in employment relationships and the modernisation of employment services, are underway. However, considerable efforts are needed to cope with rising polarisation of regional labour markets. Unemployment, and especially long-term unemployment resulting from a decline in traditional manufacturing, is increasing the risk of social exclusion, poverty and inequality in some regions in industrial transition. It is important to ensure good conditions and opportunities for people living in these regions or thinking of living there, which in turn will enhance a smooth transition and support sustainable and inclusive development.
Challenges, opportunities and actions for regions in industrial transition in promoting inclusive growth

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<th>Challenges</th>
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<tr>
<td>High labour market polarisation</td>
<td>• Inclusive employment generation</td>
<td>✓ Career guidance and retraining schemes</td>
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<td></td>
<td>• Productivity increase</td>
<td>✓ Indicators of regional well-being measurement</td>
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<tr>
<td>Potential strong spatial discrepancies</td>
<td>• Making better use of urban/rural complementarities</td>
<td>✓ Infrastructure connection (road networks, trains)</td>
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<td></td>
<td>• Extending the benefits of city agglomerations and increasing GDP</td>
<td>✓ Supply chains (e.g. agro-industry), improved linkages between SMEs and large businesses</td>
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<tr>
<td>Low inclusive growth governance</td>
<td>• Increased stakeholder engagement</td>
<td>✓ Multi-level partnerships, co-ordination committees and working groups, collaborative action platforms</td>
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<td></td>
<td>• Better policy efficiency</td>
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Key considerations for (better) policymaking

- **Trade-offs between growth and inclusion will inevitably arise and need mitigation.** Stimulating innovation and technological progress are fundamental to spur productivity growth but may put pressure on the relative demand for skilled workers through skill-biased technological change, thereby leaving the low-skilled workers behind. Policymakers in regions in industrial transition need to ensure that innovation and labour market policies are well co-ordinated in order to avoid widening skills and income gaps.

- **Successful transition means investing in places left behind.** Designing policies that target spatial inequalities requires that policymakers consider complementarities in their different objectives. Addressing income inequalities includes going beyond traditional transfers to households – targeting people – and should incorporate mechanisms aimed at ensuring equity in the provision of public goods and services – targeting places.

- **Managing an inclusive transition requires embedding inclusiveness in policymaking.** Building more inclusive growth in regions in industrial transition rests on the potential to change or adjust how policies are designed and implemented. Concerns over the undue influence of vested interests, which may be associated with influential and traditionally dominant industries, need to be overcome through transparent policymaking, the inclusion of all relevant stakeholders and accountability.

**SUPPORT FOR THE SOCIAL ECONOMY AND SOCIAL INNOVATION, GRAND-EST, FRANCE**

Grand Est is home to 15 000 socially innovative businesses (associations, co-operatives, social enterprises), employing 200 000 workers and providing EUR 4.1 billion in yearly salaries. Regional funding in 2018 amounted to just over EUR 1 million to support 405 social economy organisations. By aligning strategies for the environment, training, skills and economic development, the Region Grand Est creates territorial alliances to develop the competitiveness and economic attractiveness of the region. Focus is placed on social and labour market integration of long-term unemployed people at risk of social exclusion and on projects in the fields of social economy and environmental sustainability. Examples of local initiatives include recycling under the slogan “your waste becomes my product”, new links between rural and urban zones by the means of a public school restoration project or the concept of an inclusive city.
**Toolkit to Assess Policy Responses to Industrial Transition**

**Preparing for the future of work**

| Lack of skilled workers to move into new and emerging activities | ✓ Better anticipate skills needs for industrial transition  
| ✓ Strengthen capacity of firms to address their human resource needs internally  
| ✓ Involve local stakeholders in the planning and design of regional skills initiatives |

| Spatially concentrated lack of job opportunities for low- and middle-skilled workers | ✓ Support vulnerable workers during the period of industrial transition  
| ✓ Provide workforce and management development for start-ups and scale-ups through training and upskilling programs  
| ✓ Foster the integration of youth, women, and older people in the labour market |

| Limited investment in new sources of employment and productivity growth | ✓ Provide support for firms to become more innovative and adjust from ‘traditional sectors to new technologies  
| ✓ Assist firms in better using skills at the workplace  
| ✓ Encourage knowledge exchange and cooperation between larger and/or newer firms with smaller and/or older firms |

| Lack of co-ordination and financing mechanisms | ✓ Implement effective multi-level partnerships  
| ✓ Ensure sufficient and well-targeted financing and investment |

**Broadening and diffusing innovation**

| Creating and sustaining comprehensive innovation ecosystems | ✓ Broaden the notion of innovation and build private and public sector capabilities for innovation  
| ✓ Strengthen innovation financing and reduce barriers to investment  
| ✓ Improve monitoring and evaluation of innovation policies |

| Lack of (small) business capabilities for innovation | ✓ Accelerate the digital transformation  
| ✓ Scale business innovation networks and support clusters  
| ✓ Support effective university-industry co-operation |

| Territorial disparities in innovation diffusion | ✓ Leverage the potential of cities and tradable sectors  
| ✓ Capitalise on unique regional strengths for innovation  
| ✓ Strengthen skills development and skills utilization |
### Promoting entrepreneurship and private sector engagement

| Limited access to finance for start-ups and scale-ups | ✓ Facilitate access to finance and broaden the range of financial instruments  
|                                                        | ✓ Strengthen financial literacy  
| Limited access to entrepreneurship skills and networks for start-ups and scale-ups | ✓ Support entrepreneurs with information, training, coaching and mentoring  
|                                                        | ✓ Strengthen entrepreneurial networks  
|                                                        | ✓ Enhance start-up and SME participation in collaborative research  
| Improving the entrepreneurial enabling environment | ✓ Ensure a friendly regulatory environment through simplified regulations and registration procedures  
|                                                        | ✓ Foster an entrepreneurship culture through the development of entrepreneurial mind-sets  
|                                                        | ✓ Monitor and evaluate SME and entrepreneurship policies  

### Transitioning towards a climate-neutral economy

| Creating job opportunities for the transition to the climate-neutral economy | ✓ Support green skills and jobs through training and upskilling  
|                                                                               | ✓ Support workers in transition through dedicated job-search training and Flexicurity in labour markets  
|                                                                               | ✓ Support measures to a just transition  
| Lack of business opportunities for green innovations | ✓ Stimulate green behaviour in firms  
|                                                        | ✓ Encourage innovation in environment-friendly technologies  
| Reconciling the long-term strategic dimensions of a climate-neutral transition with short-term action | ✓ Foster local energy transitions through financial and strategic support schemes  
|                                                        | ✓ Integrate the transition to a climate-neutral economy into larger regional development strategies  
|                                                        | ✓ Ensure an enabling environment for transition  

### Promoting inclusive growth

| Strengthening regional well-being | ✓ Integrate vulnerable populations into the labour market  
|                                   | ✓ Develop and implement a regional-level well-being framework  
| Spatial discrepancies and territorial linkages | ✓ Encourage territorial co-operation through rural-urban partnerships  
|                                                        | ✓ Ensure digital connectivity and digital services in remote regions  
| Improving inclusive growth governance | ✓ Building strategic partnerships and stakeholder engagement  
|                                                        | ✓ Make inclusive growth an explicit goal across levels of government  

REGIONS IN INDUSTRIA L TRANSITION