

2 Insights into the governance of regions in industrial transition

This chapter discusses industrial transition from the perspective of its governance and policy implications. It highlights a set of challenges associated with industrial transition today, such as concentrated declines in industrial activity and falling standards of economic and social well-being. In light of these, the chapter emphasises the need for robust governance mechanisms and a place-based policy approach in order to support places undergoing industrial transformation. It also explores the role of experimental governance and policy arrangements in helping to facilitate successful industrial transition initiatives.

Introduction

Industrial transition is not a new phenomenon. Societies have undergone seismic transformations as a result of innovation many times in the past. The invention of the printing press in the 15th century, the industrial revolution of the late 18th and early 19th centuries, the Ford-inspired technologies of mass production in the 20th century and the digital and artificial intelligence (AI) revolutions of the 21st century are all relevant examples. Each of these shifts has affected regions and affected them differently, creating economic winners in certain areas while others are left behind.

What makes industrial transition today different, and potentially more challenging to deal with than in the past, has been the rise of an increasingly uncertain global environment. In a global economy that is far more interconnected than it has ever been, all regions have been confronted by challenges that have been borne, at least in part, of rapid industrial change. Over the past three decades, the world witnessed striking demographic shifts, including large waves of migration, as well as dramatic changes in how and where people work. Regions have also had to contend with a rise in intense shocks or crises, many of which have been difficult for policy makers to predict with confidence. Such crises include the 2008 Global Financial Crisis, the COVID-19 pandemic, the 2021-23 global inflation surge, an increase in the severity and frequency of climate change-induced natural disasters and rising geopolitical tensions (e.g. between China and the United States) or even war (as in the case of Russia's ongoing war of aggression against Ukraine).

The result is a global context that is increasingly complex and unpredictable. It changes rapidly, generating uncertainty for government and citizens, who need to be flexible and agile in order to quickly adapt to new circumstances. Failure to adapt and to support particularly exposed communities risks increasing inter-regional and intra-regional inequalities.

While all regions are confronted with today's new-found global complexity, regions in industrial transition may experience its negative effects more acutely. In part, this may be due to greater difficulty in shifting or adjusting their industrial bases rapidly enough or effectively enough to take advantage of the new economic opportunities an industrial transition can bring. Reconsidering existing governance and policy mechanisms can help regions in industrial transition transform their industrial base to one that better generates inclusive, sustainable regional development and greater citizen well-being. It can also help them develop the resilience to respond more effectively to uncertain global economic headwinds.

This chapter builds on insights emanating from the OECD's 2018-19 work on regions in industrial transition. After a brief introduction to the concept of industrial transition, along with its links to innovation, the chapter takes a look at why policy makers should support regions in industrial transition. Building on the practical experience of the eight regions and two countries in industrial transition that are featured in this report, the chapter then considers the conceptual and practical preconditions of regional development and governance that are needed for industrial transition initiatives to succeed. Conceptual elements include the value of a place-based approach to industrial transition, as well as an integrated approach to innovation diffusion that aligns governmental stakeholders across objectives, priorities and initiatives. Practical elements include ensuring that appropriate multi-level governance arrangements are in place or can be introduced before industrial transformation initiatives are attempted. The chapter concludes by considering how taking an experimental approach to the transition can act as a spark that catalyses a successful industrial transformation.

Regions and industrial transition: A brief overview

Twenty-first-century experience with industrial transition – for example in Germany, the United Kingdom and the United States – highlights the impact of major industrial transformations directly on a region's labour market opportunities and productivity. It also reveals the potential for such processes to negatively affect the overall well-being and quality of life of a region's residents. For example, in North East England

(United Kingdom), manufacturing sector jobs decreased by 51% between 1996 to 2022 (ONS, 2022^[1]). The United States (US) Rust Belt region¹ employed 75% of workers in the steel, automotive and rubber industries in 1950 and only 55% in 2000 (Alder, Lagakos and Ohanian, 2014^[2]).

In the Ruhr area in Germany, the substantial decline in the manufacturing industry from 1964 to 2014 was only partially offset by an increase in service jobs (IAT/Wuppertal Institut für Klima, Umwelt, Energie, 2021^[3]). In 2020, the region still suffered from significantly above-average unemployment levels – 10.1% in the region versus 6.0% in the country – and a weak knowledge economy. Unemployment in the Ruhr city of Gelsenkirchen reached 15.6% in 2020 and, in 2019, the average disposable per capita income in the city was EUR 17 015 – less than half of the average reported in Heilbronn, Germany’s highest-earning city (EUR 42 275) (Seils and Pusch, 2022^[4]; Hassink and Kiese, 2021^[5]).

As noted in the *OECD Regional Outlook 2023* (forthcoming^[6]), raising productivity growth is an important vehicle for reducing income inequalities within and across regions and territories. There is also significant potential for low-productivity regions to boost productivity growth in all economic sectors, including the industrial sector. In 2019, close to 25% of productivity differences across regions within OECD countries were due to differences in productivity within the same macro-sectors (OECD, forthcoming^[6]). Labour-augmenting innovation can lift productivity levels in lagging, industrial regions, thereby creating new job opportunities and wages, and preventing such opportunities from being concentrated in certain, often metropolitan, regions (OECD, forthcoming^[6]). For such efforts to be successful, however, it is essential for policy makers to build on a region’s existing strengths and past industrial legacy, without losing sight of the future.

Making industrial transition work

Industrial transition needs to be understood in the context of certain development challenges that affect some territories but not others and are a product of historical economic legacies. Regions in industrial transition are defined by their tendency to demonstrate two or more common characteristics that generally place them among the lower tier of performance in their own countries (Box 2.1) (OECD, 2019^[7]). Furthermore, they are generally regions that have been, and may still be, heavily reliant on extractive, resource-intensive or heavy industrial manufacturing industries. They may have well-established capabilities and deep industrial knowledge in important sectors. However, they are also typically expected to modernise, adjust or transform their industrial composition. This can include adapting their existing sectors as well as building up resources and expertise in new or emerging sectors relevant to their industrial structure to drive economic growth (OECD, 2019^[7]). Importantly, they are not necessarily poor or disadvantaged regions but may risk tipping into this category if they fail to adjust to changing circumstances. They may also suffer from institutional weaknesses, either in terms of governance or capacity. Research has shown that the efficacy of innovation policies at the subnational level is often influenced by institutional quality, which can include policy-making capacity and levels of corruption (McCann, 2023^[8]).

Box 2.1. What is a region in industrial transition?

There is no single definition of a region in industrial transition. However, it typically shares two or more of the characteristics highlighted below:

- A lower-than-average per capita gross domestic product (GDP) as a percentage of the national average.
- An average annual GDP growth of 1% or less.
- A lower-than-national-(or EU)-average level of population with tertiary education.

- A rising unemployment rate.
- A lower-than-national-average life expectancy.
- Performance in the middle to bottom half of [OECD Regional Well-being](#) indicators (e.g. jobs, income, environment, community, life satisfaction, housing, health, education).

In regions in industrial transition, these characteristics may translate into lower-than-average incomes, a perceived and/or real lack of job opportunities, a degradation of public and civic space, a rise in petty crime and a greater reliance on government transfers.

Source: Based on OECD (2019^[7]), *Regions in Industrial Transition: Policies for People and Places*, <https://doi.org/10.1787/c76ec2a1-en>; OECD Well-being indicators: <https://www.oecdregionalwellbeing.org/>

Industrial transition is an inherently place-based concept

Given the divergence from other regions in their countries that regions in an industrial transition can demonstrate, a “one-size-fits-all” development policy – e.g. one that is applied broadly to many regions at once – is likely to fall short of the mark. Rather, policy makers need to adopt a place-based approach to managing an industrial transition to promote stronger inclusive growth and well-being for the residents in a specific geographic territory and in order to reduce inter- and intra-regional disparities. Place-based approaches assume that a territory’s social, economic, environmental and institutional characteristics matter. They also presuppose that the involvement of subnational actors is important, whether solely to identify local needs and priorities or to implement specific actions. Place-based approaches differ from traditional ones in a number of ways, including the following (OECD, 2020^[9]):

- The policy focus shifts from an emphasis on external interventions to an approach that builds on a territory’s local human, natural, financial and governance assets.
- Policies are not only targeted at administrative territories but also functional economic areas that reflect real linkages across territories, including urban-rural linkages.
- The policy-making process no longer centres around the central government but rather focuses on establishing working relationships between all relevant actors (including regional and local government stakeholders, as well as civil society and the private sector).
- The traditional “siloes” approach of developing and implementing policies in isolation is dispensed with; active efforts are made to identify and leverage synergies and complementarities across sectors.

To act in concert across these areas, policy makers must be able to rely on effective multi-level governance, as getting the policy mix right requires not only identifying common objectives but also ensuring cross-sector and multi-level policy coherence and complementarity. This means engaging and co-ordinating ideas and actions among different levels of government, different policy sectors and a variety of stakeholders in what can be a difficult conversation – one that revolves around generating structural change. Success can depend to a significant degree not only on the governance arrangements in place but also on their flexibility and the capacity of policy makers to adjust them where appropriate. Conceptual governance components, such as taking an integrated approach to developing and implementing transition initiatives, and more concrete governance components, such as making roles and responsibilities clear, ensuring sufficient resources and optimising stakeholder engagement practices, are all part of the elements that can make a transition more or less successful.

Industrial transition calls for an integrated policy approach

A policy approach that addresses only one of the challenges confronting a region in industrial transition has limited potential to succeed. Rather, industrial transition calls for considering and acting on a variety of areas simultaneously. Acting on jobs and skills should also support action for building innovation and innovation diffusion. Innovation policy should not neglect the importance of boosting innovation potential and capacity among small and medium-sized enterprises (SMEs) as well as entrepreneurs. Education and learning cannot be forgotten and an opportunity to tailor these to today's transition opportunities should not be missed, for example to advance a carbon-neutral transition and promote stronger inclusive growth and well-being for the region's residents to reduce inter- and intra-regional disparities.

Given that addressing industrial transition draws on a variety of policy areas, an integrated approach, or at least an approach where policy sectors act in concert to advance the transition, may be more successful than one where individual policy areas act alone as this can generate policy fragmentation, incoherence and overlap, as well as a potentially suboptimal use of resources. Taking an integrated approach, however, first requires bringing a variety of government sectors on board and then ensuring that the various objectives, priorities and initiatives within these sectors that could contribute to industrial transition are aligned. It is further enhanced when the objectives and priorities among different levels of government are also in sync.

When an integrated approach to industrial transition is in place, policies related to economic development, environmental protection, social equity, well-being and other areas are all working towards the same goals and objectives. Moreover, an integrated approach supports greater policy continuity and clearer guidelines for decision-making and action. It can also help to align priorities while serving as a roadmap for cross-sectoral industrial transition and innovation policy. An example of how such alignment can be generated is found in Piedmont's (Italy) Unified Strategy Document (*Documento Strategico Unitario*, DSU) (Box 2.2).

Box 2.2. Piedmont, Italy: The Unified Strategy Document or DSU

Piedmont's DSU lays out the region's development vision and objectives, including territorial, economic and social development and how different regional development tools can help achieve the region's development objectives. These tools include different regional strategies, such as the Regional Strategy for Sustainable Development, the Regional Smart Specialisation Strategy (RIS3) and the regional Smart Mobility Plan. It also offers an assessment of how to make the best use of the different European Union (EU) financing streams for Piedmont, such as the Cohesion Fund Operational Programmes (specifically the European Regional Development Fund [ERDF], the European Social Fund [ESF] and the European Agricultural Fund for Rural Development [EAFRD]) and the NextGenerationEU COVID-19 recovery package. Furthermore, the document also describes how regional objectives are aligned with and embedded in national, European and international policy and development visions, in particular the European Green Deal and the 2030 Sustainable Development Agenda.

Source: Based on OECD (2021^[10]), *Regional Innovation in Piedmont, Italy: From Innovation Environment to Innovation Ecosystem*, <https://doi.org/10.1787/7df50d82-en>.

The strength of Piedmont's strategic frameworks and policies to support innovation and industrial transition lies in the regional government's initiatives to ensure that the various EU, national and regional strategic industrial transition initiatives are linked to one another. This is further supported by the region's proactive approach to articulating these links in an effort to identify strategic and cross-sector synergies.

Industrial transition depends on active governance arrangements

Beyond taking an integrated approach, which provides a methodological foundation from which regions can approach the industrial transition, certain specific governance arrangements need to be activated in order to ensure that such transitions are as successful as possible. These include clearly assigning responsibilities for transition processes among levels of government to avoid policy overlap and duplication, allocating sufficient financial, human and infrastructural resources to the transition to ensure that implementation can proceed smoothly and engaging external stakeholders to improve the effectiveness, impact and value-for-money of transition initiatives.

Clearly assigning roles and responsibilities can avoid policy overlap and duplication

Clearly assigned responsibilities among different levels of government and non-government stakeholders (e.g. clusters, incubators, academia, private sector, civil society organisations) helps actors in the industrial transition process understand their role, responsibilities and what is expected of them. This minimises potential confusion when implementing policies and programming and ensures that each person is accountable for their specific tasks. Such clarity can also help to prevent duplication of efforts and ensure that resources are being efficiently used.

For example, the region of East and North Finland piloted a new funding mechanism to advance its industrial transition aims. The governance structure supporting the piloted policy worked well for all seven regional councils participating in the pilot because each of them agreed early on who would carry out the different tasks involved in the pilot action. In addition, each council made sure that their staff had the right competencies to carry out assigned tasks, such as proposal evaluations, funding management and meeting co-ordination.

Financial and human resources matter when implementing transition initiatives

Ensuring that transition initiatives benefit from dedicated financial support is critical to their success. For instance, providing policy makers with adequate funding as well as sufficient flexibility to design and amend tailored grants or financial support schemes can help policy makers create a supportive environment in which innovative ideas can be brought to fruition. Flexibility in the use of financial resources is particularly important for three reasons. First, it can help to support a pipeline of innovative projects that would not have been funded through regular calls. In the case of Wallonia, Belgium, start-ups, SMEs and micro firms indicated that they would not have experimented as extensively as they did without the High Impact Action (HIA) grant they received from the European Commission to support their industrial transition process. Second, flexibility is necessary to enable initiatives to be amended where necessary, thereby ensuring that beneficiaries receive more targeted support. Third and relatedly, flexibility is necessary in order to ensure that financial support can redirect towards the upscaling of successful initiatives.

At the same time, dedicated human resources and local expertise are critical for enabling transition initiatives to gain traction. In particular, the implementation of such initiatives depends on having at least one dedicated individual with deep knowledge of the targeted industries and the region. It is preferable that this individual be well ensconced in the region, in order to be able to effectively mobilise pre-existing local networks when implementing the initiative as well as building new ones.

These elements were in place during the Grand Est (France) initiative, which allocated funds for a dedicated agency, along with a project manager, to oversee the development of its Future Activity Zones (*Zones d'activités du futur*, ZAFs) and associated assessment tool. The policy action required staff with specialised expertise and knowledge, high levels of professional commitment, willing to take a risk in applying a new idea and also able to engage relevant local actors, bringing them on board with the ZAF concept. It also required staff with strong project management skills, given their responsibility for co-ordinating the action and ensuring effective consultations and exchanges with stakeholders. The pilot

project faced difficulties getting off the ground until a dedicated project manager arrived, who had the time, personal dedication and responsibility to implement the action. The pivotal role of a dedicated project manager in the success of an initiative was also experienced in Cantabria, Spain.

Stakeholder engagement can help to build social capital, which can advance industrial transition

Social capital can foster good public and corporate governance in regions in industrial transition (McCann, 2023^[8]). The concept posits that residents use public and private networks and mechanisms to invest in and maintain a local sense of place. For example, the work of local business mentoring organisations can help to improve company practices, providing them with tools that can help them reinvest more effectively in local communities while also helping to improve their profitability.

Social capital, however, relies on effective engagement with others – be they individuals, firms or other organisations – that can improve and energise possible collaborative links among the public, private and civil society spheres in a locality, thereby generating a virtuous circle of social capital development (McCann, 2023^[8]). Effective stakeholder engagement can help to build social capital by generating a strong and shared sense of ownership for community development. This can support more proactive engagement by key stakeholders and also help community initiatives (such as industrial transition initiatives) to gain critical mass.

In the Greater Manchester region for example, the Good Employment Charter's extensive co-design process, with stakeholders from the public, private and third sectors, was a cornerstone of its success in building social capital. Refining charter principles and criteria in close collaboration with business organisations helped to develop a document that fused high employment standards and high levels of purpose with realistic and attainable goals for employers. Moreover, the charter implementation unit's proactive outreach to employers, including organising regular business-to-business mentoring events, helped demonstrate to interested employers that employment standards could be successfully improved without bankrupting their organisation. These elements were useful tools that lent legitimacy to the initiative, thereby encouraging more employers to sign up for the charter. As such, they helped create ownership among regional businesses for Greater Manchester's industrial transition goal of improving employment standards.

Yet, while governance arrangements such as stakeholder engagement practices can build social capital in a region and provide a strong foundation from which to advance industrial transformation, they must be well-planned and part of a larger process. Being more experimental with these arrangements, applying them to policy design and implementation may also be necessary and featured prominently in many of the regions and countries featured in this report.

Industrial transition depends on an effective regional innovation ecosystem

Industrial transition and innovation are closely intertwined (Box 2.3). Successful industrial shifts occur when firms and economies respond to new market demands and innovate to create opportunities for workers. They also depend on effective interaction among industry, academia, government and civil society actors (quadruple helix), which is foundational to any innovation ecosystem. These partnerships facilitate research and development (R&D) initiatives, access to funding and other resources, and a culture of innovation and collaboration that is essential to moving industrial transition forward.

Box 2.3. Categories of innovation activity

Innovation is a cornerstone of industrial transition and regions undergoing industrial shifts will need to underpin these through innovation. However, not all regions have an innovation ecosystem structured to be at the technological forefront. A more appropriate approach to regional innovation in these regions is to ensure that the innovation policy advances different types of innovation, including those that depart from current technologies and practices. The primary forms of innovation include:

- **Technological innovation:** refers to the development of technologically new or substantially changed goods or services, or the use of a technologically new or substantially changed process.
- **Social innovation:** refers to the design and implementation of new solutions that imply conceptual, process, product or organisational change and which aim to improve the welfare and well-being of individuals and communities.
- **Business model innovation:** refers to change in an organisation's value proposition and its underlying operating model, by modifying the rationale of how an organisation creates, delivers and captures value in economic, social, cultural or other contexts.
- **Policy innovation:** refers to a change in the processes, tools and practices used for policy design and implementation with the aim of better solving complex issues.
- **Public sector innovation:** refers to the design and implementation by a public sector organisation of new or significantly improved processes, methods or services – from data analytics to prototyping and design thinking – aimed at improving its operations or outcomes.

Source: Based on OECD (2021_[10]), *Regional Innovation in Piedmont, Italy: From Innovation Environment to Innovation Ecosystem*, <https://doi.org/10.1787/7df50d82-en>.

Developing an effective innovation ecosystem is important for regions in industrial transition given that they frequently face obstacles in nurturing and diffusing new ideas and technologies. In industrial transition regions, larger firms with established industrial specialisations typically drive innovation activities. Yet, the business ecosystem is often composed of many SMEs, family firms and businesses that contract with larger firms. This can limit innovation capacity for several reasons. First, small firms may have low innovation activity due to a reliance on specifications from dominant large firms that are their clients. Second, SMEs may have difficulties accessing investment capital which they need to undertake innovation-oriented projects. Third, physical, cultural or organisational barriers, such as the geographic isolation of rural businesses, an insular business culture or a traditional business structure can also hinder collaboration-driven innovation (OECD, 2021_[10]). Finally, the narrow definition of innovation, i.e. focused on R&D and technology, which is often adopted by regions and businesses alike, is also frequently reflected in the types of projects eligible for innovation funding in a region. Often, smaller firms have innovation potential or are innovative without realising it, but either are not eligible for funds or do not consider themselves eligible. Widely communicating and supporting a mix of different types of innovation can strengthen innovation ecosystems and is particularly important in a region in industrial transition populated by a large number of SMEs and micro enterprises.

A robust innovation ecosystem can improve a region's innovation culture, thereby helping companies address industrial transition challenges more effectively. For instance, regional governments should be involved in supporting fora or initiatives through which SMEs, large companies, universities and other innovation stakeholders can engage in collaborative problem solving. In addition, funding schemes and

investment opportunities need to be developed to provide entrepreneurs and start-ups with the necessary funding and other resources to conduct innovation-related initiatives.

To strengthen their regional innovation ecosystems, the industrial transition regions in OECD member countries and EU member states involved in this project implemented various policies and learned valuable lessons along the way. For example, cross-regional collaboration, involvement of regional and local authorities in innovation funding schemes (e.g. in East and North Finland) and societal innovation policy initiatives (e.g. in Cantabria, Spain) have shown positive results in enhancing innovation potential (OECD, 2023^[11]; 2023^[12]). Challenge-oriented (also referred to as “mission-oriented”) approaches to innovation have been successful in promoting collaborative problem solving and innovation at the regional level (e.g. in North Middle Sweden), particularly in environmental sustainability (OECD, 2023^[13]).

Why help regions in industrial transition succeed

Regions in industrial transition are facing increasing economic and social pressures. While the per capita income gap among OECD member countries has declined over the past 20 years, the gap in per capita income between the wealthiest and poorest regions in an OECD country (TL3 level) has generally widened. As of 2022, 70% of the OECD population live in countries that are experiencing increases in regional income inequality (OECD, forthcoming^[6]). These data are instructive, given that regions in industrial transition tend to experience low GDP growth and productivity compared to their intra-country regional peers.

There are, however, also specific economic factors that are characteristic of regions in industrial transition. Geographically concentrated declines in local industrial activity, especially when not compensated for by new job creation in local communities, risk leading to a fall in living standards, economic dislocation, dwindling access to public services and a growing geography of political discontent, borne of feeling that one is living in a region or a community that is undervalued by society (OECD, 2023^[14]; 2019^[7]). If left unattended, this geography of discontent risks leading to lower levels of trust in government, social unrest and/or political instability, which makes addressing it an urgent priority for policy makers (OECD, 2023^[14]; Rodríguez-Pose, 2018^[15]; Muro, 2021^[16]).

Industrial decline can lead to growing inequalities, with high costs

Industrial decline can be a catalyst for rising regional inequalities. For example, industrial decline often leads to job losses in the affected region. When industries close or downsize, workers are laid off, resulting in unemployment and reduced income opportunities for the local population. This can create a significant economic disparity between regions with a thriving industrial base and those experiencing a decline. A recent study from Canada examined the impact of manufacturing decline in the country from the early 2000s to the mid-2010s (Morissette, 2020^[17]). The study found that regions with higher exposure to manufacturing job losses experienced persistent declines in employment and wages relative to regions less affected by industrial decline.

Additionally, economic dependence on old industries exacerbates regional inequalities. Industries often form the backbone of local economies, contributing to employment, tax revenue and economic growth. When dominant industries decline, the local economy can become overly dependent on shrinking sectors. This can exacerbate regional inequalities, as areas heavily reliant on declining industries face greater economic challenges than regions with more diversified economies. In fact, regions experiencing industrial decline tended to have lower levels of innovation and higher levels of inequality than regions with a more diverse economic base (Lee and Rodríguez-Pose, 2013^[18]).

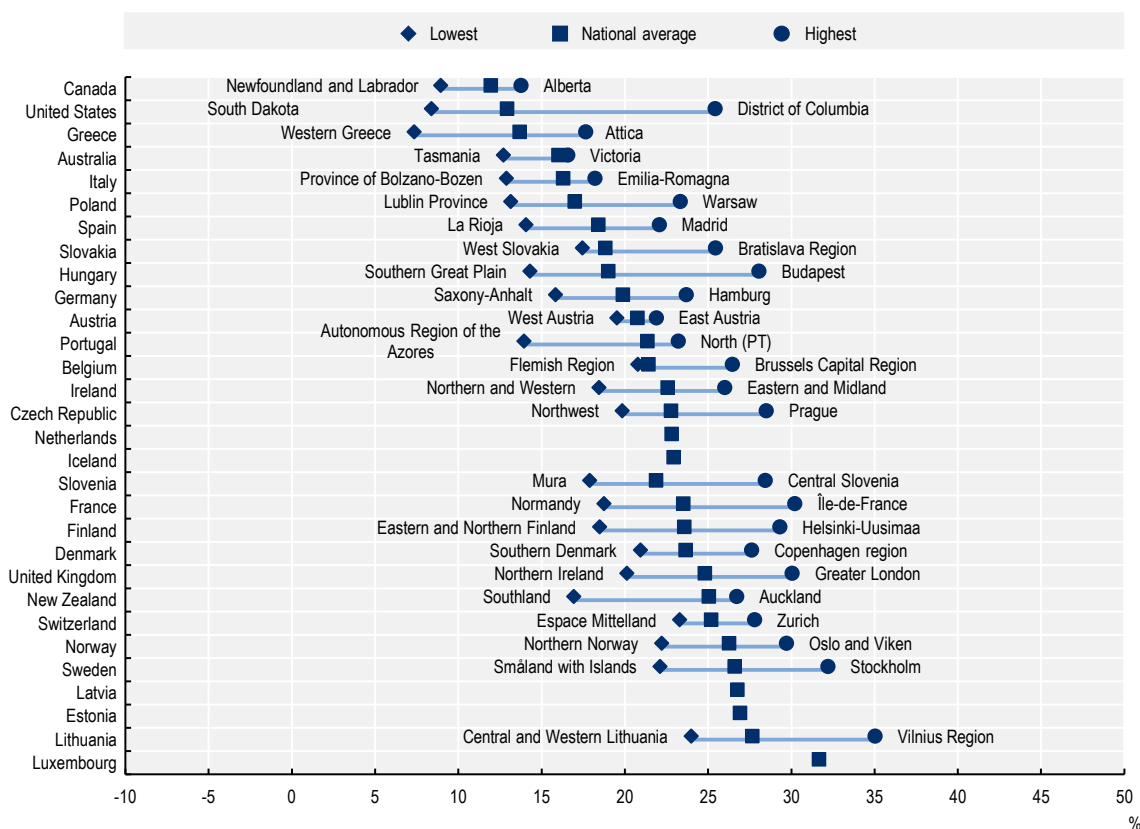
Industrial transition goes hand in hand with the green and digital transitions

Transitions towards a greener economy can affect regions in different ways and the consequences of such transitions on regions in industrial transition are not always net positive. For example, regions in industrial transition tend to have a concentration of employment and economic activity that generates high carbon emissions (OECD, 2023^[19]). Job losses in these sectors as a result of the green transition can pose risks to the economic prosperity of the regions in which they are located. Such regions often have fewer economic resources to absorb shocks and take advantage of economic opportunities. In the European Union for instance, regions that are most vulnerable to climate-related industrial transition tend to lag behind with respect to average GDP per capita and regional wages (OECD, 2023^[20]).

On the positive side of the ledger, increasing the share of green-related jobs², which carry a 20% average wage premium over non-green-related jobs, can represent an economic opportunity. However, OECD data point to a significant disparity in the employment share of green-related jobs across OECD regions (OECD, 2023^[19]). Leading regions currently have green employment shares of around 30%, while in lagging regions, green jobs account for less than 10% of employment (Figure 2.1). These differences partly reflect regional inequalities, as certain regions face other challenges such as a lack of a green skills base, which limits the ability of their labour force to participate in the green economy (OECD, 2023^[19]; forthcoming^[6]).

Figure 2.1. Regional disparities in green jobs within countries

Share of green jobs across and within countries, OECD regions, 2021 or last available year



Note: Last available year: 2019 for the UK; 2020 for Iceland; 2021 for Australia, Canada, EU countries, Norway, New Zealand, Switzerland and the United States. According to the OECD, green-task jobs are defined and analysed at the occupation level based on the greenness of their related task content.

Source: OECD (2023^[19]), *Job Creation and Local Economic Development*, <https://doi.org/10.1787/26174979>.

In order to ensure that all territories, including regions in industrial transition, can make the most of the opportunities provided by the green transition, policy makers could build education and training initiatives that will equip workers with the necessary skills for green jobs, for example in the energy efficiency, renewable energy or sustainable constructions sectors. At the same time, it is essential to ensure there are employers who are demanding these new skills. One way to do so is by raising awareness among employers of how employees with these skills can help improve business performance. In both supply and demand side instances, the initiatives can help promote more inclusive growth, while also creating broader support for green policies as the benefits of the transition are spread more evenly across the population (OECD, 2023^[19]).

As in the case of the green transition, the economic opportunities emerging from the digital transition are unevenly spread across regions, including within regions in industrial transition, and can vary according to connectivity and digital skills. Better digital connectivity, for example, allows businesses to adopt advanced technologies and reach a wider market while providing consumers with access to digital services (OECD, 2021^[21]; World Bank Group, 2019^[22]). However, sizeable connectivity differences among OECD regions (OECD, forthcoming^[6]) risks leading to significant differences in the ability of people and firms to position themselves for opportunities in the new digital environment. This, in turn, could fuel inter-regional and intra-regional inequalities.

In most of the EU regions and countries in industrial transition featured in this report, internet connectivity levels (measured as household broadband access) hovered at or somewhat below the EU's regional average (92.3%) in 2021 (Eurostat, 2021^[23]). This said, between 2015 and 2021, all of the EU regions and countries in this report saw their growth in digital connectivity³ exceed the 13.4% regional EU average (except for East and North Finland, which was consistently above the EU average) (Eurostat, 2021^[23]). The rapid increase in access to broadband Internet can help these regions as they seek to foster innovation, broaden market access and diversify their economies.

Industrial transition can address regional inequalities, helping build trust in the government

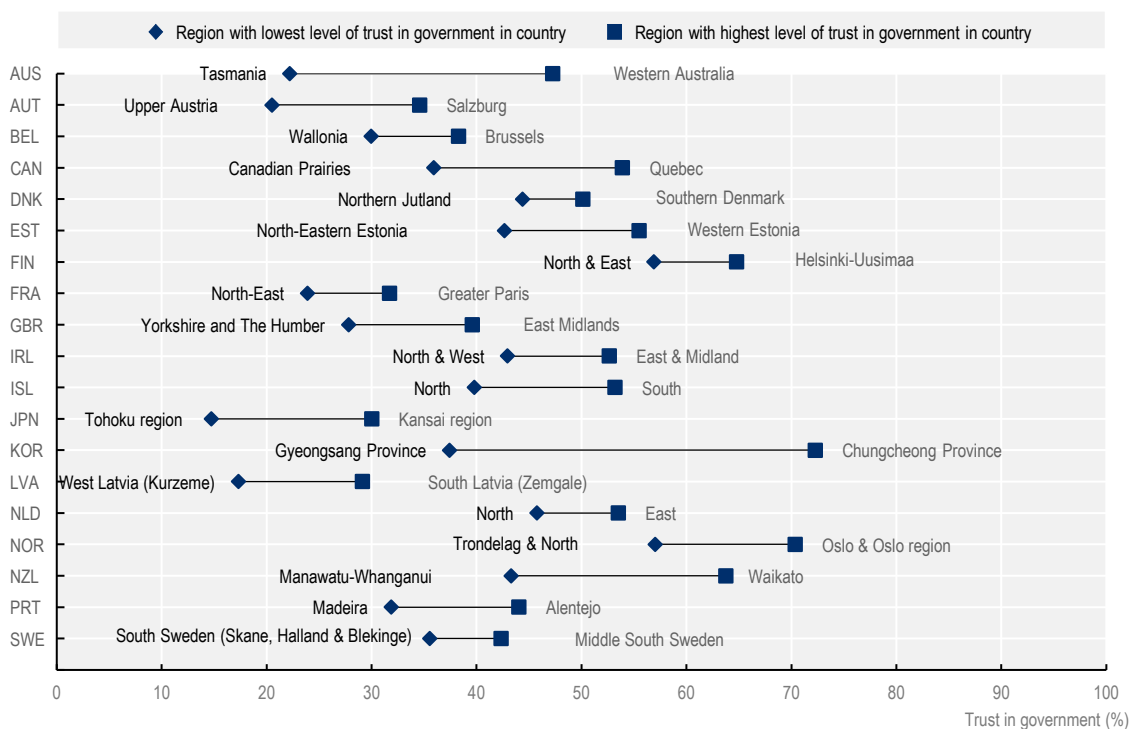
In OECD countries, regional inequalities contribute to significant variations in trust in government. The OECD Survey on Drivers of Trust in Public Institutions (also known as the OECD Trust Survey) (OECD, 2022^[24]), which covers 20 OECD member countries, reveals substantial intra-regional trust variations. These variations range from a less than 10 percentage point difference between the most and least trusting regions in Denmark and Sweden to a more than 30 percentage point difference between the most and least trusting regions in South Korea (Figure 2.2). The data suggest that trust deficits in government have a territorial cleavage in many OECD countries.

Long-term industrial decline is one factor that can contribute to regional differences in levels of trust in government. Poor short-term labour market outcomes and uneven access to quality public services, such as healthcare and education, can also contribute to territorial disparities in trust in government. Unfortunately, regions in industrial transition typically demonstrate some combination of these factors: they are experiencing long-term industrial decline, tend to have higher levels of unemployment and poorer outcomes in healthcare and education, which can be linked to service quality and/or service accessibility.

Empirical findings from OECD countries indicate that regions characterised by lower levels of trust in government can be classified into two main groups (Dijkstra, Poelman and Rodríguez-Pose, 2020^[25]): first, the comparatively wealthy areas that have experienced long-term economic decline; second, the middle-income regions that struggle to sustain economic growth due to a lack of innovation, primarily including rural areas and small or medium-sized cities. Many regions in industrial transition tend to be characterised by these structural factors. Citizens in each of these regional groups are at risk of succumbing to the geography of discontent (Box 2.4).

Figure 2.2. Regional disparities in national government trust, 2021

Share of respondents that trust the national government in OECD regions with highest and lowest level of trust by country, 2021



Source: Based on OECD (2022^[24]), *Building Trust to Reinforce Democracy: Main Findings from the 2021 OECD Survey on Drivers of Trust in Public Institutions*, <https://doi.org/10.1787/b407f99c-en>.

Box 2.4. Findings from the OECD scoping paper on “Understanding and tackling the territorial drivers of trust in government”

The OECD scoping paper “Understanding and tackling the territorial drivers of trust in government”, was completed in 2023, in support of a closed discussion among delegates of the OECD Regional Development Policy Committee (RDPC). It takes stock of the existing literature on territorial disparities in government trust. In particular, it looks at variations in trust levels among OECD countries and territories, the policy levers that may help to rebuild trust and areas for future OECD research.

The paper finds that trust deficits in government have a territorial cleavage in many OECD countries (see Figure 2.2). In part, these disparities reflect the differing levels of success that national and subnational governments have had in dealing with their citizens’ challenges and needs. Key factors that contribute to higher and lower levels of government trust in regions include a lack of economic dynamism and opportunities, poor regional labour market outcomes and disparities in access to and quality of local public services. Unless appropriate action is taken by policy makers to address regional disparities, they have the potential to contribute to a growing geography of discontent, which could fuel decreasing trust in national parliaments and increasing votes for anti-system parties.

Source: Based on OECD (2023^[14]), “Understanding and tackling the territorial drivers of trust in government”, Unpublished.

Advancing industrial transformation through experimental governance and policy making

Experimental governance involves a process of trial and error with new tools, methods and approaches when designing and implementing policy to improve development outcomes. With respect to regional development, it can be applied towards fostering innovation and economic growth in the public and private sectors, which in turn supports industrial transition (Wolfe, 2018^[26]).

Through experimental governance, regions in industrial transition can explore innovative approaches to address challenges that are specific to their context. This may involve piloting new policies, programmes or projects that encourage economic diversification, foster sustainable practices, promote entrepreneurship and innovation or support the reskilling and upskilling of the workforce.

Experimental governance offers policy makers a number of potential benefits, including the following (OECD, 2022^[27]):

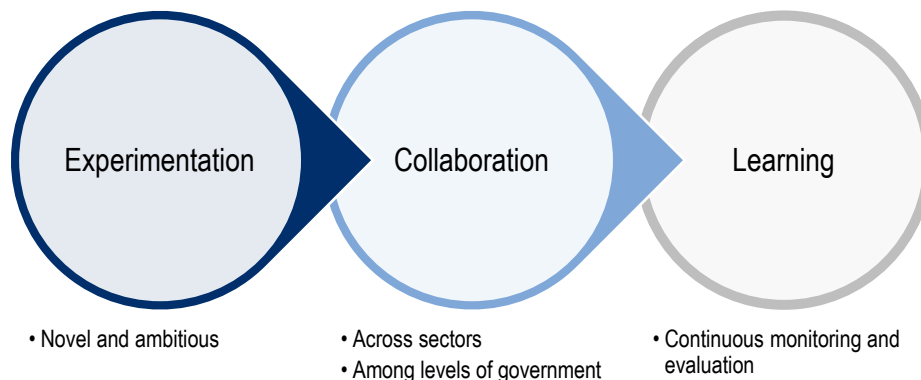
- **Evidence bases:** Evidence is gathered *ex ante*, in process and *ex post*, which can help policy makers better understand the problem at hand, design a more targeted intervention and understand what works and does not, in order to make better-informed decisions over time.
- **Innovation:** Space is created to explore innovative ideas in policy or project design and implementation.
- **Adaptability:** Initiatives are designed in an environment where adaptation or adjustment of the initial idea due to unforeseen circumstances or early signs of difficulty is possible – and encouraged in order to maximise the potential for success.
- **Risk management:** Small-scale testing of policies or initiatives allows policy makers to better identify and mitigate potential risks and unintended consequences, increasing the possibility of upscaling.
- **Cost-effectiveness:** Introducing a new concept at a smaller scale in order to better determine immediate and longer-term costs of policy options, in terms of capital (investment cost) as well as costs/benefits for firms and communities.
- **Learning and improvement:** Policy makers are given an opportunity to learn or reinforce their skills, and learn from successes and failures, promoting continuous professional development and improvement in policy design and implementation.

Experimental governance can be thought of in three related dimensions (Figure 2.3). First, experimental governance itself is a policy approach that emphasises novelty and ambition, for example by focusing on resolving large-scale societal challenges. Inherent to this dimension is an acceptance of risk by policy makers. Because experimental approaches involve testing new ideas and policies in real-world settings, there will always be some level of uncertainty and risk involved. Second, the concept of collaboration in experimental governance involves engaging a broad range of stakeholders, including citizens, businesses and government officials, in designing and implementing policies that are more responsive to local needs and conditions. Third, learning from experimental governance emphasises a continuous process of monitoring and evaluation, whereby policy makers continually evaluate the effectiveness of their policies and make adjustments based on data analysis and feedback from stakeholders. This approach can help to build trust and support among stakeholders and increase the likelihood of successful policy outcomes (Marques, n.d.^[28]).

Adopting an experimental governance approach is not without its challenges, however. Experimentation involves risk-taking and can lead to failure, both of which are unsettling concepts in a policy environment, although inherent in an entrepreneurial one (Huggins, Morgan and Williams, 2014^[29]). It also requires sufficient institutional capacity among subnational public bodies to partner with non-governmental actors (e.g. the private sector, academia, civil society and citizens) and to communicate effectively with them

regarding the rationale, risks, costs and benefits of an experimental initiative (OECD, 2020^[30]). Furthermore, it depends significantly on the political will and support given to national and subnational policy makers and civil servants to be creative and assist in scaling up their experiment if it is successful. Ultimately, experimental governance requires a shift in the public sector mindset and culture towards embracing uncertainties (Wolfe, 2018^[26]).

Figure 2.3. Three dimensions of experimental governance for regional innovation policy making



Source: Marques, P. (n.d.^[28]), “The role of experimental governance in regional innovation policymaking”, Unpublished.

How does experimental governance benefit regions in industrial transition?

When properly designed and executed, an experimental approach can enable public, private and third-sector stakeholders to work together and find joint solutions to common problems through trial and error. Notably, it can be a useful instrument for testing a new public policy, policy tool or delivery model before rolling it out more widely. Experimentation may also help test an initiative in one sector or industry before transferring it to another. Effective scaling of policy experiments can expand their reach and impact while allowing them to address industrial transition challenges on a broader scale (OECD, 2022^[31]).

An experimental approach is, however, closely intertwined with the notion of learning from policy successes and failures. To benefit industrial transition as much as possible, experimentation requires stakeholders to be flexible and all levels of government to be open to scaling up pilots if they have successfully met their objectives and are deemed appropriate elsewhere. It also requires an openness to learning from policy failures and making commensurate adjustments to implementation where they are needed to ensure greater success (OECD, 2019^[7]; Wolfe, 2018^[26]). Learning from successes and failures is best achieved when there is a system in place to monitor and evaluate the experiments through timely data collection and analysis of relevant information.

Applying experimental governance and policy arrangements to regions in industrial transition

Applying experimental governance and policy arrangements to regions in industrial transition can foster ambitious, collaborative and learning-oriented policy making and offer a valuable alternative to traditional policy models. Such an approach focuses on making the most of local knowledge to identify objectives, priorities and effective interventions and, as such, is inherently place-based. By its very nature, it can generate the space for policy makers to craft and implement new initiatives based on a local (bottom-up) concept.

At the same time, however, its success can also depend on higher levels of government establishing appropriate regulatory frameworks or guidelines, as well as on appropriate learning mechanisms. In the case of East and North Finland, for example, the European Commission grant offered the possibility of testing a new and more direct approach to funding for R&D projects, which was praised by beneficiaries, as it meant that they had to dedicate less time to administrative processes. At the same time, it was not possible to scale up the initiative due to national regulations. A re-evaluation of the regulatory framework is underway, which could lead to similar initiatives being allowed to be implemented, albeit with adjustments to the format. Thus, the pilot was successful in meeting its objectives and also provided a learning opportunity for policy makers at all levels of government.

When policy experiments meet their objectives, it is important to actively share the results with other policy makers, stakeholders and the broader public (OECD, 2022^[27]). This can be done through various means, such as case studies, reports, workshops, conferences, peer exchange opportunities or online platforms. By showcasing successful policy experiments, policy makers can inspire others to adopt similar approaches, learn from good practices and adapt them to their specific contexts. Promoting learning is particularly important among regions in industrial transition, as they may face similar challenges and can benefit from knowledge sharing on appropriate solutions and other experiences.

Experimental governance can also be promoted through investment in education and training (OECD, 2022^[27]). This means equipping policy makers with essential knowledge about policy experimentation and its usefulness, and how to apply it to policy initiatives targeting industrial transition. However, it depends on providing the necessary resources, such as funding and technical assistance, to encourage and facilitate the active participation of policy makers and enterprises.

Conclusion

Regions in industrial transition face significant challenges that can profoundly affect their labour markets, productivity and overall quality of life for residents. The decline of traditional industries and the need to adapt to new economic realities can result in job losses, lower incomes and a perceived or real lack of employment opportunities. Meanwhile, successful industrial transition depends on effective governance mechanisms, including cross-sectoral and cross-regional co-ordination, sufficient resources and engagement with external stakeholders. These elements can help to build social capital, by spurring reinvestment in local communities and helping to improve the quality of public and private governance (McCann, 2023^[8]).

Experimental governance – e.g. innovative approaches to governance arrangements and policies – is characterised by novelty, ambition, collaboration and learning. It can play a crucial role in advancing transformation and fostering innovation in industrial transition regions. However, implementing experimental governance requires overcoming or managing risk aversion, building institutional capacity and shifting the public sector mindset. Despite these challenges, applying experimental governance to policy initiatives for industrial transition can lead to more effective and place-based policy outcomes. The added value to such an approach is it permits testing, learning and adaptation before scaling up or transferring to other sectors. Overall, embracing experimental governance offers a promising pathway for regions seeking to navigate industrial transition and promote innovation-driven development.

Annex 2.A. The EC-OECD Pilot Action on Regions in Industrial Transition

In 2018, the European Commission Directorate-General for Regional and Urban Policy (DG REGIO) with support from the OECD launched the Pilot Action on Regions in Industrial Transition to support ten regions and two countries⁴ in industrial transition to prepare their S3s and innovation policies for the 2021-27 period. The action was designed in two phases. The OECD supported the first phase with a series of five thematic workshops held with two cohorts of participants, each including five regions and one country. The findings from these workshops were collated into the synthesis report [*Regions in Industrial Transition: Policies for People and Places*](#) (OECD, 2019^[7]).

As part of the project, 8 of the original regions and the 2 countries received a EUR 300 000 grant from DG REGIO as well as tailored advisory services to design an HIA that could support their industrial transition strategies.

The OECD is supporting the European Commission with an assessment of each HIA. The aim is to take stock of the potential benefits of different types of HIAs on industrial transition and of the policies that support them. Each assessment considers the actual or expected results of individual HIAs through an understanding of their objectives, activities, governance mechanisms and experimental nature. The in-depth analysis also explores how each pilot region/country expects that their individual HIA will contribute to their industrial transition and advance their S3s and governance.

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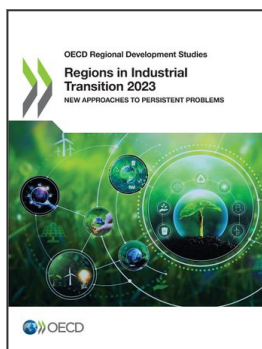
Notes

¹ The Rust Belt is a US industrial region traditionally encompassing the states of Illinois, Indiana, Michigan, Missouri, New York, Ohio, Pennsylvania, West Virginia and Wisconsin.

² The technical definition of green-related jobs could be found in OECD (2023_[19]), *Job Creation and Local Economic Development*, <https://doi.org/10.1787/26174979>.

³ 2015-21 percentage variations are as follows: Cantabria (20.6%); Centre-Val de Loire (15.4%); East North Finland (5.9%); Grand Est (14.2%); Hauts-de-France (20.9%); North Middle Sweden (15.1%); Wallonia (16.8%); Lithuania (27.7%); Slovenia (19.9%); European Union (13.4%). 2021 figures not available for Greater Manchester.

⁴ The regions are Cantabria (Spain), Centre-Val de Loire (France), East and North Finland (Finland), Grand Est (France), Greater Manchester (United Kingdom), Hauts-de-France (France), North Middle Sweden (Sweden), Piedmont (Italy), Saxony (Germany) and Wallonia (Belgium). The countries are Lithuania and Slovenia.



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