

Regions have a key role in the development of surrounding areas

Policy Brief on Impact of technological transformation on regional development



Regions are impacted by technological transformation to a different extent depending on their economic structure, level of education of their workforce and their capabilities to adjust and foster the emergence of new industries and new business models.

Regional differences imply the need for differentiated regional innovation policy responses.



Regions with a higher share of manufacturing jobs have ...



... a higher chance to adopt advanced technologies.



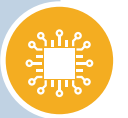
Different specialisation profiles and positions in the industrial value chain lead to distinct level of technological advancements across regions.



GDP per capita growth is the highest when adoption refers to the technology that characterises a region.



Spatial diffusion of technologies occurs across regions contiguous to each other



Smart specialisation strategies are key to optimise the potential of technology diffusion

The impact of technological transformation on regional development and cohesion can be mitigated by various types of policy measures at the level of the EU, countries and regions.

National research and innovation programmes often include an important regional dimension accounting for the objective to address regional disparities. Types of national policy measures addressing the regional challenge of technological development are for example:



Competence centres



Skills and education



Cluster initiatives



Industrial parks



Economic zones



At regional level, smart specialisation strategies are key to ensure that the potential of technology diffusion is optimised. With the help of the smart specialisation process, regions, countries and the EU can combine a joint concentration on common goals such as the green and digital transition with the competitive capacities of each region.

In the current economic context, policies will play a key role in facilitating the adaptation process of regions to the fast-paced technological change

The following observations can be made to inspire further policymaking:



At regional level, adopting new technologies will require awareness, ability and willingness.

Regional policy initiatives may be used to influence local demand.



Policy initiatives that foster technological awareness in companies are often more effective when combined with peer support and peer learning at local level, and when they extend over longer time periods.

Technological transformation will need to be seen as a solution to societal challenges at the regional and local level with more concrete measures addressing the current challenges.



Regional policy actions play a key role in organising various types of training initiatives.

About the Advanced Technologies for Industry (ATI) project

The ATI project – funded by the European Commission – supports the **implementation** of Europe's new growth strategy with a systematic monitoring of **technological trends** and reliable, **up-to-date data** on advanced technologies.



The **Policy Briefs** analyse national and regional policy measures focused on a specific policy challenge, technological area or mode of implementation and explore policy tools that have been designed and implemented with the aim of fostering the generation and uptake of advanced technologies. The reports provide a comparative analysis of some of the most relevant national and regional examples on the policy landscape in the EU. They highlight the lessons learnt based on existing policy evaluations, monitoring or any other learning process and will present both good practices and potentially the bad ones. In the case of novel policy initiatives, they focus on the key challenges in the design process.

For more information, read the full Policy Brief on the Impact of technological transformation on regional development here: <https://ati.ec.europa.eu/reports/policy-briefs/impact-technological-transformation-regional-development>

