

Country factsheet

Mexico





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Introduction





This document presents an overview of the cluster policy in Mexico. Given its importance to contextualise the cluster policies (and related) analysed in the factsheets, a comprehensive outlook of the country in socioeconomic terms can be consulted in the <u>OECD Economic Survey: Mexico 2019</u>.

The "Economic Surveys" present the major challenges faced by the country, evaluates the short-term outlook, and makes specific policy recommendations



01

National cluster policy, programmes and initiatives





1. National cluster policy, programmes and initiatives

Policy type:	Regional cluster policy (Example of Nuevo León1)
Policy name:	Business and Investment Development Strategy 2014-2020 Industrial policy
POLICY OBJECTIVES	Strengthening cooperation between companies or industry and RTDI actors Increasing competitiveness and boosting scale up of SMEs Supporting internationalisation activities Fostering R&D activities, technology development and implementation Fostering innovation and strengthening innovation ecosystems Supporting the consolidation of existing cluster organisations Promoting entrepreneurship, start-ups and spin-offs Promoting employment and upgrading skills and competences Strengthening the network of cluster organisations/cross-clustering The Strategic Plan outlines the importance of clusters in the achievement of the vision for Nuevo León 2030. Clusters are understood as central instruments for economic development, particularly in terms of innovation and entrepreneurship, driving value chains integration and improving competitiveness. These goals are embedded in Nuevo León's Special Programme for Science, Technology and Innovation (Programa Especial Ciencia, Tecnología e Innovación) and the Sectoral Programme for Economy and Competitiveness (Programa Sectorial de Economía y Competitividad), which operationalise the overarching guidelines established in the Plan for Development 2016-2021 (Plan Estatal de Desarrollo 2016-2021).
POLICY FOCUS	No specific focus The policy does no target any specific industry, but it mentions Nuevo Leon's strategic sectors where there are clusters: automobile, aerospace, agri-food, electronic appliances, software, health, biotechnology, nanotechnology, interactive media and entertainment, house and urban sustainable development, transport and logistics, tourism, as well as the need to strengthen and consolidate clusters in emerging industries such as renewable energies.

¹ Nuevo León is one of the most prosperous States in Mexico, accounting for the 23.4% of the total GDP in 2019, tops the attraction of FDI and has a strong tradition of clusters in various strategic sectors for Mexico (automotive, aerospace, medical devices, etc.) with dedicated organisations for their promotion. In fact, the National Council of Science and Technology (Consejo Nacional de Ciencia y Tecnología, Conacyt) has recognised it as the national leader in the industrial strategy based on clusters.

	The Programme for Economy and Competitiveness divides clusters in three main groups: industrial sector, which represents the core of the State industry and includes consolidated clusters such as automobile; potential sectors, which represent growing industries with many opportunities for development such as aerospace; and, transversal sector, which comprises clusters that provide support to the others, such as nanotechnology.
RESPONSIBLE AUTHORITIES	Both drafting and implementation Provides funding Oversees the implementation
	The State Government of Nuevo León is the main authority steering the development of the Strategic and Development Plans, as well as the specific sectoral Programmes. It is also the main authority responsible for overseeing their implementation. However, other relevant institutions in the State are involved in the elaboration of such policies and programmes.
BENEFICIARIES	SMEs Cluster organisations Research organisations
8	Academic institutions Start-ups
	Business associations Large firms
	NGOs Technology centres General population
	The Strategic and Development Plans set the tone for the more operational programmes. Consequently, the action lines suggested for cluster policy include a comprehensive list of beneficiaries and the expected impacts in each of them.
INSTRUMENTS Financial	Funding collaboration initiatives Support to R&D projects, SMEs becoming cluster members, etc. Innovation: voucher, support to hire PhDs, cooperation with R&I actors

	Technical assistance Explanation	Infrastructure: coworking spaces, offices, incubation and accelerator spaces, research centres, technology parks etc. Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence Support for soft skills development: coaching, management training, upskilling/reskilling Support for networking and partnership building (at national and/or international level) Marketing activities: advertising, communication, events, fairs, and so on As regards clusters, the aim of the policies is to promote the link between micro enterprises, SMEs and strategic clusters; transfer good practices to emerging
		clusters; strengthen the alliance between industry, academia and government (triple helix model), better link the human resources offer and demand; promote talent by developing the technical, scientific and professional capacities in the State in coordination with the key clusters; and, promote cluster's sustainability. The instruments listed are comprised in the Programmes as the means to achieve such objectives.
HISTORY	Period	Limited period
	Ending year (for policies with limited period)	2030
	Starting year	2015
	Explanation	The Strategic Plan intends to provide a long-term, stable framework that allows continuity in the public policies. The Development Plan and the resulting Programmes are renewed every six years.
BUDGET	Overall	EUR 1.42 million (MXN 30 m)2
	Annual	In EUR (conversion to be made where budgets are not available in EUR at EBC rate3 for that year)
	Source of funding	Secretaría de Economía y Trabajo (Dirección de Clústeres) through the initiative "Clusteres Nuevo Leon", included in the Programme for Economy and Competitiveness. The initiative intends to better integrate academia, industry and government consolidating the Triple Helix model and thus, increasing the competitiveness of the strategic sectors of the State.

² MXN 1 – EUR 0.05 in June, 2016, https://sdw.ecb.europa.eu/curConverter.do
³ https://sdw.ecb.europa.eu/curConverter.do



POLICY	Availability	No policy evaluation
EVALUATION	Results	The Secretary for Economy and Competitiveness outlines the absence of clear performance indicators to measure the impact of the clusters. Thus far, cluster activity has been monitored in accordance with the targets set by the Law for Promoting Investment and Employment in Nuevo León. However, the Secretary points that this is insufficient to measure hard data, making necessary to implement a solid methodology and to define the measurement instruments to assess the clusters' value and areas of improvement. Overall, the uneven growth of clusters and the lack of dissemination and visibility of their results are perceived as some of the main challenges.
		Although there is no full-fledged evaluation, the Government reports refer to several cluster activities. In the latest report 2018/2019 the following are mentioned (non-exhaustive):
		 Creation of the first Centres of Industrial Innovation in AI and Cybersecurity with the support of the Monterrey IT Cluster and Software Cluster, respectively. Aerospace Fair in cooperation with the Aerospace Cluster The Cluster Ecosystem of Nuevo Leon participated in various scientific-technological events 10 clusters have been certified by ESCA MoU with the Government of Alberta leading to the creation of the Fund Alberta Nuevo Leon Innovation and Commercialisation Programme, endowed with \$2 m to support advance technologies. Passport Nuevo Leon Extraordinario – tourism app developed in collaboration with the Tourism Cluster. Location of providers in coordination with clusters in strategic sectors for a further integration in value chains Traineeship for some 1,231 students (enterprises member of three clusters), of which 90% were employed after graduating.
POLICY ALIGNMENT WITH THE EU		Green economy
PRIORITIES	****	

02

State of play of cluster policy



2. State of play of cluster policy

The data below illustrates how the country ranks in terms of maturity of cluster policy. The maturity index is based on a combination of factors presented in Chapter 1 and which are scored based on their existence:

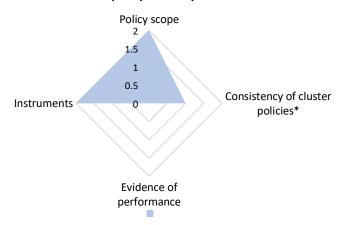
- **Policy scope:** whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies (existence of broader policies = 1 point; existence of targeted cluster policies = 2 points)
- Consistency of cluster policies: assessment of the duration and experience of the country in doing cluster policies. This dimension assesses only existing cluster policies and not broader policies (no cluster policies available = 0 points; < 10 years of experience or > 10 years (but interrupted) = 1 point; > 10 years (but with clear continuity = 2 points)
- Evidence of performance: the existence of monitoring and evaluation mechanisms determines the degree of policy development in the country (no evaluations = 0 points; existence of evaluations of past policies or in-itinere = 0.5 points; existence of ex-ante and/or ex-post evaluations = 0.5 points)
- **Instruments:** whether the policies provide any instruments to support the policy implementation, being these financial and/or technical assistance (1 point for each type of instrument available)

It is important to note that the maturity does not reflect the performance of a country, but only the degree of development of their cluster policy at the moment when the data was collected (2020). The maturity index illustrates how the country scores for each of these four dimensions (policy scope, consistency of cluster policies, evidence of performance and instruments) compared to the maximum score that they can reach.

	Mexico	Maximum
	Mexico	score
Policy scope	2	2
Consistency of cluster policies*	1	2
Evidence of performance	0	1
Instruments	2	2

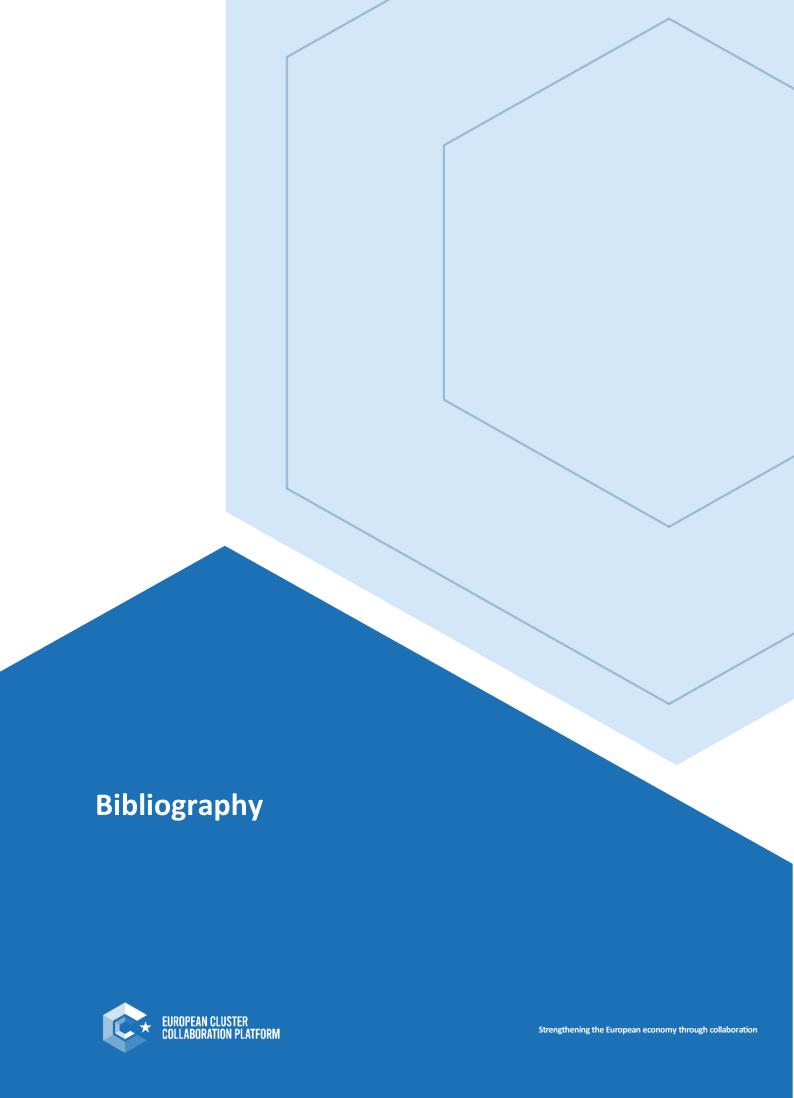
^{*} This dimension is scored solely if the country has a dedicated cluster policy and it assesses only cluster policies

Cluster policy maturity level



State of play of cluster policy in the country	
Policy evaluation (for terminated	No policy evaluation
policies)	No policy evaluations have been found for previous policies.

Policy approach in the country	Policy support for the activities of cluster organisations Cluster approach used directly by national/regional development agencies Specific policies to support cooperation projects Broad-based framework policies to support cooperation effectiveness
Continuity	The National Development Plan defines the national objectives, strategies and priorities for the integral development of the nation, structuring Mexico's policy and guiding the elaboration of specific sectoral programmes (industry, innovation, regional development, etc.), as well as the State Development Plans and their corresponding programmes.
	Even though Mexico does not have a specific policy, clusters were often mentioned in relation to the broader industrial, competitiveness and STI policies. Some initiatives such as the mapping of the Mexican clusters in 2016 or the creation of funding programmes directed towards clusters were launched by the federal government. However, the latest National Development Plan 2019-2024 does not include any reference to clusters. This absence could signal a political shift, but the sectoral programmes are yet to be elaborated, i.e. the CONACYT was assigned the responsibility to draft and coordinate the STI programme and the new decalogue for the industrial policy has been published, but no official documents support the announcement (whereas there is a strong emphasis in the proposal made by various organisations on the role of clusters, the decalogue does not include any reference).
	In Nuevo León, the cluster policy dates back to 2004 and it has continued uninterrupted since then. Clusters are still central in the economic and innovation plans of the State. Mexican States are expected to produce a new State Development Plan by 2021.
	It will be necessary to follow up the publication of the sectoral programmes at national level to determine if the absence of references to clusters in the National Development Plan affects these and in turn, the policies at state level.
Consistency	< 10 years
	Mexico does not have a national cluster policy. Clusters are mainly included within the industrial, competitiveness and STI policies. Likewise, the Mexican States do not have a specific cluster policy but in the case of Nuevo León, clusters are embedded in various programmes and plans, where their role and objectives are very well defined, following a consistent approach. Moreover, there are many initiatives in support of the State clusters, including those launched by the Red de Vinculación de Clústeres de Nuevo León (Cluster Network of Nuevo Leon), which encompasses through the Consejo de Clústeres del Estado (CECNL) (Council of State Clusters), all the strategic sectors (clusters) in Nuevo Leon operating under the Triple Helix Model. These clusters were established to boost synergies among the State Government, academia and private sector. The Council is based on the Law for Promoting Investment and Employment in the State of Nuevo Leon.



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