EUROPEAN CLUSTER COLLABORATION PLATFORM

Country factsheet

Netherlands

An initiative of the European Union

Content

Introduction

This document presents an overview of the cluster policy in The Netherlands. 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 European Semester Country Report for the Netherlands.]

The European Semester was an instrument introduced to coordinate the EU Member States economic policies and address the economic challenges faced by the EU. Its goals are "to ensure sound public finances, to prevent excessive macroeconomic imbalances in the EU, to support structural reforms to create more jobs and growth, and to boost investment". Thus, it focuses on the following areas: business environment; financial and fiscal stability; green economy; public administration; labour market and skills; and social protection and cohesion.

The COVID-19 pandemic has caused an unprecedented economic shock to the European and global economy. In response, policymakers at EU and national level have acted decisively and at short notice to make available very significant financial resources, notably through the Recovery and Resilience Facility, to tackle the threat of a prolonged downturn. National recovery and resilience plans have been drafted in each Member State to ensure a recovery that addresses the challenges identified in the European Semester. In the Netherlands, the national plan has not yet been drafted as the current caretaker government has left this task for the next Government which is still in the process of being formed since the elections of March 17th 2021.[1] In addition to the COVID-19 pandemic, the ongoing Russian military aggression against Ukraine has also taken its toll on the Dutch economy, driving prices for energy and other traded goods & commodities higher. This can be seen in the post-pandemic economy rebound of 5.0% in 2021 slowing down to 2.8%, 1.5% and 1.7% in 2022, 2023 and 2024, respectively. This domino effect has impacted other EU companies and industrial ecosystems alike, highlighting the significance of policy efforts in supporting SMEs and clusters.

In the following, a succinct overview of the cluster policy in the Netherlands will be provided. The structure of this factsheet generally encompasses:

1) an overview of the industrial ecosystems and cluster landscape in the Netherlands
2) an overview of the national cluster policy,
3) an assessment of the state of play of the national cluster policy.

[1] https://www.tweedekamer.nl/kamerstukken/detail?id=2021D16246&did=2021D16246 (last access 31.03.2023).

01

Industrial ecosystems and cluster landscape

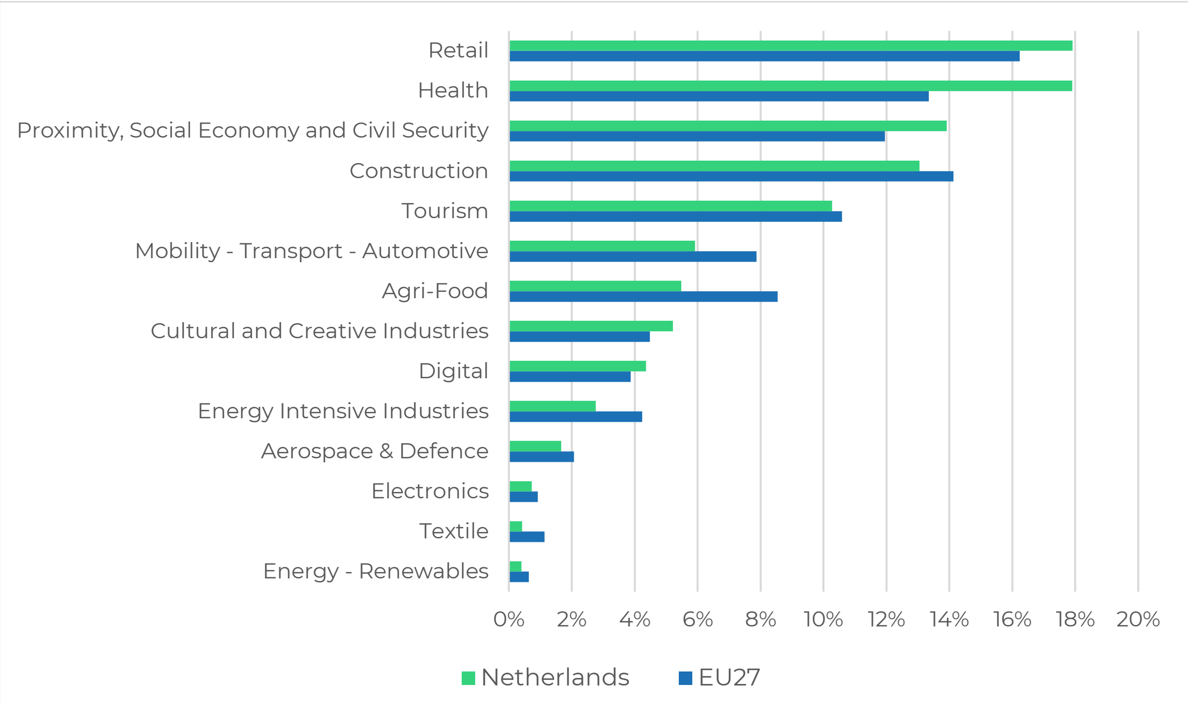
1. Industrial ecosystems and cluster landscape

Employment in the ecosystems in the country

As part of its Industrial Strategy (March 2020), the European Commission has selected 14 industrial ecosystems that are particularly relevant in Europe and encompass all players operating in a value chain.[2] The classification of the 14 industrial ecosystems have been calculated by aggregating NACE 2 -digit activities, following the methodology established in the European Commission.[3]

In Figure 1, the employment share of the Netherlands and the EU27 in each industrial ecosystem is shown relative to the number of employed persons in the 14 industrial ecosystems. The ecosystems are ordered, from top to bottom, according to the amount of employment in the country. When the bar for the country is higher than that of the EU27, it indicates that the country is more specialised in that ecosystem. This figure underlines the Dutch employment strength in several industry ecosystems. The highest employment shares in the industrial ecosystems in the Netherlands are found in the ecosystems "Retail", "Health" and "Proximity, Social Economy and Civil Security". In these industrial ecosystems, the Dutch employment share is also above the average of the EU27 Member States. Other industrial ecosystems where the Dutch employment share is above the EU27 average are "Cultural and Creative Industries" an "Digital".

Figure 1: Employment in the ecosystems



Source: ECCP (2022), own elaboration based on data from Eurostat.

[2] see here for more information https://clustercollaboration.eu/in-focus/industrial-ecosystems (last access 09.01.2023).

[3] see European Commission (2021): Annual Single Market Report, SWD(2021)351.

Regionally relevant nodes (agglomerations)

Economic activity, and therefore employment, is not equally distributed in all regions. Specialisation can be measured through Location Quotients (LQ) that reflect the relative specialisation of an activity in a region compared to the EU average. If the LQ for a given activity-region combination is above 1.5, it is considered a specialisation node, and if the activity accounts for at least 1 % of total employment in the region, it is considered regionally relevant.[4] The following tables shows the total number of regionally relevant specialisation nodes (agglomerations) in each region in the country and identifies the top five most specialised of these nodes. The first table focuses on the 88 NACE 2-digit activities or sectors, totalling 56 in the country, while the second table is based on the 14 ecosystems, which total 5 in the country.

Table 1: Number of regionally relevant sectoral nodes and Top 5 nodes by region (NACE)

Region	# of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
NL11: Groningen	4	N78 - Employment activities	Q87 - Residential care	Q88 - Social work without accommodation	Q86 - Human health activities	
NL12: Friesland	3	N78 - Employment activities	Q87 - Residential care	Q88 - Social work without accommodation		
NL13: Drenthe	4	N78 - Employment activities	Q87 - Residential care	Q88 - Social work without accommodation	I55 - Accommodation	
NL21: Overijssel	3	N78 - Employment activities	Q87 - Residential care	Q88 - Social work without accommodation		
NL22: Gelderland	4	N78 - Employment activities	Q87 - Residential care	M70 - Activities of head offices	Q88 - Social work without accommodation	
NL23: Flevoland	4	N78 - Employment activities	N77 - Rental and leasing activities	G46-Wholesale trade except motor vehicles	Q87 - Residential care.	
NL31: Utrecht	7	N78 - Employment activities	M70 - Activities of head offices	J62 - Computer programming, consultancy	Q87 - Residential care activities	R90 - Creative, arts and entertainment activities
NL32: North Holland	9	H51 - Air transport	N78 - Employment activities	M73 - Advertising & market research	M74 - Other prof., scientific, techn. act.	M70 - Activities of head offices
NL33: South Holland	5	N78 - Employment activities	Q87 - Residential care	M70 - Activities of head offices	M71 - Architectural and engineering activities	Q88 - Social work without accommodation
NL34: Zeeland	6	C20 - Manuf. of chemical products	N78 - Employment activities	I55 - Accommodation	Q87 - Residential care	C33 - Repair and installation of machinery and equipment
NL41: North Brabant	4	N78 - Employment activities	Q87 - Residential care	M70 - Activities of head offices	C28 - Manufacture of machinery and equipment n.e.c.	
NL42: Limburg	3	N78 - Employment activities	C20 - Manuf. of chemical products	Q87 - Residential care		

Source: ECCP (2022), own elaboration based on data from Eurostat.

Overall, there are fewer numbers of ecosystem nodes compared to the regionally relevant sectoral nodes by NACE sectors. This more concentrated agglomeration can at least partially be linked to the methodology of measurement of the 14 industrial ecosystems. Furthermore, the strong appearance

[4] for more information on the methodology please see the methodology note: https://clustercollaboration.eu/in-focus/policy-acceleration/country-factsheets-on-cluster-policies-and-programmes (last access 09.01.2023).

of employment activities (N78), residential care (Q87) and social work (Q88) should be seen in the context of the Pandemic situation at the time of the data collection in 2020.

The ecosystem nodes are concentrated in two groups. The first is located in the Northern Netherlands, namely in the regions of Groningen (NL11) and Drenthe (NL13) and centred on health ecosystem nodes. In Groningen, the ecosystem is specifically linked to a sectoral NACE node in human health activities (Q86). In Drenthe, the health ecosystem is based on the NACE nodes in residential care and social work (Q87-88), which it shares with Groningen.

The second group of ecosystem nodes is found in the Randstad metropolitan agglomeration area in the regions of Utrecht (NL31), North Holland (NL32), and South Holland (NL33). The digital ecosystem node in Utrecht is related to the NACE node in computer programming and consultancy (J62) there. South Holland, the province centred on Rotterdam, also hosts a digital ecosystem node which does not relate to any specific sectoral node. By contrast, the North Holland region around Amsterdam is home to an ecosystem node in cultural and creative industries, which shows up among its numerous NACE sectoral nodes in advertising and market research (M73) as well as other professional, scientific and technical activities (M74) in its top 5 nodes, but also in its sectoral node in creative, arts and entertainment activities ranking sixth.

Table 2: Regionally relevant ecosystem nodes

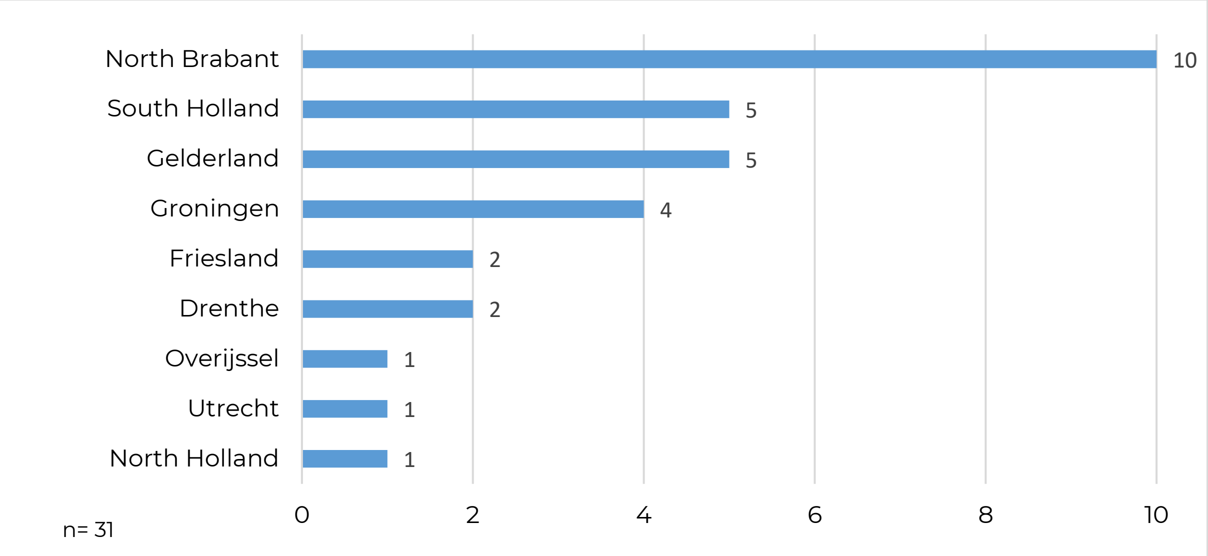
Region	# of ecosystem nodes	Node 1
NL11: Groningen	1	Health
NL12: Friesland	0	-
NL13: Drenthe	1	Health
NL21: Overijssel	0	-
NL22: Gelderland	0	-
NL23: Flevoland	0	-
NL31: Utrecht	1	Digital
NL32: North Holland	1	Cultural and creative industries
NL33: South Holland	1	Digital
NL34: Zeeland	0	-
NL41: North Brabant	0	-
NL42: Limburg	0	-

Source: ECCP (2022), own elaboration based on data from Eurostat.

Cluster organisations in the regions

There are 31 cluster organisations registered on the ECCP in the country. The majority of these cluster organisations is located in North Brabant (10 cluster organisations) followed by South Holland and Gelderland with both 5 registered cluster organisations. The following figure shows the presence of cluster organisations in the different regions.

Figure 2: Cluster organisations profiled on the ECCP



Source: ECCP (2022). Note: the data for the analysis was extracted on 14/10/2022

SMEs (83%, EU: 84%) followed by large enterprises (11%, EU: 9%) and research organisations (6%, EU:7%) constitute the majority of member organisations of Dutch cluster organisations with profiles on the ECCP. From a thematic perspective, these Dutch cluster organisations are operating in the following industrial ecosystems. Since not all cluster organisations on the ECCP provided this information, the number of cluster organisations with an allocated industrial ecosystem is lower than the overall number of cluster organisations in the country.

- Health (3 cluster organisations)
- Agri-food (3 cluster organisations)
- Mobility-Transport-Automotive (1 cluster organisation)

02

National cluster policy, programmes and initiatives

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2. National cluster policy, programmes and initiatives

In this section we provide an overview of the existing Dutch cluster policies on a national level cluster policy.

The breakdown is presented in the form of a table, with the first column showcasing information on the aspects which constitute the policy (beginning with 'Policy Objectives', following with 'Policy Focus', etc.). The second column represents the case of "Topsectorenbeleid", a Dutch national cluster policy. This factsheet showcases an example of a broad cluster policy in the Netherlands that is carried out on at a regional level across the whole country.

Within the table the text presented in bold (black) depicts standardised categories across country factsheets (56 in total for 2022), which is applied for the comparative purposes. This is followed by a complementary descriptive text to provide more insights about the cluster policy in the Netherlands.

Policy type:	National cluster policy
Policy name:	**Topsectorenbeleid**
POLICY OBJECTIVES	**Strengthening cooperation between companies or industry and RTDI actors** **Increasing competitiveness and boosting scale up of SMEs** **Fostering R&D activities, technology development and implementation** **Fostering innovation and strengthening innovation ecosystems** **Supporting the consolidation of existing cluster organisations** **Promoting social and sustainable economy and other solidarity-based initiatives**
	Since 2010, there is a cluster policy in the Netherlands focusing on 9 top sectors where the Netherlands excels in (agro-food, high tech, water, creative industries, chemicals, life sciences, energy, logistic, horticulture). The approach can be characterised as sectoral networking programmes as it focuses on networking among specific groups of companies and other actors and develops action agendas for specific sectors or technology domains. The clusters are in principle national in orientation, but some have a very strong regional concentration.
POLICY FOCUS	**Sectoral**
	The focus of the policy lies on the 9 top sectors individually. However, on top of this, there are two transversal focuses: "Headquarters", which refers to ensuring the Netherlands as an attractive headquarters of internationally operating companies and transversal themes that correspond to the so-called "Grand Challenges" of the seventh framework program and Horizon 2020
RESPONSIBLE AUTHORITIES	**In charge of drafting** **Provides funding** **Oversees the implementation**
	The policy is initiated by the national Ministry of Economic Affairs and Climate, which also provides some forms of funding and monitors the implementation. However, business has been heavily consulted in the design of the policy and much of the actual implementation of the policy is left to them as well.

Policy type:		National cluster policy
Policy name:		**Topsectorenbeleid**
BENEFICIARIES		**SMEs** **Research organisations** **Academic institutions** **Start-ups** **Business associations** **Technology centres** **Cluster organisations** **NGOs**
		The principle of the policy is that a triple helix (or golden triangle) of partners coming from government, business and knowledge institutions is forming the core of the stakeholders involved, while several other actors benefit from the policy as well.
INSTRUMENTS	Financial	**Support to R&D projects, SMEs becoming cluster members, etc.** **Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)** **Financing networking events**
	Technical assistance	**Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence** **Support for soft skills development: coaching, management training, upskilling/reskilling** **Marketing activities: advertising, communication, events, fairs, and so on**
	Explanation	The policy only includes financial instruments, mostly related to taxation and subsidising initiatives designed by the businesses themselves. There is no non-financial/technical support available.

Policy type:		**National cluster policy**
Policy name:		**Topsectorenbeleid**
HISTORY	**Period**	**Unlimited period**
	Ending year *(for policies with limited period)*	
	Starting year	2010
	Explanation	
BUDGET	**Overall**	Data Unavailable
	Annual	Data Unavailable
	Source of funding	National budget
POLICY EVALUATION	**Availability**	**Existence of monitoring and ex-ante or ongoing / interim evaluation**
	Results	Every year, in September, a progress report on the Top Sectors policy is presented to Parliament. This consists of a letter to the House of Representatives on the progress of the business policy including the top sectors and a Business Policy Monitor of the Central Bureau for the Statistics (CBS), which outlines the most important facts and figures and an (economic) interpretation where possible.
POLICY ALIGNMENT WITH THE EU PRIORITIES		**Green economy** **Digitalisation** **Resilience**

03

State of play of cluster policy

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3. State of play of cluster policy

This section presents an overview of the state of play of Dutch cluster policy in the form of a quantitative and qualitative assessment. The data below illustrates how the country ranks in terms of **maturity of cluster policy at the national level.** The maturity assessment is based on a combination of factors presented in Chapter 2, which receive a score based on the existence or absence of a given element in the cluster policy. The regional cluster policy example is not included in this assessment.

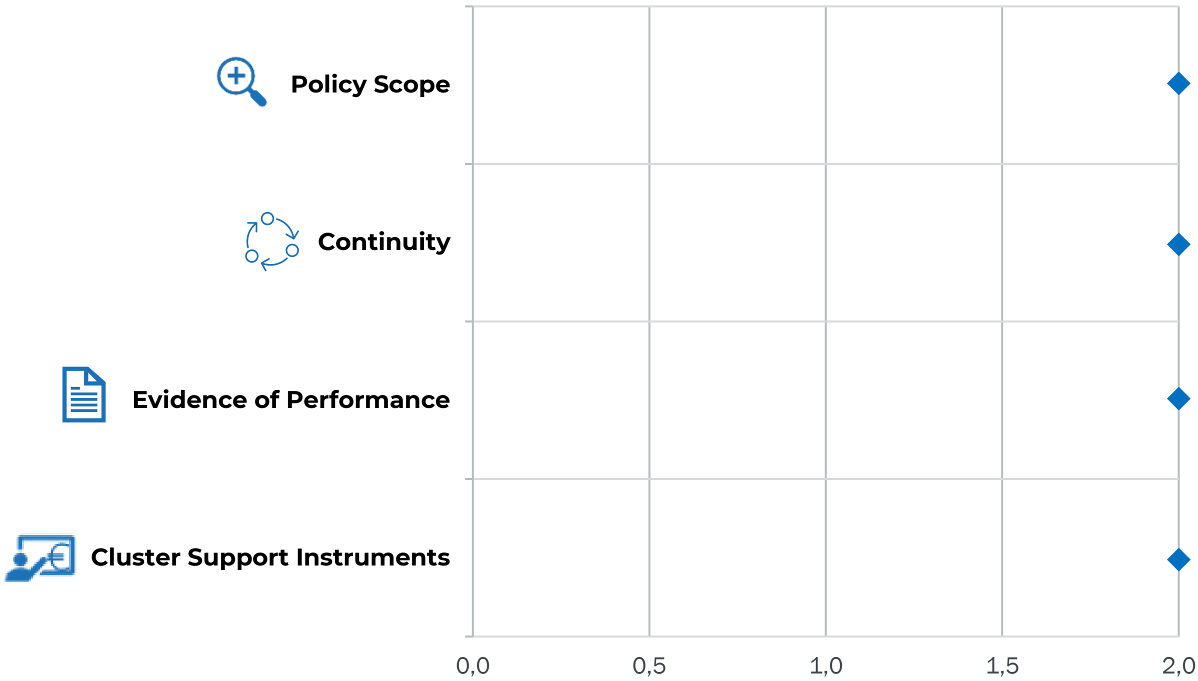
Note: the maturity assessment does not reflect the performance of a country, but only the degree of development of their national cluster policy at the moment of data collection (Q3 2022). The assessment illustrates how the country scores for each of the four criteria (policy scope, continuity of cluster policies, evidence of performance, cluster support) compared to the maximum score that they can reach. Please refer to the **Annex** for a detailed overview of the categories and the scoring system.

The table below presents an overview of the **maturity assessment for the Netherlands for 2022**. The total score of the Netherlands is 8 points out of 8.

The Netherlands	MATURITY ASSESSMENT	Max score	Actual score
POLICY SCOPE	Absence of cluster policy	0	
	Broad policy	0,5	
	Sectoral policy	1	
	National and/or regional cluster policy	2	**2**
CONTINUITY	No cluster-specific policy available	0	
	Cluster policy established recently	0,5	
	Cluster policy established between over 2 and 10 years	1	
	Cluster policy established over 10 years ago	2	**2**
EVIDENCE OF PERFORMANCE	No evaluation and / or monitoring available	0	
	Existence of evaluations of past policies	0,5	
	Existence of monitoring or an ongoing / interim evaluation	1	
	Existence of monitoring and ex-ante or ongoing / interim evaluation	2	**2**
CLUSTER SUPPORT INSTRUMENTS	No instruments for cluster development	0	
	Financial support for cluster development in the broader and / or sectoral policy	0,5	
	Financial or technical support for cluster development in dedicated cluster policy	1	
	Financial and technical support for cluster development in dedicated cluster policy	2	**2**
TOTAL (8)			**8**

Drawing from the table above that showcases the scored points in the Netherlands's cluster policy, the Figure below portrays the **degree of maturity** across four categories related to the national level cluster policy.

Figure 3: Maturity of cluster policy – The Netherlands



Source: ECCP (2022)

The text below provides a **qualitative description** of the state of play of the cluster policy in the Netherlands, which is complementary to the maturity assessment presented above.

Policy scope

Generally coordinated and organised on a national level, the Topsectorenbeleid can be categorised as a national cluster policy. Nevertheless, the focus of the policy lies on the top 9 sectors, respectively. On top of this, there are two transversal focuses: "Headquarters", which refers to ensuring the Netherlands as an attractive headquarters of internationally operating companies (1) and transversal themes that correspond to the so-called "Grand Challenges" of the seventh framework program and Horizon 2020 (2).

Continuity

At least since 2004, the Netherlands has had a cluster policy which has been gradually developed and expanded. In the first six years, five sectors were covered (agro-food, high tech, water, creative industries, chemicals). Since 2010, four additional sectors (life sciences, energy, logistic, horticulture) were added. There has thus been a certain continuity since the start of the policy. Going forward, there is already a policy in place for the period 2020-2023 in the form of a Knowledge and Innovation Covenant made by the three partners with a committed budget of approximately EUR 4.9 billion, of which EUR 2.05 billion from private and EUR 2.85 billion from public funds. The focus of this Covenant lies on mission-based funding around four core themes (energy transition and sustainability; agriculture, water and food, health and care; and safety). On a further note, this form of policy has been a policy in place since, at least 2004, and a clear continuation can be seen going to the present day and into the future, at least until 2023.

Evidence of performance

The most important evaluation of the policy is done by the Advisory Council for Science, Technology, and Innovation (AWTI) which is publishing a periodically recurring report to evaluate the policy. The latest one was published in 2016, the main recommendations are to show more flexibility, to have a more differentiated approach and to make clearer choices. The government itself is also monitoring the implementation, focusing on input (i.e. budget), output (i.e. development of private R&D expenditure), second order effects (innovative products and related turnover) and third order effects (i.e. employment and economic development). Because most of these effects are only visible after a few years, the Ministry of Economic Affairs focuses on a broad monitoring of the progress of its business policy and in a communication strategy that focuses on entrepreneurs, directors, MPs, researchers and other interested parties. Every year, in September, a progress report on the Top Sectors policy is presented to Parliament. This consists of a letter to the House of Representatives on the progress of the business policy including the top sectors and a Business Policy Monitor of the Central Bureau for the Statistics (CBS), which outlines the most important facts and figures and an (economic) interpretation where possible

Cluster support instruments

The policy only includes financial instruments, mostly related to taxation and subsidising initiatives designed by the businesses themselves. There is no non-financial/technical support available.

Cross-regional / international cooperation

The European Cluster Partnerships have been launched by the European Commission to encourage clusters to intensify collaboration across regions and sectors.

Dutch cluster organisations have been involved in 15 consortia of the European Strategic Cluster Partnerships of which 12 partnerships were focusing on internationalisation (ESCP-4i) and three on partnerships were on cluster management excellence (ESCP-4x). Consortia partners came from 10 different EU member states (FR, IT, BE, DK, ES, SE, EL, FI, SI, PT, HU). 13 Dutch cluster organisations participated in the INNOSUP-1 initiative, with partner organisations coming from 18 countries (BE, DE, EL. IE, LT, LU, RS, UK, FR, NO, SE, CZ, IL, PL, DK, PT, HU).

In the 2021-2027 funding period, the Single Market Programme supports clusters as part of the Joint Clusters Initiatives (Euroclusters) for Europe's recovery. From the Netherlands, three cluster organisations are part of three Euroclusters with partner from 13 countries (EE, ES, DE, PL, FR, BE. FI, CZ, SE, AT, BG). These Euroclusters are BioMan4R2, CircInWater and Silicon Eurocluster. Collectively, they cover four industrial ecosystems ("Health", "Renewable Energy", "Agri-food", "Electronics"). The CircInWater Eurocluster covers multiple ecosystems ("Renewable Energy", "Agri-food).[5]

[5] Assigned Euroclusters to each of the 14 industrial ecosystems is shown on: https://clustercollaboration.eu/euroclusters (last access 20.03.2023)

Bibliography

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Bibliography

Adviesraad voor wetenschap, technologie en innovatie (2016). Flexibiliseren, differentiëren, sch erper kiezen: Balans van de Topsectoren. Available under: https://www.awti.nl/documenten/adviezen/2016/09/06/advies-flexibiliseren-differentieren-scherper-kiezen---balans-van-de-topsectoren-2016 (accessed 08.08.2022).

Dutch Government website. www.rijksbegroting.nl/2017/voorbereiding/begroting,kst225626_7.html (accessed 08.08.2022).

EOCIC (2019). Cluster programmes in Europe and beyond. www.clustercollaboration.eu/news/report-cluster-programmes-europe-and-beyond (accessed 08.08.2022).

EOCIC (2019). Smart Guide to cluster policy monitoring & evaluation https://ec.europa.eu/docsroom/documents/40501 (accessed 11.08.2022).

Kennis- en Innovatieconvenant 2020-2023 (2019). kennis_en_innovatieconvenant_2020 (eerstekamer.nl) (accessed 09.08.2022).

Kamerbrief: Missiegedreven Topsectoren- en Innovatiebeleid. Kamerbrief over Missiegedreven Topsectoren- en Innovatiebeleid | Kamerstuk | Rijksoverheid.nl (accessed 08.08.2022).

Missies voor het topsectoren- en innovatiebeleid Stichting Innovatie en Arbeid (2016). Missies voor het topsectoren- en innovatiebeleid | Publicatie | Rijksoverheid.nl (accessed 10.08.2022).

Clusterbeleid in Europa: Een analyse
van clusterprogramma's in Europese landen en regio's met een bijzondere aandacht voor Wal lonië, Nederland en Duitsland. Clusterbeleid in Europa. Een analyse van clusterprogramma's in Europese landen en regio's met een bijzondere aandacht voor Wallonië, Nederland en Duitsland | Vlaanderen.be (accessed 12.08.2022).

Annex

Criterion of maturity assessment	Description	Scoring (points between 0 and 2)
Policy scope	assessment whether the country has a dedicated cluster policy, or cluster creation and/or development is targeted through broader policies, e.g. foreign trade policies, labour and social policies or specific sectoral policies, e.g. industrial policy tourism policies, agriculture policies	**absence of cluster policy = 0** **existence of broader policies = 0,5** **existence of specific sectoral policies = 1** **existence of targeted cluster policies = 2**
Continuity of cluster policies	assessment of the duration and experience of the country in carrying out cluster policies. This criterion assesses only existence of targeted cluster policies and not broader policies or sectoral policies	**absence of policies supporting cluster development = 0** **cluster policy established recently (within the last 2 years) = 0,5** **cluster policy established between over 2 and 10 years = 1** **cluster policy established over 10 years ago = 2**
Evidence of performance	assessment whether there are evaluations of past and ongoing policies and a monitoring system in place. The existence of monitoring and evaluation mechanisms determines the degree of policy development in the country	**no evaluation and / or monitoring available = 0** **existence of evaluations of past policies, e.g. ex-ante = 0,5** **existence of monitoring or an ongoing / interim evaluation =1** **existence of monitoring and ex-ante or ongoing / interim evaluation =2**
Cluster Support Instruments	assessment whether the policies provide any instruments to support the policy implementation, being these financial and/or technical support	**no instruments for cluster development =0** **financial support for cluster development in the broader and / or sectoral policy = 0,5** **financial or technical support for cluster development in dedicated cluster policy = 1** **financial and technical support for cluster development in dedicated cluster policy = 2**

Source: ECCP (2022)