



EUROPEAN CLUSTER  
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# Country factsheet

Estonia

An initiative of the European Union





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## Introduction



This document presents an overview of the cluster policy in Estonia. Given the 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 Estonia](#).

The European Semester is 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.

As a consequence of the COVID-19 pandemic, European as well as global economies have been subject to severe output losses. In response, policymakers at EU and national level have acted decisively and made very significant financial resources available to tackle the threat of a prolonged downturn. This was carried out through the Recovery and Resilience Facility, [National recovery and resilience plans](#) that have been drafted in each Member State to ensure a recovery that addresses the challenges identified in the European Semester. The Estonian National recovery and resilience plan<sup>1</sup> is structured around six pillars: the digital transition of businesses, the green transition in enterprises, digital Estonia, sustainable energy and energy efficiency, sustainable transport, and healthcare and social protection. Estonian clusters are a key tool for the successful and quick implementation of the plan. In addition to the COVID-19 pandemic, the ongoing Russian military aggression against Ukraine has also taken its toll on EU companies and industrial ecosystems, highlighting the significance of policy efforts in supporting SMEs and clusters.

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

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

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<sup>1</sup> Estonia's recovery and resilience plan, [https://ec.europa.eu/info/files/estonias-recovery-and-resilience-plan\\_en](https://ec.europa.eu/info/files/estonias-recovery-and-resilience-plan_en) (last access 26.01.2023).

01

# Industrial ecosystems and cluster landscape



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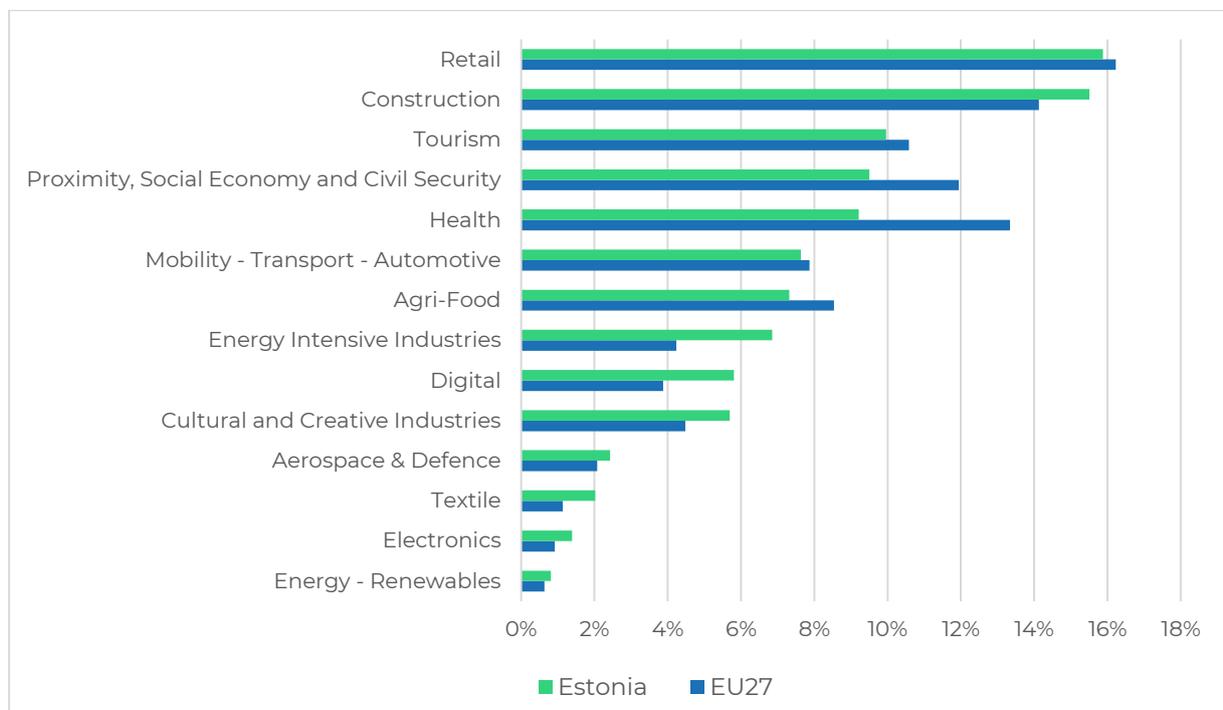
# 1. Industrial ecosystems and cluster landscape

## Employment in the 14 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.<sup>2</sup> The classification of the 14 industrial ecosystems have been calculated by aggregating NACE 2 -digit activities, following the methodology established in the European Commission.<sup>3</sup>

In Figure 1, the employment share of the region and the EU27 on average in each industrial ecosystem is shown relative to the number of employed persons in the 14 industrial ecosystems. It shows the proportion of the country's employment accounted for by each ecosystem, as well as the equivalent figure for the EU27 on average. 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. According to the figure, the industrial ecosystem that employs the most people is "Retail," accounting for approximately 16% of employment in the ecosystems. "Construction" is the second largest employer. Notably, this ecosystem's share of employment in the country exceeds that of the EU27 level, indicating its relative strength. Additionally, several other ecosystems show a high relative strength, including "Energy Intensive Industries," "Digital," "Cultural and Creative Industries," "Textile," "Electronics," and "Energy-Renewables." This strength is evident in the sectoral and ecosystem nodes that are regionally relevant in the country, as demonstrated in the section below.

**Figure 1: Employment in the ecosystems**



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

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

<sup>3</sup> 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.<sup>4</sup> 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 8 in the country, while the second table is based on the 14 ecosystems, which total 3 in the country.

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

Region	# of nodes	Node 1	Node 2	Node 3	Node 4	Node 5
EE: Estonia	8	C16 - Manuf. of wood products	C31 - Manuf. of furniture	F41 – Construction of buildings	F42 - Civil engineering	C33 – Repair & installation of machinery & equipment

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. The employment strength of Estonia in the industrial ecosystem “Construction” which emerges in Figure 1 is also reflected in a number of Top 5 regionally relevant sectoral nodes of the country (e.g., F41 – Construction of buildings and F42 – Civil engineering).

However, this is not reflected in the regionally relevant ecosystem nodes which can also potentially be linked of the methodology behind the measurement of the industrial ecosystems. Nonetheless, Estonia has regionally relevant ecosystem nodes in the industrial ecosystems “Textile”, “Energy-Intensive Industries” and “Electronics” which is also mirrored in the above average employment of Estonia in these industrial ecosystems compared to the EU27 average (see Figure 1).

**Table 2: Regionally relevant ecosystem nodes**

Region	# of ecosystem nodes	Node 1	Node 2	Node 3
EE: Estonia	3	Textile	Energy-intensive industries	Electronics

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

## Cluster organisations in the country

There are 14 cluster organisations registered on the ECCP in the country. These cluster organisations are operating in the industrial ecosystems “Construction” (2 cluster organisation), “Digital” (1 cluster organisation), “Aerospace & Defence” (1 cluster organisation) and “Renewable Energy” (1 cluster organisation). Not all cluster organisations on the ECCP provided this information. Hence, the number of cluster organisations with an allocated industrial ecosystem is lower than the overall number of cluster organisations in the country.

<sup>4</sup> 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).



The majority of member organizations of Estonian cluster organizations with profiles on the ECCP are composed of SMEs (88%, EU: 84%), followed by research organizations (6%, EU: 7%), and large enterprises (6%, EU: 9%).

# 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 Estonian cluster policies on a national level.

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 an Estonian national cluster policy.

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

Policy type:	National cluster policy
Policy name:	Development Programme of Clusters
<b>POLICY OBJECTIVES</b> 	<p><b>Strengthening cooperation between companies or industry and RTDI actors</b></p> <p><b>Increasing competitiveness and boosting scale up of SMEs</b></p> <p><b>Supporting internationalisation activities</b></p> <p><b>Enhancing the visibility of clusters</b></p> <p><b>Fostering R&amp;D activities, technology development and implementation</b></p> <p><b>Fostering innovation and strengthening innovation ecosystems</b></p> <p><b>Promoting entrepreneurship, start-ups and spin-offs</b></p> <p>The goal of this policy is to increase international competitiveness of SMEs and clusters partners through marketing, R&amp;D, and encouraging cooperative cluster projects in smart specialization areas.</p>
<b>POLICY FOCUS</b> 	<p><b>Cross-sectoral</b></p> <p>The policy focuses on growth areas of smart specialization such as ICT, health technologies and services, and valorisation of resources.</p>



Policy type:		National cluster policy
Policy name:		Development Programme of Clusters
<b>RESPONSIBLE AUTHORITIES</b> 		<p><b>Provides funding</b></p> <p><b>In charge of implementation</b></p> <p><b>In charge of drafting</b></p> <p>The policy was drafted by the Ministry of Economic Affairs and Communications and is implemented by the Estonian Business and Innovation Agency. The programme is funded by the European Regional Development Fund (ERDF) and the Estonian Ministry of Economic Affairs and Communications. The Estonian Business and Innovation Agency is responsible for allocating funding.</p>
<b>BENEFICIARIES</b> 		<p><b>Cluster organisations</b></p> <p><b>Large firms</b></p> <p><b>SMEs</b></p> <p><b>Research organisations</b></p> <p><b>Academic institutions</b></p> <p><b>Start-ups</b></p> <p>The policy supports various cluster organizations in Estonia, such as ICT Cluster, Wooden Houses Cluster, Connected Health Cluster etc. These cluster organizations have a variety of members from SMEs to start-ups and research associations. For example, the Connected Health Cluster members include start-ups, medtech, biotech and R&amp;D partners.</p>
<b>INSTRUMENTS</b> 	Financial	<p><b>Support to R&amp;D projects, SMEs becoming cluster members, etc.</b></p> <p><b>Supporting market entry (e.g. testing, proof-of concept, prototyping, demonstration projects)</b></p> <p><b>Financing networking events</b></p>
	Technical assistance	<p><b>Support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence</b></p>



Policy type:		National cluster policy
Policy name:		Development Programme of Clusters
		<p><b>Support for soft skills development: coaching, management training, upskilling/reskilling</b></p> <p><b>Marketing activities: advertising, communication, events, fairs, and so on</b></p>
	<b>Explanation</b>	The policy supports activities that include 1) Increasing the visibility of clusters through networking events, workshops, seminars and finding partners; 2) Coordinating and conducting market activities of cluster through market research, and expert assessments; 3) Development Activities: Knowledge transfer, process improvement of products and services, training workforce and coordinating innovation related activities. Advertising activities are not covered.
<b>HISTORY</b> 	<b>Period</b>	<b>Limited period</b>
	<b>Ending year</b> <i>(for policies with limited period)</i>	2023
	<b>Starting year</b>	2014
	<b>Explanation</b>	According to Enterprise Estonia, the policy is part of "The Entrepreneurship Growth Strategy 2014- 2020." The clusters will receive support from 2019 to 2023.
<b>BUDGET</b> 	<b>Overall</b>	Data Unavailable
	<b>Annual</b>	EUR 1,062,500
	<b>Source of funding</b>	European Regional Development Fund and Estonia Finance Ministries-Ministry of Economic Affairs and Communications.



Policy type:		National cluster policy
Policy name:		Development Programme of Clusters
<b>POLICY</b>  <b>EVALUATION</b>  	<b>Availability</b>	<b>in-itinere</b>
	<b>Results</b>	There are regular evaluations on the strategic level and on the level of the support measures and funding schemes. These evaluations cover the overall entrepreneurship and innovation system in Estonia and include also the cluster policy and funding scheme. Separate evaluations of this measure were carried out in 2013 and 2015, as well as an audit in 2014.
<b>POLICY ALIGNMENT WITH THE</b>  <b>EU PRIORITIES</b>  		<b>Green economy</b>  <b>Digitalisation</b>  <b>Resilience</b>

# 03

## State of play of cluster policy



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### 3. State of play of cluster policy

This section presents an overview on the state of play of Estonian 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 instruments) compared to the maximum score that they can reach. Please refer to the **Annex** for the detailed overview of the categories and the scoring system.

The table below presents an overview of the **maturity assessment for Estonia** for 2022. The total score of Estonia is 7 points out of 8.

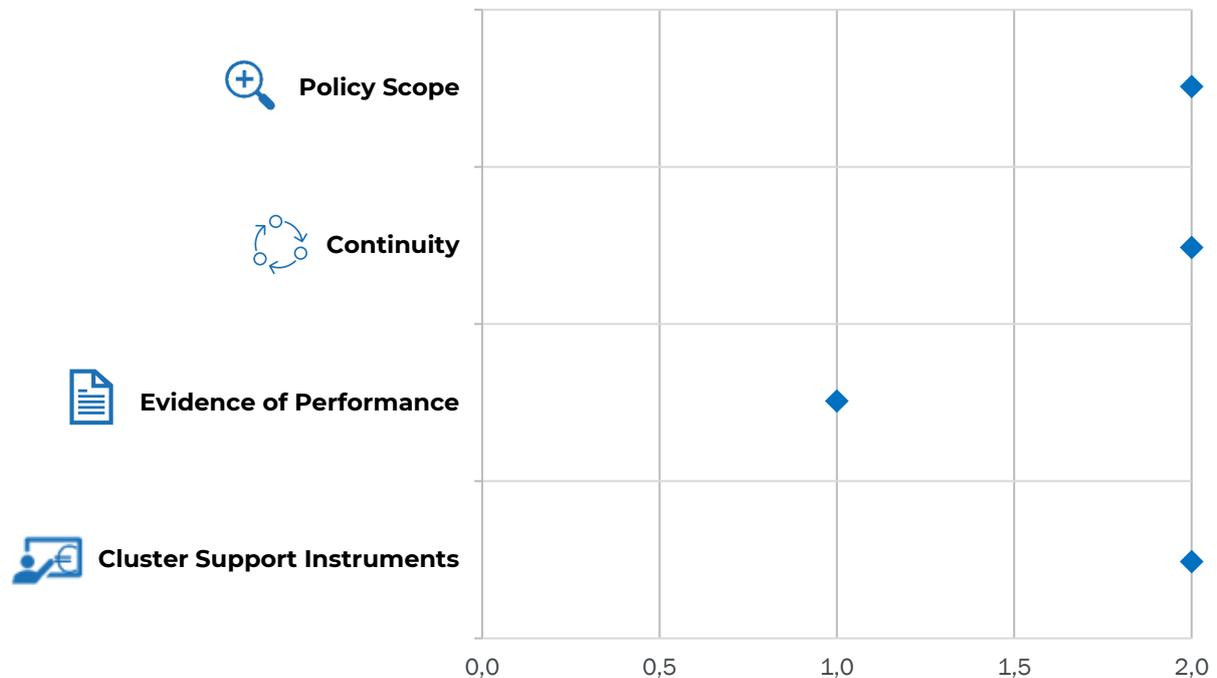
Estonia	MATURITY ASSESSMENT	Max score	Actual score
<b>POLICY SCOPE</b>	Absence of cluster policy	0	
	Broad policy	0,5	
	Sectoral policy	1	
	National and/or regional cluster policy	2	<b>2</b>
<b>CONTINUITY</b>	No cluster-specific policy available	0	
	Cluster policy established recently	0,5	
	Cluster policy established between over 2 and 10 years	1	
	Cluster policy established over 10 years ago	2	<b>2</b>
<b>EVIDENCE OF PERFORMANCE</b>	No evaluation and / or monitoring available	0	
	Existence of evaluations of past policies	0,5	
	Existence of monitoring or an ongoing / interim evaluation	1	<b>1</b>
	Existence of monitoring and ex-ante or ongoing / interim evaluation	2	
<b>CLUSTER SUPPORT INSTRUMENTS</b>	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	<b>2</b>
<b>TOTAL (8)</b>			<b>7</b>

Source: ECCP (2022)



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

**Figure 2: Maturity of cluster policy - Estonia**



Source: ECCP (2022)

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

### **Policy scope**

In Estonia Cluster Policy occurs on the national level through the policy "Development of Clusters". The policy focuses on growth areas of smart specialization such as ICT, health technologies and services, and valorisation of resources.

### **Continuity**

Cluster policy in Estonia is not extensive and is fairly new compared to its European counterparts. Up until 2008, there were no clear policies supporting clusters, however, there were programmes that supported collaboration amongst different stakeholders such as Competence Centre Programmes and Technology parks. The first national policy was the Pilot Programme for supporting cluster development, which was implemented in 2008. The policy ran from 2008 to 2013 with majority of the funding coming from European Regional Development Fund. In 2014, as part of the government's Entrepreneurship Growth Strategy 2014-2020, the Development Clusters Programme policy was implemented.

Cluster policies have been operating in Estonia since 2008, with the implementation of the national Pilot Programme for Supporting Cluster Development, from 2008-2013. In 2014, with the Entrepreneurship Growth Strategy (2014-2020) the Development Clusters Programme Policy was implemented. Clusters are supported in the period 2019-2023.



### **Evidence of performance**

There are regular evaluations on the strategic level and on the level of the support measures and funding schemes. These evaluations cover the overall entrepreneurship and innovation system in Estonia and include also the cluster policy and funding scheme. Separate evaluations of this measure were carried out in 2013 and 2015, as well as an audit in 2014.

### **Cluster support instruments**

A variety of financial & technical support for cluster organisations is provided through the Estonian Cluster policy and includes, for instance, support to R&D projects, SMEs becoming cluster members, etc. or support for hard skill development: knowledge transfer, intellectual property, entrepreneurship, export advice, market intelligence.

### **Cross-regional / international cooperation**

In the 2014-2020 funding period, the European Cluster Partnerships and the INNOSUP-1 initiative have been launched by the European Commission to encourage clusters from Europe to intensify collaboration across regions and sectors. With a total of ten cluster cooperations Estonia participates in both the ESCP and INNOSUP. Four cluster organisations participated in the ESCP for Excellence, three in the ESCP for Going International and one in the ESCP for Smart Specialisation. Two Estonian cluster organisations participated in the INNOSUP-1 programme.

In the 2021-2027 funding period, the Single Market Programme supports clusters as part of the Joint Cluster Initiatives (Euroclusters) for Europe's recovery. From Estonia, one cluster organisations is part of the Eurocluster BioMan4R2, with partners from six countries (BE, DE, ES, FR, NL, PL). This Eurocluster covers the industrial ecosystem: "Health".

# Bibliography



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## Bibliography

Enterprise Estonia (EAS). A cluster – why and for whom? [www.eas.ee/teenus/development-of-clusters/?lang=en](http://www.eas.ee/teenus/development-of-clusters/?lang=en) (last access 26.01.2023).

Eurofound. Future of manufacturing: Development of Clusters – Internationalisation policy measure (Estonia). <https://euagenda.eu/upload/publications/untitled-191855-ea.pdf> (last access 26.01.2023).

European Commission (2020). Estonian ICT Cluster paves the way for a smarter society. [https://ec.europa.eu/regional\\_policy/en/projects/Estonia/estonian-ict-cluster-paves-the-way-for-a-smarter-society](https://ec.europa.eu/regional_policy/en/projects/Estonia/estonian-ict-cluster-paves-the-way-for-a-smarter-society) (last access 26.01.2023).

European Commission (2019). Peer Review of the Estonian R&I system. Final Report. [https://www.hm.ee/sites/default/files/pr\\_estonia\\_-\\_final\\_report\\_.pdf](https://www.hm.ee/sites/default/files/pr_estonia_-_final_report_.pdf) (last access 26.01.2023).

European Observatory for Clusters and Industrial Change (2019). Cluster Programmes in Europe and Beyond. [www.clustercollaboration.eu/sites/default/files/news\\_attachment/cluster\\_programmes\\_in\\_europe\\_and\\_beyond\\_0.pdf](http://www.clustercollaboration.eu/sites/default/files/news_attachment/cluster_programmes_in_europe_and_beyond_0.pdf) (last access 26.01.2023).

Jürgenson, A. (2007). Country Report: Estonia. Europe INNOVA Cluster Mapping Project. [https://irp-cdn.multiscreensite.com/bcb8bbe3/files/uploaded/doc\\_890.pdf](https://irp-cdn.multiscreensite.com/bcb8bbe3/files/uploaded/doc_890.pdf) (last access 26.01.2023).

Tallinn City Enterprise Board. A cluster-why and for whom? [www.tallinn.ee/eng/clustersinestonia/A-cluster-why-and-for-whom](http://www.tallinn.ee/eng/clustersinestonia/A-cluster-why-and-for-whom) (last access 26.01.2023).

Tallinn City Enterprise Board. Estonia's first website that consolidates information about clusters. [www.tallinn.ee/eng/business/Estonia-s-first-website-that-consolidates-information-about-clusters](http://www.tallinn.ee/eng/business/Estonia-s-first-website-that-consolidates-information-about-clusters) (last access 26.01.2023).



## Annex

Criterion of maturity assessment	Description	Scoring (points between 0 and 2)
<b>Policy scope</b>	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	<b>absence of cluster policy = 0</b> <b>existence of broader policies = 0,5</b> <b>existence of specific sectoral policies = 1</b> <b>existence of targeted cluster policies = 2</b>
<b>Continuity of cluster policies</b>	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	<b>absence of policies supporting cluster development = 0</b> <b>cluster policy established recently (within the last 2 years) = 0,5</b> <b>cluster policy established between over 2 and 10 years = 1</b> <b>cluster policy established over 10 years ago = 2</b>
<b>Evidence of performance</b>	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	<b>no evaluation and / or monitoring available = 0</b> <b>existence of evaluations of past policies, e.g. ex-ante = 0,5</b> <b>existence of monitoring or an ongoing / interim evaluation =1</b> <b>existence of monitoring and ex-ante or ongoing / interim evaluation =2</b>
<b>Cluster Support Instruments</b>	assessment whether the policies provide any instruments to support the policy implementation, being these financial and/or technical support	<b>no instruments for cluster development =0</b> <b>financial support for cluster development in the broader and / or sectoral policy = 0,5</b> <b>financial or technical support for cluster development in dedicated cluster policy = 1</b> <b>financial and technical support for cluster development in dedicated cluster policy = 2</b>

Source: ECCP (2022)