

# Identifying good support practices for eco-innovative companies during the Covid-19 pandemic

Report on regional analysis by Lithuanian  
Innovation Centre

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## Executive summary

This report covers the insights from Lithuanian eco-innovative companies and business support organizations on the impact of COVID-19 with the aim to identify good practices and further policy development opportunities in the area of policy instruments supporting the resilience and competitiveness of eco-innovative businesses.

Based on the interviews with 8 eco-innovative companies and 7 business support organizations the most pressing challenges that had occurred during the pandemic were disruption in logistics both upwards and downwards the supply chain, reorientation of the business model by enhancing e-commerce, limited opportunities for international expansion due to the absence of physical expositions, business missions or other B2B meetings, and complications in human resource management. In addition, eco-innovative companies had identified several other challenges that are significant for their operations even though they were not influenced by the pandemic. These challenges cover barriers to business growth and development (limited perception of the value of sustainable products among customers and the limited internal resources of companies to educate their customers on the subject, higher price of eco-innovative products) and barriers to sustainability projects (various regulatory restrictions, including the labelling and handling of packaging, the production of recycled materials and the further use of production waste, lack of specific sustainability knowledge or suitable partners for the implementation of projects initiated by eco-innovative companies).

In response to the pandemic, several business support measures have been put in place in the country to help mitigate the negative effects of which the most notable examples are subsidies to employers during periods of downtime and grants to finance e-commerce solutions (E-commerce model COVID-19). The latter was welcomed for its contribution to reorienting companies towards a new business model and strengthening the digitalisation of processes. Moreover, the Supply Chain Resilience platform is seen as a successful post-pandemic initiative helping companies to adapt and build resilient supply chains in times of instability.

The analysis also showed that eco-innovative companies did not suffer losses during the pandemic, but some of them did not reach the expected performance growth. In this context, it is necessary to continue to develop support measures for eco-innovative enterprises in order to strengthen their competitiveness and resilience to external factors. Therefore, the key policy orientations should be the support for eco-innovative companies in strengthening their flexibility in order management and in finding more agile solutions for value chain management together with the enhancement of partnerships aimed at providing environmentally friendly product and service solutions.

The National Circular Economy Action Plan, currently under preparation, is identified as one of the potential policy development options in the context of this analysis. Therefore, in the coming months, cooperation on the development of this plan is the focus of action to create a more favourable environment for the development of eco-innovation and eco-innovative businesses.

## Introduction

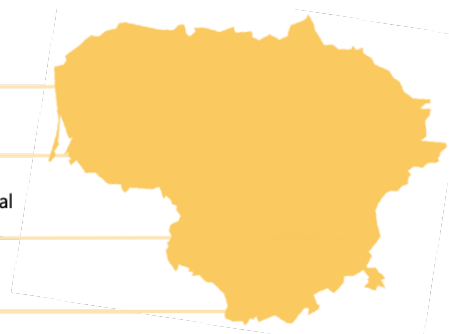
This report covers eco-innovative companies<sup>1</sup> and business support organisations operating in Lithuania. According to Eco-Innovation Index<sup>2</sup>, Lithuania holds 19<sup>th</sup> overall position among EU countries and clusters together with a group of countries catching up with eco-innovation. Based on eco-innovation activities undertaken by companies, Lithuania has notably low relative rate – according to 2021 data, it occupies 26<sup>th</sup> place in the EU. More particularly, considering enterprises that introduced an innovation with environmental benefits obtained within the enterprise (or the implementation of resource efficiency actions among SMEs) the country ranks in the 23<sup>rd</sup> position (2019 data), and based on enterprises that introduced an innovation with environmental benefits obtained by the end user (or the implementation of sustainable products among SMEs) the country ranks in the 25<sup>th</sup> position (2021 data).

19<sup>th</sup> Eco-Innovation index [2021]

26<sup>th</sup> Eco-innovation activities undertaken by companies [2021]

23<sup>rd</sup> Enterprises that introduced an innovation with environmental benefits obtained within the enterprise [2019]

25<sup>th</sup> Enterprises that introduced an innovation with environmental benefits obtained by the end user [2021]



Lithuania's position in Eco-Innovation Scoreboard. [Eco-Innovation Observatory, 2021]

However, the latest Eurobarometer data<sup>3</sup> shows that over the last few years, Lithuanian companies have been increasingly moving towards offering green products or services. In a survey conducted in 2021, 31% of companies were already bringing such products or services to the market (12% more than in 2019), and 11% planned to do so in the next 2 years (7% more than in 2019). Similarly, the country's businesses are increasingly taking action to improve resource productivity - in 2021, the share of businesses taking no action has fallen by 24% since 2019 to 8%. These latest figures also show that Lithuania's positive progress is one of the highest in the EU, suggesting that sustainable business is gaining momentum in the country.

Unfortunately, it is not currently possible to identify how many eco-innovative companies are operating in the country. More precise data on the activities and investments of such companies are also not collected. However, the general trend of companies to invest in environmentally friendly solutions can be seen in the data recorded by the country's statistics department<sup>4</sup> on the investments made by manufacturing companies in modernising their processes to have a better environmental impact (see graph below). These expenditures

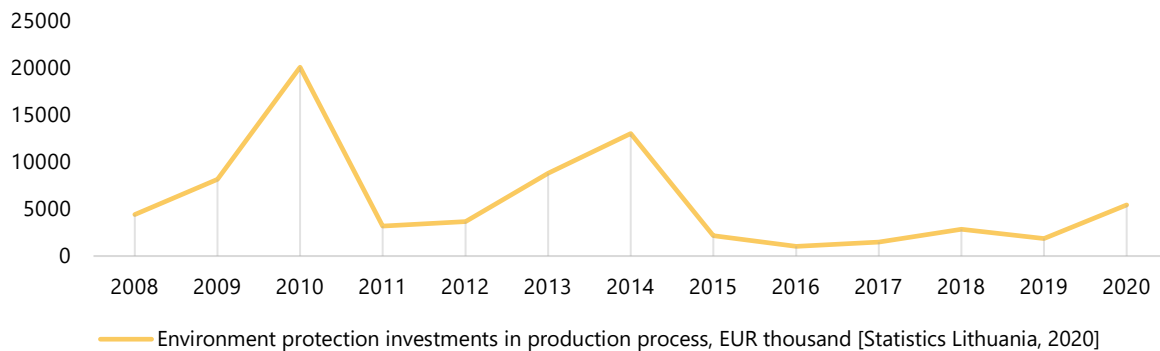
<sup>1</sup> Eco-innovative companies in this report are considered as those business entities whose “products or services cause a significant decrease in environmental impact, while remaining financially viable and not in conflict with social sustainability”. Fichter, K., Fuad-Luke, A., Klofsten, M., Bergset, L., Bienkowska, D., Clausen, J., Geier, J., Hjelm, O., Kanda, W., Kuisma, M., 2013. Support systems for sustainable entrepreneurship and transformation (SHIFT). Work package 1.

<sup>2</sup> [https://ec.europa.eu/environment/ecoap/indicators/index\\_en](https://ec.europa.eu/environment/ecoap/indicators/index_en)

<sup>3</sup> <https://europa.eu/eurobarometer/surveys/detail/2287>

<sup>4</sup> <https://osp.stat.gov.lt/lt/statistiniu-rodikliu-analize?hash=0378d049-2015-4442-95d2-dfd55328b626>

include investments in pollution prevention measures (methods, technologies, or equipment) that are part of the production process/equipment carried out by the enterprise.



Assessing the trend of rising and falling environmental spending, it can be argued that such investments are significantly linked to public support, in particular the EU Structural Funds. The 2010 upturn was driven by business support reflecting the effects of the financial crisis, while the 2014 and 2020 upturns were driven by the closing period of Structural Funds. Also, the higher overall investment in the 2007-2013 period compared to the 2017-2020 period is associated with higher EU support, especially for infrastructure projects in large companies. In this context, it is therefore important to understand whether public support has also been relevant in recent years, especially during the pandemic, both for investments in environmental solutions and for the development of eco-innovative enterprises and related initiatives.

The COVID-19 pandemic has been one of the main challenges for business over the last couple of years. However, due to limited data or lack of studies, it is difficult to determine the impact of this pandemic on eco-innovative companies. In general, according to Enterprise Lithuania review<sup>5</sup>, in terms of changes in real GDP of EU countries, Lithuania can be seen as one of the countries least affected by the pandemic after Ireland. On the one hand, public financial support for business in the domestic market has significantly mitigated the economic impact of the first wave of COVID-19. On the other hand, in foreign markets, on which the Lithuanian economy is heavily dependent through exports, the economic downturn has had a much smaller impact on the performance of Lithuanian exporting companies than expected. In this context, this report has been prepared to fill in the gaps in data on the impact of the pandemic on eco-innovative companies.

Therefore, the aim of this analysis is to overview the impact of COVID-19 on Lithuanian eco-innovative companies and the corresponding response from business support organisations. By exploring the needs of enterprises and the respective response of support organisations, the objective is to clarify and identify good practices that can be considered as a suitable support instrument to strengthen the resilience and competitiveness of eco-innovative enterprises, as well as to propose the ways and means of further policy development regarding the enabling environment for the creation and development of eco-innovative businesses in the country.

<sup>5</sup> [https://www.verslilietuva.lt/wp-content/uploads/2021/01/2020.12.31\\_Lietuvos\\_ekonomika.pdf](https://www.verslilietuva.lt/wp-content/uploads/2021/01/2020.12.31_Lietuvos_ekonomika.pdf)

## Method

The data for this regional analysis was collected by carrying out qualitative surveys – interviews. The sample included two types of respondents (support system actors and eco-innovative companies) operating in Lithuania. In this analysis, support system actors cover universities, incubators, science parks, business development organizations, financial institutions together with their related networks and institutions, while eco-innovative companies are described in footnote 1. The selection of respondents was based on:

- personal contacts – reaching out to actors in the support system who operate within the same ecosystem;
- investigation of secondary resources (media articles, organizations' websites, reports) – identifying companies to ensure that their activities meet the definition of eco-innovation and finding contacts to be approached;
- snowball sampling – asking respondents to identify similar organisations that could share their insights.

Invitations for interviews were sent by e-mail. Out of 27 sent inquires 15 agreed to participate, 3 did not agree to participate<sup>6</sup>, and 9 were nonresponding.

In total, 7 support system actors and 8 eco-innovative companies were interviewed. Detailed information on the respondents is provided in the tables below. The interviews were carried out online, using Zoom and Microsoft Teams platforms. Two interviews were carried out through a telephone call.

	<i>Type of organization</i>	<i>Services provided</i>	<i>Position</i>
<i>Support organization respondent 1 (SR1)</i>	<i>University's research institute</i>	<i>Lifecycle evaluation, environmental impact assessment, eco-friendly product design, improving environmental performance through pollution prevention and cleaner production methods</i>	<i>Director</i>
<i>Support organization respondent 2 (SR2)</i>	<i>Business support network</i>	<i>International partner, market, and technology matching, arranging international B2B events</i>	<i>Network coordinator</i>
<i>Support organization respondent 3 (SR3)</i>	<i>Business support agency</i>	<i>Implementation of national R&amp;D programmes, entrepreneurship and innovation initiatives and international cooperation and R&amp;D programmes</i>	<i>Innovation manager</i>
<i>Support organization respondent 4 (SR4)</i>	<i>Business development organization</i>	<i>Carbon footprint measurement, setting reduction targets, sustainability training, education, and communication services</i>	<i>Co-founder</i>
<i>Support organization respondent 5 (SR5)</i>	<i>Science and technology park</i>	<i>Business incubator, business development and innovation support consultations, access to laboratories</i>	<i>Innovation and entrepreneurship services expert</i>
<i>Support organization respondent 6 (SR6)</i>	<i>Innovation support organization</i>	<i>Strategic sessions on enterprise innovation, R&amp;D accounting, advising on innovation funding opportunities, innovation training</i>	<i>Head of Innovation support services department</i>
<i>Support organization respondent 7 (SR7)</i>	<i>Environmental projects management agency</i>	<i>Financing environmental projects, advising companies on financial public instruments</i>	<i>Project manager</i>

<sup>6</sup> The reason for the refusal to conduct interviews among support system actors was that separate data on eco-innovative companies and clients are not collected in those organizations.

	<i>Number of employees</i>	<i>Age</i>	<i>Turnover, EUR</i>	<i>Product</i>	<i>Respondent's position</i>
<i>Company respondent 1 (CR1)</i>	54	10	1,5 M	Cosmetics	Director
<i>Company respondent 2 (CR2)</i>	3	8	100 K	Organic fertilizers	Director
<i>Company respondent 3 (CR3)</i>	52	18	7,4 M	Food	Director
<i>Company respondent 4 (CR4)</i>	10	4	360 K	Cosmetics	Director
<i>Company respondent 5 (CR5)</i>	6	3	300 K	Household goods	Director
<i>Company respondent 6 (CR6)</i>	80	21	2,3 M	Textiles	Managing director
<i>Company respondent 7 (CR7)</i>	91	18	3,4 M	Food	Director of business development
<i>Company respondent 8 (CR8)</i>	2	4	10 K	Textiles	Owner

## Results

### Challenges

The most frequently identified challenge among eco-innovative enterprises was the **disruption in logistics both upwards and downwards the supply chain**. Due to a shortage of human resources and a sudden regulatory change, the delivery time of raw materials was prolonged and urgent decisions had to be taken to maintain production continuity, as stated by CR1, CR4, CR6, and CR7. Forward planning has become more important than ever due to extended delivery times and fluctuating raw material prices. For example, in case of CR6, the wool fibre needed to produce the finished product was sold out instantly, so ordering well in advance was necessary to obtain quality raw materials. In addition, due to the shift to e-commerce and the development of new business models, home delivery of products has also been hampered by a surge in demand for such services, and limited previous experience with e-commerce has prevented CR4 business from reaching its full potential effectively. In case of CR1, disruptions were also observed in cooperation with foreign partners who cancelled orders for finished products due to further market uncertainty. CR1 and CR5 also noted the increase in the cost of logistics services during the pandemic that reduced company profits.

The second challenge identified among respondents was the **reorientation of the business model by enhancing e-commerce**. To a different extent, CR1, CR2, CR4, CR5, and CR8 has redirected increased amount of investment in e-sales that was not planned before the pandemic. For CR1, CR4, and CR8 this was due to the closure of physical points of sale, while for CR2 and CR5 it was caused by the limited availability of physical meetings, where most of the sales took place. In case of CR1, CR4, CR5, and CR8 more resources were directed towards e-commerce development and e-marketing, while in the case of CR2, the company had to diversify its trade by entering e-marketplaces. In this context, the unforeseen shift towards online-based format has been a major challenge, requiring more financial, physical, and informational resources than would have been the case in a pre-planned development. There was also a difference in the impact of the pandemic according to the size of the respondents' companies, i.e., relatively small companies were more negatively impacted by the move

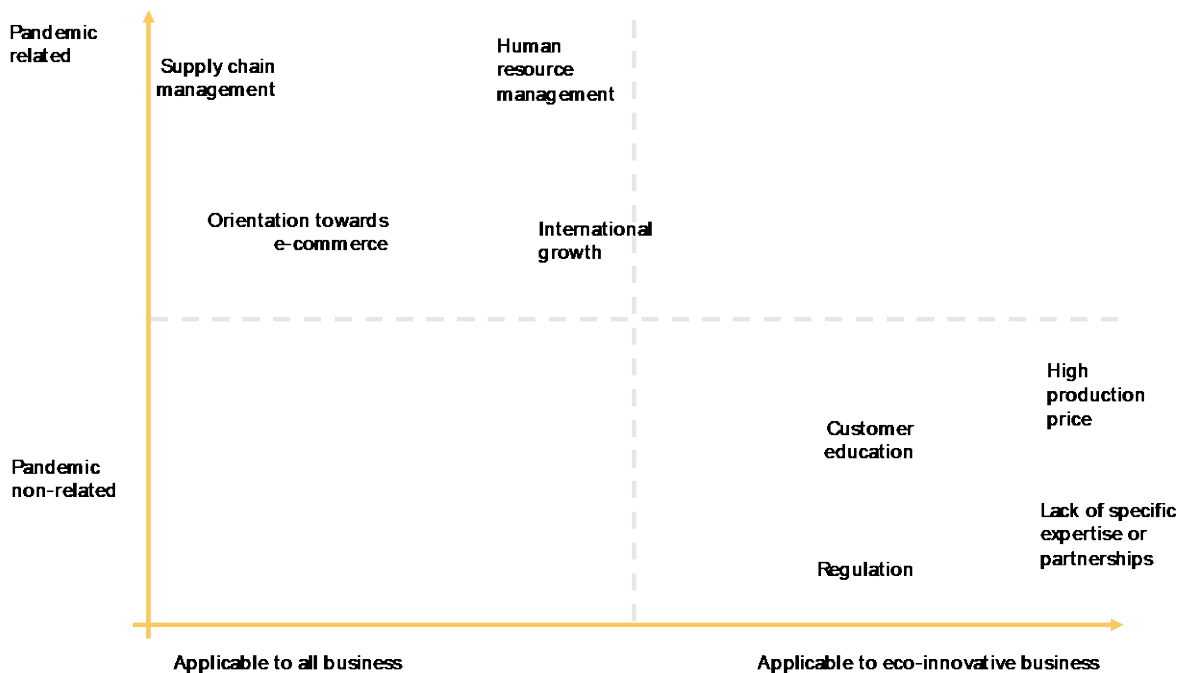
towards an e-business model than larger companies with more resources. Accordingly, while the activities during the pandemic were not loss-making, they were not as profitable as planned before the pandemic, as stated by most of the respondents.

Another challenge during the pandemic was the **limited opportunities for international expansion due to the absence of physical expositions, business missions or other B2B meetings**. These types of events are relevant for companies that conduct their business not only in Lithuania but also in foreign countries, as they can connect with potential investors or distributors of eco-innovative products. Among eco-innovative companies operating in Lithuania, foreign markets occupy an important part of business development, as not all eco-innovative products can be commercialised domestically due to their higher prices. Therefore, as a response to the problem of cancelled physical business events during the pandemic, virtual exhibitions or B2B events were organised in the country. However, CR1 and CR3 who had participated in such events felt that they were not at all worthwhile due to the lack of or relatively few contacts made. In the case of CR4, such virtual events failed because of impossibility of presenting the advantages of the eco-innovative products, which rely on a physical demonstration, such as product texture and packaging.

**Complications in human resource management** due to sick staff or limited capacity to provide jobs were also identified by several respondents as a challenging impact of the pandemic. CR3 and CR7 met the challenge of COVID-19 cases among workers with careful and flexible shift planning. However, CR1 was unable to fully support some of its staff due to the closure of its physical stores, and therefore sought assistance for the reimbursement of part of the staff's salary through public funds. In the case of CR4, a general trend of staff turnover and shortages was observed in the past year. According to CR8, during the pandemic, it was difficult to retain staff due to the company's already low income. This was one of the bigger challenges for the company, as its operations are highly labour intensive (refurbishing textiles for re-use).

During the interviews, respondents also identified other challenges that, although not influenced by the pandemic, are particularly characteristic of eco-innovative companies. These challenges can be divided into two groups: barriers to business growth and development together with barriers to sustainability projects. The first group includes the still limited perception of the value of sustainable products among customers and the limited internal resources of companies to educate their customers on the subject (mentioned by CR2, CR5, and CR8). This group also includes the higher price of eco-innovative products, which discourages some customers, so businesses are forced to attract them with promotions or discounts (mentioned by CR2 and CR4). The second group includes various regulatory restrictions, including the labelling and handling of packaging, the production of recycled materials and the further use of production waste (mentioned by CR3 and CR4). Finally, the lack of specific sustainability knowledge or suitable partners hinders the further implementation of projects initiated by eco-innovative companies (mentioned by CR1, CR6, and CR7).

All the challenges identified by eco-innovative companies are presented in the chart below. There are clearly two groups of challenges: those caused by the pandemic, but relevant for all businesses, and those not caused by the pandemic, but particularly relevant for eco-innovative enterprises.



Distribution of challenges identified by respondents in terms of relevance for eco-innovative companies and relation to the pandemic. The size of the circle indicates how often the challenge was mentioned among company representing respondents.

Although respondents representing eco-innovative companies identified several different challenges they faced during the pandemic, not all of them needed to access business support services or apply to particular support instruments. In this context, eco-innovative companies operating in the food sector can be distinguished the most (CR3 and CR7). During the pandemic, demand for food increased, as consumers were willing to buy food for longer due to the uncertainty, resulting in an upturn in the performance of such firms despite some disruptions in the supply chains. Both respondents noted that financial performance had noticeably increased during the period analysed, despite temporary operational disruptions. For the remaining respondents, the situation was less advantageous and some of them had to access business support measures.

### Good support practices

As the pandemic continued, some of the respondents have turned to a range of public support instruments to maintain their businesses competitive in the market. The following instruments are presented in the table below.



Brief description of the instrument

<p><i>Subsidies to employers during periods of downtime</i></p>	<p>Since the pandemic emerged, the country's Employment Service has been providing wage subsidies to companies whose workers were forced to take time off work. The amount of the subsidy is calculated as a percentage of the wages accrued by the worker who is out of work. During the pandemic, the size of this subsidy varied several times, with a maximum payment of 1.5-0.6 times the minimum monthly wage.</p>
<p><i>Partial reimbursement of rental payments</i></p>	<p>The partial rent reimbursement instrument, which was in place at the beginning of the pandemic, was available for the expenses incurred for renting premises for economic activities and was administered by INVEGA (Investment and Business Guarantees). This compensation was available to companies whose activities were closed or restricted during the quarantine period and to which the landlord granted a rent discount of at least 30%. The maximum monthly partial rent reimbursement was 50% of the rent charged to the tenant as of February 2020.</p>
<p><i>E-commerce model COVID-19 (E-komercijos modelis COVID-19)</i></p>	<p>E-commerce model COVID-19 is an instrument of the Ministry of Economy and Innovation that is designed to encourage businesses to adopt information technologies for the electronic management of business transactions in order to increase revenue growth. This instrument finances the deployment of e-commerce models in micro, small and medium-sized enterprises through process redesign and digitisation in: (1) customer self-service solutions on e-commerce platforms for products and services, including manufacturing and service order management solutions, and/or (2) solutions for the integration of a resource management system into e-commerce platforms for products and services.</p>
<p><i>Virtualized international business events</i></p>	<p>Due to the cancellation of physical business events during the pandemic, several organisations in the country (ex., Enterprise Lithuania, Enterprise Europe Network in Lithuania) both offered support for the participation and organized virtual business missions, exhibitions and B2B meetings to companies. This allowed companies to reach out to foreign partners despite previous restrictions on movement.</p>
<p><i>New opportunities LT (Naujos galimybės LT)</i></p>	<p>New Opportunities LT is an instrument of the Ministry of Economy and Innovation that is designed to encourage micro, small and medium-sized enterprises to focus on finding new foreign markets and expanding their existing markets. It finances individual demonstration by SMEs and their products at international exhibitions abroad. In line with global trends, the terms of this measure were adjusted during the pandemic and companies were able to receive financial support for participation in virtual exhibitions.</p>
<p><i>The Supply Chain Resilience (SCR) platform<sup>7</sup></i></p>	<p>In response to the instability in supply chains caused by the war in Ukraine, Lithuanian Innovation Centre in collaboration with Enterprise Europe Network, European Commission, and European Cluster Collaboration Platform developed the Supply Chain Resilience (SCR) platform. Its aim is to help European businesses maintain, restructure, or replace existing supply chains. The SCR platform enables companies to find partners in foreign countries to help ensure continuity of production and to secure the supply of raw materials, parts, components and/or semi-finished products or services.</p>

During the period under analysis, other business support measures, such as preferential loans for operating funds or investment projects, partial interest reimbursement, and certification of

<sup>7</sup> The SCR platform was launched after most of the interviews had been carried out and was therefore discussed at the stakeholder meetings. Although the emergence of the platform was triggered by the war in Ukraine and not by the COVID-19 pandemic, eco-innovative companies argued that the approach of the platform is successful in assessing the overall trends of disruption in supply chains and the resulting needs of companies (without distinguishing the cause of those disruptions). Therefore, this business support instrument is included in the analysis as a response to companies experiencing general economic instability.

products to be exported, were also available in the country, but respondents did not indicate that they had used or intended to use these support instruments.

Considering good business support practices from the perspective of the service providers, eco-innovative enterprises were not perceived to have specific needs. Regarding the responses of business support organisations, it can hardly be assumed that there was a clear trend of demand for support among eco-innovative companies during the pandemic.<sup>8</sup> SR2, SR3, SR5, SR6, and SR7 argued that the need for support was shaped by the instruments available at the time - if there was an option to apply for and receive support, eco-innovative companies were interested in such opportunities, but they had no other specific requirements of which respondents representing business support organizations were aware.

Moreover, during the pandemic, respondents such as SR1 and SR4, whose clients are mostly eco-innovative companies, did not see any increase or decrease in interest in their services, and the number of projects that were cancelled or stopped as a result of the pandemic was only marginal. According to them, the pandemic has not diminished the drive of eco-innovative companies to expand their activities, both in terms of sales and in terms of environmentally friendly innovation. This observation was also confirmed by respondent SR2, who continued to consult eco-innovative companies during the pandemic to find international partners and markets. In this case, however, the respondent noted that the pandemic has highlighted several trends in eco-innovative companies. Firstly, companies have started to search for more partners in the Western European and Scandinavian markets. Secondly, while a part of the population was spending long periods of time at home, there was an increase in the number of companies developing environmentally friendly products and services targeted at this lifestyle, i.e., an increase in the number of clients developing sustainable takeaway packaging<sup>9</sup> or sustainable household products. Finally, during the pandemic, the perception of sustainability among companies, due to the dramatic increase in the use of digital technologies, has been reinforced by the aim of integrating sustainability with digitalisation, i.e., in line with the objective of a twin transition<sup>10</sup>.

The above insights suggest that the challenges posed by the pandemic to eco-innovative companies were not particularly severe and that the existing business support practices were sufficient. Nevertheless, different synergies can be identified when assessing the correspondence between the challenges faced and the support instruments.

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<sup>8</sup> NOTE: The respondents from the support organisations that took part in the analysis represent a relatively small proportion of the support measures in place during the pandemic. Organisations that operated large-scale support instruments during the pandemic, which were also used by some of the eco-innovative companies surveyed (ex., subsidies to employers during periods of downtime), did not participate in the survey, or declined to take part, stating that they do not track information on such companies.

<sup>9</sup> The problem of takeaway food packaging, which has been preserved, was also mentioned in the SR1. According to the respondent, there was an emergence of companies amongst their customers who were both seeking to develop packaging made of more sustainable materials and to reduce the number of packages and the amount of waste generated.

<sup>10</sup> Twin transition refers to the development of green and digital economy based on the European Green Deal agenda.

<b>Challenge</b>	<b>Instrument</b>	<b>Result</b>
Supply chain management	The Supply Chain Resilience platform	Although the platform was not established in response to the effects of the COVID-19 pandemic, its operation is seen as a successful practice in responding to global trends.
Orientation towards e-commerce	E-commerce model covid-19 (E-komercijos modelis covid-19)	The instrument responded well to the challenge of the pandemic and encouraged companies to strengthen their business model by diversifying their sales channels in the virtual environment.
Human resource management	Subsidies to employers during periods of downtime	The instrument has responded well to the challenge of the companies and has helped maintain jobs.
International growth	Virtualized international business events New opportunities LT (Naujos galimybės LT)	Although the instruments were developed or adapted to the actualities of the pandemic, the respondents that accessed them argued that they did not find much value in participating in the virtual exhibitions. As a result, the challenge of international development has not been adequately met.
N/A	Partial reimbursement of rental payments	The instrument was specific and limited in scope, and therefore not relevant for the majority of eco-innovative enterprises interviewed.

To summarise good business support practices during the pandemic, two instruments stand out as the ones that received the most positive responses from the eco-innovative enterprises interviewed. They are subsidies to employers during periods of downtime and grants to finance e-commerce solutions (E-commerce model COVID-19). Moreover, the operation of Supply Chain Resilience Platform was favourably received by the stakeholders, even though its potential emerged after the pandemic. Finally, it is important to underline that none of these instruments is exclusively targeted at eco-innovative enterprises, but some respondents have benefited from them.

## Conclusions for further policy development

The results of this regional analysis have shown that there is a considerable lack of information on eco-innovative companies and their needs. This was highlighted in the interviews with business support organisations, some of which do not follow or have no information on eco-innovative companies in general. It is therefore challenging to assess what support such businesses actually need. While all the eco-innovative companies interviewed were profitable during the pandemic, some of them could have performed even more successfully if they had not had to adapt to the challenges they faced. The support instruments available at the time of the pandemic suggest that some of them were appropriate and helped companies to mitigate the risks they faced in terms of business continuity. The most notable examples are subsidies to employers during periods of downtime, grants to finance e-commerce solutions

(E-commerce model COVID-19), and the Supply Chain Resilience platform. However, it is important to underline that the usefulness of each instrument depended on several different conditions that may not necessarily apply to all enterprises, i.e., the need for a certain support may have depended on the type of sector and production, the size of the workforce, the predominant form of activity of the enterprise (physical or virtual), etc.

With regards to recommendations for further development of support activities for eco-innovative companies, the analysis highlighted the problem of disruptions in supply chains, which were not adequately covered by the support measures. Numerous issues had appeared both due to international transfer slowdown and increased demand in last mile delivery. It is therefore necessary to support companies in strengthening their flexibility in order management and in finding more agile solutions for value chain management. One possible direction for the development of support activities is emphasising the digitalisation of processes, enabling companies to better plan and manage their resources and develop innovative and resilient business models.

In addition, this analysis had also grasped several challenges with which eco-innovative companies struggle independently of the pandemic. In order to make eco-innovative enterprises even more competitive, policies aimed at their development should take into account possibilities to enhance partnerships aimed at providing environmentally friendly product and service solutions. These partnerships are broadly interpreted and include cooperation with researchers, foreign clients, other companies, public institutions, etc. As a significant part of the country's eco-innovative enterprises are small and require external resources to develop their activities (both financial and expert), the demand for such intervention is clear.<sup>11</sup> In this context, consumer education should also be an important policy area, with the aim of raising awareness of the use of environmentally friendly products and services. At the moment, considerably large amount of financial and non-financial resources of the companies are addressing the issue of customer doubts about the trade-off between the cost and environmental impact of eco-innovative products. By moving this barrier, eco-innovative companies would have more opportunities to channel their investments into new product development, business expansion and reducing their environmental impact.

Currently, one of the most important ongoing policy developments involving eco-innovative enterprises is the formation of a National Circular Economy Action Plan (NCEAP)<sup>12</sup> under the Ministry the Environment. The plan is intended to present the key policy instruments necessary for the transition towards a circular economy in the country under 7 directions: circular industry, circular transport, circular construction, circular waste management, circular bioeconomy, circular consumption, and new business models for circular economy. In this context, the development of new support instruments for eco-innovation and eco-innovative business development is seen as an activity with high potential to be included in the NCEAP.

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<sup>11</sup> According to 2021 Eurobarometer data, 58% of Lithuanian company respondents identified financial incentives for developing products, services, or new production processes as type of support that would help the most to expand the range of green products or services, while technical support and consultancy for the development of products, services and production processes was identified in the second place among most helpful type of support (identified by 24% of respondents).

<sup>12</sup> The establishment of a National Circular Economy Action Plan is one of the country's commitments under the Lithuanian Recovery and Resilience Facility Plan.

The preliminary list of NCEAP instruments to be evaluated, as a result of discussions between the Lithuanian Innovation Centre and the Ministry of the Environment and the Ministry of Economy and Innovation, currently includes a number of business support instruments focused on the development of eco-innovation and eco-innovative businesses. A few of them are: *Updating, disseminating and building capacity on eco-design principles among companies* (as a response to challenge of Lack of specific expertise or partnerships (figure on page 8)); *Promoting the deployment of sustainable digital solutions in the industrial sector* (as a response to challenge of Supply chain management (figure on page 8)); *Incorporating circular and climate-neutral economy priorities into policies to promote the country's exports and the integration of industry into European value chains, and developing appropriate financial incentives* (as a response to challenge of International growth (figure on page 8)); *Creating a trading platform for secondary raw materials and promoting industrial symbiosis* (as a response to challenge of Lack of specific expertise or partnerships (figure on page 8)).

It is important to stress that the proposed measures are not definitive, as the development of the plan itself is halfway through. However, based on the insights from this regional analysis and discussions with stakeholder groups, the need for appropriate support measures is still relevant. Therefore, the Lithuanian Innovation Centre is actively participating in the discussions on the development of this plan in order to ensure more favourable conditions for the development of eco-innovation and eco-innovative businesses in the country. The plan is expected to be finalised and adopted in the first quarter of 2023.