Brussels foreign trade in a carbon-neutral world

The current situation, requirements, challenges and recommendations for Brussels public organisations

October 2025



hub .brussels
our business is to help yours

Colophon

Study by hub.brussels

Coordinated by Macrine Catteloin – Head of Research - hub.brussels

Authors
Jeremy Beaudelot
Daphne Haegheman
Kurt Negrin
Tom Pamart

Proofreading
Bénédicte Wilders – Research & Design Director – hub.brussels

Page layout by klar.graphics

Creation date October 2025

Contact buresearch@hub.brussels

Responsible Editor
Isabelle Grippa, General Manager - hub.brussels - Chaussée de Charleroi, 110 - 1060 Brussels

For more information:

hub.brussels

Reproduction is authorised with acknowledgement of the source.

Table of contents

Colophon 2

Table of contents 3

Introduction 4

Methodology 5

Carbon-neutral foreign trade in the world and in Brussels:

Current situation 7

- Definition and scope of carbon neutrality 7
- The environmental impact of global trade 7
- Supranational legal framework 8

Barriers, challenges and recommendations 11

- Regulatory framework 13
  - Barriers and challenges 13
  - Recommendations to public authorities 15
- Transport and logistics 16
  - Barriers and challenges 16
  - Recommendations to public authorities 18
- Business strategy 20
  - Barriers and challenges 20
  - Recommendations to public authorities 22
- Innovation and technology 24
  - Barriers and challenges 24
  - Recommendations to public authorities 24
- Knowledge development 26
  - Barriers and challenges 26
  - Recommendations to public authorities 27
- Support and funding 29
  - Barriers and challenges 29
  - Recommendations to public authorities 30

Conclusions 31

Appendices 32

System framework - general overview 34

Introduction

In an international context marked by the climate emergency, the Brussels Capital Region[1] intends to engage in a process of sustainably transforming its economy. Consequently, the Brussels Government tasked hub.brussels with conducting a study to establish a list of recommendations designed to achieve a twofold objective: on the one hand, to maintain and strengthen Brussels' position on the international stage; on the other hand, to satisfy European requirements for carbon neutrality by 2050.

Indeed, the Brussels economy is highly dependent on foreign trade - with nearly a third of its added value and employment linked, directly or indirectly, to the export of goods and services. It is therefore essential to anticipate the impacts of climate change on international trade to capitalise on the inevitable opportunities that are about to emerge (innovation, strategic repositioning, competitive advantage, etc.). However, it is also important to mention the development of European sustainability regulation. This not only means new opportunities, but also challenges for which companies must be prepared.

Decarbonising exports offers businesses an opportunity to position themselves internationally, but it also requires them to adapt to the existing framework. A more demanding European framework now obliges small and medium-sized enterprises that form part of large organisations' supply chain to adapt by implementing more extensive reporting. The region's commitment and the implementation of regional plans, such as the Shifting Economy, can also encourage Brussels companies to adapt and decarbonise. This plan, recently implemented for the Brussels Region, aims to mobilise the Region's economic actors to rise to the challenges of sustainability, by innovating, strengthening ties between residents and creating employment and ecological, economic and social value. It is intended to achieve the objective of carbon neutrality by 2050 and bring more economic activity to Brussels. Anticipating the forthcoming implementation of European regulation and other international objectives is a major driver. Finally, strengthening international competitiveness is another significant motivating factor for decarbonising the exports of Brussels companies.

It is in this context that hub.brussels has been appointed to initiate a strategic review of the future of Brussels foreign trade in a carbon-neutral world. This process aims to provide the Government of the Brussels Capital Region (GBCR) with a series of recommendations for decarbonising the internationalisation of the Brussels economy in terms of both businesses and public authorities and public institutions, including hub.brussels. The recommendations presented in this report are subdivided into six areas identified[2] within the framework of this study: transport and logistics, business strategy, innovation and technology, knowledge development, support and funding and, finally, regulatory framework.

1 Throughout the document, for ease of reading, this will be abbreviated to BCR.
2 The process that led to the identification of these six action areas is set out in the methodology.

Methodology

To arrive at the final recommendations, hub.brussels conducted several successive research phases. The methodological process applied by the Research and Design Department combines quantitative and qualitative methods and uses internal sources of expertise, external partnerships and participatory working practices.

The first phase consisted of **comprehensive documentary research** during which the current situation of Brussels exports was tracked using the many available resources on the subject. These included statistics from public institutions, particularly the National Bank of Belgium, internal work at hub.brussels (Assessment of Brussels foreign trade, etc.), news articles, articles from scientific journals, existing policy documents, etc. The objective of this preliminary research was to obtain a first snapshot of the flow of goods and services in the BCR and the environment in which they take place: European legislative frameworks, infrastructure, data on emissions, etc. This was then used to provide a framework to gain a greater understanding of the trends, structural weaknesses and opportunities relating to Brussels' position on the international stage.

Alongside this analysis, work was also conducted to track logistics-related trade flows globally. Particular attention was paid to current logistics trends and challenges that hinder the process for decarbonising international trade. In this respect, economic and geopolitical factors were mentioned, as were the limitations arising from the private sector itself (such as business practices, market structure and technological constraints) which complicate or delay sustainable transition processes. This approach was used to reposition the Brussels Capital Region in a broader international context.

Based on these initial findings, **two internal workshops were held within hub.brussels** involving a number of departments: BU International Network, BU Export Promotion, BU Coaching, BU Awareness, BU Invest, BU European Programs, etc. The first workshop was designed to inform internal stakeholders of the preliminary conclusions of the documentary research and garner initial thoughts. The second focused on identifying relevant external stakeholders to participate in the qualitative stage of the research.

The next phase was to conduct **detailed interviews with a diverse group of stakeholders, including businesses, government institutions, sector-based organisations and other relevant stakeholders involved in the Brussels export ecosystem.** Data collection took place from January 2025 to May 2025. To ensure a sufficiently broad panel of interviewed companies, hub.brussels and a consultancy specialising in qualitative research contacted and interviewed thirty relevant stakeholders identified during the framework phase. These stakeholders were divided into six themes: Transport and Logistics, Business Strategy, Technological Innovation, Knowledge Development, Support and Funding and Regulatory Framework. These qualitative interviews were used to collect raw data that were summarised and analysed.

These qualitative data were processed with the support of an external partnership. By applying a systemic design-thinking methodology, an iterative analytical process was established in which the information gathered through the interviews could be structured, categorised and prioritised. This informed both the preparation and implementation of **analytical workshops, during which different scenarios were explored by (internal and external) stakeholders**.

Based on this wealth of information, the Research BU was able to draft this report and produce the recommendations requested by the Government.

Carbon-neutral foreign trade in the world and in Brussels: Current situation

Carbon-neutral foreign trade in the world and in Brussels: Current situation

Definition and scope of carbon neutrality

It is important to clarify what is included in the notion of carbon neutrality. It refers to the balance between greenhouse gas emissions generated by human activities and the amount removed or offset, whether through natural sinks (forests, soils, oceans) or through technological solutions (carbon capture and storage).

In the context of Brussels foreign trade, this definition means rethinking value chains, modes of transport and internationalisation strategies to minimise the overall carbon footprint.

The environmental impact of global trade

In 2018, almost 30% of global CO_2 emissions were related to international trade, which represents around 10 billion tonnes of CO_2 emitted every year. Transport obviously contributed significantly to this figure as approximately 33% of trade-related emissions are generated by transport, while 67% come from production. Overall, in 2018, international transport accounted for 10.2% of global emissions, with air transport the most polluting.[1]

Maritime transport

Maritime transport is responsible for 3% of global CO_2 emissions, but this is only set to grow. In 2023, the volume of global maritime trade increased by 2.4% to reach 12.3 billion tonnes, while for 2024, a growth of 2% in total maritime transport and 3.5% in container transport was expected. Between 2025 and 2029, the annual forecasted growth rate is 2.4% and 2.7% respectively.[2]

Furthermore, developing countries manage most of the world's maritime trade, which raises issues from a geopolitical and climatic perspective.

Goods transport in Belgium

In terms of domestic goods transport in Belgium, a 0.9% increase in quantity is observed compared to 2022 and a rise of 0.5% compared to 2021.[3] In our country, the transport sector accounts for 21% of greenhouse gas emissions (2023), 96% of which is from the road sector.[4] International transport fell by 3.7% and 6.8% respectively. The proportion of international transport (18%) compared to domestic transport (82%) remains constant.[5] In 2023, 73% of goods transport in Belgium was performed on behalf of a third party (i.e. using a transport company). This traffic increased by 2.2% between 2022 and 2023 and reduced by 0.5% compared to 2021. The share of road transport on own account was 27% in 2023. This type of transport has decreased by 5.5% compared to 2022 and by 1.9% compared to 2021.

1 World Trade Organization, "World Trade Report 2022: Climate change and international trade", 2022, p. 100
2 UNCTAD, United Nations Trade and Development, Review of Maritime Transport 2023
3 https://statbel.fgov.be/en/themes/mobility/transport/road-freight-transport
4 https://climat.be/en-belgique/climat-et-emissions/emissions-des-gaz-a-effet-de-serre/emissions-par-secteur
5 https://statbel.fgov.be/en/themes/mobility/transport/road-freight-transport

Supranational legal framework

The EU's environmental legislation under the European Green Deal is an important framework for this report, and for the definition and scope of the notion of net emissions and "zero carbon".

Here are some key milestones in the development of the European framework:

- Paris Agreement (2015): recording international climate objectives, including the commitment by signatory countries to hold the increase in global temperature to well below 2°C by attempting to limit it to 1.5°C above pre-industrial levels.
- European Green Deal (2019): the European Commission launched the Green Deal with the aim of making the European Union the first climate-neutral space by 2050. This means reducing net greenhouse gas emissions to zero.
- European Climate Law (2021): the European Parliament and the European Council adopted this regulation which writes into law the objective to become climate neutral by 2050. This is legally binding on all Member States.
- Fit for 55 (adopted in October 2023): the EU updated its intermediate objective to reduce emissions by 2030, changing it from 40% to at least 55% compared to 1990 levels. This package of measures defines the policies designed to support this aim and accelerate the transition to a low-carbon economy. The FuelEU Maritime Regulation was introduced as part of the Fit for 55 package. It promotes the use of renewable, low-carbon fuels in the maritime sector. The objective is to reduce greenhouse gas emissions from energy consumption on board ships by 80% by 2050.

CSRD and reporting[6]

The Corporate Sustainability Reporting Directive (CSRD), in force since 2014, was amended in 2022. This Directive extends the reporting obligation to a greater number of companies and requires detailed reports on sustainable development.

The Corporate Sustainability Due Diligence Directive (CSDDD), adopted in 2024, requires companies to identify and address negative impacts on human rights and the environment in their own operations and value chain.

6 The Omnibus package was recently introduced. The Omnibus package is a collective measure to modify and simply several existing laws into a single law, so that the CSRD can be introduced correctly and practically at national level.

Brussels foreign trade: current situation

Belgium stands out due to its strong economic, social and political openness to the rest of the world. In 2024, the country was ranked 3rd in the KOF[7] globalisation index.[8]

Moreover, in order to illustrate the importance of foreign trade for the BCR, the Brussels Institute for Statistics and Analysis, in view of hub.brussels' interest in obtaining this figure, calculated that 33% of the gross value added (GVA) and 28% of Brussels employment are directly or indirectly linked to foreign trade.[9] These two figures signify the importance for the Region of economic relations with the rest of the world.

It is important to highlight that services play a key role in Brussels foreign trade. Indeed, in 2023, Brussels companies exported 35.6 billion euros worth of services worldwide. Just over half the service exports (55%) related to professional, scientific and technical activities and financial and insurance activities. The sectors of information and communication technologies, transport and storage and wholesale and retail trade; repair of motor vehicles and motorcycles complete the "Top 5" with a total share of 24%. It must also be noted that the transition in which a large number of countries are engaged is helping to create many opportunities for services companies (consultancy for adapting to the regulatory framework, expertise on certain specific subjects, etc.).

Moreover, it should be stressed that the main foreign clients of Brussels companies are located in the European Union. In fact, no fewer than 76.3% of them are based in European Union countries. This increases to 88.1% if all European countries are taken into account.[10]

In terms of goods exports, for 2024, these fell by 24.7% to 8.9 billion euros.[11] The two highest-selling product categories remained products of the chemical or allied industries and transport equipment, although they declined sharply and only amounted to only 5.3 billion euros in total, compared to 8.3 billion euros in 2023. Transport equipment exports reduced by 58%, while exports of products of the chemical industry fell by 11.6%. With regards the main export markets, Germany, the Netherlands, France and Luxembourg continue to be ranked in the first four places, while the United Kingdom completes the top five, with the United States in sixth place.

7 GYGLI Savina, HAELG Florian, POTRAFKE Niklas et STURM Jan-Egbert (2019): The KOF Globalisation Index – Revisited, Review of International Organizations, 14(3), 543-574 https://doi.org/10.1007/s11558-019-09344-2 external.

8 The ranking, established by ETH Zurich, measures the economic, social and political dimensions of globalisation

9 https://ibsa.brussels/actualites/un-tiers-de-la-creation-de-richesse-en-region-bruxelloise-est-lie-aux-exportations This figure, calculated in 2024, is based on 2015 information. This work is shortly set to be updated with 2024 figures.

10 In addition to European Union Member States, the following states must be added: United Kingdom, Switzerland, Russia, Norway, Turkey, Belarus, Ukraine, Montenegro, Kosovo, Serbia, Iceland, Liechtenstein, Andorra, Albania, Bosnia and Herzegovina, Faroe Islands, Gibraltar, Macedonia, Moldova, San Marino and the Holy See.

11 Assessment of Brussels Foreign Trade, Section I: Foreign trade in goods

Barriers, challenges and recommenda-tions

Barriers, challenges and recommendations

The Brussels Capital Region has an open economy, strongly focused on the service sector and where international trade plays a key role in both the creation of value added and the vitality of the local economy, comprised mainly of small and medium-sized enterprises.

In a rapidly changing world, the challenge for Brussels is to assert its position as an environment favourable to the international development of companies, while taking into account current economic, geopolitical and climate-related challenges. Companies that manage to develop their international business while fully incorporating the decarbonisation objectives will probably benefit from a decisive competitive advantage. The aim therefore is to turn decarbonisation from a regulatory constraint into a strategic lever for Brussels SMEs. This requires guidance and integrated (financial, technical, regulatory) support and the creation of a local ecosystem of knowledge and skills. Such an approach would secure access to foreign markets, strengthen companies' resilience and position Brussels as an economic hub aligned with the European objective of carbon neutrality.

It is firstly important to note that the attitude of the stakeholders interviewed was generally positive with regards a change towards a more sustainable logistics chain, while also emphasising - for many of them - the risks and challenges to international development. In this respect, the reporting obligation incumbent on large companies in relation to their greenhouse gas emissions and the reduction measures implemented have an indirect effect on smaller businesses. Indeed, these are also required to provide such information without however having the necessary human and financial resources. In addition, given the current geopolitical context and the change in economic and trade relations, sustainability in international trade tends to be relegated to the background. Several interview participants confirmed that the geopolitical situation is greatly influencing their company's strategic and logistics decisions. Finally, the regulatory framework (whether European, federal or regional) and its many developments are sometimes difficult to follow for companies (especially SMEs).

As outlined in the methodology, the recommendations set out below are mainly the result of a qualitative process during which more than thirty - public and private - stakeholders were consulted or involved. This methodological choice reflects the commitment to anchor the recommendations in the reality of the needs, constraints and dynamics specific to companies, rather than following a strictly theoretical or "top-down" process. They were therefore formulated by taking this tangible feedback into account, in order to provide a targeted, pragmatic and coherent response to the challenges expressed. They are grouped into six separate but interconnected themes:

- Regulatory framework: this reflects the legislative and regulatory context in terms of decarbonisation and sustainability within the international economy at different levels of governance, such as the Shifting Economy or the Green Deal.
- Support and funding: this theme includes the current support of public institutions, at regional and non-regional level, both financial and non-financial.
- Transport and logistics: the transport used for international trade and how the different options are used by businesses.
- Strategies implemented within companies: this theme covers the choices made by companies in the current economic situation and includes current choices in terms of international development, as well as future choices and requirements to adapt the strategy in the context of the purpose of this study.
- Innovation and technology: this theme includes the development of technology and innovation to support the decarbonisation of companies' exports.

- Knowledge development: this theme covers knowledge development within public support, along with development of companies' knowledge on a given subject. This mainly relates to the measurement of indicators, reporting, developing the knowledge required to ensure competitiveness, and disseminating the right information to the right audiences.

The same structure was applied to each of these themes, beginning with the barriers and challenges reported by the stakeholders interviewed, followed by the recommendations to be implemented by both private-sector organisations and by public authorities.

It should be noted that these barriers and challenges are based on Brussels entrepreneurial landscape, which comprises mainly small and medium-sized enterprises. Consequently, these also represented most of the participants in the qualitative study and the resulting recommendations therefore focus mainly on this target group. In addition, while these observations and recommendations aim to be exhaustive in reflecting the views expressed by the stakeholders consulted, they cannot be fully comprehensive in relation to the Brussels entrepreneurial landscape as a whole.



Regulatory framework

Barriers and challenges

Administrative and legal complexity

Brussels exporting SMEs have to contend with layers of European, federal and regional regulations that can be difficult to follow.

At the European level

Increasing EU regulations in terms of the environment and their rapid development[12] make anticipating and planning difficult for SMEs, creating uncertainty that may curb investments in low-carbon projects.

Regulatory developments, including the recent relaxing of some of the EU's environmental rules, such as the Omnibus package,[13] are a major challenge for SMEs. They need a clear, sustainable and stable long-term vision of the transition so that they can define and implement a real business strategy.

Finally, the lack of standardisation across EU Member States, specifically on aspects such as national or regional labels or certifications, makes the regulatory framework harder to understand for SMEs and therefore complicates their processes when they export to several European countries. In addition, the application of regulations in general is somewhat uneven. Standards (e.g. sustainability of products, packaging, green logistics) are not always harmonised between Member States in their implementation, which creates barriers for SMEs operating in several countries.

The main EU regulations in this area are as follows:

- **CSRD[14] (Corporate Sustainability Reporting Directive)**

  Although the Corporate Sustainability Reporting Directive targets primarily large organisations, its obligations extend indirectly to SMEs through the value chain. Indeed, although they are not directly subject to the reporting obligations, SMEs must often provide data to their clients, partners or banks, which creates a significant administrative burden. However, they rarely have the necessary internal resources to collect, check and present such information. This complexity limits their ability to demonstrate their alignment with the taxonomy[15] and may limit their access to funding or markets related to the green transition.

12 In this respect, see the report on the obligation to implement the CSRD and the CSDDD decided by the European Council in early 2025.

13 Presented on 26 February, the Omnibus package aims to simplify and refine existing regulations on sustainability, such as the CRSD, CSDDD and the EU taxonomy.

14 https://finance.ec.europa.eu/capital-markets-union-and-financial-markets/company-reporting-and-auditing/company-reporting/corporate-sustainability-reporting_en

15 The EU taxonomy defines what may be considered as a "sustainable" economic activity in relation to European climate and environmental goals.

- **CBAM[16] (Carbon Border Adjustment Mechanism)**

  Adapting to new reporting rules related to the Carbon Border Adjustment Mechanism is still complex and costly for exporting companies in certain sectors (steel, cement, fertilisers, electricity, aluminium, hydrogen and many others). Furthermore, customs procedures are particularly onerous, even for low-value consignments, which now require greater carbon traceability.

European voluntarism in terms of the environment is sometimes perceived as a barrier to competitiveness, especially with regards export markets that are not subject to the same standards.

The European regulatory framework is therefore both a powerful action lever and a significant source of uncertainty for exporting SMEs.

At the federal level

SMEs often have to deal with complex taxation and customs regulations. Although certain tax measures in support of the transition already exist, there is not yet a coherent federal tax framework that clearly supports the decarbonisation of foreign trade, in conjunction with regional energy transition policies.

At the regional level

The highly regionalised promotion of foreign trade is managed by the three Regions through dedicated agencies (hub.brussels, FIT and AWEX).[17] Furthermore, decarbonisation is partly covered by regional competences such as innovation, mobility and urban planning (particularly for logistic infrastructures). The division of competences and the fragmentation of levers makes it difficult to implement an integrated and coherent approach at federal level to support SMEs in decarbonising their internationalisation.



16 https://taxation-customs.ec.europa.eu/carbon-border-adjustment-mechanism_en

17 The federal government and the 3 regional agencies work together within the Belgian Foreign Trade Agency to organise "royal" economic missions or State Visits.

Recommendations to public authorities

- Although the harmonisation of environmental standards is a European competence, the BCR can play an advocacy role and promote interregional cooperation in this area. This cooperation is already taking place, for example, through collaboration platforms such as the European Trade Promotion Organisation (ETPO) and Trade Promotion Europe (TPE), of which hub.brussels is a member and where information and good practices are shared by trade promotion organisations in Europe. The TPE platform ensures consistent representation and a unified voice at European level.
- The Region could encourage the convergence of practices between Regions and Member States, particularly in terms of labels and certifications, in order to reduce regulatory fragmentation. Establishing a mechanism for the mutual recognition of green certifications in Europe would help to reduce compliance costs and give greater clarification to Brussels exporting SMEs.
- The Brussels Region could report the difficulties and recommendations of SMEs relating to the administrative and legal burden to the federal and European authorities with the aim of simplifying regulations on decarbonisation.
- SMEs also appear to lament the lack of fair regulation regarding the price paid for CO_2 and would prefer the costs to be borne more collectively.
- More advanced and integrated cooperation on sustainability between the different regions, together with the integration of sustainability into public processes and criteria, would provide businesses with a clearer framework, while in public institutions, working together on this issue would improve efficiency.
- Sustainability criteria would need to be included in public procurement contracts, ensuring that these are adapted and proportionate to the capacities of SMEs.
- hub.brussels could introduce a dedicated section for SMEs in general, and for exporting SMEs in particular, within its various support and information tools (hub.info), to help them understand and anticipate developments in European, federal and regional regulation, and to adapt their practices to sustainability requirements. This support could also provide clear tracking of relevant regulatory deadlines by sector, thus facilitating monitoring and planning for SMEs. Information and awareness of sustainability in the business world is already integrated into various tools designed to support companies. Increased centralisation of such information would further improve its visibility and facilitate access for companies. The hub.info website is a valuable resource in this respect.

Transport and logistics

Barriers and challenges

- The low-carbon transition of transport is underway, but the sector is still affected by a certain conservatism and heavily focused on reducing costs. For companies, the choice of transport and logistics is still predominantly led by economic criteria. In BCR, road transport largely dominates: it accounts for at least 90% of incoming and outgoing goods flows (2021 figure: transit vans (<3.5 t) represented 11% of traffic on the Brussels' road network. Even in 2012, this figure was 8%).[18]

The Climat.be method (taken from the United Nations Framework Convention on Climate Change) does not include international aviation and shipping in national emissions. For Belgium (2019), transport therefore accounts for 26 million tonnes of CO_2, but if international aviation and shipping were included, the result would be 58 Mt CO_2.

Lack of suitable infrastructure in BCR

- The supply of low-carbon logistics infrastructure is limited in Brussels, both in terms of rail and river transport and with regards suitable consolidation solutions for companies. Furthermore, developing such infrastructure depends on policy decisions and significant investments which, at this stage, struggle to establish themselves as a priority on the regional or national agenda. This is a structural barrier to the low-carbon transition of goods transport in Brussels.
- Although effective for decarbonisation, in the Brussels region, rail as a mode of goods transport experiences a range of technical limits that hinders its deployment. The prevalence of passenger trains on the network further restricts the development of freight. It is also important to note that rail operators prioritise full trains, a model unsuited to the dispersed production volumes of SMEs. The current limitations and restrictions of rail freight in the Brussels Region - particularly in terms of infrastructure and flexibility - therefore make its use for export marginal and even unviable for most companies.
- With regard to waterways, the current container terminal at the Port of Brussels, which is not large enough, severely limits the prospects for developing large-scale river transport.
- There are few practical solutions to connect Brussels to European low-carbon logistics corridors and intermodal transport (rail, river, logistics hubs) is not sufficiently developed or easy for Brussels SMEs to access, either operationally or financially.

18 Environment.Brussels; Mobility and transport in the Brussels Region, September 2024, https://environnement.brussels/citoyen/outils-et-donnees/etat-des-lieux-de-lenvironnement/mobilite-et-transports-en-region-bruxelloise

A Brussels company - specialising in fermentation - exports 98% of its production. The company uses boats to transport to distant markets and road transport for closer markets. The train is used very infrequently because it is poorly developed while the rivers are not suited to container transport.

Another company - producing biscuits and snacks - is looking for more sustainable solutions to road transport. The rail option is currently impossible and, to change this state of affairs, significant public support (to develop infrastructure in particular) would be needed.

The issue of competitiveness

- Low-emissions transport options (such as the "green" services of transport companies that use bikes in city centres, offsetting CO_2 emissions, using electronic vehicles for the delivery fleet, rail or river transport) are often more expensive than conventional solutions. These extra costs (for example, 3% to 5% for green options with transport companies like UPS or DHL) can reduce profit margins and lead to a competitive disadvantage compared to international competitors subject to fewer constraints. In addition to this, there is also a time constraint, as low-carbon logistics solutions often mean longer transport times. This is due to the fact that rail or river transport has to be coordinated with other deliveries, which lengthens delivery times. Road transport also needs to be coordinated to avoid vehicles travelling when empty, which can lead to a rise in logistics waiting times.
- International customers require speed and reliability, which forces companies to choose the fastest, often most polluting option (e.g. road or air freight).

Limited capabilities of SMEs and insufficient data

- SMEs often lack the necessary internal resources to analyse their logistics flows, measure their carbon impact and explore alternative solutions.



Recommendations to public authorities

- To respond to the main challenges related to the capacity, connectivity and especially the attractiveness of rail transport for companies, play a key role by supporting sustainable modes of transport, particularly through investments in rail infrastructure and suitable incentives based on successful examples abroad.
- Develop decarbonised logistics hubs near Brussels and across its region in order to improve the flow of goods, including exports and reduce pressure on the road network. Increase the influence of the Port of Brussels, which is home to a major industrial and river transport hub, could also be given as an option.
- Since the use of bikes for urban logistics is currently focused heavily on the last mile, assessing the relevance of transporting Brussels goods using this mode of transport from the first mile. In this context, the role of cycle-logistics organisations is worth exploring. Provided that they are well integrated with the main transport routes, cycle-logistics operators can be incorporated into longer logistics chains linked to export activities. The use of cargo bikes, already used by stakeholders like Urbike, is a suitable solution for local deliveries, especially in a dense urban environment such as Brussels.



As part of an initiative supported by the European Eurocities network,[21] a large organisation that was interviewed has implemented an initiative, in the city of Mechelen, that has reduced CO_2 emissions and fine particles of last mile parcel delivery by 97% and 77% respectively. To achieve this, three priorities were established: use only clean vehicles for distributing and collecting parcels; create a network of collection points open 24 hours a day and 7 days a week, easily accessible to recipients; and reduce the number of unsuccessful deliveries.[22] These are lessons that can be drawn on to implement a similar scheme for the first mile.

- Develop or support the development of low-carbon shipment consolidation platforms, as an SME can rarely fill a single container on its own.
- Integrate a dedicated low-carbon logistics (international) component into public authority information tools, within a one-stop shop (like hub.info managed by hub.brussels) to support Brussels SMEs in their transition to sustainable logistics solutions by providing them with diagnostics tools, practical guides and tailored decision-making support.
- Change the mentality surrounding business trips in companies through information and awareness campaigns. Several proposals can be made to companies: only travel if it provides added value (signing of contracts, sensitive negotiations, establishing relationships of trust), make the most of new, post-COVID practices by incorporating videoconferencing into the international sales strategy to save time and money and reduce the carbon footprint. To this end, it is important to make greater use of the opportunities offered by the foreign offices of foreign trade agencies (like hub.brussels) or local representatives.

- Showcase inspiring companies and put them in contact with other businesses from the entrepreneurial world. Some companies demonstrate that solutions which may at first appear to be niche products can be at the forefront of innovation and deployed on a large scale. Thus, the Brussels company Javry is known for importing coffee beans aboard a sailing boat, but a large group like Pernod Ricard also exports some of its products to the United States using the same means of transport. This can transport 850 tonnes of goods in one trip, in a timeframe comparable to that of a cargo ship.

The French company "Grain de Sail" has two sailing boats that connect Brittany (Saint Malo) with New York in a maximum of 25 days. In addition to this service and loading/unloading at the departure/arrival port, the company provides pick-up and transport to the loading/storage port, insurance for the goods and additional security at the port if required (security guard, additional cameras, seals, etc.).[23]



19 The mission of this European network - of which Brussels is part - with 200 large cities representing 150 million people in 38 countries is to create places where people can enjoy a good quality of life in a safe and green environment where low-carbon smart solutions are used to purify the air and improve public services and where people can travel sustainably, feel connected to their community and all new arrivals are welcome.

20 https://eurocities.eu/latest/put-on-your-slippers-zero-emission-deliveries-are-here/

21 https://graindesail.com/en/transportation-services/

Business strategy

Barriers and challenges

- Many companies still view sustainability as a constraint rather than a strategic lever able to stimulate innovation, improve their competitiveness and create value internationally. This perception can hamper international alignment and the company's competitive position and limit its transformation potential.
- One of the major obstacles to decarbonising the export strategy of Brussels SMEs is the lack of internal resources to identify, anticipate and integrate climate-related issues into their international development. This deficiency is seen at several levels:
    - The transition towards decarbonised modes of production, supply and transport may involve high initial investments that are difficult to access for SMEs.
    - The regulatory landscape is fragmented: each market can impose specific requirements in relation to sustainability (standards for production, labelling, carbon taxes, etc.).
    - Shortage of human resources, many SMEs struggle to monitor and anticipate these developments, and to integrate the certifications necessary for placing their products on the market.
    - Furthermore, the employees responsible for export rarely have specific training in climate-related issues (carbon accounting, regulations, ESG reporting, certifications, etc.).
- To date, few SMEs have internal tools or indicators to assess the carbon impact of their international operations (sourcing, transport and logistics, etc.) and the life cycle of exported products is rarely analysed. This lack of data limits the ability to make informed decisions and move towards more sustainable practices.[22]
- For Brussels SMEs, embarking on a process of environmental labelling or certification is a challenge due to many barriers. International certifications often require external audits, the involvement of specialist consultants and compliance with high standards. For an SME, this could amount to a high financial cost. In addition, certification procedures involve a considerable administrative burden (data collection, reports, monitoring indicators). Many SMEs do not have the human resources or sufficiently developed tools to satisfy these requirements. Finally, the coexistence of many labels (international, European, Belgian, Brussels, sector-based, private) gives rise to a certain amount of confusion. SMEs find it difficult to identify those that are truly relevant for their target markets and are afraid of investing in certifications that may not be recognised abroad.
- For many SMEs, export is focused on growth and entering new markets without a real connection to the environmental strategy, when there is one. Furthermore, sustainability is often treated as a cross-disciplinary or secondary function (CSR, compliance), without a direct link to international development objectives. This dual state of affairs restricts the strategic integration of carbon neutrality into key decisions: market selection, logistics choices, partnerships, etc.

22 Although the Digital Product Passport, a regulation arising directly from the European Green Deal will begin to come into force for certain products in 2026. This regulation is similar to a passport for physical products. Various data are collected and stored on it, such as the product's composition, its environmental footprint, how it can be repaired/recycled/processed, etc. This passport can then be viewed by any party in the logistics chain using, for example, a QR code.

- Faced with the uncertainty surrounding the medium- and long-term benefits of a low-carbon international strategy, such as access to new markets, enhanced reputation and even improved brand image and attracting talent, many companies remain reluctant to change their business model. Moreover, there are few tools that can be used to give a tangible assessment of the indirect benefits associated with this process.

A lack of time and resources prevents a proactive approach. The company is in a period of strong growth, limiting its room for manoeuvre. Some actions have been identified, particularly on packaging or energy, but not yet implemented.

A company operating in the food and beverages sector.



Recommendations to public authorities

Introduce support tailored to strategic transition

- Strengthen the individual support programme for Brussels companies that want to incorporate sustainability into their business model by developing a specific coaching offer for exporting SMEs that want to realign their internationalisation strategy with the objectives of carbon neutrality.
- Develop a dedicated module on sustainability - in addition to the 4 priorities already explored: strategy, technologies and organisation, customer relations and culture and skills - in the international maturity tool set up by hub.brussels.
- Publish sector-based practical guides combining international strategy and sustainability.

Facilitate access to new markets

- hub.brussels may need to help Brussels SMEs to access new markets and turn decarbonisation into a competitive advantage:
    - By improving, with the support of the international network, the identification of the countries/regions where environmental regulation is already strict and where customer demand for low-carbon products/services is strong.
    - By putting them in contact with foreign partners attentive to climate-related issues, through the organisation of targeted B2B missions, trade shows, etc.
    - By facilitating their access to international tenders that include environmental criteria.
    - By showcasing examples (success stories) of Brussels SMEs that have succeeded in incorporating sustainability into their international strategy to inspire other companies and demonstrate the feasibility of this transition.
    - By establishing a chart of the most relevant labels, relating them to targeted export markets, in order to guide SMEs and avoid dispersing their efforts.

Develop inter-company partnerships

Encourage and support inter-company cooperation, through clusters, export consortiums and relationship platforms in order to share the costs related to internationalisation (logistics, certifications) and improve the competitiveness of Brussels SMEs.

Enhance its brand image

- Public bodies can help Brussels SMEs to communicate their commitment to decarbonisation. This may give them an international competitive advantage allowing them to stand out on foreign markets by satisfying the requirements of customers and partners attentive to climate-related issues.

- Given the importance of services in the Brussels economy, public support can help businesses implement a functional economy model, which prioritises the product's use-value rather than its ownership. This approach aims to replace the sale of a good with the provision of a service offering the same functions. The product remains the property of the supplier, while the customer pays to use it. The commercial relationship is not therefore limited to the act of buying, but extends throughout the product's entire duration of use. There are several benefits to this model. It can strengthen a company's position on the market, boost local employment, extend the lifespan of products and optimise the use of material resources. By encouraging a process of use rather than consumption, the functional economy model contributes to a transition towards a more sustainable economy.
- Thus, while not exhaustive, here are two alternative strategies to exporting identified in the course of this study:
    - Nearshoring: developing production sites abroad would enable Brussels companies to reduce their logistics and transport costs by producing close to their target markets (nearshoring), thereby reducing their CO_2 footprint while strengthening their competitiveness. Furthermore, establishing production sites abroad gives them greater flexibility to deal with fluctuations in demand and the risks relating to global supply chains. Finally, a local presence increases the company's credibility and visibility on foreign markets, supporting the creation of partnerships. This is not removing the company from the Region, but adopting a strategy that consolidates its activities and improves its international positioning. This approach is used to consolidate the role of the head office and the production site, while developing exports to new markets. Internationalisation therefore contributes to enhancing the global profile of the regional economy.
    - Creating a franchise abroad may be an effective way for a Brussels company to develop internationally while reducing its carbon footprint. By assigning the operation to a local partner, the company can establish itself on a new market without having to bear all the costs and risks of a subsidiary on its own. The franchisee also brings their knowledge of the market, regulations and consumption habits, which increases the business' chance of success. This model also enables local production and sourcing, thereby reducing long-distance transport and the associated CO_2 emissions. The expertise is transferred, but not most of the products, which significantly reduces physical international flows. The franchise helps to build an international network, while strengthening competitiveness and the responsible image of the SME (see the models set up by brands such as "Le Pain Quotidien" and "Exki").
- Although not directly linked to export activities, other avenues can still support Brussels companies' international development while contributing to decarbonisation objectives.

Company operating in the events sector

The company has recently replaced plastic with wood for packaging its equipment. However, since wood is heavier, this creates logistics challenges. It produces everything through a short distribution channel in Belgium before selling internationally. This reduces its carbon footprint related to production and supports the local economy.

The company is considering solutions to make its exports more sustainable, such as local production in the export regions instead of exporting them from Belgium. However, this solution has not yet been implemented.

Innovation and technology

Barriers and challenges

Access and cost of funding to invest in the transition

- Initial investments in the field of decarbonisation (energy efficiency, lower-carbon technologies, digitalisation, R&D) often represent a high cost and involve a degree of risk for SMEs.[23] These investments are also subject to the company's financial uncertainties and, in a difficult economic environment, can slow as SMEs will generally prioritise operating expenses and short-term survival.



23 See the BISA publication on Innovation in Brussels/https://ibsa.brussels/actualites/innovation-a-bruxelles-les-grandes-entreprises-en-tete

Recommendations to public authorities

- In terms of regional public support, the aim is to encourage the integration of low-carbon technology solutions across the entire value chain of Brussels companies, including export activities, while taking into account the economic limitations of SMEs. In this respect, it is useful to boost collective innovation by developing a clustering dynamic based on the triple helix model, bringing together companies, research centres and public authorities. This approach could be used to strengthen Brussels identity on the international stage in terms of green innovation, particularly through the creation and development of sustainable industrial clusters in strategic sectors such as low-carbon construction.
- Public support should also encourage R&D projects with significant potential for the low-carbon transition, by prioritising funding for such initiatives. Public aid should prioritise the most structuring technological projects, i.e. those that make a direct contribution to decarbonisation, competitiveness and the low-carbon transformation of the regional economy.
- hub.brussels can help Brussels SMEs to strengthen their capacity to innovate in a sustainable, competitive and outward-looking way, while aligning them with the European objective of carbon neutrality by 2050.

Support the adoption of digital technologies and tools by Brussels SMEs

- Digitalisation can be a lever to enable Brussels SMEs to expand their activities internationally while reducing their carbon footprint, provided that they benefit from appropriate support and funding to integrate these tools into their international strategy.
- Adopting digital tools (such as ERP, CRM or e-commerce platforms) helps to improve internal processes and reduce the need for some physical travel.
- Furthermore, public support can encourage companies to integrate innovative solutions to optimise their logistics operations to become low-carbon. Blockchain, on the sole condition that this technology becomes less energy intensive and is fuelled by green energy, may for example, strengthen the sharing of information within the value chain, by making it both secure and fully transparent. One interview participant (a large organisation) indicated how it is using and exploring all these technologies.
- Finally, as already mentioned (in the transport section), swapping some physical assignments with videoconferences can contribute to decarbonisation.

Promote simple and accessible digital tools for carbon reporting

- Facilitate SMEs' access to platforms that enable them to collect, measure and analyse their carbon emissions. These tools should incorporate reliable methodologies, satisfy regulatory obligations and promote continuous improvement of environmental performances. In this respect, carbon accounting has become an essential tool for driving the low-carbon transition of companies. However, its implementation often raises a number of issues:
    - Collection and reliability of data: particularly for scope 3[24] which requires the involvement of the entire value chain and increased cooperation with stakeholders;
    - Skills and expertise: specific training for internal teams, or the support of external experts, is often required to ensure the quality, relevance and comparability of the results;
    - Transparency and consistency of the approach: regular accounting and clear communication are essential to lend credibility to climate commitments and satisfy the requirements of the regulations, investors and customers.



24 A full explanation of the different scopes, established by the European Commission, can be found in the appendices.

Knowledge development

Barriers and challenges

- With so many solutions and so much information available, it is difficult for companies to determine how to begin their transition and integrate it into their internationalisation strategy.
- The fragmentation of knowledge sources is a major challenge for Brussels SMEs. Relevant information is spread between various public bodies, industry federations, private offices, international platforms, etc. As a result, SMEs struggle to know where to look first and find it difficult to gain a coherent and comprehensive view of the solutions and good practices available for their transition to decarbonised foreign trade.
- SMEs need data and recommendations appropriate to their sector, their size and the Brussels economic and regulatory situation.
- SMEs may feel that their efforts are insignificant in comparison to large organisations in the same sector, which can generate significant apathy. Furthermore, they do not always have access to information on feedback and good sector-based practices. This situation can slow the adoption of sustainable practices in their internationalisation strategy.
- The associated costs and benefits are difficult to evaluate, which curbs investment in terms of time and financial resources. In addition, most existing approaches target medium-sized and large companies, although the Brussels entrepreneurial landscape consists mainly of small organisations with specific needs.
- Carbon footprint measurement tools lack standardisation and remain largely inaccessible to SMEs. While some large organisations have internal tools, SMEs struggle to find solutions that fit their size, their resources and their operational needs.
- Information asymmetry and unreliable data are common, which can lead to scepticism and accusations of ‘greenwashing’. For example, companies find it difficult to trace the actual origin of materials or verify the credibility of environmental claims beyond simple statements, which affects trust between market participants.

Recommendations to public authorities

- In the hub.brussels' "export" tools introduce a transition section, and in the "transition" tools include an export section.
    - Thus, in terms of support to make business models more sustainable, a specific export-focused component could be developed.[25]
    - In its self-diagnosis tool to identify the best sustainability strategy to be implemented, an export-dedicated section could be developed.[26]
    - Create an "export" section in hub.info's Sustainable Entrepreneurship Guide which explains the concept of a company in transition, the circular economy, the social economy and sustainable digitalisation and presents all the support and funding schemes available.[27]
    - For first-time exporters, ensure that the transition issue is fully integrated into the support.
- Provide a platform containing an inventory of suitable solutions, categorised based on the size, business sector and financial capabilities of companies. A tailored decarbonisation audit is also recommended to enable companies, among other objectives, to position themselves in relation to their sector and to the entrepreneurial landscape as a whole.
- Integrate and encourage partnerships between companies in the same sector and the same entrepreneurial landscape to develop initiatives and clearly defined resources. The federations can play a role in providing information and resources. As previously mentioned in the Logistics and transport chapter, this can be achieved by creating a single knowledge portal or platform concerning different links in the logistics chain or certain sectors.

The Linked.farm cooperative is a platform that connects farmers and producers on one side and individuals, restaurants and stores on the other. The objective is to allow the first group to offer their product, via a shortened supply chain, to the second group. In practice, the farmers/producers can "place" their products in over a thousand hubs in Belgium. Subsequently, interested parties can source them there.[30]

- Raise companies' awareness of the benefits arising from a sustainability approach and promote the training and knowledge needed to integrate sustainability into the company's operation to future entrepreneurs and start-ups. Companies in the start-up phase often find it easier to integrate decarbonisation into their DNA and development objectives. On the other hand, established companies must adapt their business model and, where necessary, restructure their logistics facilities and infrastructure to integrate these objectives. It will therefore be easier for a start-up that incorporates this aspect when designing its export model to align its practices, than for a more mature company, where the business is already structured based on other reasoning. For this mature company, the transition to a decarbonised model involves a deeper and potentially more demanding transformation. The perception of the effort required can vary depending on the maturity level of the company.

25 https://hub.brussels/en/services/coaching-to-make-your-business-model-more-sustainable/
26 https://testing.hub.brussels/sustainability/evaluez-votre-entreprise/ ? step=97-7
27 https://info.hub.brussels/en/guide/sustainable-entrepreneurship
28 https://www.linkedfarm.eu/#/

- Support and integration of knowledge in terms of decarbonisation must be suited to the company's sector, age, DNA and products.
- Provide better guidance to companies giving them easier access to relevant information on subsidies, labels and aid.
- Improve research on this subject, and make this information available to Brussels entrepreneurs. The focus should be on small and medium-sized companies to improve the assessment of their needs and actions and give them greater support.
- Foster collective awareness on sustainability in production and the logistics chain. The challenge is to redefine the notion of urgency: it may be useful to work with companies and customers to reassess what is truly critical and reconsider how flows are organised. In this respect, the just-in-time model, which has long been a driver of competitiveness and efficiency, is now being contested. To make logistics chains compatible with climate-related challenges, it is becoming necessary to initiate a collective discussion about our expectations regarding delivery speed - for both individuals and B2B and about the importance of sustainability in production and consumption choices.
- Support knowledge sharing between companies in the same sector or the same logistics chain. This will help to promote collaborations, generate economies of scale and boost innovation in the sector, unlike a strategy of increased competition. Sector-based group approaches (for example through industry federations) can reduce costs and create a momentum effect and peer comparison.



Support and funding

Barriers and challenges

- According to many companies, the criteria for obtaining certain grants are often unrealistic and do not take into account the reality for SMEs. For example: grants related to the circular economy are often awarded to large organisations that have the capacity to recycle large quantities of waste. This puts SMEs at a disadvantage. The criteria for accessing aid are often too complex or rigid for small organisations that lack the time and resources needed to compile the applications. Some companies eventually decide to give up on aid.
- Large organisations have the resources needed to hire consultants and report on the reduction in their carbon footprint. As for small companies, they often find themselves at a loss when faced with these requirements and do not know how to respond.
- Financial support schemes for companies do exist, but they lack cohesion, especially since they cover different themes, such as energy, mobility, innovation, the economic transition and foreign trade. Due to this fragmentation, SMEs do not have a clear and coherent view of the available aid. Consequently, it is difficult for them to identify the support most suited to their specific needs quickly.
- Furthermore, regional schemes are managed by a range of organisations, including finance&invest.brussels, Innoviris, Brussels Economy and Employment and Brussels Environment, each with its own eligibility criteria, procedures and awarding methods. This multiplicity does not make the offer transparent for SMEs. For small organisations, the complexity of administrative procedures (compiling applications, etc.) is also a major challenge.



Recommendations to public authorities

- Include an environmental performance criterion into export aid schemes and make the awarding of such aid partially conditional on decarbonisation commitments, recognising companies that incorporate an emissions reduction plan or low-carbon solutions into their internationalisation strategy. In this respect, the implementation of the Shifting Economy "International Trade 9" should be developed.
- Intensify the transition in the context of support to (new) exporters. To this end, the future obligation to complete the self-diagnosis developed by hub.brussels (where 10 of the 70 questions relate to ESG criteria) before being able to participate in any type of international activity (trade shows, economic or royal missions, etc.) is a good thing.
- Financially support specialist audits in decarbonising export activities, enabling Brussels companies to assess their current flows and identify tangible optimisation levers with a low-climate impact (e.g. modelling of scenarios to transition to low-carbon solutions).
- Raise awareness of the various European funding programmes that Brussels exporting companies can access.
    - As part of the NCP Brussels mandate,[29] make sure that the workshops and webinars organised annually by the European Programmes BU[30] of hub.brussels reach as many relevant SMEs as possible.
    - Promote the Enterprise Europe Brussels network, the contact point for the Enterprise Europe network for Brussels companies that want to find out more and obtain tailored support relating to transition, digitalisation, innovation, research and development, resilience, etc. In addition to information, this network, whose experts can be found at hub.brussels and BECI, provide advice on expanding internationally and help to find international partners.
- Support the integration of Brussels SMEs into European networks involved in decarbonisation, to develop partnerships and encourage the exchange of good practices.

It is very important to listen to SMEs and VSEs, which are the main employers in Belgium. Consultancy firms can provide useful information, but it is crucial to take the feelings of those on the ground into account. SMEs have an in-depth understanding of the challenges they face, and their perspectives should be incorporated into policy formulation.

29 That is, in relation to the Horizon Europe programme and technology, innovation and research stakeholders.

30 This service works to promote innovation, research and development in the Brussels ecosystem, i.e. public and private companies (regardless of size), stakeholders from academia and the non-profit sector. This service, based on the NCP–EEN collaboration, ensures activation of the most relevant channels, opportunities and instruments to achieve various international expansion objectives at every stage of a company's development.

Conclusions

This document, along with all of the processes used to produce it, shows that while the attitude of the stakeholders interviewed is generally positive in relation to a transition towards greater sustainability in their internationalisation strategy, the associated risks and barriers remain central to their concerns. SMEs in particular are facing increasing sustainability reporting requirements without always having the necessary resources. Furthermore, the changing geopolitical situation and the volatility of international trade relations sometimes tends to relegate sustainability to the background. Finally, the multiplicity and rapid development of regulatory frameworks - European, federal and regional - are an additional challenge for companies operating internationally. However, alongside these challenges, the transition to a low-carbon economy is also an opportunity for exporting SMEs: it can be a driver for innovation and strengthen their competitiveness on international markets.

It is based on these findings, enhanced by a systemic analytical framework, that the recommendations in this study have been formulated. By emphasising both the internal constraints encountered by the companies and the external factors that influence their ability to change, the systemic analysis highlights the influence loops and leverage points. When activated through appropriate public support, these can generate positive momentum effects for a low-carbon foreign trade strategy for Brussels. The recommendations therefore aim to identify and activate the levers that can turn decarbonisation into a driver for international competitiveness for Brussels companies, while providing the public authorities with tangible courses of action.

In this respect, it is necessary to limit uncertainties in the Brussels ecosystem. This means guaranteeing that transition issues remain on the agenda despite (geo) political and economic upheavals and enabling companies to access, understand and even anticipate regulations (whether European, federal or regional) and the resulting consequences and obligations.

It is also important to support the sustainable transition of SMEs operating internationally, by providing them with practical and suitable tools. Similarly, increased access to new markets is a major lever for exporting SMEs, both to improve their competitiveness and to seize new opportunities. To facilitate access to these new potential customers, the report recommends enhancing the existing support provided to Brussels SMEs in identifying countries and regions where the demand for low-carbon goods and services offers a lever for growth. This also involves strengthening their relationships with foreign partners who are attentive to climate-related challenges, by including these themes in the programmes of various meetings abroad (economic and royal missions, trade shows, etc.) and improving their access to international tenders incorporating environmental criteria. At the same time, showcasing Brussels "success stories" will help to inspire other companies and lend credence to the transition towards sustainable internationalisation strategies.

Finally, this study highlights the potential for the Brussels Capital Region, an open economy focused on foreign trade, to transform the European requirement for decarbonisation by 2050 into an opportunity; a lever for innovation and competitiveness for exporting SMEs, while consolidating the region's international positioning.

Appendices

Glossary

- **UNCTAD**

United Nations Conference on Trade and Development: United Nations body that works to promote trade, investment and sustainable development, especially in developing countries.

- **CSDDD**

Corporate Sustainability Due Diligence Directive: this directive requires companies to identify and address negative impacts on human rights and the environment in their own operations and value chain.

- **CSRD**

Corporate Sustainability Reporting Directive: this Directive extends the reporting obligation to a greater number of companies and requires detailed reports on sustainable development.

- **GHG**

A gas present in the atmosphere that retains heat by absorbing and emitting infrared radiation, thus contributing to the greenhouse effect.

- **Greenhouse Gas Protocol**

An international standard framework for measuring, reporting and managing greenhouse gas emissions. It helps organisations, cities and countries calculate and report their emissions in a consistent and transparent manner.

    - **Scope 1 emissions**

    Direct greenhouse gas emissions from sources owned or controlled by an organisation. Examples: the combustion of fuel in company vehicles or in its facilities, as well as emissions from production procedures (smoke from factories, chemical reactions, etc.).

    - **Scope 2 emissions**

    Indirect greenhouse gas emissions related to the production of the energy purchased and consumed by an organisation. Although the organisation itself does not produce this energy, these emissions are attributed to it as a consumer. For example, electricity purchased from an energy supplier.

    - **Scope 3 emissions**

    Indirect greenhouse gas emissions that are produced in the value chain of an organisation, both upstream and downstream. Scope 3 is often the largest share of an organisation's total emissions.

- **WTO**

World Trade Organization: international organisation that oversees the rules of global trade between countries. Its objective is to promote free, fair and predictable trade through negotiations, monitoring compliance with trade agreements, and resolving trade disputes.

- **European Union's Omnibus Package**

A set of legislative amendments proposed in 2018 to strengthen and standardise financial supervision in the EU. It amends several existing directives and regulations to ensure more coherent supervision and greater cooperation between supervisory authorities, and to support the Capital Markets Union.

System framework - general overview

This framework was developed during the collaborative workshops led by hub.brussels and produced with the stakeholders of the Brussels entrepreneurial and corporate ecosystems: the results clearly draw on a participatory process and on the collective input of the stakeholders involved.

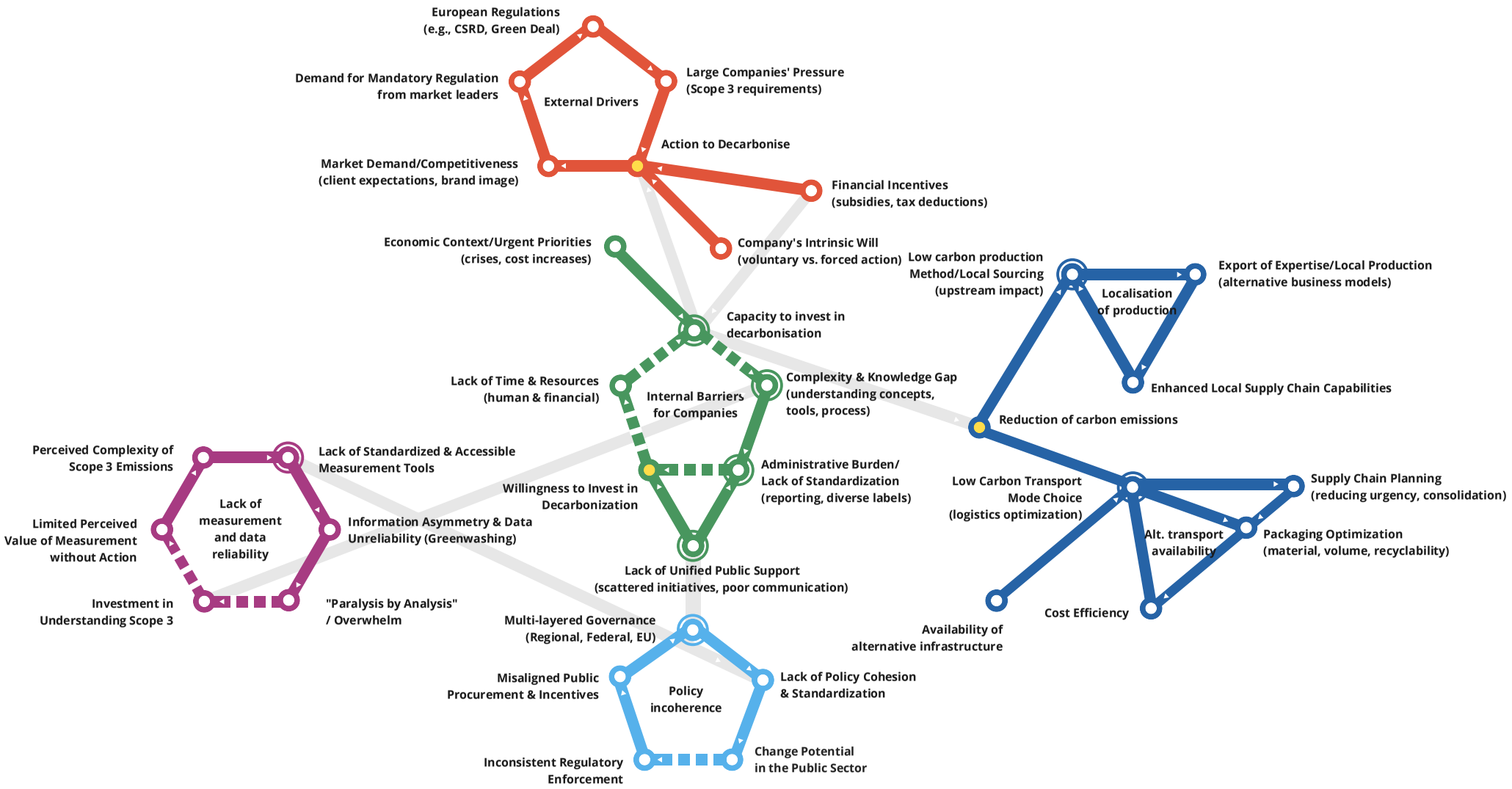
This framework has the advantage of providing a systemic representation of the ideas and contributions that emerged during these working sessions.

List of participants - interviews

Name	Type of stakeholder	Related theme
Agence wallonne à l'exportation et aux investissements étrangers (Awex)	Public Service	Government support and financing
Agoria	Federation	Representation of technological companies
Belgian Cycle Logistics Federation (BCLF)	Federation	Representation of cycle-logistics
BC Materials	Company	Knowledge development
Be Climate Hub	Ecosystem/platform	Knowledge development & support
BeCOM	Company	Software
Better Business	Company	Knowledge development
BPost	Public limited company	Logistics
Brussels Environment	Public support	Knowledge development
Brussels Enterprises Commerce & Industry	Federation	Support & consultancy
Cap Conseil	Company	Knowledge development
Galactic	Company	Food and beverages
Great Granola	Company	Food and beverages
Konligo	Company	Events
Kultkefir	Company	Food and beverages
MadLab	Company	Food and beverages
South Pole: expert in climate, energy efficiency and renewable energies	Company	Knowledge development
Pegi	Company	Food and beverages
Pulsitive	Company	Training & consultancy
Infrabel	Public limited company	Logistics
Haven van Antwerpen	Public limited company	Port
Vlaio	Public Agency	Support & consultancy
D-Carbonize	Company	Software
Tapio	Company	Software
Fevia	Federation	Representation of the food industry

Flanders Investment & Trade	Public Service	Government support and financing
Finance and Invest Brussels	Majority public-owned limited company	Public support and funding
ULB	University	Academia
Javry	Company	Food and beverages
Port of Brussels	Public company	Port
The Bridge	Company	Knowledge development
TopCare Laserworks	Company	Creative and cultural
Transauto	Company	Automotive

hub.brussels • Systemic diagram
Strategic reflection on the future of foreign trade in Brussels



1 Causal Story 1: Internal Barriers and Challenges for Companies in Decarbonization
2 Causal Story 2: External Drivers and their Impact on Decarbonization
3 Causal Story 3: Decarbonizing the Export Value Chain
4 Causal Story 4: Public Policy Incoherence & Implementation Gaps
5 Causal Story 5: The Challenge of Carbon Measurement & Data Reliability

Intended outcome
Variable
Leverage point
Influence in the same direction (if A increases, B increases and vice versa)
Influence in the opposite direction (if A increases, B decreases and vice versa)

Sources:
Interviews conducted by hub.brussels

hub
.brussels
our business is to help yours