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SUSTAINABLE ENTREPRENEURSHIP ALONG GREEN CORRIDORS

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Abstract. The research in this paper highlights the interaction and development of sustainable entrepreneurship activities in the environment of Green Transport Corridors. The objective is to show how the concept of Green Transport Corridors, initiated by the European Commission, comprises the framework for an entrepreneurial ecosystem bearing the potential to deploy sustainable entrepreneurship activities to the benefit of new start-ups as well as already existing small and medium sized companies (SMEs). The methods used are to analyse the existing green corridor initiatives together with their economic growth strategies and their impact on the surrounding entrepreneurial ecosystems. The results will be discussed in the context of network and cluster theories and evaluated by previously made studies and cases from SME sector in regard to logistics and networking. Additionally, with focus group meetings core requirements for green corridors together with a set of key performance indicators (KPI) are elaborated. The results are that Green Transport Corridors set the frame for sustainable development and foster a coherent entrepreneurial ecosystem especially for start-ups and existing SMEs in the logistics sector.

Keywords: Sustainability, transport corridors, entrepreneurial ecosystem, logistics networks.

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1. Introduction

Since the appearance of the first Transport White Paper (COM 2001: 370 final) of the European Commission in 2001 the necessity of shifting volumes of the dominant road traffic to other more efficient transport modes is being expressed constantly. The goal was linked to the preparation of an environmental friendly transport sector, and at the same time to provide safer and efficient transportation by reducing accidents, congestions and negative impacts through emissions, i.e. noise, light and pollution. After the revision of the EU Transport White paper (COM 2006: 314 final) in 2006, the concept of green corridors was introduced as an initiative of the European Commission in the Freight Transport Logistics Action Plan (FTLAP 2007). According to FTLAP, green corridors will “reflect an integrated transport concept where short sea shipping, rail, inland waterways and road complement each other to enable the choice of environmentally friendly transport”. In recent years, on European and also on national level an increasing number of initiatives have been taken to speed up the shift towards greener and more efficient logistic solutions in Europe. Important steps on EU level in this development process have been the Green Paper on TEN-T from 2009, as well as the TEN-T Policy Review 2011 and the EC White Paper on “A Sustainable Future of Transport”. The current situation

shows that the main characteristics of a green corridor and conditions that make a transport corridor actually green are varying but it is already visible that there are also common topics, which are recognised by all green corridor initiatives. Most important common factors in all green corridor projects are trans-nationality and co-modality, which enables the choice of environmentally friendly transport along a usually international transport route. Furthermore, all initiatives agree that for green transport adequate trans-shipment facilities, innovative transport technology, and advanced ITS applications are compulsory to achieve environmentally friendly transport solutions.

Beside these more technical oriented topics also a set of requirements and key performance indicators (KPI) for green corridors are developed in order to describe a framework for the corridor governance and to safeguard a sustainable corridor management. This framework influences the economic environment of the corridor and impacts the entrepreneurial ecosystem directly. The implementation of a green corridor concept lies still mainly on the involved stakeholders, but the corridor framework fosters a coherent guideline for sustainable entrepreneurial activities. This paper focuses on the benefits for entrepreneurial activities and especially small and medium sized enterprises (SME) as being part of a Green Transport Corridor. The research question is how and to which extend can SMEs benefit from being part of the Green Transport Corridor and how do the frame conditions of green corridors impact entrepreneurship and the business environment around corridors.

2. Theoretical frame

The theoretical frame describes Green Transport Corridors, their business environment and their impact on the entrepreneurial ecosystem and the integrated SME sector. SMEs are not necessarily responsible for supply chain management in the whole but are due to their size and specialized service they offer stakeholders of the supply chains of larger manufacturers and industry players. In the following the growing importance of the Green Transport Corridor concept is presented. Furthermore, the role of SME as stakeholders in this development is explained by allocating the corridor in the context of cluster and network theories.

2.1. Green Corridor initiatives

In the realisation of green corridor concept the Baltic Sea Region (BSR), being one of the most innovative and ecological oriented regions in Europe, enjoys a vanguard position in the development of green transport concepts. The authors took part in some important green transport corridor initiatives around the BSR e.g. the East-West-Transport-Corridor, linking Denmark and Sweden via the Baltic Sea and Lithuania with Belarus and Ukraine. In the follow some important initiatives together with their current status and their main results shall be highlighted. It should be mentioned that this list is not complete, since in the following years and also in upcoming periods more project initiatives will be established to promote green transportation.

- EWTC II – The East-West-Transport-Corridor II corridor links Denmark, Sweden, Northern Germany, Lithuania and Russia together in a network. The defined corridor runs from Esbjerg in the Western part of Denmark across the Great Belt bridge and from North Eastern part of Germany across the Baltic Sea further on to Karlshamn in Sweden, and from here on, via the Baltic Sea to Klaipėda in Lithuania and further on to Moscow or Belarus to Central Asia. The corridor is mainly land-based, based on intermodal train solutions and sea-based solutions (short sea shipping) across the Baltic Sea.
- Scandria – The Scandria corridor covers the area from the South Western part of Norway and South Eastern part of Finland via Sweden (Region Halland and Region Skåne) and further on via Zealand to Berlin/Brandenburg in Germany. At present, the corridor is mainly a road-based corridor supplemented with ferries/bridge when crossing the Øresund and Femern, but with a possibility of introducing more intermodal rail, especially on the German part.
- TransBaltic – The TransBaltic initiative has its focus on improving the transport system around the Baltic Sea and core partners from Norway, Sweden, Denmark, Germany, Poland, the Baltic States and Finland.

- NECL II – The North East Cargo Link II project tries to develop and promote a Midnordic Green Transport Corridor as a cost-effective and environmentally friendly transport route with partners from Norway, Sweden, Finland and Russia.

Meanwhile the BSR Transport Cluster Project for sustainable, multimodal and green transport corridors has been approved by the BSR Programme and launched in 2012 (BSR Transportcluster 2012). The BSR Transport Cluster includes among others all four previously described green transport initiatives and it acts as an umbrella platform for the whole Baltic Sea Region by joining forces and knowledge of the BSR transport projects of the period 2007-2013. The main objective of the BSR Transport Cluster is to connect all transport modes and to strive towards a green BSR transport network in order to develop a coherent concept and a common standpoint for sustainable macro-regional transport and regional growth policies for the BSR on European level. In addition to the above mentioned BSR Programme cooperation projects, the research project SuperGreen was launched in the 7th Framework Programme and supported by the European Commission (DG-TREN).

- SuperGreen –The purpose of SuperGreen is to promote the development of European freight logistics in an environmentally friendly manner and evaluate a series of green corridors covering representative regions and main transport routes throughout Europe (SuperGreen 2010).

Finally, the Nordic green corridor initiative, launched in 2008 and managed by the Swedish Logistics Forum, has to be mentioned due to its strong impact on the BSR.

- Green Corridor – in the green corridor initiative of the Nordic States the government offices in Denmark, Finland and Norway, as well as the European Union's research consortium SuperGreen cooperate in order to define and implement green corridor concepts for Northern Europe. More than 30 local projects were identified as part of the Swedish initiative (Green Corridor 2010).

These goals and the overall strategy for a single European transport area are dominated by the implementation and development of environmentally friendly transportation, i.e. by reducing emissions, particularly greenhouse gases (GHG), developing intermodal transport systems with the exploitation of the individual benefits of each system (co-modality), and supporting innovative intelligent transport systems (ITS) for all transport modes (Hunke, Prause 2012). However, environmentally friendly transport is only one interesting aspect of green corridors. Due to the transnational character of a corridor network, the companies of different sizes and with different cultural and business background are working together to organise and realise the corridor services. The companies are embedded in transnational supply chains which are part of the corridor and they are contributing to the corridor performance. So the question arises how and with which principles the entrepreneurial activities within a corridor are organised and coordinated.

2.2. Frame requirements for Green Corridors

Starting point for all green corridor initiatives in the BSR was the logistics status after the EU enlargement in 2004 which was realised by the project “LogOn Baltic – Developing Regions through Spatial Planning and Logistics & ICT Competence” under the BSR Programme between 2006 and 2007. The empirical activities of LogOn Baltic showed that the landscape of inter-company logistics was dominated by larger production companies and logistics service providers together with their closed and company oriented ICT-systems in order to safeguard the control of their individual supply chains and to realise dedicated platforms for sourcing of transport services mainly from regional SME (Kersten *et al.* 2007; Kron, Prause 2008; Prause 2010a; Prause 2010b). The results lead the Swedish Logistics Forum to the formulation of six requirements on green corridors targeting to overcome the dominating hierarchical logistics landscape described in the LogOn Baltic project and to be able to implement environmentally friendly, efficient and sustainable logistics solutions (Green Corridor 2010):

- Sustainable logistics solutions with documented reductions of environmental and climate impact, high safety, high quality and strong efficiency,
- Integrated logistics concepts with optimal utilization of all transport modes, so called co-modality,
- Harmonized regulations with openness for all actors,
- A concentration of national and international freight traffic on relatively long transport routes,

- Efficient and strategically placed trans-shipment points, as well as an adapted, supportive infrastructure, and
- A platform for development and demonstration of innovative logistics solutions, including information systems, collaborative models and technology.

Of special importance for the SME sector is the demand of “openness and harmonisation for all actors” as well as “collaborative models and technology” stressing a more balanced and cooperative work of all kind of suppliers, manufactures, forwarders, customers and disposal companies which are involved in the green corridor supply chain activities. However, the requirements of the Swedish Logistics Forum have to be completed by a quantitative instrument to be able to evaluate the green supply chain management performance, i.e. to monitor and control the performance in the Green Transport Corridor development. In recent years, the EU forces the development of guidelines on specific criteria how to monitor and assess the overall green logistics actions. In the European funded project East-West-Transport-Corridor (EWTC) a “Green Corridor Manual” was developed for the first time. It tries to give a holistic and consistent monitoring concept for multi-modal sustainable transport (Fastén, Clemetson 2012). The green corridor manual consists of a set of recommendations and guidelines on how to implement the green corridor concept according to the EU freight agenda and as promoted by the EU Baltic Sea Strategy.

2.3. Key performance indicators

The green corridor manual focusses on the definition of a set of key performance indicators (KPI) and incentives and regulations for more efficient, high quality, safe, secure and environmentally friendly transport facilities and services. Such a manual can list indicators and measures with their potential impacts, together with a governance model for the development of a stepwise deployment of this concept. The manual can be read by all stakeholders of the corridor. This applies also for each SME in the network to evaluate their own potential and measure their own performance. It is also possible to look into and elaborate different options for the certification of green transports, which is of great economic interest for the single company who is awarded as well as the whole transport market.

There are different aspects which will influence the performance of each stakeholder in the transport corridor. One approach to evaluate the performance is by defining criteria. These criteria are separated into enabling and operational criteria. Enabling criteria describe the settings of the transport chain in regard to the hard infrastructure, meaning roads, railways, terminals, ports etc. The soft infrastructure includes the information and communication systems which support the transport logistics services offered along the defined transport route or a set of factors. Another aspect of enabling the performance of a transport chain are the different regional, national and international policies and regulations which apply to all stakeholders. Operational aspects describe the geographical settings as such, the transport and logistics solutions by involving new and innovative business models. The implementation of transport techniques will have also a direct impact on the performance of a transport corridor measured by given KPIs. The overall performance of a transport corridor is measured by summing up the performance of its stakeholders. This means for specific standards appearing in the KPIs that these standards have to be implemented especially on company level otherwise this standard cannot be realised on corridor level. Therefore, corridor standards represent minimum criteria for the corridor stakeholders. The following table gives an overview about the KPIs which were selected from the EWTC project and were also tested during the project duration.

Table 1. Performance areas of green supply chains

Performance areas	Operational indicators	Enabling indicators
Economic efficiency	Total cargo volumes On time delivery	Corridor capacity
Environmental efficiency	Total energy use Greenhouse gases, Co2e Engine standards ISO 9001 dangerous goods	Alternative fuels filling stations
Social efficiency	ISO 31 000 ISO 39 000	Safe truck parking Common safety rating Fenced terminals

Source: Fastén, Clemetson (2012)

The KPIs are covering the economic, environmental and social aspects. Whereas the economic and environmental indicators are more focussing on physical and quantitative aspects, i.e. stressing efficiency and service quality, the referred standards about dangerous goods (ISO 9001 dangerous goods) as well as the ISO norms for risk management (ISO 31 000 and ISO 39 000) are laying emphasis on safety and road traffic security aspects. Another popular indicator for social performance measured the sick leave rates of companies, fluctuation by employee turnover, the number of temporary employees and workers and the average salary level and salary differences between the stakeholders of the transport corridor. These indicators express how the sustainable performance is developed in the corridor and due to the composition of the corridor indicators as the amalgam of all corridor stakeholder indicators the KPIs together with other corridor requirements, stressing openness, collaboration and harmonisation, forming the entrepreneurial environment of the green corridor by supporting networking and sustainable development of the corridor stakeholders. First test results from the EWTC project show that more detailed aspects must be considered like age, gender, level of education, and experiences of the employees (Fastén, Clemedtson 2012). Finally, the enhanced corridor requirements together with the set of KPIs will act as a corridor mission formulating the framework for the sustainable corridor development and shaping the business environment for sustainable development.

2.3. Corridors, networks and entrepreneurship

The concept of a transport corridor consists of physical logistics flows connecting the main hubs in shape of a tubular transport system leading to the perception of a transport corridor as a tubular logistics cluster. Those systems realise a high complexity of interactions among their actors along the supply chains within the corridor so that a network perspective may better explain the emergence of collaborative practices and integrative behaviours in logistics in general and supply chain management from organisation's point of view (Lee 2005). Researchers have begun to suggest the need for a network-based view of supply chains, recognizing that the interactions between organisations in a supply chain are rarely as sequential as a chain structure would suggest (Bovel, Martha 2000). As a whole, studies acknowledge the importance of a network structure for the effective diffusion of supply chain-related practices (Roy *et al.* 2006), as well as for efficiency and flexibility of the responses of the supply chain to customer expectations (Wathne, Heide 2004). Due to natural reasons transport and logistics activities have often close relations to strategic alliances, cooperation and collaboration agreements which can result in cluster activities. Arising from the social network theory a transport corridor can be seen as a scale free network. It started from dyadic relationships between two stakeholders and grew to a broader network. Specific characteristics of scale-free networks vary with the theories and analytical tools used to create them, however, in general, scale-free networks have some common characteristics. One notable characteristic is the relative high number of nodes with relations to other nodes which greatly exceeds the average. The nodes with most of the relations are often called "hubs", and may serve specific purposes in their networks. Thus, hubs are both strength and weakness of scale-free networks. These properties have been studied analytically using percolation theory by Cohen *et al.* (2000) and by Callaway *et al.* (2000).

Fig.1. Transport corridor in social network theory

Source: developed by authors

By applying the network theory to the tested green corridor (EWTC) even more characteristic of this tubular logistics cluster are demonstrated. Due to the transnational dimension of the green transport corridor the hubs and stakeholders along the corridor are artificially separated more than an absolute free network would allow (dotted lines). For each geographical region hubs can be defined, e.g. because of the location it might be sea ports which offer best places for co-modality and entry processes for cross-border transportation. These hubs are surrounded by other nodes which have a close relation and alliance to this specific hub but can also have other relations to any other smaller node originally located around another hub.

When it comes to the study or establishment of logistics cluster initiatives the Baltic Sea Region is one important area inside Europe. A study of the project “LogOn Baltic” revealed big differences in the level of the regional networking activities around the Baltic Sea Region. The development of cluster structures in the logistical sector were remarkably underdeveloped, especially in the regions located in the former UDSSR countries, so that there are no regional offers for logistics services in these regions (Kersten *et al.* 2007). This structural weakness is linked with a general lack in language skills and intercultural experience of the people working for the SMEs which was subsumed under a weakness of logistic service providers in “soft factors”. These observations have a direct impact on the development of green transport corridors because the majority of them are linking regions in Western and Eastern countries like EWTC or Scandria. Consequence of these lacks in soft factors in Eastern European regions, especially in relationship with networking and cluster building activities, have been discussed in several studies in the academic literature not only in the context of logistics (Wölf, Ragnitz 2001; Prause 2010a; Prause 2010b; Kron *et al.* 2007). The studies revealed that knowledge spill-over effects inside the cluster have been regarded as relatively unimportant by the managers of the cluster companies. The perception of the interviewed managers was more focused on operational topics like cheap labour and land prices than on strategic soft topics like innovation and networking. As a result the authors proposed that initiatives for establishing green corridors should rather concentrate on the development of logistics soft factors than on pure investments in infrastructure. Meaning, the underestimation of the soft dimensions is indicating a strategic weakness of the cluster and a threat for the future networking activities and cluster development (Prause 2010a).

A special importance for networking and cluster building plays trust. So, for example, in transaction costs theory a direct explanation is given how to understand the linkage between organisational structures stating that the lesser the trust in a socio-economic system, the more formal structures are required in organisation and cooperation. Also, game theory is leading to the conclusion that on the long run all parties’ interests are best achieved by a social environment which is as transparent as possible and favours cooperation, reciprocity and trust (Katajamäki 2006).

3. Green Transport Corridors and the entrepreneurial environment

Previous theory analysis describes the concept of green transport corridor as a tubular logistics cluster. Furthermore, there is a large variety of possible factors influencing the performance of these clusters. Additionally, the performance of companies inside a cluster can only be understood when their integration is taken into account. The most complete measure for the performance of clusters is the value added generated in the cluster. The value added generated in the cluster is the sum of the value added generated by the members of the population. In practice, the measurement of the performance of clusters is a very complicated task because the necessary data for the analysis of the various variables influencing the performance of a cluster are not available. In his PhD thesis Peter de Langen (2004) developed a framework for the assessment of the performance of seaport clusters and considered a set of variables influencing the performance of a seaport cluster. He proposed four variables describing the cluster structure. As a consequence, he was able to provide a basis for an assessment of strengths and weaknesses of the structure of the considered seaport clusters and derived from their strengths and weaknesses recommendations for improving the performance of these clusters.

3.1. Case study: Rostock Seaport Cluster

Rostock is located in North – Eastern Germany and it was the largest port in GDR till 1990. Rostock seaport is still an important German port at Baltic Sea and it represents an important hub in the green corridor project Scandria. Like in all seaports also in Rostock all basic activities are related to handling and transfer functions

of cargo and passenger. The generic work in a seaport cluster is based on logistics and service activities. A closer view at the companies integrated in the Rostock seaport cluster reveals that nearly all of them belong to the logistics-related sector, outlining that the seaport cluster can be considered as a service cluster. All companies at Rostock seaport are part in at least one of the seven sectors of seaport handling, transportation, logistics, seaport administration, services of sea pilots and experts, and ferry companies. In a performance study, senior managers of the seaport cluster have been interviewed according to the underlying concept of De Langen (Prause 2010a). The relative low number of interviewees does not give a representative image of the situation inside the cluster but it indicates a trend which could be strengthened by results of other empiric activities.

A first result of the study revealed that the intensity of integration of the different service sectors into the seaport cluster differed heavily and those sectors which are related to passengers like travel agencies and cruise and ferry companies are not well integrated into the existing seaport cluster at all. Furthermore, more hardware-oriented services like repair and maintenance are sharing a similar situation. So as a first result it can be stated that the kernel of the Rostock seaport cluster is represented by cargo-related logistical service providers and navigation-related services.

In accordance with the analytical framework of De Langen, an analysis of the eight structural variables of the Rostock seaport cluster was realized, ordered in the two categories “cluster structure” and “cluster governance”. Surprisingly, the study brought to light that knowledge spill-over effects inside the cluster have been regarded as relatively unimportant by the interviewees. This shows together with the weaknesses in the variety of goods and in the cluster population a strategic disadvantage in the area of innovations of the cluster. The high ranking of the available working power, the high transportation volumes and the low land prices are revealing an emphasis on operating topics in the perception of the cluster companies.

The stated strengths in the Rostock Seaport Cluster are focusing on freight forwarders and brokers who are generating and distributing the service tasks among the cluster companies. These intermediaries are competent and there is a high quality in problem solving inside the cluster. But again, these mentioned strengths are emphasising more the operative level of business activities. When it comes to the weaknesses inside the cluster, the existing level of trust is low revealing again a strategic problem for the future cluster development. Concerning the topic of trust it was assessed that the actually level of trust inside the cluster was very low and additionally the importance of trust for the cluster development was regarded as low. This weak perception for trust as an important cluster dimension is also expressed in the second weak point concerning the existence of central actors. Central actors like the port administration are acting as a moderator between the different cluster companies and laying the basis for common cluster activities. This leads to an increase in the trust level among the cluster population. As a result, the neglect of the soft dimensions is indicated as a strategic weakness of the cluster and a threat for the future cluster development. In further interviews in the Rostock region with experts from public authorities, associations of enterprises, logistics service providers and trading companies it turned out that the actual situation in Rostock region can be characterised by a weak industrial density and a lack of skilled workers due to the migration to the economically more developed regions of Germany, especially to the Hamburg region (Prause 2010b). Most of the complaints about the weakness of region were related to soft factors. The experts are regarding the lack of a regional logistics strategy for Mecklenburg-Vorpommern as a strategic problem for the whole logistics sector. Additionally, the level of the regional networking activities and the development of cluster structures in the logistical sector are remarkably underdeveloped so that there are no regional offers for logistics services in Rostock region. This structural weakness of the region is linked with a general lack in language skill and intercultural experience of the companies and an underdeveloped educational sector for the field of logistics.

3.2. Case study: Logistics Networking in Hamburg

Hamburg is representing the German logistics capital with more than 5,000 classical logistics companies and approximately 150,000 employees in the logistics sector. By taking into account also the employees in the logistics service sector like consultation, IT services and transport assurances, the number of employees in the larger metropolitan region of Hamburg even exceeds the number of 230,000 employees. This phenomenon is heavily driven by the development of Hamburg seaport enjoying a growth rate despite recession years.

In order to strengthen the development of the logistics cluster in Hamburg region, the logistics initiative for Hamburg was founded in 2005 with the target to establish additional 14,000 new jobs in Hamburg and to generate an additional value added in Hamburg of approx. 6 billion Euro. The forecast for the effects of the activities of the logistics initiative was based on the Regionomica study (Regionomica 2005).

Three topics have been identified as main success factors for the further logistical development of Hamburg:

1. free land for logistical operations
2. technical innovation projects in logistics
3. education and qualification in logistics

As an important bottleneck for the further development in the logistics sector, the study identified a lack of educational capacity in the Hamburg region since the increasing need of skilled workers and employees in logistics was threatening the whole logistics sector in Hamburg. So the logistics initiative stressed heavily the expansion of logistical education and qualification in Hamburg. One important factor for the Hamburg region is the development of free land for logistical purposes since the high density in the Hamburg region leads to a permanent shortage of space. Under the precondition that the space problem will be solved in the next 10 years, the study is estimating the creation of approx. 700 new logistical jobs in the first year, and up to 8,500 new logistics jobs till 2015. With an average gross value added per employee in logistics of approx. 55,000 Euro for the next 10 years, the total additional value added from new jobs in logistics was calculated to approx. 3 billion Euro.

The indirect effects of the logistical initiative have been estimated to be 3 % considering the following three topics:

1. Effects from technology and innovation
Estimated effect: 1 % per year
New jobs: approx. 500
2. Effects from education and qualification
Estimated effect: 0.5 % per year
New jobs: approx. 500
Additional value added: 80 million Euro
3. Effects from cooperation
Estimated effect: 1.5 % per year
New jobs: approx. 750
Additional value added: 230 million Euro

The most interesting result of this analysis is the relative high value of 1.5 % due to cooperation yielding in the same total effect like innovation and education together. The study contained the important statement that the estimated effects of cooperation have been detected already empirically during the writing of the study. Altogether, the study estimated the total effect of the logistics initiative of Hamburg with 14,000 new jobs in direct and indirect logistical sectors and an additional value added for Hamburg of approx. 6 billion Euro.

Conclusions

The concept of Green Transport Corridor is highly ranked on the political agenda however the question still remains if and how the private business sector, mainly SMEs in logistic sector can benefit from these attempts. This research shows an approach to provide a framework for sustainable development by applying the Green Transport Corridor concept in the entrepreneurial environment. SMEs are seen as the main stakeholders and also the main beneficiaries in this process.

Former studies analysing the potential benefits for regions and private enterprises from being part in cluster structures demonstrated consentaneously that cooperation and network activities among cluster stakeholders are the way to achieve most efficient operations. To measure the cluster performance and to monitor the activities of the SMEs involved in the green corridors there are also theoretical and rather practical approaches described. From an EU funded project a so called "Green Corridor Manual" can be used as well as results and requirements from other green corridor initiatives. According to that manual the performance

of these tubular logistics clusters is influenced by enabling and operational factors, trying to represent and connect the hard and soft infrastructure as well as operational aspects.

The answer of the research question is that SME by their operational nature are heavily integrated in the development of green transport corridor concepts. SME cover the highest amount of logistic activities in a supply chain; this applies to traditional view as well as the green supply chain management. However, the green corridor approach emphasizes the integration of SME into green transport corridors by stressing the requirement of “harmonized regulations with openness for all actors” enhancing the position of SME sector as stakeholders in the green corridors. This will give a perfect frame condition for the development of SME performance and also the economy of regions and markets they operate in. Since the implementation of green corridor concepts is still in the test phase the final business structures are still unknown but in any case it is crucial to involve the SMEs into the process of the development right from the start and in further development.

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