

# Report SWOT - Orientation

## O1 - Environment

Sustainable District Logistics (SDL) orients logistics towards:

- Reduction of natural resource consumption (energy, soil, water, fuel, etc.)
- Preserving landscape configuration (density of hard infrastructures, etc.)
- Re-utilisation of products
- Recycling of parts of products, semi-products and wastes
- Pollution prevention and reduction
- Diffusion of new clean technologies, eco-efficient means and modes of transport
- Utilisation of renewable sources of energy

### Strengths



- Agenda 21 initiatives
- SEED - Sustainable European Economic Development
- Interactive web-site on green indicators

### Weaknesses



- Regional plan of the County of Viborg - lack of integration of environmental indicators and objectives
- Weak rail based freight transport service
- Lack of public interest in environmental issues

### Threats



- Planned enlargement of speed and carrying capacity on existing main road network
- A rise in the intraregional commuting
- SME's lack of innovation in clean technologies
- Political focus on environmental issues has diminished in Denmark
- Increasing transit transport

### Opportunities



- Development of "green accounting" on public activities in Viborg County
- Reports on traffic, transport and infrastructure=increasing the knowledge of the planning authorities in the County of Viborg
- Development of greening SME industries
- Public awareness on damages on the environment

## Main hypotheses of alternative options

To integrate environmental objectives in planning activities targeting infrastructure projects, business development of SME's, traffic and transport management.

- take actions towards a re-vitalisation of the freight transport by railway
- establishment of an inter-modal transport corridor based on ship-lorry-train via the commercial harbour of Hanstholm in the North-West of Viborg County
- development of an existing website established and supported by the regional authorities, that can monitor the environmental load from the transport sector by selected measurable indicators

## O2 - Economy

Sustainable District Logistics (SDL) orients logistics towards efficiency, customer satisfaction and community well-being based on:

- Reduction of the material, energy and transport intensity (flows) in the economy (decoupling) also by means of soft and clean technologies
- Investments for the incorporation and reduction of the environmental and social costs in logistics accounting
- Dematerialisation of economy (durability of goods and services, miniaturisation of products, substitution of products by services)
- Reduction of transport growth and more balanced modal split in favour of rail and water
- Information and Communication Technology to substitute transport (e.g. telecommuting, home-shopping and delivering, teleconferences, teleworking, etc.)

### Strengths



- Strong specialisation within furniture and food production
- Publicly financed programme aimed at supporting entrepreneurial activities
- Focus on business, economic growth and welfare

### Weaknesses



- The regional industry generally characterised as low-tech
- Development of skills and competencies of local workforce predominantly organised within firms (non-formalised competencies)
- No focus on the reduction of transport growth

### Threats



### Opportunities



- Predominantly small and medium-sized firms within the local transport and furniture industries
- Labour shortage of skilled workforce in specially in the furniture industry
- A lower level of formal training/qualifications among the workforce than average in DK
- Absence of higher-level institutions of education and research
- High dependency on industries within the primary sector (fishery and agriculture)
- Re-development of the harbour of Hanstholm from mainly handling fish to also value-adding activities related to fishery
- Include the actors in the logistical chain to implement SDL
- New routines in organising transport and logistics
- Include the actors in the logistical chain in order to promote SDL
- Increased focus in planning system of Viborg County on relationships between transport, infrastructure and regional development

### **Main hypotheses of alternative options**

Increase the efficiency in the regional transport system in order to stimulate and sustain the economic activity in the region. To compensate for the peripheral location of SME's, that is orientated towards non-local markets, by an economic efficient and environmentally friendly organisation of freight transport and logistics:

- to develop the competence on advanced logistics services of local transport firms
- to orient attention and develop competencies of external logistics among local SME's as a strategic asset
- a co-development of business and environmental strategies on sustainable district logistics
- to prevent a re-location of local businesses within labour-intensive industries to Eastern European countries - for example the furniture and metal working industries
- establishment of an inter-modal transport corridor based on ship-lorry-train via the commercial harbour of Hanstholm in the North-West of Viborg County. Development of intermodal hubs at the harbour of Hanstholm and a railway node in Viborg County (for example Thisted)

# Report Swot Social Potential

## SP.01 Perception of a variety of development approaches

The Sustainable District Logistics (SDL) approach is facilitated by:

- Willingness and practices of the logistics stakeholders (businesses, public authorities, civil society and communities) to open their views and ways of thinking, looking at new issues and conceptions on local and logistics development (debates, seminars, interdisciplinary working groups, animation and mobilisation of citizens, new plans on sustainable development, etc.)

### Strengths



- Local initiative to strengthen innovation and marketing processes of the local and national furniture industry
- West-Link: a transport corridor from North Atlantic countries to Europe via Viborg County
- SEED - Sustainable European Economic Development
- Interactive web-site on green indicators
- Transport political Network
- North sea Commission, Network on transport corridors
- Campaign on local traffic safety

### Weaknesses



- Little attention on environmental impacts from new infrastructure and transport projects

### Threats

- Limited awareness on logistics and transport within the SME sector



### Opportunities



- Introducing transport and logistics as competencies within existing knowledge and innovation centre of furniture production

### Main hypothesis of alternative options

- Tender of courses on logistics and environmental management for the needs of SME's via Centre of Wood and Furniture in the city of Skive
- Involvement of SME's in roundtables on specific implementation of SDL-measurements according to the conditions of the local industry

## SP.02 Entrepreneurial creativity and innovation

The Sustainable District Logistics (SDL) approach is facilitated by:

- Reproductive capacity of the local context, based on common cultural roots, mobilisation of potential resources and research to improve the quality of life (projects and plans for sustainable businesses, banking, agriculture, tourism, etc.)
- Fertilisation of the local economic fabric to embed the single business into the fluxes of internal and external production relationships (typology and number of businesses, their life expectancy, sizes, markets, eco-efficiency technologies, etc.)
- Corporate Social Responsibility (CSR), defined by the recent (2002) European Union action framework, as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (typology and number of businesses and public bodies with social and environmental quality certifications, etc.).

### Strengths



- Existing local firm networks among specific industrial sectors - e.g. furniture industry

### Weaknesses



- Lack of competence-based networking within the local transport sector

### Threats

- Possible migration of local competencies within central localised industries - e.g. the furniture industry
- A growing fusion and centralisation among formerly independent SME's



### Opportunities



- Specialisation within knowledge-intensive segments of locally based industries - e.g. furniture and transport

### Main hypotheses of alternative options

- actions and strategies towards new competencies within existing industrial clusters in Viborg County - e.g. less focus on manual work and greater focus on innovation and development activities within furniture, food and metal working manufacturing.

- strategy development of new localised forms of regional expertise and excellence beyond duplicable manual production - fx. logistics competencies in networks of SME's.

### SP.03 Capacity to cope with complexity and to anticipate change

The Sustainable District Logistics (SDL) approach is facilitated by:

- Strategies at local level able to increase the capacity of the logistics stakeholders to anticipate changes and to cope with a large amount of problems finding solutions that can reduce uncertainty while evaluating and managing local / global interdependencies (flexibility of the local economic and social fabric, integrated programmes and common medium and long term projects supported by training and education on visioning methods, chaos and complexity theories, etc)

#### Strengths

- Transport political Network
- North sea Commission, Network on transport corridors



#### Weaknesses

- Existing programmes and networks on transport, environment and infrastructure objective primarily involves experts, politicians and planners. Lack of practitioners



#### Threats

- Lack of human and economic resources among SME's represents a hinder to cope with new challenges - e.g. sustainability strategies



#### Opportunities

- Existing programmes and networks represent platforms for introducing objectives and best practices on sustainable logistics etc.



#### Main hypotheses of alternative options

- Introduce the concept of sustainable district logistics within existing planning and policy networks such as Transport Political Network and the North Sea Commission on transport corridors
- Co-ordinate policies and actions via interregional networks on de-coupling economic regional growth from a parallel growth in freight traffic

### SP.05 Discovery and re-encoding of the local specificities and knowledge

The Sustainable District Logistics (SDL) approach is facilitated by:

- Close interrelationships between the components of the concerned local context, considering different cultures and knowledge that can have an impact on logistics processes (number of endogenous companies, projects on local diversity recovery, cultural heritage, arts & crafts, oeno-gastronomy, agro-eco-natural tourism, economic and social diversification, etc.)

#### Strengths

- A strongly localised industrial base within furniture and metalworking manufacturing with extensive export to world markets



#### Weaknesses

- Export relations for some industries are concentrated on few international markets with little scope for entries on new markets - e.g. the furniture industry's dependence on the German market



#### Threats

- Rapid shifts in specific international markets
- Lack of higher level research and education institutions
- Majority of workforce employed within primary and secondary sectors



#### Opportunities

- Development of existing skills to advanced competencies in a globalised network economy



#### Main hypotheses of alternative options

- To increase the knowledge among local SME's on existing local specificities and assets, and the resources gained from inter-regional business networks. Through an identification of local characteristics, the supplement of non-local resources could be developed and directed strategically on a collective regional level.

# Report Swot Dynamics

## DY.02 Open collective learning

Changes in favour of Sustainable District Logistics (SDL) can be produced by:

- Improving the capacity of the logistics stakeholders to acquire and utilise knowledge and know-how; this means to develop a culture of co-operation in several policy fields, for instance in spatial planning and territorial flows management

### Strengths



- Close B-2-B relationships within the local furniture industry enhance rapid knowledge and experience exchange among furniture firms

### Weaknesses



- Rivalry and competition among SME's within same sector creates inertia in sharing of knowledge

### Threats



- External take-overs of local firms could threaten localised trust-based inter-firm relations

### Opportunities



- The existing close relationships among local furniture firms and transport firms represents a potential information and knowledge exchange network on best practices of logistics

### Main Hypotheses for action

- Integration of knowledge and practical experience on environmentally efficient logistics and transport in seminars and workshops targeting the local SME's and provided by the local industrial boards and consultants.

## DY.03 Negotiation and co-decision

Changes in favour of Sustainable District Logistics (SDL) can be produced by:

- Improving the capacity of the logistics stakeholders to determine strategies that have the wider possible consensus; this means to develop a culture of participation, attributing, for instance, equal decision role to the different interest groups (economic, social and environmental)

### Strengths



- The integrated involvement of transport firms in organising supply chains within the furniture industry distributes logistical competencies and decisions

### Weaknesses



- Limited involvement of the transport sector in the regional policymaking on transport

### Threats



### Threats

### Opportunities



- A scope for greater involvement of transport firms in decision-making regarding eco-efficiency in logistics of transport-buying firms - e.g. furniture

### Main Hypotheses for action

- The establishment of a network within major industrial clusters in the County of Viborg in order to develop and implement strategic actions on the regional freight logistics and transport.