01 Environment

Selected aspects of orientation

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

Main indicators

Structural statistics

OR0. Basic indicators for SDL

Chadana Statistics		
Total area (km2) year	5100,24	2002
Total inhabitants (inhabitants) year	2391123	2002
Population density (inhabitants/km2) year	469	2002
Land use development		
Agriculture and rural area (%) year	61	2002
Urban area (%) year	10	2002
Area for transport purposes (%) year	3	2002
Area used for recreation/nature (%) year	18	2002
Water (%) year	3	2002
Resource use development		
Total residual household waste (tonnes) year	1.397.000	2002
, , , , , , , , , , , , , , , , , , ,		
Residual household waste per inhabitant (Kg) per inhabitant year	678	2002
CO2 production (tonnes) due to road transport year	31.428.000	2002
Total residual non-household waste (tonnes) year	16.708.000	2002
Environmental impact development		
Total CO2 production, Netherlands (tonnes) year	38.894.000	2002
Total CO2 production, Netherlands (tonnes) per inhabitant year	2.4	2002
CO2 production (tonnes) due to rail transport year	113.000	2002
CO2 production (tonnes) due to road transport year	31.428.000	2002
CO2 production (tonnes) due to water transport year	4.323.000	2002
CO2 production (tonnes) due to air transport year	786.000	2002
Total NOx (tonnes) transport emission year	171900	2002
Total VOC (tonnes) transport emission year	93700	2002
Total SO x transport (tonnes) emission year	1100	2002

^{1 -} Project: INNESTO Pilot Project: Brabant, Task: Environment

02 Economy

Selected aspects of Orientation

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.)

Main indicators

OR02. Basic indicators for SDL

Basic Structure		
Total GDP (current billion EURO) year	258.886	2002
Total employment in all sectors (%) year	1.053.400	2002
Investment: Gross fixed capital formation in transport industry (Netherlands) current	1.100.000.00	0 2000
EURO year		
E-logistics (%) year	87	2002
E-commerce (producers) (%) year	85	2002
E-commerce (consumers) (%) year	55	2002
Transport infrastructure development		
Railways total Km	2806	2002
Railway sole track Km	930	2002
Use Railway (in Brabant) track Km inhabitants day	2,2	2002
Roads total Km	19060	2002
Railways capacity -(trains per week) year	32000	2002
Road congestion, traffic jams and time loss		
41.4 road congestions per 10.000 vehicles with a total of 4244 hours		
Transport intensity		
Total passenger transport, national (billion Pkm) by road year	196,6	2002
Total passenger transport, national (million) by rail day	1	2002
Total passenger transport, national by water year	974.000	2002
Total passenger transport, national (million) by air year	32	2002
Total freight transport by rail, national (million Tkm) year	30	2002

03 Socio-culture

Sustainable District Logistics (SDL) orients logistics towards:

- Promotion of sustainable styles of production and consumption
- Investments in human capital (education and training) especially on sustainable development, logistics, transport, etc.
- Transdisciplinarity for integrated management of logistics and integrating planning
- Investments on innovation (Research & Development)

Main indicators

OR03. Basic indicators for SDL

Population structure		
Total population (women and men) year	2391123	2002
Women (%) year	50,04	2002
Men (%) year	49,96	2002
Total inhabitants aged 15 - 64 year	1626000	2002
Women aged 15 - 64 year	769000	2002
Men aged 15 - 64 year	830000	2002
Total life expectancy years year	77,76	2002
Women life expectancy years year	80,47	2002
Men life expectancy years year	75,05	2002
Activity developments		
Unemployment rate (%) year	3	2002
Activity rate (%) year	67	2002
	3	2002
Employment in agriculture sector (%) year	ა 15	2002
Employment in industry sector (%) year	_	2002
Employment in all services sector (%) year	59 7	
Employment in transport services (%) year	7	2002
Employment per transport mode: road (%) year	30	2002
Employment per transport mode: water (%) year	6	2002
Employment per transport mode: rail (%) year	10	2002
Employment per transport mode: air(%) year	8	2002
Employment in supporting and auxiliary transport activities # e.g. travel agencies (%)	13	2002
year		
Employment in all trade activities, wholesale and retail trade share (%) year	15	2002
Education level		
University degree (%) year	9	2002
High school degree (%) year	65	2002

^{1 -} Project: INNESTO Pilot Project: Brabant, Task: Socio-culture

04 Social equity (between individuals)

Selected aspects of Orientation

Sustainable District Logistics (SDL) orients logistics towards:

- Improvement of accessibility to goods, services, people and places, developing services that meet the
 needs of local population, including women, the poor, the rural, the disabled, elderly people, immigrants,
 ethnic minorities, etc. (equal accessibility)
- Balanced local development
- Health and safety activities
- Reduction of unnecessary and undesirable travels, movement and material flows

Main indicators

OR04. Basic indicators for SDL

Equal opportunities developments		
Women unemployment rate (%) year	2,6	2002
Men unemployment rate (%) year	2,1	2002
Women in local government (%) year	33	2002
Families below the poverty line (absolute and / or relative) (%) year	10,5	2002
Immigrant families below the poverty line (%) year	40	2002
Transport intensity impacts		
Death related traffic accidents over total local population (%) year	0,01	2002
Injury related traffic accidents over total local population (%) year	0,27	2002

05 Inter-local equity (between territories)

Selected aspects of Orientation

Sustainable District Logistics (SDL) orients logistics towards:

- Balanced interlocal development (economic, socio-cultural and environmental)
- Development of fair and solidarity relationships between different local / regional contexts (equal accessibility in trade, economy, socio-culture, environment)
- Balanced alliance between logistics operators of different local areas
- Diffusion of connecting high technology systems (e.g. digital cities, interlocal digital networks)

Main indicators

OR05. Basic indicators for SDL

Economic and social cohesion

Immigrants over total local population (%) year	0.6	2002
Emigrants over total local population (%) year	0.63	2002

REPORT indicators Equity between generation

06 - Equity between generation

Sustainable District Logistics (SDL) orients logistics towards:

- Research concerning sustainable logistics scenarios, patterns, methods and technologies
- Education to nourish the ability of future generations to conceive new styles of production and consumption
- Conservation and development of environmental resources
- Strategic impact assessment of the logistics patterns (long-term risks and damaging changes) considering the aspects of the other 9 components on the future generations

Main indicators

Social cohesion

Share of population (%) below 15 years year	18,6	2002
Share of population (%) above 65 years year	13,1	2002

REPORT indicators Diversity

07 Diversity

Sustainable District Logistics (SDL) orients logistics towards coherence, flexibility, permeability and diffusion of:

- Local identities and fabrics (biodiversity, habitat, socio-cultural heritage, economy vocations, etc.)
- Innovation and development of economic sectors, focused especially on small and medium sized enterprises, income sources both in rural and urban areas, styles of production and consumption (values and ethics)

Main indicators

Social diversity

Immigration (%) by origin Europe year	39	2002
Immigration (%) by origin America year	18	2002
Immigration (%) by origin Asia year	21	2002
Immigration (%) by origin Africa year	21	2002
Immigration (%) by origin Oceania year	1	2002

REPORT indicators Networking and Partnership

09 Networking and Partnership

Sustainable District Logistics (SDL) orients logistics towards:

- Development of regional / local networks of production, distribution and consumption
- Investments in social capital (community glues, intermediary bodies, bridges and networks)
- Networked organisations (e.g. consortia between businesses, co-operation between private, public and social sectors, co-operation between local and metropolitan consortia of transport and logistics)
- Alliances between environmentally friendly transport modes and operators
- Exchange of experiences and good practice of sustainable transport and logistics between different local and regional contexts
- Alliances and collaboration between public authorities and private actors of different local / regional contexts

Main indicators

Business and their association and consortia

Total businesses (local units) in all economy sectors year	142.600	2002
Businesses (local units) in agriculture sector year	17.600	2002
Businesses (local units) in industry sector year	11.000	2002
Businesses (local units) in all services sector year	54.900	2002
Businesses (local units) in all transport services year	2.231	2002

P2 Creativity and innovation in an entrepreneurial culture

Selected aspects of Social Potentials

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.).

Main indicators

P02. Basic indicators for SDL

Average business size in all economic sectors

6.8 employees per unit

Average business size in main economic sectors: agriculture, industry and services

Agriculture - 2.4 employees Industry - 19.7 employees Services - 7.2 employees

Average business size in transport services

11.8 employees

Businesses with ISO 14001, EMAS II, Vision 2000 and SA 8000 certification

ISO 14001 257 out of 1152 total certificated companies in the NetherlandsEMAS II 6 out of 29 total certificated companies