Report indicators environment

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

Methodology adopted to estimate transport related environmental data

The methodology totally relies on:

- the calculation made to estimate the amount of Pkm, Tkm and/or vehicle-km attributable to the concerned local area (see the "O2 - Economy" aspect);
- the national average value of goe (gram of oil equivalent), CO2, NOx and VOC per Units of Transport (Pkm and Tkm) and/or vehicle-km;
- the determination of local average value units utilising the above-mentioned data for transport mode, vehicle typologies and morphological features that characterise the concerned local area.

The number of local Pkm and Tkm are multiplied by the average unit values of:

- goe (gram of oil equivalent), to determine the energy consumption in Toe;
- CO2 gram, to determine the emissions in terms of CO2 tonnes; it is recommended to verify the estimate with a parallel calculation made by multiplying vehicle-km by the related average value of CO2 gms per vehicle-km; it is also useful to compare the national and local energy intensity in terms of goe per GDP unit (EURO) and Toe per inhabitant;
- NOx emissions, to determine the emissions in terms of NOx tonnes; it is recommended to verify the estimate with a parallel calculation made by multiplying vehicle-km by the related average value of NOx grams per vehicle-km;
- VOC emissions, to determine the emissions in terms of VOC tonnes; it is recommended to verify the estimate with a parallel calculation made by multiplying vehicle-km by the related average value of VOC grams per vehicle-km.

Main indicators

Structural Statistics		
Total area (km2) | year	826,7	2001
Total inhabitants (inhabitants) | year	45.940	2001
Population density (inhabitants/km2) | year	55,6	2001
Land use development		
Agriculture and rural area (%) | year	63	2004
Urban and industrial area (%) | year	15	2004
Area for transport purposes (%) | year	1	2004
Area under environmental protection (%) | year	21	2004
Resource use development		
Total residual household waste (tonnes) | year	27.600	2001
Residual household waste (Kg) per inhabitant | year	601	2001
Total residual non-household waste (tonnes) | year	71.650	1996
Residual non-household waste (Kg) per unit GDP (current EURO) | year	0,1	1996
Total energy consumption (Toe) in all sectors | year	138.258	2001
Total energy consumption (goe) per unit GDP (current EURO) | year	150	2001
Total energy consumption (Toe) per inhabitant | year	3,01	2001

Energy consumption (Toe) in industry | year	48.317	2001
Energy consumption (Toe) in other uses | year	54.486	2001
Energy consumption (Toe) in transport | year	35.455	2001
Total energy consumption (Toe) in rail transport | year	554	2001
Total energy consumption (Toe) in road transport | year	34.901	2001
Total energy consumption (Toe) in passenger transport | year	96.593	2001
Energy consumption (Toe) in passenger rail transport | year	497	2001
Energy consumption (Toe) in passenger road public (buses) transport | year	222	2001
Energy consumption (Toe) in passenger road private (cars and motorcycles) transport | year	25.874	2001
Total energy consumption (Toe) in freight transport | year	8.862	2001
Energy consumption (Toe) in freight rail transport | year	57	2001
Energy consumption (Toe) in freight road transport | year	8.805	2001

Environmental impact development

Total CO2 production (tonnes) | year	1.036.980	1995
Total CO2 production (tonnes) per inhabitant | year	24	1995
Total CO2 production (tonnes) due to all transport modes | year	87.457	2001
CO2 production (tonnes) due to rail transport | year	1.686	2001
CO2 production (tonnes) due to road transport | year	85.771	2001
Total CO2 production (tonnes) due to all passenger transport modes | year	67.106	2001
CO2 production (tonnes) due to passenger rail transport | year	1.546	2001
CO2 production (tonnes) due to passenger road public (buses) transport | year	355	2001
CO2 production (tonnes) due to passenger road private (cars and motorcycles) transport | year	65.204	2001
Total CO2 production (tonnes) due to all freight transport modes | year	20.351	2001
CO2 production (tonnes) due to freight rail transport | year	139	2001
CO2 production (tonnes) due to freight road transport | year	20.212	2001
Total NOx (tonnes) transport emission | year	519	2001
NOx (tonnes) rail transport emission | year	4	2001
NOx (tonnes) road transport emission | year	515	2001
Total NOx production (tonnes) due to all passenger transport modes | year	349	2001
NOx production (tonnes) due to passenger rail transport | year	4	2001
NOx production (tonnes) due to passenger road public (buses) transport | year	4	2001
NOx production (tonnes) due to passenger road private (cars and motorcycles) transport | year	341	2001
Total NOx production (tonnes) due to all freight transport modes | year	170	2001
NOx production (tonnes) due to freight rail transport | year	1	2001
NOx production (tonnes) due to freight road transport | year	169	2001
Total VOC (tonnes) transport emission | year	558,7	2001
VOC (tonnes) rail transport emission | year	0,3	2001
VOC (tonnes) road transport emission | year	558,4	2001
Total VOC production (tonnes) due to all passenger transport modes | year	535,6	2001
VOC production (tonnes) due to passenger rail transport | year	0,3	2001
VOC production (tonnes) due to passenger road public (buses) transport | year	2,1	2001
VOC production (tonnes) due to passenger road private (cars and motorcycles) transport | year	533,2	2001
Total VOC production (tonnes) due to all freight transport modes | year	23	2001
VOC production (tonnes) due to freight rail transport | year	0	2001
VOC production (tonnes) due to freight road transport | year	23	2001
Night average level concentration (db) of traffic noise | year	61,2	2002
Day average level concentration (db) of traffic noise | year	67,1	2002
Water quality: max EBI (I-V) | year	III	2002

Report indicators economy

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.)

Methodology adopted to estimate transport related economic data

The following steps characterise the methodology utilised to estimate the basic Transport Units (Pkm and Tkm), their relative units in relation to GDP and number of inhabitants, as well as their incidence in terms of social and environmental costs (externalities).

The calculation of locally-based Pkm and Tkm combines two methods.

The bottom-up approach consists of:

- considering the number of vehicles attributed (by public registers) to the concerned local area;
- multiplying the number of each vehicle typology by an average number of km travelled per year in order to estimate the number of vehicle-km;
- multiplying the number of vehicle-km by an average number of passengers or tonnes per vehicle in order to arrive at estimating Pkm and Tkm.

In the case of road public and rail transport, another method to calculate Pkm and Tkm takes into account the available data on passengers and tonnes transported per year. These data are multiplied by an average number of km travelled per trip.

The second method can be defined as a top-down approach and consists of:

- utilising the nationally available data (Pkm and Tkm) on transport modes that exist in the concerned local area;
- selecting appropriate variables to gauge the national data in terms of the concerned local context; generally this will involve information on the local GDP value, the number of inhabitants and the value of household consumption which can be used as a common denominator in the two territorial dimensions;
- calculating Tkm and Pkm per unit in terms of the relational variable (e.g. Pkm per GDP or per inhabitant);
- multiplying the above-determined average number of Pkm/GDP of inhabitant (and Tkm) by the value that the selected variables have in the concerned local area;
- determining the range of a wise attribution of Tkm and Pkm to the concerned local area (maximum and minimum values).

The last operation serves to compare the results of the two approaches and to arrive at a final attribution of the estimated values of Tkm and Pkm to the concerned local area.

The externality costs are estimated in a similar manner:

- taking as a point of reference the estimates of national average costs (greenhouse gases, air pollution, noise, accidents, congestion) per unit of transport (Pkm and Tkm) that are pertinent to the local prevalent transport modes;
- multiplying the above-selected cost units to the Pkm and Tkm attributed to the concerned local area;
- calculating the percentage value of transport-derived externalities on the local GDP in order to fully recognise their total amount.

Main indicators

Basic structure		
Total GDP (current EURO) | year	923.394.000	2001
Total employment in all sectors | year	12.195	2001
Structural development trade		
Local units in wholesale trade | year	275	2002
Local units in retail trade | year	718	2002
Total store (all trade activities) surface (m2) per 1000 inhabitant | year		
Businesses with access to the Internet over all end users (%) | year	36	2004
Households with access to the Internet over all end users (%) | year	64	2004
Transport infrastructure development		
Railways per typology (sole track Km) | year	44	2001
Railways Km per 1000 inhabitant | year	0,96	2001
Total roads Km | year	630	2001
Roads Km per 1000 inhabitants | year	13,7	2001
Regional roads Km | year	69	2001
Provincial roads Km | year	302	2001
Local roads Km | year	259	2001
Railways capacity - passenger (trains per day) | year	32	2001
Railways capacity - freight (trains per day) | year	2	2001
Road capacity per day (veichles) in regional roads | year	15.000	2001
Road capacity per day (veichles) in the other roads | year	10.000	2001
Road traffic jams - hours per inhabitans in regional roads | year	0,009	2001
Road traffic jams - hours per inhabitans in the other roads | year	0,010	2001
Crowding-hours per inhabitant in public transport | year	0,0072	2001
Transport intensity		
Total passenger transport (million Pkm) | year	644	2001
Passenger transport (million Pkm) by rail | year	35	2001
Passenger public transport (million Pkm) by road (buses) | year	11	2001
Passenger private transport (million Pkm) by road (cars and motorcycles) | year	598	2001
Total freight transport (million Tkm) | year	164	2001
Freight transport (million Tkm) by rail | year	4	2001
Freight transport (million Tkm) by road | year	160	2001
Passenger transport intensity (Pkm per unit GDP) | year	0,7	2001
Freight transport intensity (Tkm per unit GDP) | year	0,18	2001
Passenger transport intensity (Pkm per inhabitant) | year	15.000	2001
Freight transport intensity (Tkm per inhabitant) | year	3.600	2001
External costs of transportation		
Total environmental and social costs (current EURO-millions): total transport | year	97,3	2001
Greenhouse costs (current EURO-millions): total transport | year	7,7	2001
Air pollution costs (current EURO-millions): total transport | year	40,6	2001
Noise costs (current EURO-millions): total transport | year	11,6	2001
Accidents costs (current EURO-millions): total transport | year	24,8	2001
Congestion costs (current EURO-millions): total transport | year	12,6	2001
Environmental and social costs (current EURO-millions): passenger transport | year	57,5	2001
Greenhouse costs (current EURO-millions): passenger transport | year	4,7	2001
Air pollution costs (current EURO-millions): passenger transport | year	17,3	2001
Noise costs (current EURO-millions): passenger transport | year	5,3	2001
Accidents costs (current EURO-millions): passenger transport | year	22,8	2001
Congestion costs (current EURO-millions): passenger transport | year	7,5	2001
Environmental and social costs (current EURO-millions): freight transport | year	39,8	2001
Greenhouse costs (current EURO-millions): freight transport | year	3	2001
Air pollution costs (current EURO-millions): freight transport | year	23,4	2001

Noise costs (current EURO-millions): freight transport | year	6,3	2001
Accidents costs (current EURO-millions): freight transport | year	2	2001
Congestion costs (current EURO-millions): freight transport | year	5,1	2001
External costs of rail transport		
Greenhouse costs (current EURO-millions): total transport | year	0,2	2001
Air pollution costs (current EURO-millions): total transport | year	0,4	2001
Noise costs (current EURO-millions): total transport | year	0,9	2001
Accidents costs (current EURO-millions): total transport | year	0,1	2001
Congestion costs (current EURO-millions): total transport | year	0,1	2001
Greenhouse costs (current EURO-millions): passenger transport | year	0,2	2001
Air pollution costs (current EURO-millions): passenger transport | year	0,4	2001
Noise costs (current EURO-millions): passenger transport | year	0,7	2001
Accidents costs (current EURO-millions): passenger transport | year	0,1	2001
Congestion costs (current EURO-millions): passenger transport | year	0,1	2001
Greenhouse costs (current EURO-millions): freight transport | year	0	2001
Air pollution costs (current EURO-millions): freight transport | year	0	2001
Noise costs (current EURO-millions): freight transport | year	0,2	2001
Accidents costs (current EURO-millions): freight transport | year	0	2001
Congestion costs (current EURO-millions): freight transport | year	0	2001
External costs of road transport		
Greenhouse costs (current EURO-millions): total transport | year	7,5	2001
Air pollution costs (current EURO-millions): total transport | year	40,2	2001
Noise costs (current EURO-millions): total transport | year	10,7	2001
Accidents costs (current EURO-millions): total transport | year	24,7	2001
Congestion costs (current EURO-millions): total transport | year	12,5	2001
Greenhouse costs (current EURO-millions): passenger transport | year	4,5	2001
Air pollution costs (current EURO-millions): passenger transport | year	16,9	2001
Noise costs (current EURO-millions): passenger transport | year	4,6	2001
Accidents costs (current EURO-millions): passenger transport | year	22,7	2001
Congestion costs (current EURO-millions): passenger transport | year	7,4	2001
Greenhouse costs (current EURO-millions): freight transport | year	3	2001
Air pollution costs (current EURO-millions): freight transport | year	23,4	2001
Noise costs (current EURO-millions): freight transport | year	6,1	2001
Accidents costs (current EURO-millions): freight transport | year	2	2001
Congestion costs (current EURO-millions): freight transport | year	5,1	2001

Report indicators socio-culture

O3 - 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

Population structure		
Total inhabitants | year	45.940	2001
Total inhabitants aged 15 - 64 |year	29.950	2001
Women life expectancy years | year	83,3	2001
Men life expectancy years | year	77,4	2001
Activity developments		
Unemployment rate (%) | year	4,7	2001
Activity rate (%) per year over population aged 15 - 64 | year	67	2001
Employment in agriculture sector | year	796	2001
Employment in industry sector | year	7.505	2001
Employment in all services sector | year	3.894	2001
Employment in transport services | year	342	2001
Employment in supporting transport services | year	63	2001
Employment in trade services | year	1.396	2001
Education level		
Drop-out rate (%) over total student population of upper secondary schools | year	5,1	2000
University degree over all local population (%) | year	2,3	1991
High school degree over all local population (%) | year	17,64	1991
Education programmes on the environment | year	4	2001

Report indicators equity aspects

O4 - Equity between indivituals

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

Equal opportunities developments

Women unemployment rate (%) | year	8	2001
Women activity rate (%) over the respective population aged 15 - 64 | year	60	2001
Men unemployment rate (%) | year	2,1	
Men activity rate (%) over the respective population aged 15 - 64 | year	73	
Transport and logistics firms (%) over total companies directed by women | year	15	2003
Women over total men in local governments (%) | year	13	2003

Transport intensity impacts

Death and injury related traffic accidents | year	210	2001
Death and injury related traffic accidents over total local population (%) | year	0,46	2001

O5 - Equity between territories

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

Economic and social cohesion

GDP per inhabitant (in current Euro) | year	20.100	2001
Immigrants over total local population (%) | year	6	2001
Interlocal Internet - based networks | year	1	2000

O6 - Equity between generations

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	12,4	2001
Share of population (%) above 65 years | year	22,4	2001
Dependency rate per year (% of 0-14 and 65 - over aged people over population aged 15 - 64) | year	53,39	2001
Immigrant pupils over the autochthonous pupils in primary schools (%) | year	12	2001

Immigrant pupils over the autochthonous pupils in lower secondary education (%) | year	11	2001
Development impacts		
Public debt per inhabitant (current EURO) | year	647	2002
Strategic environmental impact assessment projects | year	1	2002

Report indicators systemic aspects

O7 - 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		
East Europe immigration flow over total immigrants (%) | year	60	2001
Environmental diversity		
Biodiversity (programmes and plans)	4	2002
Economic diversity		
Businesses with local origin certification	39	2002

O8 - Subsidiarity

Sustainable District Logistics (SDL) orients logistics towards capacity building (knowledge dissemination and decision-making openness) based on:

- Integration of local and wider (global) dimensions (glocacity)
- Reduction of the spatial range of material flows
- Streamlined organisation of material flows
- Integration of top-down and bottom-up approaches in streamlined organisations (businesses, public administrations and other associations)
- Empowerment of local communities

Main indicators

Institutional subsidiarity		
Budget autonomy of local authorities in current EURO | year	13.704.268	2002
Budget autonomy of local authorities over the total municipality revenue (%) | year	41	2002
Transport flow subsidiarity		
Transit over all freight transport (%) | year	0	2001
Supply internally borne and internally provided over all freight transport (%) | year	3	2001
Supply internally borne and externally provided over all freight transport (%) | year	32	2001
Distribution internally borne and internally delivered over all freight transport (%) | year	1	2001
Distribution internally borne and externally delivered over all freight transport (%) | year	64	2001
Freight transport occurred inside the local area over total supply Tkm (%) | year	25	2001
Freight transport occurred inside the local area over total distribution Tkm (%) | year	20	2001
Freight transport occurred outside the local area over total supply Tkm (%) | year	75	2001
Freight transport occurred outside the local area over total distribution Tkm (%)| year	80	2001

O9 - 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	4.927	2001
Businesses (local units) in agriculture sector | year	1.075	2001
Businesses (local units) in industry sector | year	1.674	2001
Businesses (local units) in all services sector | year	2.178	2001
Businesses (local units) in road transport services | year	182	2001
Businesses (local units) in rail transport services | year	5	2001
Businesses (local units) in supporting transport services | year	16	2001
Consortia between logistics operators | year	1	2001
Business associations | year	8	2001

O10 - Participation

Sustainable District Logistics (SDL) orients logistics towards:

- Enlargement of the stakeholders constellation to incorporate in the logistics processes new points of view, cultures, interests and behaviours (e.g. those concerning women, new generations, elderly, disabled, poor people)
- Information, animation and facilitation
- Stakeholders involvement and legitimate acknowledgement in the decision-making processes of spatial planning, transport, logistics, etc.
- Involvement of different agencies (private, public and social) in the management of logistics processes
- Community participatory forms of co-operative management of proximity logistics processes
- Democratic management of the strategic impact assessment of logistics processes

Main indicators

Actors mobilisation

Public awareness campaigns related to the environment | year	2	2001
Public awareness campaigns related to transportation and logistics | year	0	2001
Non profit associations (volunteer) related to social, cultural and environmental interests | year	281	2001

Report indicators social potential

P1 - 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.)

Main indicators

Workshops and seminars focused on sustainable development

0

Publications and public information on sustainable development and related innovation

1 e-learning web-site on Sustainable Business inserted in the provincial portal in 2003

P2 - 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.).

Main indicators

Average business size in all economic sectors

2,9 employed per local unit in 2001

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

In 2001:Agriculture 1 employed per local unit; Industry 5,3 employed per local unit; Services 2 employed per local unit

Average business size in transport services

2,5 employed per local unit in 2001

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

3 ISO 14000/1 (wood, clothes and ink production), 1 eco-label (shoes production), 4 biological marks in 2003

P3 - 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

Main indicators

Programmes directed towards sustainable development

5 in 2003: 1 Mountain Community Development Plan and 2 Waste Plans (ready); 1 Local Agenda 21 and 1

aeolian power plan (under elaboration)

Training courses based on issues of sustainable development

0 in 2002

P4 - Enrichment of the local knowledge to create a cohesive multicultural environment

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

- Open interrelationships between different knowledge and cultures, considering both the current and future components of the local context and their probable impact on logistics processes (programmes for the emersion of black-market activities, exchange programmes with other local systems, projects on multicultural integration, labour and social insertion, etc.)

Main indicators

Programmes for emersion of black market activities

2 in 2003 (1 derived from a national plan, the other based on a local agreement between the social partners)

Projects of multicultural integration and for labour - social insertion

5 of multicultural integration; 1 local plan for social insertion (regarding all municipalities)

P5 - 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.)

Main indicators

Endogenous companies

Percentage over total businesses per year (not yet available)

Projects on local economic, environmental and socio-cultural diversification

Number and main contents per year (not yet available)

P6 - Ability to reach optimal levels of attainment and fulfilment of life

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

- Dialogical capacity of a territorial system to be simultaneously open and cohesive in order to create the knowledge preconditions for integrated logistics plans (interdisciplinary training and university courses on individual and collective empowerment, motivation and participation, etc.)

Main indicators

Training and university courses on environmental and social accounting

3 training courses in 2002 regarding business quality, tourism, agro-tourism and local development

P7 - Fractal distribution of responsibilities and competence

The Sustainable District Logistics (SDL) approach is facilitated by a multi-level governance of the logistics processes, based on:

- Integration of top-down and bottom-up approaches in decision-making at a territorial level (diversity of institutional characteristics in number of structures, distribution of responsibilities and power, etc.)
- Integration between local and global dimensions (balanced responsibilities and co-operation between small and large transport and logistics companies, etc.)
- Close interaction between economic actors, the society and the institutions (informal relationships and formal procedures of decision-making in public policies and programmes, etc.)

Main indicators

Competencies and responsibilities assigned to local authorities

Municipalities have full responsibility in all policy fields concerning their territories according to the recent national and regional reforms (only defence, police, justice and foreign policies are excluded)

New governance methods applied to plan and project implementation

New methods developed in local plan concerning social services, according to the regionally co-ordinated plan in 2003

P8 - Facilitating structure for autonomy and collaboration into the decision-making

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

- Collective identity of the local context where political institutions, civil society and citizens manifest different economic, environmental and social interests (participation at public budget allocation and shared responsibilities in public spending, mutual and co-operative collaboration between the logistics companies and their stakeholders, etc.)

Main indicators

Freedom of choice assigned to local authorities in public budget

1.826.362 current Euro in 2002, equal to 20% of the total transfer from the State, Region and Province to the Mountain Community

P9 - Primary reliance on the endogenous resources without compromising the ones of the others

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

- Collaboration between the local actors to utilise endogenous and exogenous resources in a synergetic way (common territorial marketing plans, locally based investments, exchange of good practices with other local contexts, pilot projects between universities, businesses, trade associations, etc.)

Main indicators

Joint territorial marketing plans

4 in 2003: 1 Leader Plus project, 1 integrated local development plan (PISL); 1 territorial tourism promotion plan; 1 local plan for business incentives

Conferences with other EU local communities

1 in 2003 concerning Mini Olympiads (for children)

P10 - Shared value system taking into account environmental, socio-cultural and economic interdependencies

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

- Collaboration between the logistics stakeholders (businesses, public authorities, civil society and communities) in taking into account the economic, social, cultural and environmental values and interdependencies (programmes for public awareness raising, typologies of stakeholders involved in relevant local initiatives, committees, forums, inter-departmental groups, etc.)

Main indicators

Stakeholders involved in relevant committees, forums, inter disciplinary groups related to local development initiatives and plans

56 groups of different local stakeholders involved in the economic and social development plans managed by the Mountain Community in 2003 and before

P11 - Social cohesion

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

- Networks of interpersonal relationships, common culture, sense of belonging, mutual trust between local operators and communities (role of the volunteer sector, socio-ethics funds, plans for urban renovation, social inclusion, employment, housing, etc.)

Main indicators

Local inclusion plans (housing, social transport, child care, immigrants, elderly, etc.)
One Local Action Plan for social services with an average public expenditure of 131 Euro per inhabitants in 2002 (6 million current Euro as a total); minors, families, elderly, disables and young people as the main target groups

P12 - Opportunity and room for fair interactions

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

- Interactions aimed at guarantying the rights to be parts and citizen of the local system through appropriate structures and services (logistics plans based on eco and fair trade with other local contexts, projects on equal opportunities between men and women, human and not-only-human civil rights, involvement in public spending management, etc.)

Main indicators

Centres for equal opportunities (e.g. women and men) and civil rights
1 provincial Equal Opportunity Centre (women and men) still (2003) acting at local level

Participation of immigrant groups in local government decision-making
No initiatives already existing in terms o number of municipalities or statutory charters and resolutions

P13 - Capacity for creating shared visions of local development

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

- Courses of action based on long term strategic thinking, transdisciplinary co-operation between the logistics stakeholders, flows of knowledge and participative decision-making (territorial pacts and agreements, Local Agenda 21, environmental education plans, etc.).

Main indicators

Territorial development pacts and Local Agenda 21
1 territorial pact regarding the Central Apennine area (still acting) and 1 Local Agenda 21 (under elaboration) in 2003

P14 - Integration of social and technical skills for innovative processes

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

- Integration of "tacit" (embedded in the local context) and codified (formalised learning methods) knowledge (professional, technological and business-orientated), as well as access to higher technologies to smaller businesses (training courses, connection with universities, inter-companies collaboration, stages and professional mobility, participatory planning for urban and rural renovation and development, etc.)

Main indicators

Vocational training courses that integrate social and technical skills
9 in 2002

Vocational training courses on logistics and transport
2 in 2002 concerning transport

P15 - Access to information and dialogue

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

- Information and debate on transport and logistics issues and processes to favour connective tissues between local actors, communities and institutions (transparent procedures in decision-making, acknowledgement of what decision can be really influenced by the citizens' participation, campaigns and

projects for awareness raising, etc.)

Main indicators

Interactive communication networks with the citizens, e.g. e-government

1 Internet-based portal managed by the Mountain Community for e-government involving all municipalities, citizens, business and the civil society (2003 improvements of the system activated some years ago)

P16 - Existence of facilitators and animators of multiple interactions

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

- Local development agencies and agents to facilitate interactions between the logistics stakeholders through a knowledge flow aimed at capacity building (promotion of participatory spatial and logistics planning, joint projects on corporate social and environmental responsibility, networks of businesses innovation and support services, etc.).

Main indicators

Local development agencies

3 in 2003 (1 Leader Plus LAG, 1 local development consortium, 1 local intermediary body)

Report indicators dynamics

D1 - Enhancing problem understanding

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

- Increasing the capacity of the logistics stakeholders to enlarge scope and perspective of analysis in order to nourish innovation and creativity that are based on social and environmental awareness and responsibility; this means, for instance, to consider the close interrelationships between organisations, territories, spatial and temporal dimensions

Main indicators

Existence of local initiatives towards innovation and creativity in logistics

One local industry company working with external firms for logistics solutions

D2 - 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

Main indicators

Existence of training courses, seminars and workshops to increase knowledge of logistics operators

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D3 - 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)

Main indicators

Existence of round tables, joint committees and groups of logistics stakeholders for plans and projects development

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D4 - Creation of a shared vision

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

- Improving the capacity of the logistics stakeholders to think strategically in a long-term perspective; this means, for instance, to define transparent business and territorial purposes and to follow them with coherent organisational behaviours (missions)

Main indicators

Existence of inter-sectoral and integrated territorial plans decided with the involvement of logistics stakeholders

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D5 - Client orientation

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

- Improving the capacity of the logistics stakeholders to elaborate and perform eco-prosumerism strategies; this means, for instance, to create alliances between producers, consumers, local communities and suppliers taking into account the natural environment, the non human species and the future generation

Main indicators

Existence of codes and charters on transport and logistics, which involve local stakeholders

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D6 - Result orientation

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

- Improving the capacity of the logistics stakeholders to assess constantly the outcomes of business and territorial plans; this means, for instance, to monitor client-satisfaction, stakeholders appreciation, performance costs and revenues, taking into account also the impacts of logistics on the environment, health and socio-culture in terms of styles of production, consumption and life

Main indicators

Existence of monitoring systems managed by logistics operators on stakeholder satisfaction, impacts on the environment, health and socio-culture

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