



Environmental Policies for Cities in the 1990s

10
2

OCDE



OECD

PARIS 1990

WHERE TO OBTAIN OECD PUBLICATIONS - OÙ OBTENIR LES PUBLICATIONS DE L'OCDE

Argentina - Argentine

Carlos Hirsch S.R.L.
Galería Güemes, Florida 165, 4º Piso
1333 Buenos Aires Tel. 30 7122, 331.1787 y 331.2391
Telegram: Hirsch-Baires
Telex: 21112 UAPE-AR Ref. s/2901
Telefax: (1)331-1787

Australia - Australie

D.A. Book (Aust.) Pty. Ltd.
648 Whitehorse Road, P.O. B 163
Mitcham, Victoria 3132
Telex: AA37911 DA BOOK
Telefax: (0)3873 5679

Tel. (03)873.4411

Austria - Autriche

OECD Publications and Information Centre
4 Simrockstrasse
5300 Bonn (Germany)
Telex: 8 86300 Bonn
Telefax: (0)228)26.11 04

Tel. (0228)21.60.45

Germany - Allemagne

Gerold & Co.
Graben 31
Wien 1

Tel. (0222)533.50.14

Belgium - Belgique

Jean De Lannoy
Avenue du Roi 202
B-1060 Bruxelles
Tel. 63220
Telex: 63220
Telefax: (02)538.51.69/538.08.41

Tel. (02)538.51.69/538.08.41

Canada

Renouf Publishing Company Ltd.
1294 Algoma Road
Ottawa, ON K1B 3W8
Telex: 053-4783
Stora

Tel. (613)741.4333

Telefax: (613)741.5439

USA - États-Unis

61 Sparks Street
Ottawa, ON K1P 5R1
211 Yonge Street
Toronto, ON M5B 1M4

Tel. (613)238.8985

Tel. (416)363.3171

Federal Publications
165 University Avenue
Toronto, ON M5H 3B8
Telefax: (416)581.1743

Tel. (416)581.1552

Les Publications Fédérales
1185 rue de l'Université
Montréal, PQ H3B 3A7

Tel. (514)954-1633

Les Éditions La Liberté Inc.
3020 Chemin Sainte-Foy
Sainte-Foy, PQ G1J 3X6

Tel. (418)658.3763

Telefax: (418)658.3763

Denmark - Danemark

Munksgaard Export and Subscription Service
35, Nørre Søgade, P.O. Box 2148
DK-1016 København K
Telex: 19431 MUNKS DK

Tel. (45 33)12.85.70

Telefax: (45 33)12.93.87

Finland - Finlande

Akatemien Kirjakauppa
Keskuskatu 1, P.O. Box 128
00100 Helsinki
Telex: 125980

Tel. (358 00)12141

Telefax: (358 00)121.4441

France

OECD/OCDE
Mail Orders/Commandes par correspondance:
2 rue André-Pascal
75775 Paris Cedex 16
Bookshop/Library:

Tel. (1)45.24.82.00

33, rue Octave Feuillet
75016 Paris

Tel. (1)45.24.81.67

(1)45.24.81.81

Telex: 620 160 OCDE
Telefax: (33-1)45.24.85.00

Librairie de l'Université
12a, rue Nazareth
13602 Aix-en-Provence

Tel. 42.26.18.08

Germany - Allemagne

OECD Publications and Information Centre
Schiedstrasse 7
5300 Bonn 1
Telefax: (0)228)26.11 04

Tel. (0228)21.60.45

Greece - Grèce

Librairie Kaufmann
28 rue du Stade
105 64 Athens
Telex: 218187 LJKA Gr

Tel. 322.21.60

Hong Kong

Swindon Book Co. Ltd.
11 - 15 Lock Road
Kowloon, Hongkong
Telex: 50 441 SWIN HX
Telefax: 739 49 75

Tel. 366 80 31

Iceland - Islande

Mál Mog Meaning
Laugavegi 18, Pósthólf 392
121 Reykjavík

Tel. 15199/2420

India - Inde

Oxford Book and Stationery Co.
Scindia House
New Delhi 110001
Telex: 31 61990 AM IN
Telefax: (11)332.5993
17 Park Street
Calcutta 700016

Tel. 331.5896/5308

Tel. 240832

Indonesia - Indonésie

Pdji-Lipi
P.O. Box 269/JKSMG/88
Jakarta 12790
Telex: 62 875

Tel. 583467

Ireland - Irlande

TDC Publishers - Library Suppliers
12 North Frederick Street
Dublin 1
Telex: 33530 TDCP EI Telefax: 748416

Tel. 744835/749677

Italy - Italie

Libreria Commissionaria Sansoni
Via Benedetto Fortini, 120/10
Casella Post. 552
50125 Firenze

Tel. (055)645415

Telefax: (39.55)641257

Via Biancamano 29
20155 Milano

Tel. 365083

La diffusione delle pubblicazioni OCSE viene assicurata dalle principali librerie ed anche da:
Editrice e Libreria Herder
Piazza Montecitorio 120
00186 Roma

Tel. 679.4628

Libreria Hoeppli
Via Hoeppli 5
20121 Milano

Tel. 865446

Telex: 31.33.95 Telefax: (39.2)805.2886

Libreria Scientifica
Dot. Lucio de Biasio "Acqui"
Via Meravigli 16
20123 Milano

Tel. 807679

Telex: 800175

Japan - Japon

OECD Publications and Information Centre
Landic Akasaka Building
2-3-4 Akasaka, Minato-ku
Tokyo 107
Telex: (81.3)584.7929

Tel. 586.2016

Korea - Corée

Kyobo Book Centre Co. Ltd.
P.O. Box 1638, Kwang Hwa Moon
Seoul
Telex: 735.0030

Tel. (REP)730.78.91

Malaysia/Singapore - Malaisie/Singapour

University of Malaya Co-operative Bookshop Ltd.
P.O. Box 1127, Jalan Pantai Baru 59100
Kuala Lumpur
Malaysia

Tel. 756.5000/756.5425

Telex: 757.3661

Information Publications Pte. Ltd.
Poi-Fu Industrial Building
24 New Industrial Road No. 02-06
Singapore 1955

Tel. 283.1786/283.1798

Netherlands - Pays-Bas

SDI Uitgeverij
Christoffel Plantijnstraat 2
Postbus 20014
2500 EA's-Gravenhage

Tel. (070) 3178.99.11

Tel. (070) 3178.98.80

Voor bestellingen:
Telex: 32486 index

Telefax: (070) 317.63.51

New Zealand - Nouvelle-Zélande

Government Printing Office
Customer Services
33 The Esplanade - P.O. Box 38-900
Petone, Wellington
Tel. (04) 685-355

Telefax: (04)685-333

Norway - Norvège

Norwegian Info Centre - NIC
P.O. Box 125
Bjornland Næringsvei 2
0602 Oslo 6
Telex: 79668 NIC N

Tel. (02)57.33.00

Telefax: (02)68.19.01

Pakistan

Mirza Book Agency
65 Shahrah Quaid-E-Azam
Lahore 3
Telex: 44886 UBL PK. Ana: MIRZA BK

Tel. 66839

Portugal

Libreria Portugal
Rua do Carmo 70-74
Apart. 2681
1117 Lisbon Codex
Telefax: 37 02 64

Tel. 347.49.82/3/4/5

Singapore/Malaysia - Singapour/Malaisie

Spain - Espagne

Mundi-Prensa Libro S.A.
Castelló 37, Apartado 1223
Madrid 28001
Telex: 49370 MPLI
Libreria Internacional AEDOS
Consejo de Ciento 391
08009-Barcelona

Tel. (91) 431.33.99

Telefax: 575 39 98

Telex: (93) 317-01-41

Tel. (93) 301-86-15

Sweden - Suède

Fritzes Fackboksföretaget
Box 16356, S 103 27 STH
Ragringgatan 12
DS Stockholm

Tel. (08)23.89.00

Telex: 12387 Telefax: (08)20.50.21

Subscription Agency/Abonnements:

Wennergren-Williams AB
Box 30004
104 25 Stockholm

Tel. (08)54.12.00

Telex: 19937 Telefax: (08)50.82.86

Switzerland - Suisse

OECD Publications and Information Centre
Schedenstrasse 7
5300 Bonn 1

Tel. (0228)21.60.45

Telex: (0228)26.11 04

Librairie Payot
6 rue Grenus
1211 Genève 11

Tel. (022)371.89.50

Telex: 28356

Subscription Agency - Service des Abonnements
4 place Piquet - BP 3312
1002 Lausanne

Tel. (021)341.33.31

Telex: (021)341.33.45

Madinet S.A.
Ch. des Paléttes
1020 Revena/Lausanne

Tel. (021)635.08.65

Telex: (021)635.07.80

United Nations Bookshop/Library des Nations-Unies
Palais des Nations
1211 Genève 10

Tel. (022)734.60.11 (ext. 48.72)

Telex: 289696 (Attn: Sales)
Telefax: (022)733.98.79

Taiwan - Formose

Good Faith Worldwide Int'l. Co. Ltd.
9th Floor, No. 118, Sec. 2
Chung Hsiao E. Road
Taipei

Tel. 391.7396/391.7397

Telex: (02) 394.9176

Thailand - Thaïlande

Sukait Siam Co. Ltd.
1715 Rama IV Road, Samyan
Bangkok 5

Tel. 251.1630

Turkey - Turquie

Kültür Yayınları İa-Türk Ltd. Stl.
Atatürk Bulvarı No. 191/Kat. 2
Kavaklıdere/Ankara
Dolmabahçe Cad. No. 29
Besiktas/Istanbul

Tel. 25.07.60

Tel. 160.71.88

Telex: 43482B

United Kingdom - Royaume-Uni

HMSO
Gen. enquiries
Postal orders only:
P.O. Box 276, London SW8 5DT
Personal Callers HMSO Bookshop
49 High Holborn, London WC1V 6HB

Tel. 25.07.60

Tel. 160.71.88

Telex: 297138 Telefax: 071 873 8463

Branches at: Belfast, Birmingham, Bristol, Edinburgh,
Manchester

United States - États-Unis

OECD Publications and Information Centre
2001 L Street N.W., Suite 700
Washington, D.C. 20036-4095

Tel. (202)785.6323

Telefax: (202)785.0350

Venezuela

Libreria del Este
Avenida F. Miranda 52, Aptdo. 60337
Edificio Galpán
Caracas 106

Tel. 951.1705/951.2307/951.1297

Telegram: Librate Caracas

Yugoslavia - Yougoslavie

Jugoslovenska Knjiga
Knez Mihajlova 2, P.O. Box 36
Beograd

Tel. 621.992

Telex: 12466 jk bgd

Orders and inquiries from countries where Distributors have not yet been appointed should be sent to: OECD Publications Service, 2 rue André-Pascal, 75775 Paris Cedex 16, France. Les commandes provenant de pays où l'OCDE n'a pas encore désigné de distributeur devraient être adressées à: OCDE, Service des Publications, 2, rue André-Pascal, 75775 Paris Cedex 16, France.

九十年代的城市环境因素

Environmental Policies for Cities in the 1990s

ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

Pursuant to article 1 of the Convention signed in Paris on 14th December 1960, and which came into force on 30th September 1961, the Organisation for Economic Co-operation and Development (OECD) shall promote policies designed:

- to achieve the highest sustainable economic growth and employment and a rising standard of living in Member countries, while maintaining financial stability, and thus to contribute to the development of the world economy;
- to contribute to sound economic expansion in Member as well as non-member countries in the process of economic development; and
- to contribute to the expansion of world trade on a multilateral, non-discriminatory basis in accordance with international obligations.

The original Member countries of the OECD are Austria, Belgium, Canada, Denmark, France, the Federal Republic of Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States. The following countries became Members subsequently through accession at the dates indicated hereafter: Japan (28th April 1964), Finland (28th January 1969), Australia (7th June 1971) and New Zealand (29th May 1973).

The Socialist Federal Republic of Yugoslavia takes part in some of the work of the OECD (agreement of 28th October 1961).

Publié en français sous le titre:

L'ENVIRONNEMENT URBAIN:

QUELLES POLITIQUES POUR LES ANNÉES 1990?

Second Printing, 1991

© OECD, 1990

Application for permission to reproduce or translate
all or part of this publication should be made to:
Head of Publications Service, OECD

2, rue André-Pascal, 75775 PARIS CEDEX 16, France.

This report was prepared by a Project Group established under the auspices of the OECD Group on Urban Affairs. The report* is the result of a three-year inquiry which included the analysis of twenty case studies and the organisation of a major Conference in Berlin, Germany, in January 1989.

It examines various existing urban environmental improvement policies, it proposes ways and means to improve the co-ordination of policies which have an environmental impact on cities and it describes the policy instruments which are available to national, regional and local governments. Finally, it assesses local initiatives in three main areas of concern: urban rehabilitation, urban transport and urban energy management, and it proposes policy guidelines for improvement in these three areas of concern.

The OECD Group on Urban Affairs endorsed these policy guidelines in May 1990 and the OECD Council agreed to their derestriction on 18th July 1990.

* The report was written by the OECD Urban Division with the assistance of two consultants: Mr Christopher Kilby (Planner, New Zealand) for the main report and Mr Graham Haughton (University of Leeds, United Kingdom) for the Summary.

ALSO AVAILABLE

Climate Change: Evaluating the Socio-Economic Impacts (1991) (97 90 02 1) ISBN 92-64-13462-X	FF130	£16.00	US\$28.00	DM50
Fighting Noise in the 1990s (1991) (97 91 02 1) ISBN 92-64-13457-3	FF100	£12.00	US\$21.00	DM39
State of the Environment (1991) (97 91 01 1) ISBN 92-64-13442-5	FF180	£22.00	US\$38.00	DM70
Transport and the Environment (1988) (97 88 01 1) ISBN 92-64-13045-4	FF95	£11.20	US\$21.00	DM41
Urban Housing Finance (1988) (97 88 08 1) ISBN 92-64-13156-6	FF60	£7.50	US\$13.50	DM26

Cut along dotted line

ORDER FORM

Please enter my order for:

Qty:	Title	Price
.....
.....
.....
.....
	Total :

- Payment is enclosed
- Charge my VISA card Number of card
(Note: You will be charged the French franc price.)
 Expiration of card Signature
- Send invoice. A purchase order is attached

Send publications to *(please print)*:

Name

Address

.....

.....

Send this Order Form to OECD Publications Service, 2, rue André-Pascal, 75775 PARIS CEDEX 16, France, or to OECD Publications and Information Centre or Distributor in your country *(see last page of the book for addresses)*.

Prices charged at the OECD Bookshop.

THE OECD CATALOGUE OF PUBLICATIONS and supplements will be sent free of charge on request addressed either to OECD Publications Service, or to the OECD Distributor in your country.

CONTENTS

STRUCTURE OF THE REPORT	7
SUMMARY AND POLICY GUIDELINES	9
Chapter 1. THE NATURE OF THE CHALLENGE	19
1. Introduction	19
2. The urban environment – a definition	20
3. The development of cities – economic specialisation	21
4. Current problems in the urban environment	21
5. The nature of change: factors contributing to the current state and awareness of the urban environment	28
Chapter 2. A POLICY FRAMEWORK FOR THE URBAN ENVIRONMENT	33
1. Is urban environmental policy necessary?	33
2. Present policy aims and initiatives	35
3. The sustainable development of cities – the focus for the future	36
Chapter 3. ORGANISATIONAL INTEGRATION AND ECONOMICS – A KEY FOR SUCCESS	39
1. Defining integration	39
2. Appropriate levels of government responsibility	43
3. Policy and programme formulation	43
4. Project implementation	47
5. Economic instruments	50
Chapter 4. NEW INITIATIVES TO OLD PROBLEMS – URBAN AREA REHABILITATION, URBAN TRANSPORT, URBAN ENERGY	61
1. Urban area rehabilitation	61
2. Urban transport	70
3. Urban energy	80
FUTURE DIRECTIONS	91

List of Insets

1. Integration of environmental policies at the city level – the case of Angers (Maine-et-Loire), France	41
2. Programme for the development of an organisational structure for environmental protection at the municipal level – the case of Norway	45

3. The Groundwork Foundation – making urban environmental improvement happen, United Kingdom	49
4. 'Antipollution Agreements' in Japan	56
5. Environmental initiatives with urban redevelopment – False Creek, Vancouver, Canada	66
6. Large scale renewal of derelict docklands – the case of Salford Quays, Greater Manchester, United Kingdom	67
7. Evaluation of the combination of an area licensing scheme and different public transport subsidies as environmental policy measures in Stockholm County, Sweden	75
8. Packaging of measures for air pollution abatement from traffic – the case of Athens, Greece	78
9. Airshed quality management – the case of Los Angeles, United States	79
10. The role of Combined Heat and Power (CHP) in energy conservation and emission reduction – the case of Denmark	84
11. Least-Cost Utility Planning (LCUP) – the case of Seattle, United States	86
12. Environmental improvement model – Berlin, Germany	88

List of Figures and Tables

Figures

1. Summary of the maximum 8 hourly CO concentration in cities, 1980-1984	24
2. A framework for integration	40
3. Urban degradation: the increasing problem	62
4. Urban degradation: improving the environment	64
5. Transport pollution: the increasing problem	71
6. Transport pollution: improving the environment	73

Tables

1. Total water withdrawal by major uses	23
2. Percentage of population exposed to transport noise	25
3. Percentage of public expenditure on pollution control by local, regional and national governments	34
4. The short term impact of area licencing in Singapore	52
5. Importance of energy activities in the generation of major pollutants	81

STRUCTURE OF THE REPORT

The summary together with the conclusions of the project on urban environmental policies is presented hereafter at the beginning of the report. It contains a brief description of the innovative and successful approaches which are analysed in detail in the report (especially in Chapter 4) and it provides policy guidelines for action at local, national and international levels.

Chapter 1 of the report describes the various attributes of the urban environment and provides a definition of what constitutes the "urban environment". The chapter also briefly outlines the current state of the urban environment and describes the various factors that have contributed to the existing conditions. In this respect, the aspects of changing economic structures, changing societal values, increased awareness and understanding of urban environmental problems, intervention failures, and market failures are addressed.

Chapter 2 of the report presents a policy framework for the urban environment. It discusses why urban initiatives for environmental problems are necessary and outlines present policy approaches. The chapter also discusses what future policy directions will be necessary to achieve the sustainable development of cities.

Chapter 3 of the report discusses the organisational and institutional mechanisms that are necessary to achieve successful integration with respect to policy and programme formulation and project implementation within the urban environment. The range of policy instruments that are available to decision-makers for internalising environmental costs into urban development strategies is also discussed.

Although there are a large number of urban environmental issues that are currently of concern to OECD countries, it would be too lengthy a task to tackle them all in this report. As an indication of the types of initiatives and actions being undertaken in specific areas, *Chapter 4* (the last chapter of this report) focuses on three issues: urban area rehabilitation, urban transport and urban energy, and outlines the innovative approaches and lessons to be learnt with respect to financing, short and long term impacts and political feasibility.

SUMMARY AND POLICY GUIDELINES

1. SUSTAINABLE DEVELOPMENT: A CHALLENGE FOR CITIES

Cities are dynamic economic and social entities which play a driving role in the development of regional, national and international economies. They act as centres of population, production and consumption. At their best they embody all the positive advantages of economies of proximity, scale and concentration. At their worst they can produce a high degree of environmental degradation including air, water and noise pollution, land contamination and the generation of considerable amounts of waste. These factors, taken together or in isolation, significantly diminish the quality of life for urban residents and clearly indicate that cities are not making their full potential contribution to achieving global sustainable development.

Sustainable development is defined in the "Report of the World Commission on Environment and Development" as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

The challenge posed by this concept of necessity requires cities individually and collectively to contribute to sustainable global development. Cities must therefore always frame their short-term policies in this long-term perspective of evaluating whether and how initiatives contribute to the future development of the global environment.

Pressures on the urban environment

Evidence from all OECD countries suggests that the most pressing major environmental problems facing urban areas today are:

Air pollution

This is a particular problem in urban areas, mainly because of traffic and industry. Many national air quality standards, as well as recommended concentration limits set by the World Health Organisation (WHO), are still being exceeded in the cities of OECD countries.

Water pollution

The main uses of water are for cooling purposes in power stations, various industrial applications and domestic supply. At present, water supply operations are substantial users

of both space and energy, whilst the inadequate treatment and disposal of urban waste water from domestic and industrial sources too often pose health risks to the public.

Waste from cities

As cities grow and consumption per capita increases, many urban areas are running out (or have already run out) of sites for the disposal of solid wastes. In addition, more and more communities are unwilling to tolerate the creation or extension of waste disposal sites.

Noise generation

The primary sources of noise pollution in urban areas are road traffic, neighbourhood and aircraft noise. Approximately 15 per cent of the population (or more than 100 million people) in the OECD area are exposed to potentially harmful urban noise levels. In some cases this level continues to rise, particularly as road traffic increases.

Pressure on land for urban development

The growth of urban areas has led to a significant conversion of land from agricultural to urban uses over the past few decades. In some OECD countries not only is more land being contaminated in cities and more intensively used overall, but more land is being demanded for low-density suburban expansion.

Deterioration of the quality of urban life

Large cities in particular have become more congested and more polluted, making them less attractive and less efficient for both individuals and businesses.

Degradation of urban landscapes

The city itself is in some senses a non-renewable resource. The built environment of parts of many cities constitutes irreplaceable national and global treasures. Though Venice is perhaps the most extreme and most precariously balanced example of this, at a different scale every city has a mixture of built environments and related cultural heritages and traditions which if lost can never be replaced.

Urban environmental policy principles

There is now a heightened public awareness and concern about environmental and related public health issues. There is a much wider knowledge and understanding of the processes involved and the limits of environmental damage that can and should be tolerated. Moreover, the spiralling costs of tackling urban environmental degradation are being recognised, encouraging initiatives to limit its occurrence. Together these factors give policy makers a strong motive to devise new solutions. Already there are some areas of general agreement on the principles involved. These can be summarised as the *need for*:

- ***Developing long-term strategies*** for the management of the urban environment in the context of sustainable global development;
- ***Adopting a more cross-sectoral approach*** to the planning of development proposals, for instance better integration of transport and land use planning. This should draw

administrative and political forces together to work more effectively for the environment;

- **Facilitating co-operation and co-ordination** within the public sector, and between the public and private sectors and local communities;
- **Enabling the producers** of pollutants to absorb environmental and social costs through fiscal and pricing mechanisms;
- **Setting and enforcing minimum environmental standards**, to protect the various aspects of the urban environment from individual and collective deterioration – for instance, setting maximum pollution tolerance levels and encouraging the preservation of open spaces, such as parks, in cities;
- **Increasing the use of renewable resources** and fostering low-waste and recycling processes;
- **Encouraging and building on local initiatives** and community involvement, and improving local capacities for environmental activity, particularly through the retraining of local people for local jobs.

2. INITIATIVES FOR KEY ISSUES IN THE URBAN ENVIRONMENT

Introduction

In the following sections three environmental priority themes have been isolated for more detailed discussion. **Urban area rehabilitation** is an important issue in all OECD Member countries, which between them have amassed a tremendous store of knowledge and expertise in tackling it. **Urban transport** is another priority area for many OECD countries, as the rise of private transportation in particular has contributed to accelerating conditions of congestion and pollution in many cities. **Urban energy** is an area in which OECD countries have less experience, but in which considerable scope for positive progress exists with a view to reducing pollution and improving standards of public health. These three themes clearly do not cover the whole range of environmental issues facing cities today. They are, nonetheless, indicative of the nature and range of some of the most important problems and solutions being identified as priority areas for urban environmental policies.

Initiatives for urban area rehabilitation

Issues

The massive industrial restructuring of the 1970s and 1980s left large tracts of land abandoned, as many traditional industries left the cities. On the other hand, many growing cities have developed over the same period with low quality or insufficient infrastructure and with poor environments. With appropriate government intervention to provide a strategic development framework and fund pump-priming activities, much can be done to turn around the fortunes of these areas, to realise their latent potential in contributing to the vitality of city economies. The nature and scale of problems inevitably vary between areas, from the problems of continuous incremental deterioration in the physical and social

environment to the relatively sudden, dramatic shrinkage or closure of a factory or port facility. Although urban change is always and everywhere in motion, this report is primarily concerned with situations involving large sites and a considerable legacy of physical problems left behind, with, for instance, land that is contaminated and abandoned or lacking engineering structures.

Some important common themes for the management of area rehabilitation and improvement can be identified from the diversity of problems which are covered in this section. Many OECD cities have now capitalised on the creation of new opportunities which have arisen as a result of the decline of coastal and estuarine heavy industries and related infrastructure. Initiatives have been undertaken to reverse the downward spiral of decline with new investments which help generate private investment confidence and support the forging of new roles and identities for these areas.

Innovations

Special-task agencies – taking a comprehensive area-based approach – in many cases have been initiated to expedite the processes of change, for instance in Winnipeg, Canada and Dublin, Ireland; the Urban Development Corporations in the United Kingdom are another example. Local implementation of projects, involving a range of key local actors and agencies, is also often essential. Numerous examples now exist of failed attempts by central government initiatives to impose a scheme on a local area, which did not come to life until local government was encouraged to become more involved. Although the ability to recognise and be responsive to local potential is far from a local prerogative, local involvement is often a necessary, albeit not a sufficient, condition for project success.

The creation of a strategic vision and development framework for an area has underpinned virtually all successful area initiatives, providing the necessary supportive framework to attract private investors. In addition, the legacy of substantial site-specific problems has required government financial resources to clean up an area as a pre-condition to making private investment viable. Powers over site acquisition have also often been fundamental to success, helping to overcome the problems of fragmented ownership and land sterilisation by land speculators holding on to key plots of land.

The development of a range of partnership arrangements, between the public and private sectors in particular, but also with local community organisations, has been especially important. These partnerships have helped to establish common objectives, clear divisions of responsibilities and overall co-ordination in task achievement. Recognition of *the importance of inter-relationships between economic, social and environmental objectives in rejuvenating an area* has also been important. The creation of a high quality local environment with a high amenity value has been essential to attracting commercial developments and housing alike. Similarly, the development of an appropriate mix of housing and community facilities has often been essential in creating a new positive image for an area and minimising the dangers of social polarisation and the “leakage” of the benefits of economic upturn. And, in many instances, for instance in Vancouver, Canada, and Salford, United Kingdom, *the successes of area schemes have had significant positive spillover effects* in helping revitalise surrounding areas.

Policy guidelines

1. ***Strategic vision and a development framework*** are essential ingredients to a co-ordinated approach to area renewal, maximising the synergies between different schemes and reducing unproductive disturbance to existing activities;
2. ***Urban area rehabilitation has to be multi-dimensional in approach***, encompassing enhancements to the physical environment, the built environment and the social fabric, with a view to improving the quality of life for residents and efficiency of businesses. It is important that the identity of an area be enhanced, not destroyed, and especially in terms of cultural heritage and preservation of the positive aspects of existing built and natural environments;
3. ***Public-private partnerships*** can enhance the effectiveness of the activities of all concerned and create a sense of mutual trust and mutual purpose with which to propel change in a beneficial direction;
4. ***Special purpose, locally-based agencies*** are often best suited to implementing and co-ordinating urban area redevelopment, if they are unencumbered by excessive bureaucratic constraints and are locally sensitive and flexible in approach;
5. ***Urban area improvement schemes should minimise the possible negative social implications of change*** such as the displacement of former urban residents (and, in particular, the poor, the aged, the minorities);
6. ***Local initiative should be fully utilised*** in area improvement and local needs acknowledged; community participation in the **process** of change can be as important as the final stage of rehabilitation, improving the sense of community responsibility.

Initiatives for better urban transport

Issues

The seemingly inexorable rise of private transport has brought with it a mixture of benefits and costs for society as a whole. Nowhere is this more clear than in large cities and conurbations, many of which are now experiencing major problems of congestion, pollution, pressure on land and increasing problems of access to urban services for those without cars. In addition to these local manifestations, there are other important issues: rising consumption of a dominant non-renewable resource, oil; land pressures outside the city for better inter-urban roads; and pollution on such a scale that it is suspected of being a major contributor to global warming.

At the present time, traffic congestion is creating unprecedented inefficiency in both the functioning of cities and the use of fuel. Cities whose roads are congested day after day slow down the movement of both people and goods. In the process, slow-moving traffic increases the fuel consumption of cars and lorries, further increasing both energy consumption and pollution. Undoubtedly the scale of this problem is now threatening the economic vitality of some cities and placing unacceptable burdens on general public health. In many cities the usual response is to react to an immediate crisis by accommodating existing demands and building more roads. All too often, this short-term remedy carries with it long-term problems. Demand management which seeks to reduce demand, without overlooking it altogether, is needed with strategies ranging from greater investment in public transport to encouraging home-working.

There is a pressing need for greater co-ordination of urban transport policies, co-ordination between public and private transport modes, as well as co-ordination between transport and other policies and activities. In too many cities there is a counter-productive fragmentation of both planning and implementation powers. In particular, there is a need to plan public and private transport provision in parallel, which in many instances will require initiatives which harness the demand for private transport whilst optimising levels of accessibility within and between cities.

There remains a strong case for better internalising the social and environmental costs of urban transport into the pricing mechanism for fiscal measures. Measures which tax usage (e.g. fuel taxes) rather than ownership (e.g. taxes on sale, annual taxes) are especially efficient.

In addition, both central and local government can play leading roles in initiatives to promote public transport in particular, to manage all urban traffic in a more co-ordinated fashion and to develop and use cleaner fuels. There is significant scope to involve the private sector in these initiatives, to provide public transport facilities, to improve the design of private transport and, possibly, even to lead or participate in road pricing schemes.

Innovations

Innovation in the field of urban transport has often concentrated on management and fiscal arrangements in the short-term and on the introduction of new technologies for the longer term. The option of introducing **road pricing** has long been advocated but it is still rarely implemented: an area licensing scheme has been in use for 15 years in Singapore and it is proposed that such a scheme be implemented in the near future in Stockholm.

Differential vehicle taxation in Germany has recently helped promote a shift to low emission cars and certain cities, in the same country, favour the use of so-called "friendly vehicles" (quieter and cleaner than the norm) in their most sensitive areas. More generally, a number of OECD governments have introduced price differentials through their taxation measures which favour unleaded over leaded petrol.

Integrated packages of traffic measures geared to local needs and potentials have now been drawn up in some cities. In Italy for instance, traffic measures are now drawn together to rationalise the use of existing roads and parking areas, to speed up both public and private transport systems, to integrate public and private transport networks and to protect the environment in particular areas and zones. In Athens, integrated measures are being introduced to create new outer ring roads, to build new public transport networks, to co-ordinate better the different modes of public transport, restrict inner area traffic and relocate large public and private enterprises with high traffic demands to sites outside the city centre.

Local schemes, in circumstances of severe environmental conditions (e.g. smog), have recently restricted, in several cities, the use of individual motor vehicles, depending on their contribution to urban pollution.

Policy guidelines

1. ***There is a need for strategic planning in the management of urban transport systems***, moving towards long-term time horizons and away from ad hoc, incremental responses to demand. This will need to be linked to a strategic vision of future settlement patterns both within and outside particular urban areas.

Therefore, *transport planning and land use planning* need to be seen as inextricably linked;

2. *Demand for private transport is growing rapidly, but cities will not cope unless some transfer is made to mass transit media*, as well as to alternative means of transport and communications, such as walking, cycling and greater use of telecommunications. Demand management in urban transport needs to do more than simply meet every expressed demand with new infrastructure, especially roads; instead it must anticipate and re-orient demand with a view to creating a locally appropriate mixture of public and private transport;
3. *Greater co-ordination is required between public and private transport* (e.g. through creating a separate joint administrative agency to manage urban transport in totality). This is important as it needs to be recognised that greater co-ordination is required between public and private transport;
4. *The full social and environmental costs of urban transport need to be appreciated and absorbed by users*, as was recently agreed by European Transport Ministers*. This requires the creation of new accounting mechanisms, which should include the costs of accidents, congestion, pollution, noise and use of public space in the total costs of private vehicle and public transport use. Such new accounting mechanisms would form the basis for improving both the price structure and the provision of transport infrastructure;
5. *The burden of transport taxation needs to be shifted further towards usage rather than ownership*, implying a move from vehicle and annual road taxes to, for instance, fuel taxes, road pricing and area licensing arrangements, in order that transport users acknowledge and pay for the urban environmental costs which they generate as a result of the frequency and extension of their transport habits;
6. *Identifying more environmentally-acceptable ways of catering for transport demands can be considerably expedited by encouraging private sector initiative*. In particular private sector resources should be directed to both improving public transport systems and to finding less environmentally-degrading means of catering for private transport demands.

Initiatives for greater urban energy efficiency

Issues

Cities inevitably involve the consumption and, to a varying extent, production of energy for residential and commercial use. In this section we are concerned with energy provision direct to homes and business premises.

Taken both together and in isolation, the generation, distribution and utilisation of energy can all be improved to enhance overall energy efficiency and more specifically to reduce undesirable emissions. This makes sense locally, nationally and globally, since most energy production at present involves the unsustainable use of non-renewable natural resources. It is important in this context to recognise that it is not only non-renewable

* European Ministers of Transport members of the European Conference of Ministers of Transport (ECMT) met on 22 November 1989 for a special session on Transport and the Environment. The press communiqué of that session states that "determined action will be taken nationally and internationally to take a sound economic approach which takes proper account of environment".