

# Towards a new planning process

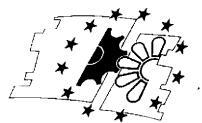
## A guide to reorienting urban planning towards Local Agenda 21



European Sustainable Development and Health Series: 3



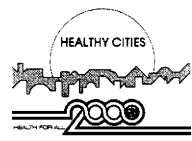
European Sustainable  
Cities & Towns Campaign



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Healthy Cities Network

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**Target 13: Settings for health**

*By the year 2015, people in the Region should have greater opportunities to live in healthy physical and social environment at home, at school, at the workplace and in the local community*

**ABSTRACT**

The quality of living conditions and wellbeing of city dwellers is a central goal of urban policy. Urban planning plays a critical role in reducing the levels of pollution and increasing the quality of life in cities. Most European planning systems do not yet explicitly address issues of sustainability, health, pollution or equity. International commitments to move towards sustainable development, involving all interests in the process of policy-making, provide a framework for a new approach. Effectively coordinated programmes are necessary to integrate land use and transport, economic, social and environmental issues and resource planning. This can only be achieved if stakeholders whose interests affect or are affected by the urban planning process in cities are involved. Involving the public and promoting awareness and shared ownership of the process is especially important. This document provides a guide to reorienting urban planning towards the principles of Local Agenda 21 through a process with 21 steps, divided into six main stages. Each stage is illustrated by examples of current European activity that can act as models to shape future practice.

**Keywords**

HEALTHY CITIES  
CITY PLANNING  
URBAN HEALTH  
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## Foreword

Urban planning is designed to regulate the use of land and other physical resources in the public interest and can make a tremendous difference in the quality of life and wellbeing of people living in cities.

This document focuses on the process and practices of urban planning in the context of the principles of Local Agenda 21. It aims to facilitate discussion and analysis on how new ideas or existing experiences could be detailed and applied to integrating the principles of Local Agenda 21 in the urban planning process; to developing guidance based on cities' needs and expectations; and to contribute to a new vision for urban planning principles that are more sustainable. WHO drafted the document in close partnership with representatives of municipalities belonging to the Multi-city Action Plan on Health and Local Agenda 21, which was set up within the framework of the European Sustainable Cities & Towns Campaign.

This document is intended to assist people responsible for overall urban planning in cities. It is intended to assist in the process of reorienting urban planning towards the principles of Local Agenda 21. The document discusses urban trends in Europe, describes urban planning systems and structures and suggests a practical approach that will encourage an integrated planning process. Future Healthy Cities documents will consider the integration of health within urban planning

and how this can be used to address urban health concerns and promote health in general.

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## Introduction

A central goal of urban policy is to improve the living conditions and wellbeing of city dwellers. Nevertheless, many people experience a declining quality of life, and this is intimately connected with environmental and social conditions. Many cities, for example, are experiencing a high incidence of pollution and stress-related illnesses linked to poor industrial and transport planning, poor housing quality, underemployment and poverty. Access to basic services and community support is being undermined by changes in the spatial structure of settlements, especially increased dependence on car transport and land-use segregation.

Urban planning has a critical role to play in improving people's wellbeing and quality of life. International conferences on sustainable development have highlighted this message, from the United Nations Conference on Environment and Development in Rio de Janeiro in 1992 to the most recent United Nations Conference on Human Settlements (Habitat II, the City Summit) in Istanbul in 1996. Many city authorities share these urgent concerns. This document is the result of collaboration between WHO and the cities and towns linked to the Healthy Cities project and the European Sustainable Cities & Towns Campaign.

At the outset of this discussion, it is important to clarify and define the terms used. "Urban planning" is used throughout

this document to describe the process by which the use of land in cities is regulated in the public interest. Governments throughout Europe have established systems intended to achieve this. The evolution of these systems within different cultural and institutional frameworks has led to variation in the terminology used to describe the process. Examples include *urbanisme* or *aménagement du territoire* in France, town planning in Great Britain, *Raumordnung* in Germany and *urbanistica* in Italy. The European Commission, through its Expert Group on the Urban Environment, has used the umbrella term spatial planning (1) to describe the process. This term includes land-use planning, town and country planning, physical planning, urban and regional planning, territorial planning and space management systems. This document focuses primarily on urban issues and therefore uses "urban planning" as an umbrella term. In addition, "urban planning" has the potential to reflect the implications of land-use strategies, policies and programmes for the social, economic and physical environments.

Most urban planning systems in Europe (with some notable exceptions) do not effectively address sustainability, health, environmental and equity issues. Powerful interests that affect the urban environment – such as transport and energy agencies –

are not involved. The voices of the most vulnerable social groups are not heard. Instead planning policy often promotes changes that increase car use and land-use segregation, exacerbating environmental and social problems.

Urban planning needs to become a part of the solution instead of part of the problem. Cities and towns need to be more consciously planned if they are to become more sustainable. If sustainability is the goal, Local Agenda 21 offers a process by which municipal land-use plans

can be drawn up and implemented in partnership with key players in the health, economic, social and environmental spheres.

The attempt to take an integrated approach to urban problems means significant changes in policy and behaviour at all levels. Within this context, Local Agenda 21 also stresses the importance of involving local communities and different interests in the process of policy-making, both to inform the process and to encourage changes in awareness.



## Challenges in cities and the role of urban planning

### World urban trends

Worldwide economic trends are having a greater and greater impact on urbanization. Economic, social, environmental and cultural forces worldwide need to be understood to make sense of urbanization trends and other changes in the spatial distribution of the world's population over the last 15–20 years. The following are some of the key conditions and trends identified at the recent United Nations Conference on Human Settlements (2).

### Social trends

Most countries in Europe are making social progress, as demonstrated by increased life expectancy and decreased hunger, life-threatening deprivation and preventable or curable diseases. Nevertheless, the growth in urban poverty has been one of the most noticeable trends during the 1980s and 1990s. The social components of sustainable development, including social equity, social justice, social integration and stability, are central to a well functioning urban society and need to be understood better. Housing quality within cities differs substantially between low-income and high-income groups and between private rental housing, public housing and owner-occupied housing.

### Economic trends

Cities and urban systems have been and will remain central to the economic development of most countries. Nevertheless, the process of globalization may transform the economic and social fabric of large urban areas and remodel their spatial structure. Ensuring that urban land serves the economic and social needs of all urban inhabitants is one of the most complex tasks for urban government.

### Urban governance

Competent and accountable urban governance is a key factor in the potential contribution of cities to economic and social development.

### Urban form and planning

Within cities and towns, new infrastructure and services such as water supply, sanitation, solid waste collection, transport and communication may either propagate urban sprawl or be contained within more efficient high-density, balanced land use and infilling. New approaches to planning, including environmentally sound land-use policies, accountability and participation are essential to achieving healthy, productive and equitable human settlements.

### European trends

Since the early 1980s, common trends

have developed in the European Region. Urbanization has continued to increase, especially in central and eastern Europe and in the newly independent states of the former USSR. The population and number of people employed have grown more rapidly in most large cities (over 500 000) than in smaller cities in the most industrialized countries. In many cities social exclusion and spatial segregation are increasing (3).

Environmental and transport problems have become more prominent in the vast majority of cities, and these problems are linked to health challenges and the perception that the quality of life is declining.

Decentralization has taken place, with people moving out of the city centres to the suburbs and business moving its activities from the centre to the outlying areas. The city centres, meanwhile, are home to increasingly vulnerable or marginalized groups.

In the countries of central and eastern Europe, cities are adapting their development patterns to a market economy following the political upheavals of the early 1990s. Market-driven spatial changes in many cities are proceeding with few safeguards for environmental quality, social equity or the health of the residents.

According to an assessment of Europe's environment conducted by the

European Environment Agency (4), the environment of European cities and towns is deteriorating in general. Two thirds of Europeans live in urban areas covering 1% of the total land area. The assessment recognizes that urban air quality has improved but finds it still frequently unsatisfactory in large cities. Urban water supply is neither allocated nor managed efficiently.

The consumption of scarce resources by cities is increasing: every day a city of 1 million inhabitants consumes an average of 11 500 tonnes of fossil fuels, 320 000 tonnes of water and 2000 tonnes of food and produces 2500 tonnes of CO<sub>2</sub>.

### **The importance of urban planning**

Many experts consider spatial planning, in both urban and rural areas, to be a key instrument for working towards sustainable development at the local level. Since the United Nations Conference on Environment and Development in Rio de Janeiro, in 1992, interest in innovative approaches to reducing environmental damage and improving health has been increasing. In the European Region, the current framework of action is related closely to Agenda 21 (5) and HEALTH21 (6), the health for all policy framework for the WHO European Region. Many actions and programmes have been established by international or national

## **Box 1.**

### **Relationships between different levels of planning frameworks**

#### International framework

##### **Environment and development**

- Agenda 21 (5) (United Nations Conference on Environment in Stockholm in 1972 and United Nations Conference on Environment and Development in Rio de Janeiro in 1992)

##### **The Habitat agenda**

- United Nations Conferences on Human Settlements in 1976 and 1996 (2,8)

##### **Other United Nations conferences**

- World Conference on Human Rights, Vienna, Austria, 1993
- International Conference on Population and Development, Cairo, Egypt, 1994
- World Summit for Social Development, Copenhagen, Denmark, 1995
- Fourth World Conference on Women, Beijing, China, 1995

##### **Health for all**

- Declaration of Alma-Ata, 1978 (9)
- WHO strategy for health for all by the year 2000 (10) and strategy for health for all in the 21st century (11)
- Ottawa Charter for Health Promotion, 1986 (12)
- Athens Declaration on Healthy Cities, 1998 (13)

#### European framework

European Charter on Environment and Health (European Conferences on Environment and Health in 1989, 1994 and 1999)

Environment for Europe (ministerial conferences in 1991, 1993, 1995 and 1998)

European strategy for health for all (including the regional targets for health for all: 1984, 1991 and HEALTH21 (6))

European Union – Fifth Environmental Action Programme (14) and especially its urban dimension, the Sustainable Cities Project

European Conferences on Sustainable Cities & Towns, Aalborg, Denmark, 1994 (15), and Lisbon, Portugal, 1996 (16), and the European Sustainable Cities & Towns Campaign

European Council of Town Planners and the New Charter of Athens 1998 (European Council of Town Planners' principles for planning cities) (17)

Organisation for Economic Co-operation and Development: work on sustainable development and territorial development

### **National frameworks**

National environment and health action plans

National environmental action plans

National strategies for sustainable development

National planning acts

Planning and policy guidance for local authorities

National and regional or provincial transport strategies

### **Regional (provincial) or metropolitan (city) framework**

#### **Region, province or county**

Regional plans or guidelines for the local authorities

Structure plans giving a broad policy context

#### **Metropolitan areas**

- A master plan or general town plan, such as Vienna, Lyon and Toronto

#### **Cities and towns**

- Structure plans
- Land-use plans
- Local regulations or local plans
- Municipal corporate plans
- Economic development plans
- Urban renewal plans
- Transport plans
- Environmental or ecological plans

- Local environment and health action plans
- City health plans prepared in accordance with the principles of Healthy Cities (such as in Copenhagen (18))
- Local Agenda 21 plans
- Strategic environmental assessment of plans and strategic sustainability assessment of plans

### Neighbourhood frameworks

Borough or district plans for small towns, parts of cities or neighbourhoods

Development briefs and design guides for specific development areas

Building control: insulation, light, structures and materials

Planning permission for new construction or renewal projects

Environmental impact assessment of new construction or renewal projects

Web sites that give more information on international conferences and initiatives are listed at the end of this document.

institutions in response to challenges at the local level. As part of the WHO Healthy Cities project and the European Sustainable Cities & Towns Campaign, the idea of focusing more closely on the urban planning process arose as a possible way of reducing urban stress, making future cities a healthier place to live and achieving sustainable development at the local level.

The International Healthy and Ecological Cities Congress – Our City, Our Future, held in Madrid in March 1995, emphasized the need for policies and

action plans for health and sustainable development (7). Many participants at the Congress stressed the broader framework of spatial planning – the international, national and regional levels – and the importance of urban planning as a tool for achieving sustainable cities. Numerous policy documents, declarations and experiences refer to the importance of the urban planning process in achieving local sustainable development (7). Box 1 gives an overview of the different levels of planning frameworks.

## Urban planning systems in Europe

### Institutional frameworks

The type of planning system that has evolved in each European country has depended on the country's legal system and institutional framework, the relative roles of the different actors in the development process and the degree to which a separate planning profession has emerged. Despite the differences, planning systems have been at the forefront of public efforts to manage new development and protect and improve the environment. Nevertheless, exchanging experience and comparing case studies are extremely difficult without a detailed understanding of the planning system in the country under discussion. Such understanding is not straightforward when in many countries in the 1990s "the field has been characterised by a permanent turmoil which has created a state of permanent instability affecting structures and systems" (19).

Comparison of European planning systems reveals many contrasts. For example, in Denmark the legally binding plan-based system allows developments if they are in conformity with the development plan and planning system. In the United Kingdom, the plan provides only a presumption of the kind of development that will or will not be allowed. In Romania, since the Revolution, local councils have been empowered to take the necessary actions to improve

environmental conditions and the quality of life of local residents.

The planning system is not clear in most of the newly independent states. In the previous system, local governments had no separate legal identity and were subject to strict hierarchical control by the central government. In the new system, central and local governments are becoming partners. Powers and responsibilities are being transferred to local authorities. Elected local governments are already responsible for urban planning in most countries, but the process of transfer is taking place more rapidly in responsibility and expenditure than in power and resources (19).

Three types of planning systems can be identified. The first has a clear centralized pattern, although it may have more than one planning tier. The second has a balanced distribution of responsibilities through the different levels. The third has a totally decentralized system with a high degree of autonomy at the different levels. Some countries are moving from a regulatory planning system to a more discretionary one, and others are trying to implement a stricter framework to avoid ad hoc decisions. In some countries the plan is only a guide; in others, it is a law.

Although the scope and methods of operation of urban planning systems clearly differ, they generally comprise three functions.

- Long-term strategic planning provides an integrated vision for the future based on an overall evaluation of strengths, weaknesses, opportunities and threats.
- Plan-making is “providing frameworks through development strategies and plans at different geographical scales” including national, regional, city, neighbourhood and specific sites (1). The plan includes a wide spectrum of content: strategies, policies, projects, structures, facts, figures, land use, settlement patterns, statutory measures, housing, retail, leisure tourism, community development and transport schemes, environmental action, measures to achieve social equity, economic decisions and investment.
- Development control includes “legal or administrative procedures operating at the local level to control the location and form of development and change of use within buildings”(1).

Countries differ in relation to the professional expertise and training of planners. In some countries urban planning is dominated by architects (especially in southern Europe). In other countries such as the United Kingdom, the Netherlands and Germany there is a strong tradition of planning and a long-established profession.

## Types of plan

European countries have introduced different types of plan. These range from structure plans and strategic plans to local plans. Several of these approaches have been modified or adapted over time.

Structure plans originate from the United Kingdom. They operate at county or subregional level and are broad in their scope, covering some social and economic considerations as well as those purely of land use. They are highly generalized, which is how they sustain flexibility.

Master plans can operate at the municipality or city-wide levels. They provide broad land-use zones for an entire administrative area and can be implemented through a more detailed local plan.

Local land-use plans are more precise and detailed. In general, their scope has to be fairly narrow, confined to areas of imminent change or where strict control is necessary. Their time horizon is shorter than structure or master plans.

Action planning is an implementation-oriented approach to solving problems at a local level with community participation. This approach is described in more detail in the document in this series on community participation in local health and sustainable development (20). Action planning fits well with the view of planning as a process rather than a product.

Informal plans are simpler to prepare and more sharply focused on a specific issue or challenge and can be the basis for negotiation rather than regulation. They can be more closely related to a municipality's corporate plan or other policies but lack the legal status of a formal plan.

Strategic plans reflect the process view and are characterized by intersectoral coordination and financial feasibility. The output is not just a plan for land use but a set of interrelated strategies for land, infrastructure and financial and institutional development.

Addressing the new agenda of local sustainable development requires environmental professionals to broaden their perspective to consider economic and social sustainability as well as the environmental aspects of land use. Urban planners need to develop greater awareness of the social and environmental considerations of specific types of urban development.

### **Critique of traditional approaches to urban planning**

In most countries, urban or spatial planning is understood to refer to the planning of the physical structure of development or land-use planning. Historically, master plans have played a

central role in the urban planning process. The master planning approach has been changed or improved in some countries, but this remains the starting-point of urban planning for many countries.

This type of planning is a fundamental tool of urban development and management. Nevertheless, in recent years it has been much less effective than it could be. It has been severely criticized as being too complex, bureaucratic, time-consuming, static and elitist. Many of its policies can become outdated, rendering the process irrelevant.

It has also been criticized for not promoting public participation. Community groups, target beneficiaries and nongovernmental organizations are usually excluded from the process. In addition, urban planning tends to be divorced from the sectoral processes responsible both for urban finance and for providing urban infrastructure and services.

Today, there is a new emphasis on decentralization, transparency and accountability. Agenda 21 needs to be translated into local agendas with an emphasis on the environmental and social challenges resulting from damage partly caused by conventional urban planning. A more flexible, indicative and proactive type of planning is needed.



## Towards a sustainable healthy city

### What is a sustainable city?

A sustainable city could be defined as a city in which the population enjoys a high quality of life and which takes care not to transfer socioeconomic and environmental or health problems to other places or future generations (21). To achieve this goal, many people agree that new principles and processes of sustainable urban planning need to be created based on an intersectoral approach incorporating spatial and environmental aspects as well as health, social, cultural and economic elements.

Sustainable development “seeks to deliver basic environmental, social and economic services to all residents of the community without threatening the viability of the natural, built and social systems upon which the delivery of these services depends” (22). Above all, the main characteristics of sustainable development, as stated in the European Union’s Fifth Environmental Action Programme (14), are:

- to maintain the overall quality of life;
- to maintain continuing access to natural and built resources; and
- to avoid lasting environmental damage.

Nevertheless, the European Commission’s Expert Group on the Urban Environment

states that sustainable development is broader (1), embracing concerns for:

- the quality of life;
- equity between people (prevention of poverty);
- intergenerational equity;
- the social and ethical dimensions of human welfare; and
- the carrying capacity of natural systems.

The Eurocities (European Association of Metropolitan Cities) Project Group on Urban Planning and Environment has established its own definition (23):

“sustainable development is about maintaining and enhancing the quality of human life, social welfare and cultural, natural and historic inheritance whilst living within the carrying capacity of the supporting ecosystems and the resource base”.

The aim should be to build a new urban culture in which rich people and poor people can enjoy a sustainable and congenial lifestyle that leads to a viable urban structure (22). Awareness-raising and capacity-building are crucial to achieving sustainable development. Citizens in all walks of life need to become more aware of the consequences of their lifestyle and the means for

change, at both personal and community levels. Finally, an institutional framework is needed for the creation of a local culture of urban sustainability.

### **Local Agenda 21**

Local Agenda 21 focuses on creating a sustainable culture. Chapter 28 of Agenda 21 (5), entitled “Local authorities’ initiatives in support of Agenda 21”, states succinctly why local governments have a key role in its implementation. So many of the problems addressed by Agenda 21 have roots in local activity. As the level of government closest to the people, local authorities have a vital role in educating, mobilizing and responding to the public to promote sustainable development. The chapter also lists four objectives. The most important is that, by 1996, local authorities in each country should have undertaken a consultative process with their populations and achieved a consensus on a local Agenda 21.

Local Agenda 21 processes differ from city to city since they reflect the different local contexts. Some countries, such as the United Kingdom, Finland and the Netherlands, have initiated national programmes of support. In the United Kingdom, such initiatives have several purposes:

- to promote local consultative processes on sustainable development;

- to disseminate guidance for local authorities on how to move towards sustainability at the local level;
- to develop models of community consultation, participation and local consensus; and
- to involve and facilitate the full participation of all relevant sectors and major groups in the Local Agenda 21 process at a national level.

The national context strongly influences work towards a local Agenda 21. A lack of resources and technical capacity within most local authorities and the fact that local governments are often restricted by national government both in raising revenue and in taking initiative impede local implementation.

Nevertheless, in Europe the process has been supported and publicized through various initiatives originating from the First European Conference on Sustainable Cities & Towns in Aalborg, Denmark in 1994. The Aalborg Charter follows up on the mandate given to local authorities at the United Nations Conference on Environment and Development and stresses the importance of moving forward together towards sustainability. The European Sustainable Cities & Towns Campaign, launched after the Aalborg Conference, aims to promote development towards sustainability through Local Agenda 21 processes by strengthening

partnership among all actors in the local community as well as inter-authority cooperation.

The Second European Conference on Sustainable Cities & Towns in Lisbon in 1996 endorsed an action plan (17). It is based on local experiences as reported and discussed at the Conference. The action plan takes into consideration the principles and recommendations laid down in the Aalborg Charter, a guide from the United Kingdom Local Government Management Board (24), a report from the European Commission's Expert Group on the Urban Environment (1) and a guide from the International Council for Local Environment Initiatives (25). The principles of the Lisbon action plan include:

- preparing local government for the Local Agenda 21 process;
- establishing strategies for community involvement;
- defining sustainability management tools;
- defining a Local Agenda 21 approach and planning;
- raising awareness and education; and
- strengthening interauthority partnerships and cooperation.

In most countries, the Local Agenda 21 process does not involve creating a new system of plans. Instead, existing planning

instruments are to be adapted to Agenda 21 requirements so that municipal plans become overall action plans for achieving sustainable development. In keeping with the ecological approach of Agenda 21, these plans will be expected to cover not only urban planning issues but such aspects as the use of environmentally sound technology, biotopes, green spaces and the enhancement of the diversity of human experiences. In addition, since health concerns are fundamental to achieving sustainable development, they should be an integral part of Local Agenda 21 plans.

### **Towards healthy cities**

The re-emergence of concern about urban health can be explained in part by the patterns of growth and distribution of the world population. The large-scale movement of people to towns, which began with the industrialization of Europe, has become a global phenomenon. The urbanization process begins with movement from country village to towns and then cities. This can progress to migration between countries and the movement of people from the poorer to the richer parts of the world.

In the European Region, cities are at many different stages of development. In some countries new cities are still being established, and old ones continue to grow and be remodelled. In other countries,

once-great cities are undergoing a rapid decline, with increasing population, deteriorating physical infrastructure and inner-city decay, as well as the loss of young and skilled people to economically more rewarding areas. Finally, in some countries, cities are being ravaged and destroyed by civil and guerrilla wars.

The health consequences of poverty in the cities and suburbs in the European Region include a high incidence of heart disease and stroke, cancer, accidents, violence and sexually transmitted diseases, including AIDS. The trend of growth and decay in some cities has been accompanied by dramatic changes in traditional structures, such as the decline of the three-generation family and the changing expectations of women and men, together with changes in personal and social lives. All these aspects of the urban condition have combined to highlight the urban health crisis and challenge all actors in the city.

During the dialogue on health in human settlements held during the United Nations Conference on Human Settlements (Habitat II) (8), the participants addressed the causes of the resurgence of infectious diseases in the 1990s, the health challenges specific to women and children and the main environmental health challenges presented by inadequate water supply and sanitation.

Health should be part of the process and planning of each local Agenda 21 and

urban plan. Action from the bottom up linked with organizational development is one of the best starting-points in raising health awareness. In fact, positive health is an indicator of sustainability. The WHO Healthy Cities project addresses these issues through comprehensive strategies for health and sustainable development. Now in its third phase (1998–2002) (26), the project provides a local context for the implementation of the health for all principles of WHO (6), Agenda 21 (5), and the Ottawa Charter for Health Promotion (12). The project provides city health authorities and local government with two new roles: 1) information and analysis and 2) policy and advocacy (27). In June 1998, the International Healthy Cities Conference (13) in Athens, Greece marked a decade of Healthy Cities action. The event illustrated the extent to which Healthy Cities has become a significant European and global movement for change. The Athens Declaration on Healthy Cities (13), reinforcing the commitment to the principles and processes of Healthy Cities and Local Agenda 21, was signed by 101 city representatives.

The work by the Multi-city Action Plan on Health and Local Agenda 21 within the framework of the WHO Healthy Cities project and the European Sustainable Cities & Towns Campaign aims to create guidance for incorporating concerns for health and sustainable development into

Local Agenda 21 and other city planning processes (20,28,29).

### **Current best practice – integrated policy-making and sustainable development**

Some local authorities stand out as beacons of innovative good practice in incorporating health and sustainability into spatial policy-making. This section provides examples.

#### **Local Agenda 21 network in Sweden**

In Sweden, 288 municipal governments have started working with Agenda 21. The Swedish Society for Nature Conservation distributes a bimonthly newsletter to 1500 subscribers as well as development guides on current issues in the Agenda 21 process. Booklets are being produced on sustainable planning, transport and biological diversity. An ongoing pilot project in the City of Växjö aims to develop strategies for a better environment and local sustainable development (30).

#### **Manual on environment and planning in Rotterdam**

The City of Rotterdam (the Netherlands) has developed practical guidance for incorporating environmental aspects into land-use planning. The Rotterdam manual for urban planning and environment (23)

provides a method for implementing environmental policy at the local level through the land-use planning system. The manual develops two practical strategies. The first requires that any specific policy aspect must be located at the appropriate spatial scale. The second provides three clusters of environmental factors that planners must address in decision-making about urban development. A blue cluster covers matters of relevance to future generations, a green cluster emphasizes ecological quality and refers to the conservation of habitats and species and a grey cluster deals with traditional environmental concerns such as noise, safety, air quality and soil contamination (23).

#### **Sustainable urban development in Vienna**

The City of Vienna (Austria) has adopted principles for sustainable urban development. Urban development planning has the task of providing the basis for socially and ecologically sound urban development. This involves tackling a series of problems, mainly related to housing and transport. The current *Urban development plan and the Vienna traffic concept* (31) summarizes the political goals and visions for Vienna's step into the 21st century.

### Environmental action programme in Lancashire

Lancashire County (United Kingdom) has developed the Lancashire Local Environmental Action Programme. Lancashire's local Agenda 21 process has gone through three phases: information-gathering, policy-making and implementation. It offers a good example of partnership-based planning between the county council and administration, citizens, green audit working groups and other community groups.

### Environmental impact assessment in local planning in Ottawa

During the development of the City of Ottawa's (Canada) new Official Plan (1988–1991), the community pressured the City to become more environmentally accountable in its decision-making. The City's environmental evaluation process acts as a tool to assess the impact of planning activities and land use on the environment. It also provides a means of assessing the impact of public and private activities on the environment and of determining the mitigation measures necessary to prevent or reduce the impact of a proposal during its planning phase. The process is based on a successive screening approach and is divided into two phases: screening of the proposal and a detailed study, if necessary.

### Sustainable development planning in Amersfoort

The City of Amersfoort (the Netherlands) began to construct 4400 dwellings in the Nieuwland Development Area in 1995. At the start of the planning stage, the city initiated an environmental impact report that compared the effects of different alternatives. Partly on the basis of this exercise, a municipal development plan was drawn up for the area that was subsequently translated by the private sector into a master plan (32).

### Environmental assessment ensures sustainability in Munich

The City of Munich (Germany) relocated its airport in 1987 and simultaneously started to plan the München Riem, the redevelopment of the former airport area. The city council combined consideration of the potential redevelopment with the requirement to prepare a strategic environmental assessment study. The results provided the basis for all further planning actions being undertaken for the area. Further, the city council decided that planning of development should be accompanied by environmental impact studies. The aim was to ensure that the requirements for sustainable development in urban areas were respected in every step of the planning process. The environmental aspects are implemented

through participatory input into the planning process. This is regulated by the German Building Code, voluntary municipal environmental analysts and various consultancy groups (33).

### Green belt planning in Lisbon

The City of Lisbon (Portugal) has established the Peripheral Park, which is a continuous structure of green open spaces, woods and old farms. Located at

the northern boundary of the city, the area, approximately 500 hectares, is regarded as Lisbon's green belt. The Peripheral Park originated from the need to resolve several problems on the periphery of the City. The landscape quality, its value as part of the historical heritage and the recreational potential of the space formed the basis of a specific type of park that will combine both existing and new types of land use (23).

## A new urban planning paradigm

Given all the principles and strategies and the examples of effective action, what can urban planners do to promote the health and wellbeing of people in cities?

### Components of the new approach

Future cities need to be more consciously planned if they are to address sustainability properly. Sustainability cannot be left to spontaneous mechanisms or to market forces. Urban planning practices also need to be changed to reflect a new awareness and to integrate environmental, health, economic and social concerns in the 21st century. For example, new city master plans and new neighbourhood plans can be guided by a set of community values and a new community vision involving the citizens.

Many urban planners realize that the environmental, social and economic factors that promote wellbeing are complex. The holistic approach, advocated by planning pioneers, looks at the interrelationship between the whole person and his or her environment. This generalist approach is not opposed to the specialized thought and detailed work on health carried out by the medical profession. These two approaches are not only complementary but also mutually indispensable.

The city is made up of various communities, and the prerequisites for

health are now more than ever a prime concern (34). Stress created in cities riddled with violence, disruptive behaviour and unregulated traffic can directly affect citizens' health. Urban planners working in connection with law enforcement agencies can help alleviate these conditions. The city should create a nurturing environment by providing a full range of community and leisure facilities and by actively encouraging public participation in city affairs by all citizens. Urban planners have an active role to play in this.

The new approach to make urban planning more effective has the following components:

- community participation to set clearer objectives for planning interventions; to encourage a feeling of ownership; to promote public awareness; to strengthen urban management instruments; and to encourage community involvement (20);
- involvement of all stakeholders in the city: everyone whose interests are affected by urban planning processes, from the initial stages of the planning process to implementation and maintenance;
- coordination between national plans and policy guidance and local information and interests;
- interaction of urban and economic



planning to ensure clearer links between the various planning processes for cities, especially in addressing local community employment and the development needs of small businesses;

- sustainability: by taking into consideration the thrust of Agenda 21, urban planning will provide approaches that address longer-term concerns for sustainable urban development, including energy-efficient urban forms;
- financial feasibility: urban plans should be prepared with full awareness of the financial implications of proposals, including capital and maintenance costs and cost-recovery mechanisms; and
- subsidiarity: taking decisions on planning at the lowest level compatible with achieving the desired objectives can help to maximize participation in and the effectiveness of planning processes.

The European Commission is increasingly recognizing the key role of urban planning. The *Green paper on the urban environment* (35) and the European Union's Fifth Environmental Action Programme (14) indicated that urban planning is one of the instruments that can improve the urban environment by:

- encouraging greater diversity
- avoiding urban sprawl
- redeveloping urban wasteland
- revitalizing existing city centres
- promoting urban design.

## **Working for integration**

The interrelated nature of the urban challenges related to sustainable development requires an integrated approach that promotes action at various levels simultaneously. Nevertheless, implementing this approach effectively requires a conceptual shift that addresses changes in lifestyles and in production and consumption. A key prerequisite for such changes is the need for political commitment to sustainability. Sweden's contribution to Habitat II is an interesting example that focuses on sustainable practices based on changing attitudes and behaviour; training and education; and the role of the mass media (30). Numerous initiatives and trends provide leverage points for change in how urban challenges are addressed. Some examples are as follows.

### **Policy integration**

Policy needs to be integrated at the highest levels, moving away from sectoral approaches and working for intersectoral action directed towards sustainability.

### **Urban planning**

Urban planning is a powerful tool both for reducing the overall impact of settlements on the local or regional environment and for improving conditions within settlements.

### Managing urban flows

Urban flows include water, energy, materials and waste. These flows can be managed through ecological ecosystem principles, aided by new technologies to improve both efficiency and amenity and contribute to sustainable use of resources.

### Integrating environmental and urban planning

Environmental and urban planning can be integrated. Opinions differ as to whether these two essential components should be linked by developing integrated environmental plans or by preparing land-use plans that have been subjected to environmental assessment. In some countries, environmental assessment is an essential component during the early stages of the planning process.

### Integrating transport and urban planning

Transport and urban land-use planning should also be integrated. Urban form, which includes the pattern and density of development within and between settlements, influences patterns of transport and the quality of life. Many cities have already begun this process.

### Providing open space in urban plans

Open spaces include informal and formal parks, watercourses, agricultural land,

private gardens and city squares. They fulfil several ecological functions, including improving air quality, increasing biodiversity and managing stormwater. The amount and quality of open space in a city is also important in influencing the quality of life of the population.

### Mixed land use

Schemes for mixed land use can be encouraged. Rigid land-use zoning has been criticized as one of the causes of new single-use developments within cities. Mixed land use can contribute to reducing the number and distance of urban journeys, especially if it is linked to restraining traffic and developing integrated strategies to achieve sustainable urban transport. At the city scale, mixed land use implies seeking a balance of dwellings, jobs and facilities in each part of the city.

### Integrating health into urban planning

Integrating health into urban planning is a new challenge for both health and urban planning professionals. The links between health and sustainability are complex. The relationships are not only a matter of ecological sustainability; they are also related to social and economic sustainability. Some models suggest that community conviviality, environmental quality and economic vitality need to be balanced and integrated to ensure social

cohesion and a civic community and to attain better health and wellbeing. Poverty and inequality contribute strongly to the deterioration of health and wellbeing.

### Linking urban planning and Local Agenda 21 to formal planning

Linking urban planning and Local Agenda 21 to formal planning processes is being explored in some countries such as Sweden. Community participation seems to form the strongest link. Urban planners are also seeking to incorporate sustainability objectives into urban plans and to take a more strategic approach to planning. In some countries, such as Denmark, existing planning instruments are being adapted to Agenda 21 requirements so that municipal plans become overall action plans for sustainable development.

### Reorienting urban planning

Urban planning covers a broad variety of themes and constitutes a process of balancing and integrating a variety of interests. Although an intersectoral approach does not guarantee sustainability, increasing the integration of city plans tends to increase sustainability.

The potential for cities to implement strategies, policies and plans towards sustainability depends on the cities' geography, demographic trends, economic structures, cultural aspects and

administrative context. Urban planning systems are essential for developing and implementing city-wide policies for sustainable development in which environmental, health and socioeconomic objectives are increasingly linked. Despite the differences between cities, a few general requirements for urban planning to make progress towards sustainability have been identified:

- including short- and long-term objectives in the strategic plan or vision of the future;
- ensuring good understanding of the local context before preparing plans;
- assessing the social, economic and environmental impact of draft plans (carrying out sustainability assessment);
- using indicators to facilitate decision-making;
- promoting strong community involvement and participation; and
- ensuring life cycle sustainability.

Many of these principles are already evident in some European planning systems: they operate over a range of geographic scales; they include community involvement in various ways; and most of them are open and democratic in operation, seeking to take into account future social, economic and environmental effects and implications for different groups within the population.

Nevertheless, although innovation has been effective in some places, the impact of the new sustainable development agenda on planning systems generally

remains limited. A major shift is needed not only in attitudes towards intersectoral work but also in relation to established planning policies and tools.

## Urban planning policies and tools

The new planning paradigm described here challenges long established policies such as those on land-use zoning, density controls, transport hierarchies and green belts. Traditional techniques of planning may need to be reviewed. This chapter suggests some new policies and tools that may be needed to achieve sustainable urban planning.

### Reviewing policies

Life cycle sustainability is closely related to sustainable development. Cities should be suitable for all people in all stages of their lives, including elderly people and handicapped people. One quarter of the population of the Netherlands, for example, is either older than 55 years or disabled, and this proportion will increase in the future.

The strict zoning policies of the past decades, which have led to differentiated land use and the subsequent development of extensive residential suburbs, have in turn stimulated commuter transport, which is at the heart of many environmental and health problems currently facing cities. The principles on which urban planning practice have been based need to be fundamentally reviewed. Strategies that emphasize mixed use and increasing development density are more likely to result in people living close to their workplaces and the services they require for everyday life. A car then becomes an

option rather than a necessity. Strategies encouraging greater diversity and avoiding urban sprawl have already been put in place in such countries as the Netherlands (35).

The University of West England in Bristol, United Kingdom, has carried out some interesting work in this area. Its design guide for planners, designers and developers has suggested three essential basic principles (36):

- increase local self-sufficiency to reduce impact elsewhere, based on the assumption that the city is an ecosystem;
- satisfy social, economic and aesthetic human needs (shelter, warmth, health, work and a pleasant environment), based on the principle that such needs are the prime purpose of sustainable development; and
- build robustness and adaptability into the environment, to keep options open where possible, both now and for the future (for example, design buildings to facilitate future change of use).

The guide suggests that local autonomy can be increased at varying scales of operation: the individual dwelling (for example, increasing energy efficiency); the cluster of buildings (such as promoting local drainage of stormwater and improving wastewater treatment); the

neighbourhood (for some facilities and work opportunities); and the city (higher-level retailing and cultural and commercial facilities). The purpose of policy discussions between stakeholders could be to try and ensure that problems related to the use of space (land and buildings) are tackled at the lowest feasible level in the hierarchy. This might mean that a variety of agencies such as energy, transport and education agencies, together with market interests responsible for employment, retailing and leisure facilities, adopt more sustainable development strategies as part of the urban plan (36).

### **Practical planning tools**

There are various examples of practical guidance for incorporating environmental aspects into urban planning: the Rotterdam manual for urban planning and environment (23), the environmental matrix for monitoring various indicators and their impact on the environment developed by the Amsterdam Department of City Planning, the Canadian index of

ecological carrying capacity and social carrying capacity, the local environmental plans in France and the good practice guide of the Department of the Environment in the United Kingdom (37). Nevertheless, these practical tools do not consider health sufficiently (38). An integrated approach requires new methods and tools for analysis, decision-making and implementation. But there are constraints:

- a lack of long-term vision to guide the development of planning objectives;
- conflicts between short- and long-term economic objectives and societal needs;
- geographical and functional fragmentation in many institutions;
- legal and technical frameworks that limit the harmonization of planning activities; and
- a mismatch between the political and planning frameworks.

Developing an effective approach towards achieving sustainable urban development requires different types of tools (Box 2).

## **Box 2.**

### **The range of tools needed for healthy and sustainable urban planning**

#### **Policy tools**

Policy tools include general and specific guidelines and indicators such as biophysical, health, economic, social and cultural indicators (39,40).

#### **Planning tools**

Planning tools include techniques and information for day-to-day planning in transport, residential housing, natural landscaping and programmes to reduce, reuse and recycle.

#### **Information tools**

Information tools include baseline and periodic data within reports on the state of the environment or health reports such as city health profiles (41,42), impact monitoring and exchange of information through networks.

#### **Fiscal tools**

Fiscal tools draw attention to equity: for example, incentives such as tax relief for those who live close to where they work; disincentives such as tax subsidies for commuting by car; subsidies for public transit; life cycle costing; and appropriate government procurement policies.

#### **Decision-making tools**

Decision-making tools include urban planning, environmental impact assessment, strategic environmental assessment or strategic sustainability assessment, mediation skills, stakeholder and interdisciplinary teams and mechanisms to ensure greater public involvement.

#### **Educational tools**

Educational tools target urban planners and health practitioners and can include conferences, workshops, task forces, case studies, training and small-group sessions.

#### **Participation tools**

Participation tools include innovative techniques such as participatory mapping of a settlement, modelling of new housing designs, collective planning, seasonal calendars and fora for ideas.

### **Participatory techniques**

Of particular importance are ways of drawing the community into planning debates, raising awareness about the causes of environmental and health problems and inviting thoughts on the way forward (20). Box 3 shows a wide range of participatory tools.

Planning for real is the name of a cluster of techniques and materials that provide communities with practical tools to participate in the development and planning of their own neighbourhoods.

Tony Gibson developed planning for real in the 1970s and introduced it to over 100 communities in the United Kingdom. In 1993 a group from the London School of Economics designed a new planning for real kit and a users' guide for community groups. The kit is designed to help community leaders involve other members of the community in such a way that nobody feels unduly dominated by the views or proposals of anyone else. The kit is not yet designed to solve city-wide problems (43).

### **Box 3. Participatory tools and techniques for urban planners**

- Participatory mapping of the settlements by the inhabitants
- Community members undertaking surveys of the settlement to collect socioeconomic data
- Collective modelling of new housing designs that will better meet the needs of residents
- Collective planning of new settlements
- Collective identification of resources including access, management and control
- Walks through neighbourhoods to identify the different informal activities or housing conditions
- Seasonal calendars to identify seasonal events
- Wealth ranking of all households in the settlement
- Analysis of trends or life histories
- Perceived relations with other groups and organizations identified through Venn diagramming techniques
- Identification of priorities through collective ranking
- Acting out of the life stories of individuals in the community to provoke discussions about the opportunities and constraints facing residents
- Establishment of formal and informal groupings that can provide a focus and maintain the momentum of community-driven development

*Source: An urbanizing world (44)*



## Twenty-one steps to healthy and sustainable urban planning

### The process as a whole

These guidelines are presented with the aim of offering guidance on planning elements, methods and tools for use by local authorities. A theoretical, step-by-step sequence to be followed is provided to clarify key issues. It is recommended that all steps be considered, although each city needs to find the most appropriate approaches for its local situation. Even if these steps have a certain logical sequence, they should not be taken as a strictly chronological blueprint for action.

The proposed planning process consists of six broad stages, which are developed into 21 steps:

1. Getting started: building partnerships
2. Knowing your city: analysis of issues
3. Looking forward: common vision
4. Getting organized: action planning
5. Taking action: implementation and monitoring
6. Getting feedback: evaluation and feedback.

Political commitment is an important prerequisite to the process, and a core organizational body needs to be established to monitor and guide the overall planning process. Each of the stages may require the input of different people, and each city needs to choose the type of arrangement that may best suit and reflect its administrative planning

system and political context. The major actors in the city must also be committed to the structure chosen. In some cities structures may already be in place and building on them may be feasible. Examples are provided for each stage. Before the process starts, agreement must be reached that the following elements will form the fundamental guiding principles:

- intersectoral collaboration
- community participation
- an integrated approach
- partnerships and alliances
- equity
- health promotion
- supportive environments
- accountability
- the right to peace.

### Stage 1. Getting started: building partnerships

Building partnerships is crucial to establishing an organizational structure for planning by service providers and users and to balance the diverse interests of business, sustainable development and community groups. It needs to be considered as part of the planning process. During this phase, urban planners aim to identify the partners in service delivery and how service users will participate in the planning process. The process of building partnerships and

## **Box 4. Twenty-one steps for a healthy and sustainable urban planning process**

### **Stage 1. Getting started: building partnerships**

1. Defining the scope, goals and objectives of planning
2. Understanding health issues and increasing health awareness
3. Getting the approval of the local council, forming a stakeholder group and a working group
4. Building appropriate partnerships with key actors
5. Establishing means for community participation

### **Stage 2. Knowing your city: analysis of issues**

6. Defining the scope and the issues to be analysed
7. Defining sustainability and health priorities
8. Implementing detailed sustainability and health assessment to complete the issue analysis
9. Setting priorities based on previous analysis

### **Stage 3. Looking forward: a common vision**

10. Developing a common community vision based on strengths and weaknesses, opportunities and threats
11. Identifying key principles and values for a healthy and sustainable city
12. Involving the community in the process

### **Stage 4. Getting organized: action planning**

13. Defining the action planning process and the framework of the action plan
14. Establishing strategic goals
15. Setting targets
16. Selecting specific implementation strategies and programmes

### **Stage 5. Taking action: implementation and monitoring**

17. Creating effective structures and planning links
18. Establishing internal auditing and monitoring procedures

### **Stage 6. Getting feedback: evaluation and feedback**

19. Selecting useful indicators for measuring progress
20. Measuring and reporting on performance and progress
21. Getting feedback from the community

## **Box 5.**

### **Participatory local statutory planning in Johnstone Shire, Australia**

Johnstone Shire is a local authority with 19 144 inhabitants in Queensland, Australia. In April 1991, the newly elected Johnstone Shire Council decided to prepare a new and revised town plan (25). The Council adopted objectives in the plan review process that sanctioned the establishment of a participatory planning approach: involving the community in the decision-making process; being aware of community aspirations; developing a vision of Johnstone Shire that reflects these aspirations; and developing the corporate plans and structures necessary to achieve the vision. During the planning process, partnership arrangements were established between the Johnstone Shire Council and commercial organizations, civic groups, farm industry groups and sports associations. A series of consultative committees (economic, social and environmental planning) were established, plus specific constituency or civic groups that provided input into the planning process.

strategic alliances must be facilitated by an institution that diverse community interests consider to be legitimate (45).

#### **Stage 2. Knowing your city: analysis of issues**

An analysis of issues should normally give a picture of the city by presenting the local area; describing the state of environment and health in the area; outlining social conditions, including education, welfare, poverty, employment, unemployment, crime, drug problems and migration; describing existing plans such as strategic plans, city master plans and city health plans; and identifying problems, needs and opportunities. These elements can be organized to form a comprehensive

description of the city as a whole and lead to the definition of target areas (25, 45, 46).

#### **Stage 3. Looking forward: a common vision**

Developing a common vision starts with an analysis of the strengths, weaknesses, opportunities and threats for the entire city (known as SWOT analysis). During this phase, such activities as future workshops, school competitions, forums for ideas, thematic weeks at schools and factories and meetings with business groups should be initiated. Citizens should be informed and asked to contribute their thoughts or ideas for the future of their city or community. The city council needs to

### **Box 6. Guidelines to the Poznan city master plan 1993–2005: why a new plan in a market economy?**

In 1993, the Poznan City Council (Poland) created several new planning tools. The most important one was the guidelines to the new Poznan city master plan. The former plan had been prepared 20 years previously under completely different social, economic and political conditions. The work on the new plan is taking into account the aspects of the former plan that can be adapted. The main objectives of city policy on urban planning are:

- to make good use of the city's potential;
- to preserve the natural environment and reduction of urban sprawl;
- to promote the cultural environment;
- to formulate guidelines based on concentration and conservation;
- to analyse the transport system and to form a policy; and
- to conduct studies of the impact on technical services: water and sewerage, heat and electrical power.

*Source:* personal communication, Director of the Town Planning Office and Chief Architect of Poznan

adopt a long-term vision for the city to provide guidance for the establishment or review of the city master plan and neighbourhood plans. This process of formulating a vision for the city can provide the principles and key objectives to develop its future (20,45,46).

#### **Stage 4. Getting organized: action planning**

This phase is the central element in sustainable development planning. All the previous phases (forming partnerships, establishing a vision for the city and analysing issues) are preparatory work for

### **Box 7. Draft local plan in Bristol, United Kingdom: sustainable development principles**

In Bristol's first city-wide plan for nearly two decades (47), local authorities brought together planning policies for the city in one document. It aimed to maintain and enhance Bristol's regional role and to take advantage of the city's important position in the United Kingdom and in Europe. Five principles were incorporated into the development control process to ensure that developments are sustainable.

**Cradle-to-grave approach.** The cradle-to-grave approach addresses environmental challenges from the initial construction phase through the operations of the completed development, including those that will occur when operations change or stop.

**Thinking globally, acting locally.** The effects of many decisions and actions made at the local scale transcend local authority, regional and national boundaries. This must be reflected in planning decisions.

**Working together.** A partnership approach to environmental management is adopted, involving close cooperation between agencies from the statutory, commercial and voluntary sectors.

**Prevention is better than cure.** The implications of certain actions for the environment are not always immediately clear or easy to determine. A precautionary approach is, therefore, desirable.

**The polluter must pay.** Those who cause environmental damage must bear the full costs of control. In planning terms this means that development proposals must include provisions for compensatory measures aimed at removing or reducing any environmental damage to an acceptable level and replacing lost or damaged resources.

**Box 8.****Metropolitan Lyon master plan in 1992: winner of the European Planning Prize**

When the Lyon (France) conurbation updated its master plan between 1985 and 1992, it produced a planning document (48) dealing directly with the why and the how of time-based management of its main targets. The document aims to reinforce the internationalization of Lyon via an approach to development involving a more economical use of space and taking account of internal social equilibrium. This planning exercise has already affected the life of the city in numerous ways. Its material and cultural implications impact on very different parts of the city and on the solutions to everyday problems but will also have a lasting influence on future developments. Among the planning ventures inspired by the master plan is a debate on the conurbation's hospital structure, with a view to drawing up new planning propositions. The master plan was awarded the European Planning Prize in 1995.

**Box 9.****Metro Toronto's changing communities: innovative responses**

Metropolitan Toronto is Canada's major immigration reception centre: 30% of all immigrants to Canada settle there (49). The Metropolitan Government of Toronto (Metro Toronto) has been responsible for providing key social and community services for nearly three decades. Faced with an increasingly diverse population and structural economic change in Canada's largest metropolis, Metro Toronto has been proactive in developing new service models to respond to emerging needs. Metro Toronto, a regional government, has become the level of local government primarily responsible for providing human services. The focus on people-oriented services has shaped an approach to planning and service delivery built on collaboration, cooperation and partnerships between Metro Toronto and the communities it serves. Changes in these communities have led to new strategic directions in metropolitan government policies. Initiatives include organizational change in housing, governance and participation in homes for elderly people, service delivery in social services, programme development in services for children, planning and development of services in hostels and community support in social development. These best practices demonstrate how Metro Toronto's service system is becoming more accountable to clients and communities, reflecting the changing population and developing responsible and flexible organizational structures and delivery mechanisms.

creating an effective action plan. This action plan provides a strategy to address problems and needs at a systemic level and with a long-term perspective. It contains specific targets for both short- and long-term progress and describes the mechanisms for assessing whether the targets have been achieved. Citizens and local institutions and organizations should be invited to submit implementing agreements to be included in the strategic action plan. The action planning process should define the process, review previous phases of the community vision and analysis, establish objectives, set targets,

select implementation strategies and programmes, develop the framework and promote partnerships for implementation (25).

### **Stage 5. Taking action: implementation and monitoring**

This phase concentrates on implementation and monitoring. Even the best action plan does not guarantee that problems will be solved and needs will be met or that life in a city will be healthier or more sustainable. Citizens and service users are often sceptical about planning and plans. The failure of local

#### **Box 10.**

#### **Copenhagen's city health plan for 1994–1997: proposals for a healthy city**

Copenhagen's city health plan covers prevention of illness and health promotion activities in the entire City of Copenhagen (Denmark). The report covers:

- challenges for Copenhagen as a healthy city
- the principles of health promotion
- analysis of the health situation
- the priorities for health promotion
- networks for health
- health promotion settings
- themes for health promotion
- appropriate target groups for health care
- the support functions needed to achieve the plan
- implementation of the proposals.

*Source: Healthy city plan of the City of Copenhagen, 1994–1997 (17)*

governments to implement plans is often attributed to a lack of will on the part of local government institutions and officials. The ultimate outcome of a plan should not be the plan itself but institutional reform followed by action. The results of the plan should be integrated into the local administrative practices, including budgetary priorities, investment and development decisions. In addition, the people who have conceived the plan should be able to transform the organizational structures they used for planning into organizational structures that have specific responsibilities and capabilities for implementation. This phase can lead to the creation of effective

structures for jurisdictional reform, decentralization, interdepartmental coordination and the establishment of effective planning links. Finally, monitoring should be realized through internal auditing and reform of procedures, rules and standards (25).

### **Stage 6. Getting feedback: evaluation and feedback**

This stage is important because once people are engaged in the details of implementing a plan, they can easily lose sight of the overarching purpose of planning: to make the community healthier and more sustainable. Making progress towards sustainability requires systematic

#### **Box 11.**

#### **Facilitation of product redesign in the City of Stockholm, Sweden**

Stockholm Water Ltd. (Vatten) is a company owned by the City of Stockholm. It is responsible for producing and distributing drinking-water and treating wastewater in Greater Stockholm. For the past three years, Vatten has carried out an intensive programme aimed at reducing the discharge of hazardous substances into the sewerage system, especially heavy metals such as lead, cadmium and mercury (25). Vatten's multisectoral approach has involved the city government, neighbouring municipalities, small businesses, professional associations and local households. This programme has substantially reduced the concentrations of various metals in sewage sludge from 50% to 84% over 18 months in 1990–1991. This was achieved although the City lacks regulatory powers to impose penalties or to close down polluting industries.



## **Box 12.**

### **Sustainable development reporting in Hamilton-Wentworth, Canada**

The regional municipality of Hamilton-Wentworth (Canada) includes six area municipalities. In June 1990, the Regional Council launched the Sustainable Community Initiative by creating a Citizens' Task Force on Sustainable Development. Through a consultation process lasting two and a half years and involving over 1000 citizens, the Region developed a community vision called Vision 2020 (25). The community consultation process highlighted 11 key areas that require major change in policy if the Region is to become sustainable. Additionally, the consultation process identified 300 detailed recommendations for Vision 2020. The implementation of the Vision 2020 document, the 11 key areas of policy change and the 300 recommendations are supported by a system of monitoring, reporting and evaluation of performance and progress towards sustainability. The Region established a programme called Annual Report Card Day and the Indicators Project – Signposts on the Trail to Vision 2020. This reporting and feedback programme was aimed at measuring the community's progress towards Vision 2020. The indicators project provided a set of measures to monitor the implementation of Vision 2020 through key statutory plans and to serve as a critical mechanism in linking projects together.

evaluation of whether the plan's action strategies are adequate and have had the desired effects. Performance reporting and progress reporting are the key elements in this stage. Indicators are an effective tool for measuring performance in implementing an action plan, yet they

are an unreliable way of evaluating sustainability itself. Community feedback is also essential since it provides information, rewards and disincentives so that a community is better able to regulate its own behaviour.

## Conclusion

The experience of local authorities across Europe and beyond shows very clearly that moving from a simple mechanism to regulate land use to a healthy and sustainable urban planning process is not straightforward. This process requires three elements:

- an appropriate national planning framework that encourages an integrated approach and puts the quality of life and sustainable development high on the urban agenda;
- urban planning, transport, environmental, economic, social, health and community interests have to be willing to dismantle the barriers between them and collaborate for the greater good;
- an open-minded, innovative orientation that challenges conventional market and planning assumptions and learns from emerging best practice across the world.

An urban plan focusing on the health and wellbeing of the urban population is not concerned solely with controlling land use. It requires finding policies and means of implementation that achieve social, environmental and economic goals simultaneously. In some countries governments are making this explicit. Sustainable development means ensuring a better quality of life for everyone, now

and for generations to come. This means:

- social progress that recognizes everyone's needs;
- effective protection of the environment;
- prudent use of natural resources; and
- maintenance of high and stable levels of economic activity and employment.

This document has set out the stages of policy-making and implementation that are necessary to achieve a coordinated approach. The process involves building partnerships, understanding critical issues, developing a common vision, planning action, implementation, monitoring and evaluation. It may look like a linear process, but that is just for ease of presentation. In essence it is cyclical, a continuous learning process in which the experience of working together and taking action feeds back to the start. An effective programme of action in one sphere of policy builds confidence and draws other groups into engagement. In turn, the broadening spectrum of interests and agencies involved allows the plan to be bolder and more resolute.

A healthy city programme is not a bureaucratic exercise. Invariably it means changing patterns of living – for example, moving away from excessive dependence on private motor vehicles that pollute and congest the city. Healthy urban plans affect people directly, and it is therefore

vital to involve the community actively, to gain their support and to encourage households and businesses to change.

Successful healthy and sustainable urban planning requires a proactive local authority. The municipality is the best body available to weave the policy threads together into a coherent multi-agency plan. To do this it needs to understand the process and develop the skills of collaborative working. It also needs to have a clear idea of what kinds of urban planning processes and policies will improve resource efficiency and the health, safety and wellbeing of citizens.

Many cities and towns have begun to take action to address these issues. The following recommendations are drawn from examples of best practice from around the world.

## Recommendations

1. Regulation is needed within each planning system to respond to environmental and health concerns, while preventing development from migrating to areas of weaker control.
2. Planning should not always seek to balance the benefits of development against costs to the environment and health. Planners should try to find new solutions that can achieve environmental, social and economic goals.
3. Planning approaches should seek to be guided by objectives. National and regional planning bodies should define sustainability and health targets and broad environmental strategies.
4. City plans should describe the intended states of both environment and health. They should include indicators of sustainability and health to measure both the extent of the problems and the level of success in dealing with them.
5. Planning systems with rigid zoning plans need to find ways of becoming more flexible to respond to environmental and health challenges. The promotion of mixed-use schemes is one example of such flexibility.
6. Planning systems, despite their differences, are largely sets of procedures. Their strongest powers relate to the regulation of private development projects. Market forces often determine the desirable locations for proposals or projects. Planning systems should therefore work closely with public expenditure programmes and infrastructure and grant regimes to encourage sustainable development on sites where negative environmental effects can be mitigated.
7. Local proposals need to fit with regional and national strategies or

regulations. There is no single solution, but the local situation needs to be analysed and a wider range of environmental, economic, social and health challenges need to be considered before a plan is formulated.

8. The use of a planning system to influence urban form is a long-term mechanism, but strategies must be developed immediately to improve accessibility and reduce the emissions caused by transport that threaten local health and global ecosystems.
9. A consistent planning scheme for

urban and rural areas in Europe must be developed in the coming years to ensure that more sustainable and healthy approaches are applied in the face of economic globalization.

10. Cities should embark now on a systematic and integrated process to produce and implement healthy and sustainable urban plans as part of their Local Agenda 21 programmes. Each city has to find the most appropriate approach for the local situation, but each should consider how to incorporate all 21 steps of the process set out in this document.

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## Useful Web sites

### World Health Organization

- Regional Office for Europe, Copenhagen  
<http://www.who.dk>
- European policy for health for all statements and declarations  
<http://www.who.dk/policy/polstat.htm>
- Regional Office for Europe, Centre for Urban Health – Healthy Cities project  
<http://www.who.dk/healthy-cities>
- Healthy Cities project bibliographies  
<http://www.who.dk/healthy-cities/biblio.htm>
- Headquarters, Geneva  
<http://www.who.int>

### European Commission

- Directorate-General for Environment, Nuclear Safety and Civil Protection (DG XI)  
[http://europa.eu.int/comm/dg11/index\\_en.htm](http://europa.eu.int/comm/dg11/index_en.htm)
- Sustainable Cities Project  
[http://europa.eu.int/comm/dg11/urban/home\\_en.htm](http://europa.eu.int/comm/dg11/urban/home_en.htm)
- Directorate-General for Transport (DG VII)  
<http://europa.eu.int/en/comm/dg07/index.htm>

### United Nations

- United Nations Centre for Human Settlements  
<http://habitat.unchs.org/home.htm>
- Global Urban Observatory  
<http://www.urbanobservatory.org>
- United Nations Department of Economic and Social Affairs: Earth Summit+5 (Special Session of the General Assembly to Review and Appraise the Implementation of Agenda 21, New York, 23–27 June 1997)  
<http://www.un.org/esa/earthsummit>
- United Nations Economic Commission for Europe  
<http://www.unece.org/welcome.html>

## **International Institute for Sustainable Development**

<http://iisd1.iisd.ca>

## **Links to international conferences relating to environment and development**

<http://www.iisd.ca/linkages>

## **Organisation for Economic Co-operation and Development**

<http://www.oecd.org>

## **European Sustainable Cities & Towns Campaign**

<http://www.sustainable-cities.org>

## **International Council for Local Environmental Initiatives**

- World Secretariat – Toronto  
<http://www.iclei.org>
- European Secretariat – Freiburg  
<http://www.iclei.org/iclei/la21.htm>

## **Eurocities**

<http://www.eurocities.org>

## **Car Free Cities network**

<http://www.edc.eu.int/cfc/index.html>

## **Cyberbia – Internet resources for the built environment**

<http://www.arch.buffalo.edu/pairc>

## **European Council of Town Planners**

<http://www.ceu-ectp.org>

**Centre of Urban Planning and Environmental Management –  
University of Hong Kong – urban planning and related Web links**

<http://www.hku.hk/cupem>

**URBED – the Urban and Economic Development Group**

<http://www.urbed.co.uk>

**Resource for Urban Design Information**

<http://rudi.herts.ac.uk>

**European Academy of the Urban Environment**

<http://www.eaue.de/default.htm>