

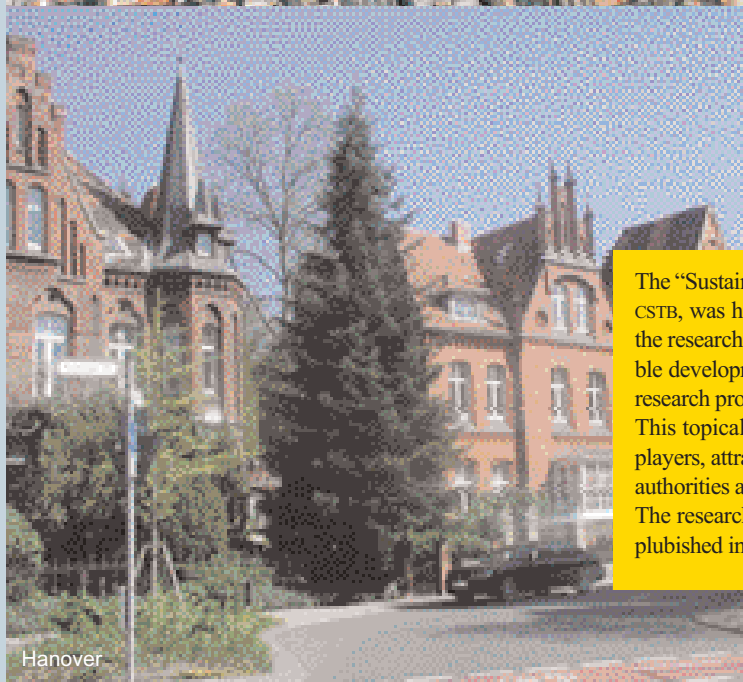
Sustainable cities in Europe

Local and regional issues versus the objectives of sustainable development

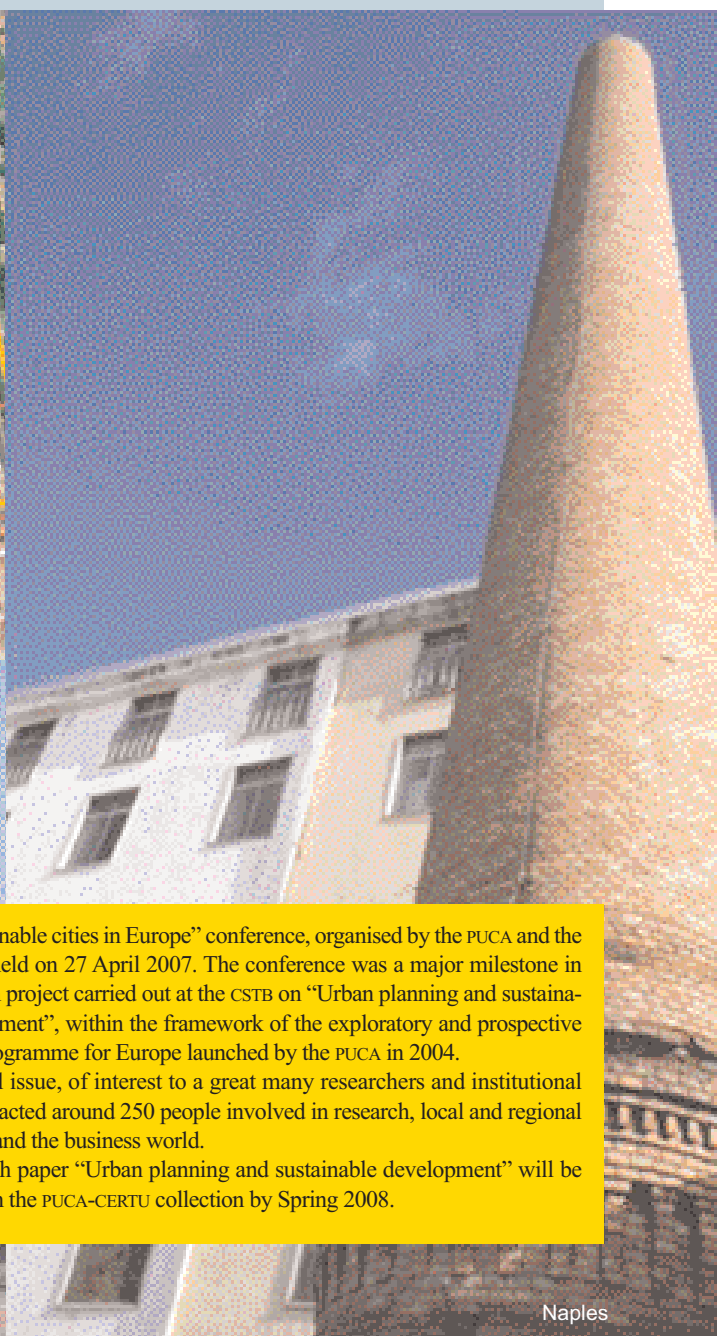
PUCA



Manchester



Hanover



Naples

The “Sustainable cities in Europe” conference, organised by the PUCA and the CSTB, was held on 27 April 2007. The conference was a major milestone in the research project carried out at the CSTB on “Urban planning and sustainable development”, within the framework of the exploratory and prospective research programme for Europe launched by the PUCA in 2004.

This topical issue, of interest to a great many researchers and institutional players, attracted around 250 people involved in research, local and regional authorities and the business world.

The research paper “Urban planning and sustainable development” will be published in the PUCA-CERTU collection by Spring 2008.

Alain Lecomte

Director-General of the DGUHC

The growth of urbanisation worldwide, its inevitability and its impact on climate change mean that the sustainable city is one of the most crucial priorities of the 21st century.

The PUCA plays a key role in analysing the issues involved, as demonstrated by the “Exploratory and prospective research programme for Europe” launched in 2004, which focuses on ten topics, one of which is urban planning and sustainable development at the European level. Focusing on the local/regional scale is all the more justifiable in that these issues are faced by every country in Europe, however different their histories and resources may be. With this in mind, during Germany’s Presidency of the EU, a meeting of European ministers responsible for policy in these areas was organised within the framework of the Leipzig Charter, which promotes an integrated approach to urban development.

This Charter marks the initiation of concerted European discussions on sustainable cities.

Today’s conference on Sustainable Cities in Europe presents players in urban development and from local and regional authorities with a range of shared experiences aimed at encouraging discussion of the different forms of urban organisation and of the approaches and tools required to build sustainable cities. Comparisons between European cities are a rich source of information. Of course, however similar the issues that must be dealt with, the solutions developed are not the same, given that they are dependent on different institutional and legislative contexts, different city council policy and different approaches to governance implemented by local authorities.

These various issues have been investigated in the “Urban planning and sustainable cities” research carried out at the CSTB, some of the results of which will be presented today.

The concept of the sustainable city puts the emphasis on the environmental and urbanistic aspects of building a city. Nonetheless, it is equally essential to focus on the economic and

social aspects as well. The aim is to find solutions that reconcile environmental protection with the creation of value in the real estate, property and economic markets, without amplifying the social inequalities that go with this. As an administrative director in charge of housing and urban planning, this is an issue that cannot be underestimated. Sustainability is a term that should be understood in the broad sense of an ideal to be striven for, one that reconciles the demands of urban development, environmental protection and economic and social development, on the scale of the city and that of the urban territories across which it develops. Nonetheless, sustainability may be thought of as a concern of rich nations, given the fact that its immediate cost is not within everyone’s means, even though it may worth it in the long run. This is one reason why we need to ensure that sustainability is to everyone’s benefit and does not generate new economic and social inequalities.

Another important issue is the form and scale of the sustainable city. In a country like France, which has more than 36,000 communes, how do we define a city? How do we define an agglomeration? While decisions have to be taken on the scale of the city, there is no such thing as a sustainable city without a sustainable agglomeration, since there is a constant interchange between the city and the surrounding area.

In this, transportation plays an extremely important role, which must be factored into the equation.

This conference sets out to tackle all these different aspects, taking the cities of Manchester, Barcelona, Lille, Naples and Hanover as examples, with speakers from diverse backgrounds: local authorities, researchers and academics.

I hope that you will all find this conference highly rewarding.

Alain Maugard

Chairman of the CSTB

The “sustainable city” is now one of the CSTB’s four key research priorities. The subject of the sustainable city is currently gaining in importance, and this is no mere passing trend. The fact that 250 people have come to this conference amply demonstrates that this is now a central concern of the professionals, elected officials, government and local authorities here present. I would like to praise the PUCA’s foresight in funding this research on sustainable cities in Europe since 2004.

The crucial issues which we will be examining, through a comparative analysis of European cities are:

What forms does sustainable urban organisation take, what approaches and resources are needed to develop them? How are the policies on urban planning, transportation, housing and the environment interlinked? What scales and structures of local governance are appropriate for developing sustainable cities?

It is vital that we address these issues right now in light of the impact on them of new challenges: climate change, energy efficiency and saving energy, health, environmental inequality, as well as risks to the public and the need to protect the population. The sustainable city, in the way it is conceived and developed, must therefore deal with new challenges, at local and global level, and open up debate on social alternatives. The attempts made to date to develop sustainable cities are nothing in comparison to what we will see in the future. The city is one of the core concerns that the 21st century will have to deal with, because urban growth worldwide, together with the ecological footprint this entails, are incompatible with the planet’s dwindling and non-renewable resources.

Furthermore, civilisation is inherently urban. So, the only possible solution is to try and make urban civilisation compatible with protecting natural resources.

If we look closely at energy consumption in the city, we see that American cities consume twice as much energy and produce twice the amount of greenhouse gas emissions as European cities.

The European model is therefore in a relatively better position when it comes to proposing possible solutions. European players need to tackle head-on the problem of how to reconcile urban lifestyles, energy use and the need to save resources,

which is one of the most vital issues. Hence the urgency with which we need to speed up application of sustainable development requirements. Furthermore, as well as addressing the impact of urbanisation on the environment, sustainable development must also deal with health problems caused by pollution in the city and inside buildings.

It is also important not to forget the socio-economic aspects of sustainable urban development.

I would like to discuss the possibility that the increasing demand for technological performance related to sustainable development will create a rift in society. Implementing such performance levels will come at a price and so will be more problematic for the least well-off. We may well ask whether demand for technological performance related to sustainable development will not further aggravate urban inequalities. Studies carried out on the issue of environmental inequality show that the most disadvantaged people, in social and economic terms, are also those who already live in environments subject to the highest levels of pollution and risk. Are we moving closer toward a situation where the demands of sustainable development will be met on different levels both within the city itself and between cities? What can be done to prevent social inequalities related to environmental issues from taking root? And how can we ensure that the poorest people enjoy the benefits of cheaper energy achieved thanks to progress in energy-saving technology? Developing a sustainable city is an opportunity to tackle and deal with social issues by taking an alternative approach, focusing on how these issues are linked to urban life and to the environment.

As for sustainable economics, this may require an approach entailing analysis of the “urban metabolism” and the total cost of the city, taking account of the indirect and deferred effects of negative external factors over time and in spatial terms. The question of how we will pay for sustainable development remains to be resolved, as does that of developing incentive schemes to change behaviour (tax breaks, low-interest rate loans and CO2 trading, etc.). The economics of sustainable development still have to be worked out, taking account of the entire economic cycle as well as the ways in which the urban system functions. For example, on the scale of the city, the economic added-value partly generated by public investment in urban development is swallowed up by higher land and property prices. We see a constant rise in the price per square metre of existing housing, which is the underlying cause of a

growing social divide between tenants and landlords. So, what can be done to resolve the contradiction between measures taken to improve the metabolism of the city, contain urban sprawl and protect the environment, and the lack of available funds to distribute or recover the added-value of property? Can we hope to collectivise certain city values, leading to the redistribution of added-value and reinvestment in sustainable urban development?

Finally, we can see three unstoppable trends in the way in which cities are governed:

- The decentralisation of authority and responsibility for the city to local authorities, which implies providing adequate means to those in charge of running the city, notably through taxation. Moreover, public authorities need to develop greater cooperation on scales appropriate for developing sustainable cities and agglomerations.
- A multiplication of levels of governance and of the players involved in building sustainable cities. This implies developing innovative institutional funding packages and public-private partnerships to encourage shared responsibility and investment in the sustainable city.
- The involvement of local residents. Encouraging the people that live and work in the city to become involved in (urban development and policy) projects related to the city has now become crucial.

To conclude, I would add that you are the pioneers paving the way toward dealing with an issue that will be a prime concern of the 21st century.

Sustainable cities in Europe: issues and perspectives

Lydie Laigle

Manager of the CSTB's Urban, Social and Technical Change Laboratory

Sustainable cities: key elements and guidelines

The sustainability of a city depends less on its component parts than on the capacity to transform and develop its heritage in order to conceive *alternative approaches* to development. Defining possible avenues for development, without creating new vulnerabilities, is one of the key factors in sustainability. Sustainable development is increasingly the focus of institutional processes, but this is not to say that, for the moment, it is already institutionalised. It still needs to be appropriated at the social and collective levels. The sustainable city therefore requires active public and collective involvement in developing the urban environment. It is extremely tempting to associate a specific model of urban development with the sustainable city. In fact, it may be that a sprawling city is sustainable while a compact city is not. For example, most Mediterranean cities are congested in the city centre with dispersion into the sprawling peri-urban areas, whereas the problem in Northern European cities is rather how to deal with people deserting the urban centre and migrating to dispersed peri-urban areas. Obviously, cities do not have the same local issues and dynamics to contend with. Some may be moving in the opposite direction to sustainable development (peri-urbanisation, economic polarisation, urban fragmentation and segregation, etc.). The sustainability of a city depends upon an ongoing adjustment between the successive changes that it goes through, the policies framing these changes and dynamic forces generated by the latter in time and space. It is essential for local authorities to attempt to understand how these points are inter-related.

Urban forms, local governance and the sustainable city

To what extent does using sustainable development as a guideline serve to generate new ways of designing and developing the city? Is there any consistency between sustainable urban design and the processes developed to implement it? How can a balance be found between urbanisation trends and the ways in which sustainable cities should be developed?

The city of Barcelona illustrates the possibilities of developing initiatives to transform the city that are related to new concepts of the city. During the 1980s, faced with increasing urban density, Barcelona based its urban planning project on regenerating public spaces and creating urban centres. A spatial and participative approach to urban development on the local scale of a neighbourhood was developed with the aim of establishing greater diversity of purposes and of populations, quality of urban life and access to public spaces and facilities. Thanks to this approach, the concept of the compact city was developed, which, paradoxically, was designed to overcome the problems of extremely high density. Since the year 2000, the reference to urban ecology has led the municipal councils to implement more integrated approaches to urban development, henceforth taking account of the issues of mobility and urban waste. The second aspect of the project focused on extending the compact city model to the network of medium-sized cities. A more strategic approach to spatial planning was therefore developed on the regional scale of the Catalanian government aimed at containing dispersion into the peri-urban areas and protecting the environment within the agglomeration.

The example of Hanover illustrates the possibility of implementing two complementary models, each on a different scale, of urban spatial organisation (the “city of short distances” and “decentralised concentration”). The objective is, first, to

improve the interconnections between urban functions, local services and public facilities. Second, the aim is to minimise social and environmental vulnerability resulting from badly controlled urban sprawl. This example also reveals how growing concern over ecological issues has given rise to progressive and negotiated urban regeneration based on intercommunal cooperation and citizen participation.

The role played by the legal and institutional context

Since the year 2000, legal and institutional reforms have been introduced in the majority of EU Member States to integrate the requirements of sustainable development. Naturally, these reforms vary from one country to the next. In France, this involves encouraging greater intercommunal cooperation in a more integrated and strategic vision of spatial planning. In Great Britain, reform has resulted in more flexible planning procedures at local level, although this has not been extended on a larger scale. In Spain, decentralisation means that autonomous regional governments are now more involved in intercommunal spatial planning and in environmental protection. These reforms set out new obligations for the local authorities and foster policies designed to encourage a revitalisation of local initiatives. Nonetheless, the content and impact of these changes differ from one country to the next. In France, we see a redeployment of planning tools and methods (SCOT, etc.), and partnerships developed between local authorities at various levels. In Great Britain, proactive government policies encourage citizens and business players to be involved, together with more partnerships on projects and various forms of contracting at local level. These policies include financial incentives granted to local authorities by the State and based on an obligation to achieve results and the tendering system.

Issues and potential solutions

In this new context, instilling fresh impetus into sustainable development initiatives depends on local authorities taking the institutional and legislative reforms on board, and adopting strategies for action defined by public and private players and citizens with a view to dealing with issues specific to the area. Nonetheless, the regulatory and legislative obligations can, in some cases, contradict local policies aimed at tackling issues specific to the area.

In France, the predominant role attributed to intercommunal planning means that it is possible to think of the sustainable city in terms of the urban area. But integrating planning guidelines into the actual implementation of development projects requires an institutional compromise between intercommunal authorities and commune authorities. Such compromises are not easy to find when the communes find themselves having to deal with social and economic issues such as protecting jobs, seen as a priority in comparison to environmental issues dealt with at the level of the metropolis. Compromises such as these cannot be made without the involvement of citizens and business players, nor without political support shared across the commune and intercommunal authority. Moreover, legislation designed to enforce application of polluter-pays and precautionary principles may, paradoxically, create risks for intercommunal authorities trying to deal with the issues involved in redeveloping industrial wasteland. In Lille, the intercommunal authority has been approached to grant permission to change the use of polluted industrial sites, whereas it still does not have the resources to deal with the information needed to assess the environmental and health risks. When it comes to environmental audits, the interplay between those involved has become more complicated in recent years, with skills transferred from decentralised government departments to the intercommunal authorities and private service providers. The new system for risk-sharing and accountability resulting from legislative reform may also present obstacles to sustainable urban regeneration projects.

In Great Britain, the reference value in the rules applying to land

use and the use of partnerships encourage greater synergy between skills possessed at various institutional levels and by business players. Nonetheless, centralised State funding, together with the diversity of partnership structures, blocks any chance of an overall approach to urban regeneration projects at local level. The motivation behind projects conceived by local authorities is primarily related to the State funding available rather than dealing with specific issues affecting the area. This partly explains why the spread of sustainable development guidelines has been limited.

In Barcelona and the surrounding agglomeration, top-down spatial planning is now combined with the bottom-up and participative approaches hitherto implemented in urban development projects. While such top-down approaches are aimed at extending the compact city model to the network of medium-sized cities, it is not certain that the planning tools and approaches implemented (the proportionality rule of one job per inhabitant, etc.) will make it possible to reproduce this compact city model on a larger scale. This is all the more likely given that some communes are questioning the guidelines set out by the regional planning authorities, which are not particularly concerned with local dynamics: will people go and live in the areas provided for under urban planning master schemes for urban expansion? There is therefore a risk of inconsistency between the different decision-making levels, not to mention less control of local dynamics engendered by urban planning schemes.

This comparative analysis shows that institutional and legislative reform are essential but inadequate for achieving the sustainable city. Hence the need for local authorities to improve their skills in order to adapt their approach to dealing with local issues.

Approaches and tools

The methods and tools used to build the sustainable city can be found in the play of tension and complementarity between the different approaches developed to build it. The progress achieved and the obstacles encountered are affected by the problematic inter-relations between public planning operations and citizen participation, strategic and forward-planning approaches on the scale of the territorial unit and an integrated “territorial” approach, codified regulatory approaches and partnership approaches, political will and technical expertise in project supervision, the legislative and institutional integration of the principles of sustainable development and their appropriation by the local authorities and populations.

There remains the need to ensure that these approaches and tools complement one another and are put to “good use”. The case of Hanover illustrates one way of doing this, notably by reconciling planning approaches with participation tools on the scale of the city and that of intercommunal groups. Thus, spatial planning on the intercommunal scale is aimed at containing and organising urban sprawl, with a view to restricting lifestyles and travel in peri-urban areas. In parallel to this, participation organised within the framework of Agenda 21 is raising citizens’ awareness of global ecology issues, encouraging them to assess the environmental impact of their actions. Moreover, public debate with residents and professionals from the housing, energy and transportation sectors held upstream of urban development projects makes it possible to negotiate and compromise with regard to technical choices and urban development. Hanover also demonstrates how it is possible to reconcile a codified, contractual approach with collective appropriation. In response to energy issues, the intercommunal authorities have developed a climate plan, together with the possibility of negotiating contracts between private individuals and the local authority to promote renewable energy. Nonetheless, such pioneering local initiatives come up against Germany’s national energy policy, which mainly relies on fossil fuels.

The examples of Barcelona and Naples illustrate how difficult it is to link strategic and “territorial” approaches at different levels of governance. Regional planning in Catalonia takes a theoretical and strategic approach, whereas the City of Barcelona approach is based on participative and partnership-oriented action. In Naples, a pragmatic approach is taken, one that places greater import on the approach rather than the design of urban models. Naples has developed an integrated and “territorial” approach to urban regeneration. To deal with intense congestion and cuts in urban territories generated by transport infrastructure, the city has established cross-cutting approaches for drawing up urban planning and transportation texts, aimed at restoring quality and fluidity within the city. “Territorial” and consultative approaches have also been implemented to revise the urban development project in light of local disparities: some authorities have to deal with dilapidated buildings, the risk of earthquakes and volcanic eruptions, while others are concerned with economic and urban regeneration. The strength of the project lies in the guidelines that have been negotiated between all the stakeholders in light of the specific issues focused on in each area.

Manchester and Lille are emblematic of the problems encountered in trying to reconcile codified regulatory approaches with partnership approaches. To offset the lack of consistency in urban regeneration plans on the scale of large areas, the City of Manchester has undertaken a number of programmes in partnership with the State. This has enabled it to multiply the scope of regeneration projects within which stricter regulations apply and to develop a broader vision encompassing a combination of fragmented operations covering various territorial units. While the Agglomeration of Lille is still focused on a participative municipal approach, together with an array of sector-orientated sustainable development actions, the increasingly important role of intercommunal cooperation in spatial planning and territorial solidarity has now resulted in a more strategic approach to sustainable urban development.

New stakeholders and issues

In all the cities studied, we found that the skills and responsibilities of those in charge of developing the city are being reconfigured. Public players at many levels have to deal with the rise of the private sector (in the sectors of development, property, business, energy supply and waste management, etc.), and of citizen pressure groups and associations.

These changes imply that public action needs new arbitration bodies to regulate the actions of the private sector and associations, without hindering the development of the sustainable city. The challenges at stake involve three areas of priority action: land management, environmental risk management and social equality.

Land management: faced with pressure on land and cuts in public budgets, the majority of European cities no longer have the resources needed to undertake major land acquisitions. Furthermore, public control over land use remains the preferred means of containing urban sprawl and promoting compact cities. The intercommunal authority in Hanover and the *Generalitat* in Catalonia illustrate the resources that have been developed to exercise this right, and to make the objectives of urban mix and environmental quality the subject of contracts. In Great Britain, the lack of public control over land use is an obstacle to implementation of a general and coordinated strategy. The result is a fragmented approach to sustainable development, seen as a means of economic development in the case of Manchester.

Managing environmental risk is focused on dispersed agglomerations that consume high levels of resources and produce high levels of pollution, as well as on agglomerations with a significant industrial past and which have placed the emphasis on "redeveloping the city in the city". As demonstrated by the example of Metropolitan Lille, urban redevelopment on industrial wasteland raises problems regarding the distribution of roles and responsibilities between public and private players. Revising local urban planning schemes to enable planners and developers to regenerate wasteland plots means that the local authorities assume their responsibility for the future use of such sites and the risks involved in the long term and in spatial terms. This is why they are developing social and environmental

recommendations, as well as new contract instruments that include clauses relative to the developers' environmental accountability.

The issue of social equality is also crucial. Improving the quality of urban life makes a city more attractive but puts greater pressure on property prices, thereby excluding a large section of the population from living in redeveloped areas. Cuts in the proportion of housing stock subsidised by the public authorities in many European countries and the environmental requirements that put pressure on the building sector tend to push up the price and quality of redeveloped or new housing. Hence the risk of an imbalance in supply and demand at a time when the overall cost of housing in household budgets has substantially increased. In such a context, we may well ask: who is developing sustainable cities and for whom are they intended?

Redeveloping industrial wasteland put to the test of urban sustainability: the examples of Manchester and Lille

Bruno Villalba

Lecturer at the Institute of Political Studies in Lille

The major challenge in developing the sustainable city is how to progress from a technical utopia to a political utopia, in terms of plans for living together as a community. While sharing technological know-how is simple enough, reconciling political priorities raises many problems. Such problems are related to the ambiguity inherent in the concept of sustainable development. After focusing on the intergenerational aspects of sustainable development, the last few years have seen a growing interest in more specifically local aspects. Such a focus on the local territorial unit raises the issue of the interdependence between territories which combine the options of sustainable development theory with the practical procedures for implementing know-how.

A territorial unit is characterised by three aspects which are totally interdependent: material (the physical characteristics of the territory and the facilities developed within it), organisational (the territory considered as an entity affected by different players in conflict with one another) and identity aspects (history of the territory). A territorial unit is subject to internal and external pressures and also changes in line with other, interdependent, territorial units. First, local development in a territorial unit is affected by territorial dynamics at an international level. Second, a territorial unit is made up of a number of inter-dependent sub-units, which may, for example, lead to segregation. From the point of view of sustainable development, issues such as pollution, which exist across borders and boundaries, illustrate how essential it is for us to take account of the interdependent nature of territorial units. To what extent do urban policies integrate the underlying requirements of sustainable development in territorial units? Do such policies result in new modes of spatial use within territorial units?

Is this a challenge to the principle of mobility?

How are local/regional sustainable development policies funded and how is sustainable development reconciled with the need for economic development? Participative democracy and new decision-making processes raise the issue of who is accountable for collective decisions. Negotiating with civil society presupposes that the objective is to define a collective, political, project. Finally, is the issue of sustainable development in

local/regional territorial units a spatial development issue or a political choice?

Brownfield regeneration and urban attractiveness in Manchester and Lille

Mélanie Tual

Urban planner, specialising in research on sustainable urban development, CSTB

Lille and Manchester are two cities with comparable urban heritages and spatial planning issues. There is a tendency for the differences in their political and institutional contexts to converge under the increasingly strong influence of European Union governance. It is interesting to ask how the integration of sustainable development in national planning, and then at local level has operated in the two cities. How have institutional instruments been developed in these two countries and the two cities in view of the requirements of sustainable development? Have the two cities encountered similar problems? What solutions and methods of adaptation have they implemented to integrate the requirements of sustainable development into their practices?

Decentralisation and integration - France and Great Britain are two countries that share a centralised conception of the State. Due to the influence of EU policy, both nations have undertaken a policy of decentralisation. In France, this has been in progress for the last 25 years, but has been introduced much more recently in Great Britain, where the process is more one of devolution. Two kinds of regional assembly have been set up that have limited powers. They are not elected and the State is over-represented. Under the pretext of decentralisation, the British State is in fact rationalising the way in which national territory is organised, without abandoning its control over this territory. This reform has the advantage of facilitating the systematic integration of sustainable development. Legislation on urban development has changed in different ways in the two countries. In France, new laws have been voted on that factor in the requirements of sustainable urban development: the Urban

Renewal Act, together with Acts on Housing, Clean Air and Clean Water, etc. In Britain, the emphasis is on form, for example, beginning by imposing an audit of national policy relative to sustainable development.

Two different approaches to urban planning.

In France, where there is a deep-rooted tradition of urban planning, regulation is still the key factor in how urban development is structured (Local Urban Planning Schemes and Spatial Planning Directives). The State sets out guidelines on sustainable development for local authorities by introducing new regulations.

In Great Britain, the government is working towards making planning procedures much simpler.

It does not control local authority activities through legislation but rather grants subsidies to local authorities based on a tendering system and an obligation to achieve results. More and more labels and awards for excellence are being introduced to encourage local authorities to innovate. Sustainable development has become a new criterion for receiving awarded government funding.

New local planning documents in line with sustainable development requirements.

While both Britain and France have reformed their planning documents, their efforts to integrate sustainable development have been directed at different aspects. In France, planning documents must be drawn up in stricter relation to policy, within the framework of the Solidarity and Urban Renewal (SRU) Act, which provides for Planning and Sustainable Development Projects (*Projets d'Aménagement et de Développement Durable*, or PADD), and major innovation thanks to Local Urban Planning Schemes (PLU) and Territorial Coherence Schemes (SCOT) compared with the former Land Use Plans (POS) and Master Plans (*Schémas Directeurs*). In Great Britain, urban planning documents now include a policy aspect, called the "vision" for the city, a development strategy that defines the main guidelines without, as is the case in France, drawing on a detailed audit. Reforms of the planning system, introduced since the year 2000, have given priority to governance within the framework of sustainable development, requiring municipalities to involve as many local players as possible in drawing up planning documents and in

integrating the principle of sustainable development in the various texts that make up these documents. The single planning document has been replaced by a series of files including themed strategies, that can each be revised separately, in a bid to encourage private initiatives.

Implementing sustainable urban development at the local level

Partnerships and the involvement of civil society.

In Great Britain, local authorities cannot draw up urban planning documents nor obtain funding, without developing partnerships with civil society and the State. Partnerships also provide the framework for relations between local authorities, between the latter and public agencies, as well as with the private sector (Private Public Partnerships). In France, civil society is not systematically involved in this way, although there is a requirement to consult the local population at key stages in drawing up urban planning documents for all major urban projects and for local initiatives.

Decomartmentalisation and integration of sector-based policies. In Great Britain, decompartmentalisation takes place mainly under the impetus of national urban renewal programmes designed to organise an integrated approach to regional and local development.

In France, such initiatives are more likely to be based on local initiatives and local political influences.

Controlling land use. In France, the urban planning regulations are the key instrument. In Great Britain, the building permit application procedure and national urban renewal programmes are the key instruments. The latter are used by local authorities, within limited perimeters, to exercise strict control over land use. Outside these perimeters, the laws of the market rule and it is difficult to draw up local spatial development strategies.

Different approaches to sustainable urban development

Manchester and Lille both try to reconcile the management of their urban heritage, issues specific to the area and new sustainable development requirements.

Comparable urban heritage. In the past, both cities were European industrial centres and both have been seriously hit by de-industrialisation. They have had to deal with problems relative to a deterioration in the quality of the urban environment, with residential areas inhabited by workers that have become run-down, industrial wastelands and high levels of soil and water pollution.

Similar local issues and advantages.

These issues are mainly related to urban heritage. Both cities have supported the transformation to post-industrial economy, with a certain degree of success, although this still needs to be consolidated, mainly by diversifying the economic fabric of the area, curbing urban sprawl and redeveloping rundown residential areas. This has involved, in both cases, developing the attractiveness of the urban area and promoting competitiveness in the European arena, while meeting local needs and improving the inhabitants' quality of life. These two dynamic and ambitious cities have in common a history of strong political power, embodied by charismatic men and women, an active network of associations, a strong local identity and an enhanced new image thanks to effective marketing.

Different approaches to sustainable urban development.

The approach developed in Manchester is described as "entrepreneurial": priority is given to economic growth, with prosperity seen as the sine qua non of sustainability and, in particular, as the best way to address social issues. In Lille, sustainable development is based on the principles of territorial solidarity and equality, and economic development comes second to this. In both cities, the environment aspects have long been the weak part of sustainable urban development, but things are now changing.

The difficulties encountered in Manchester to implement sustainable urban development in the area are, above all, cultural and conceptual.

In Great Britain, there is a great deal of confusion surrounding the concept of sustainable development: it is not necessary to factor in all three aspects - economic, social and environmental - at the same time to implement sustainable development. Resources are mainly allocated for economic and social development. Nonetheless, under the influence of the approaches developed by the international urban elite, and out of concern to make the city more attractive, the approach taken by Manchester is changing to be more in line with the commonly-accepted conception.

In Lille, the problems are primarily institutional. Coordination between communes and intercommunal authorities is complicated. Reform of intercommunal cooperation instruments designed to rationalise the institutional scene have in fact made it more complicated. The lack of centralised expertise at one level makes local action less effective. As far as protecting the environment is concerned, the growing influence of the private sectors raises the question of how responsibility for the environment should be distributed.

Urban regeneration in Manchester: great potential for sustainable urban development

Michael Hebbert

Professor of Urban Planning at the School of Environment and Development, University of Manchester

The confusion that surrounds the concept of sustainability in Great Britain can be explained, or excused, by the real correspondence that exists between the objectives of urban regeneration and those of sustainable development. Given the early development of industrialisation in the country, British cities underwent an exceptionally long period of peri-urbanisation, the emigration of certain social categories, economic disinvestment and spatial abandonment. Upon becoming Prime Minister in 1997, Tony Blair called upon the Urban Task Force, a commission chaired by the architect, Richard Rogers, to examine the reasons for economic and demographic decline in the cities against a national context of economic growth, job creation and an increase in the number of households. The Task Force found that the environmental malaise and economic and demographic decline in English cities was due to the failure of urban planners to conceive of the city as a place where people choose to live in order to satisfy their personal aspirations in terms of leisure activities, work and lifestyle. The Rogers Report recommended that the planning system should henceforth encourage compact and high-density urban development on brownfield sites.

Manchester, a city of contrasts

Manchester is an example both of urban decline and the potential for urban regeneration. The city has been subject to peri-urbanisation and the exodus of the middle classes over a particularly long period. In addition, at the end of the 20th century, operations to demolish certain run-down neighbourhoods and clean up and redevelop brownfield sites resulted in the emergence of abandoned urban spaces, located on the edges of the historic city centre, where the best access and facilities can be found. Manchester also illustrates the

potential for urban renaissance. At the end of the 1990s, urban planning regulations relative to streets and buildings developed for the urban regeneration of Hulme, were extended to cover the entire city. Some of these regulations have helped build up Manchester's reputation in the matter of urban regeneration. Greater Manchester is distinctive in that it covers a very large area (practically the same as London, 1,300 km² (501 square miles)) and has a small city centre (116 km² (44 square miles)). The agglomeration has a population of 2.5 million inhabitants, with only 450,000 in Manchester itself.

Many of the inner city districts are facing serious problems and the city is ranked as the 3rd poorest local community in England. Nonetheless, Manchester is the regional capital and the country's largest financial and business centre after London. It boasts a remarkable standard of cultural, sports and business facilities, as well as an airport. Local politics are very stable (Labour), which has enabled the establishment of a strong local authority. Manchester's urban regeneration policy is closely in line with the Urban Task Force's recommendations.

Sustainable urban development is viewed as the physical regeneration of wasteland, vacant buildings and residential areas. Residual spaces have been filled in, old buildings renovated or replaced, and over 2,000 apartments have been built each year, mainly in the form of large building complexes.

Many regeneration projects have been implemented in East Manchester, including the conversion of Ancoats Mills, the development of an eco-district on the site of a former run-down residential area, and the transformation of an industrial wasteland into "Sportcity", etc.

East Manchester: successful regeneration projects...



© CSTB/DR

The regeneration of all these areas has been orchestrated thanks to the New East Manchester partnership.

In January 2007, SportsCity was selected from among 68 other sites to house Britain's first ever super-casino.

This project has become the focus of much criticism, seen as a symbol of a regeneration strategy that is based primarily on developing private property rather than on the quality of the environment and meeting the needs of families.

In 2007, the City of Manchester published a *Development Guide* which reflects a desire to take sustainable development requirements into account. This guide sets out environmental standards for the building sector (energy efficiency, renewable energy, microgeneration, water and waste management, green building guidelines and protecting biodiversity). For the moment though, these are just simple recommendations that have been taken on board in a handful of "model" projects.

Industrial wasteland versus the attractiveness of urban life in Lille Metropolis

Annette Groux

Head of Spatial Planning and Urban Renewal for the Urban Community of Lille Métropole

The Urban Community of Lille Métropole (LCMU) encompasses 85 communes and has a population of around 1,100,000 inhabitants in an area of 611.45 km² (236 square miles). It consists of two major agglomerations, 50% of which is classed as an agricultural area. In addition to its "traditional" powers in the areas of planning, land use and housing based on planning documents, the Act adopted in July 1999 relative to improving intercommunal cooperation entails a whole new range of issues for the LCMU to deal with. New community powers (economic development, preserving the natural heritage, etc.) have entailed the introduction of the agglomeration tax on businesses (*taxe professionnelle d'agglomération*). The LCMU has become a strategic development tool for the area.

A particular urban framework and landscape

The Urban Community of Lille consists of two urban hubs: Roubaix-Tourcoing (200,000 inhabitants) and Lille (230,000 inhabitants). Such urban polycentrism developed around industrial manufacturing and the rise of the single industry, textiles, during the 19th century. The urban landscape has been profoundly affected by this industrial past, as well as by a wave of building large estates in the 1960s and 1970s, redevelopment operations in the centre (Euralille) and the arrival of the high-speed train link.

The metropolitan area has not been spared by industrial decline, which has brought with it unemployment, social problems and urban degradation in many forms. The closing of the coal mines, industrial decline and, especially, the decline in the textile and clothing industry, the restructuring of transportation have all left many spaces completely vacant. In 1993, almost 50% of all

industrial wasteland in France was to be found in the Nord Pas de Calais Region, mainly in the former mining area, the region around Valenciennes and the Lille agglomeration.

Trends in spatial planning and urban planning

Since 1991, the LMCU has been implementing a “revitalised city” policy in a bid to turn degraded areas to good use, improving their value and the quality of life of the inhabitants and boost development across the metropolitan area. This blueprint is embodied in the Local Urban Planning Scheme (PLU) and is reflected in efforts to curb urban sprawl, mainly by setting an objective to build two-thirds of housing within the existing area. The urban renewal policy lays out measures for redeveloping certain priority areas, which account for 20% of the territory. These areas are sites that are considered disadvantaged, in the broadest sense of the term, and likely to be subject to ecological inequality.

In application of the Decree of 13 September 2005, the LMCU acts as the manager in charge of the urban planning document, firstly, in the process of cleaning up the site for the purposes of the permit and, secondly, in deciding on what use it should be put to when industrial sites that are listed for the protection of the environment (Installations Classées Pour la Protection de l’Environnement, or ICPE), are shut down.

For example: Onduclair was an “ICPE” on an industrial estate in Wasquehal from 1957 to 2005. As part of its plans for the city centre, the commune decided to develop housing on this site. Lille Métropole was therefore called upon to change the land zoning policy in the PLU and grant approval to change the use of the land.

The procedure took 23 months to complete, thus demonstrating the problems involved in terms of timing when planning to change the use to anything other than industrial. The zoning in the PLU does not overlook the possibility that a site may be polluted and the petitioner for any project must furnish proof that the planned land use is compatible with any residual soil pollution.

Reconciling public issues and private interests

In view of the attractiveness of redeveloping industrial wasteland, in a context of curbing urban sprawl and a proactive urban renewal policy, the private sector has been hit hard by the ensuing pressure on the property market. On the other hand, the public sector’s financial resources are being cut, in the case of local authorities and the State alike. If the rise of the private sector may be seen as an opportunity in terms of the financial resources and expertise it may bring, it should nonetheless be aware that its interests may conflict with the general interest of the community or the commune. It is therefore preferable to define procedures in advance so that all parties get what they want and that they all assume responsibility in the process of urban renewal.

Does the extension of the precautionary principle spell the end of urban renewal?

National policy regarding polluted sites and land designed to improve the protection of health and the environment has been tightened up thanks to a number of decrees. At the same time, case law has changed the role of the mayor to make him/her more accountable for management of polluted land. The Ministry considers that it is not up to the Regional Directorate for Industry, Research and the Environment (DRIRE) to impose measures that become necessary due to a change in land use and that managing any potential risks should come within the scope of the mayor’s responsibility for general health and safety, who should therefore carry out any investigations deemed necessary. Consequently, communes and private developers are responsible for a change of land use, especially with regard to health risks to future residents. The mayor’s role has thus changed, making him/her more accountable for polluted land, even though this change is not the subject of an Act clarifying the legislation.

As a result, implementing the principle of urban renewal has become complex in legal term regarding the health precautions that should be taken, and very expensive in terms of the cost of land in urban areas, demolition costs and cleanup costs. The future of this policy is therefore anything but certain as far as the local authorities are concerned.

Compacity, urban sprawl and transport issues in Mediterranean cities

Olivier Soubeyran

Professor at the Université Joseph Fourier in Grenoble, Institute of Alpine Geography, UMR CNRS Pacte-Territoires Laboratory

A great deal of rhetoric surrounds the concept of the sustainable city, worldwide, and its implementation in different national planning contexts is interesting. The ways in which the concept of the sustainable city filters down into local culture and enriches the concept of sustainable development are worth closer examination, and, together with the comparison of different cases, can help improve our understanding of what sustainable urban development really implies.

Urban renewal and preservation are two basic components of sustainable urban development.

The question is knowing what exactly is meant by urban renewal and preservation given that the distinction between the two is blurred and that the one often works to the detriment of the other. We should then focus attention on the systems involved and the compatibility of architectural preservation and social renewal.

The problem of scale has been studied in experiments carried out in Germany: to meet the challenges of the current ecological crisis, there are local solutions that are not transferable. A national solution is not necessarily compatible, for reasons to do with logic or time, with the solution to the same problem dealt with locally. A planned, forward-looking approach is not compatible with a reflexive, or even retroactive, approach to sustainable development. Non-sustainable urbanisation and urban planning experiments are judged in light of ecological, economic and social aspects. But it is no longer possible to deal with one of these key aspects by dealing with another: an ecological problem cannot be reduced to a social problem. A substantial improvement in one of these key areas usually results in a serious degradation in one of the other two. In spite of the corrective measures we may implement on the side, non-sustainable urban planning produces the very things that are destroying us and destroys the very things that produce us. The major step forward, proposed in these sustainable urban models, involves producing what is productive and destroying what is destructive. The crux of the question is then to figure out the best way to analyse how sustainable urban models work in relation to this change.

Naples and Barcelona: two different approaches to reconciling density and sustainability

Floridea Di Ciommo

Economist, Urban Planner and Researcher at the Politecnica University in Madrid

Traditionally, the debate on sustainable cities focuses on analysing the social and economic processes at work and ignores any analysis of the environmental aspects. The approach developed by the *Politique Ecologique Urbaine* movement “re-centres” the debate on Nature in the city and reveals the extent to which the urban environment is also affected by the experience of social and environmental problems. How have these two cities integrated the concept of sustainable development? What approaches, methods, institutional changes and new practices have been implemented to promote sustainable development? Do they serve to develop cities that are “really” sustainable? By sustainable development, we also mean a redistribution of or equal access to resources, in this case to urban resources. How do the various levels of territorial governance promote these two aspects? How does integrating sustainable development into urban spatial planning, by the planning authorities, impact on the conditions for access to urban resources?

In Spain and Italy, responsibility for local and regional planning is decentralised. The requirements of sustainable development are integrated through urban planning policy on various scales: every region has authority to organise urban planning and defines its own laws for governing the territory. The State acts as mediator to ensure balance and solidarity in the inter-regional distribution of sensitive resources: water in Spain, tax resources in Italy.



How do they conceive sustainable development ?

In these two countries, sustainable development is conceived in different ways depending on the territorial scale involved (national, regional or local). In Italy, the national government has declared its primary concern is environmental, while the regions are focused more on the socio-spatial issues of access to urban resources.

In Spain, the national conception of sustainable development is intricately linked to protecting the coastline and water resources. Nonetheless, in the regions, this conception is geared more to spatial development.

The institutionalisation of sustainable development in Naples began in the mid-1990s. The aim of this is to make urban planning documents for metropolitan areas more mutually consistent. This mainly involves inter-relating the various urban plans, and, in particular, working to integrate the different network plans, in line with social and economic objectives (links between poorer and richer districts) and ecological objectives (taking biodiversity and volcanic risks into account). Spatial planning in Barcelona is distinctive in that it is regulated by sustainable development criteria: maintaining the compactness of the City of Barcelona, a growth strategy focused on urban centres, implying counterweight cities where people should be able to live and work.

These two cities have several key points in common: restricted geographical sites (relief, coastline), important role played by urban planning experts in policy decisions, and the same institutional complications: both have given up on the idea of setting up an intercommunal territorial authority to deal with the issues of sustainable development, and the two cities have a similar urban heritage embodied in a compact urban form. However, they have taken different approaches to integrating the prerogatives of sustainability into urban development. While Naples is trying to make a compact city more spacious by creating urban parks and gardens in interstitial spaces,

Barcelona's urban plan is based on reclaiming public spaces and creating urban hubs. In both cases, these approaches reflect a determination to "recentre" urban development on Nature. This implies re-establishing a certain balance between public space and housing in Barcelona, and, in Naples, prohibiting construction on the scarce green spaces that are available in the urban area. As a result, the aim of upgrading transportation infrastructures is to improve the quality of urban life and urban mobility in Naples, whereas, in Barcelona, it is to contain dispersion into the peri-urban areas within the agglomeration of Barcelona by developing compact "counterweight cities".

In the two cities, the relation between the concept of the sustainable city and the approaches developed to achieve it differs. In Naples, a pragmatic approach is taken, according more importance to approaches than to concepts, whereas a more theoretical and strategic approach underlies the sustainable urban development model applied in Catalonia. In Barcelona, the compact, diversified and complex city is seen as the model to be referred to in terms of urban ecology, while in Naples, developing the sustainable city is based on the idea of urban accessibility.

In Italian cities, transportation networks are planned in relation to spatial planning, whereas in Barcelona, urban regeneration was initially based on consolidating the urban hubs, to then go on to develop a network of compact cities outside the metropolitan region.

Naples: Inter-relating urban planning and transport infrastructure planning

In Naples, this inter-relation of transportation infrastructures and spatial planning has resulted in the planning and programming departments taking the issue of use into account in drawing up policy on infrastructure. For example, working-class districts in the east of the city (at the foot of Mount Vesuvius), which are subject to various social disadvantages, were cut off from the rest of the city due to the presence of road infrastructures. These have

been demolished and replaced by a metro station designed to link this part of the city to the centre and to serve as a new urban hub for this district. Another example is the working-class district in the north of the city, where the problems are social insecurity and run-down housing, which has been the object of a policy to improve public transport accessibility, with a new station linking to middle-class, more affluent districts. This new social mix instigated by public transport services has become a source of social tension and conflict between young people.

Barcelona: consolidating the compact city and integrating development of the city in an inter-urban network

In 1995, the *Generalitat* drew up a territorial plan for the entire region of Catalonia and approved the master schemes and general plans for the City of Barcelona. The principles set out in all these planning documents incorporate environmental, social and economic aspects. Rather than taking account of current dynamics in the region, the approach taken is aimed at providing the impetus to develop new dynamics: Barcelona's sustainable urban planning policy highlights the issues at stake beyond the metropolitan area, within an extended regional urban arc that will form a network of 16 cities channelling growth from the metropolitan region. The principles of sustainable development are thus applied in two forms: maintaining the compactness of the City of Barcelona with a view to environmental sustainability, a growth strategy focused on urban centres, implying counterweight cities where people should be able to live and work.

This comparative analysis highlights an approach to sustainable urban development that is pragmatic in Naples and strategic in Barcelona, and where each has its limits. In the case of Barcelona, local and regional dynamics are inadequately accounted for: will people go and live in the areas provided for urban expansion under urban planning master schemes? In wanting to extend the compact city model to the network of medium-sized cities, the territorial planning scheme aims to create a mix of urban uses and an autonomous local labour market in these cities. However, it is not certain that the planning tools and approaches

implemented (the proportionality rule of one job per inhabitant, etc.) will make it possible to reproduce this compact city model on a larger scale. In the case of Naples, the importance placed on spatial planning to the detriment of strategic planning restricts the inter-relations between the three aspects of urban development.



Via Julia (1985)

Barcelona: conceiving sustainable development at a metropolitan scale

Francesc Magrinya

Professor at the Polytechnic University of Catalonia, Spatial Planning and Transport Department

Up until the 1970s, Barcelona had little concern for the quality of the urban environment. Things changed with the re-establishment of democracy, and the city's action has since been focused on the idea of the urban project. With the emergence of sustainable development discourse, a new approach has been developed that gives priority to designing quality public spaces. It is impossible to understand the transformation of Barcelona without taking into account the role of the associative movements during the 1970s. These associations were made up of technicians, some of whom succeeded in being elected or in becoming city councillors who brought with them an excellent understanding of the city's problems. They initiated a discourse on upgrading urban centres and the monumentalisation of the surrounding area, then considered to be lost space, of poor urban quality, that needed to be re-integrated into the city centre.

During the 1980's, the discourse on cleaning up the city began to adapt to changes in the city and, with the increasing vogue for the "service city", the discourse took a more culturalist turn. To meet demand for facilities and "space to breathe", a first series of areas (mainly industrial) were repurchased by the city during the industrial crisis, from 1975 to 1985. This period also saw a number of cooperative initiatives between the City and the School of Architecture, famed for encouraging innovative design.

Street furniture as the benchmark

From the 1990s on, the City of Barcelona began to show a particular interest in street furniture, while it continued to reclaim space, as demonstrated in the Ronda de Dalt project. The library, of high quality design, which stands above a busy main road (La Ronda de Dalt) close to an area of large estates, was built in response to criticism of the City of Barcelona for its lack of investment in public transport services and the low standard of facilities on large estates.



Street furniture in Avenue Guipuzcoa

© CSTB/DR

The compact, complex and diverse Mediterranean city

In the context of competitiveness and sustainable development, Barcelona's strategy has been to promote compact development in the city whilst pursuing its work on public space. The challenge involves successfully reconciling mixed land use and developing public transport. A joint project undertaken by the University and the Urban Ecology Agency has led to a number of



The district of La Ronda de Dalt before and after

© CSTB/DR

pilot schemes to reclaim public space in light of sustainable development, based on the theories of Cerdà. Cerdà conceived of the city in terms of four principles: the independence of the individual in the home, the independence of the home in the city, the independence of means of transportation (physically separate on the roads), and ruralising the urban and urbanising the rural.

A study is currently in progress on the relation between public space and traffic space. This involves “specialising the city”, by reserving certain streets for traffic and considering others as public space. Promoting sustainable development implies giving priority to pedestrians, then to cyclists, then public transport and lastly to car users. Roads are designed in accordance with this principle, as well as with that of the independence of different means of transportation. Traffic simulation experiments based on these principles have been carried out in the old quarter of Gracia, using a main network for cars and diverting vehicles away from the roads and narrow streets that are not part of this network. This simulation only resulted in a drop from 40,000 vehicles to 38,000 an hour. In El Prat de Llobregat, a network of pedestrian streets and a cycle network have been developed to deal with the conflict between these two forms of transport in Barcelona. The aim of these various projects is, eventually, to integrate the three networked mobility systems. The next stage will be to prohibit street parking. To do this, all public spaces that might be used as car parks have been identified.

To promote this approach, certain indicators have been defined in partnership with the Urban Ecology Agency as a policy decision aid: a compactness indicator (e.g. minimum 2.50 m for pavements, minimum criterion relative to space for sociability), a complexity indicator (the Shannon biodiversity index applied to urban diversity), an indicator of social mix (cross-referencing age and geographic origin of inhabitants, public facilities, public transport networks and pedestrian networks).

On the scale of the agglomeration, spatial planning sees preserving green areas as the priority.

A “coastal system master plan” has been established, with a view to reclaiming a 500 metre-long strip of coastline and to stop property speculation on agricultural and non-urban land. High-density hubs within the conurbation have been created to make the agglomeration more compact, with the underlying idea of the urban project, i.e. of progressive urbanisation.

AGENDA 21 BARCELONA

Discourse on sustainable development first appeared with the Agenda 21 movement, which initially involved one-off initiatives, such as erecting solar panels in a football stadium. Later, a whole series of experimental projects were carried out: “recycling points”, waste sorting units and gas-powered buses, etc. Agenda 21 now includes 100 measures.



Library built over La Ronda de Dalt

© CSTB/DR



Panoramic view of the site and police station project

Compact cities, environmental quality and mixed use: the issues at stake in the high-density city

Roberto Gianni

Head of the Urban Planning Department in Naples

Since 1945, the surface area of Naples has increased six-fold. The city has failed to develop the urban facilities required for the smooth running of a modern city and this urban growth has arisen to the detriment of the environment, without being accompanied by competitive economic development.

In the early 1990s, the degradation of urban space could be seen in excessive urban sprawl, with outlying areas characterised by extremely poor public facilities and services. Today, the local economy is centred on the building sector, which is regulated in law, although not in practice. Property speculators invest substantial financial resources in these sectors, to the detriment of the local economy which is getting poorer and poorer. The lack of any urban planning scheme does not allow the political powers to deal with the city's major problems, namely the weak economy and environmental and social degradation.

Citizens take action in response to the deterioration in the quality of urban life (1970-1980)

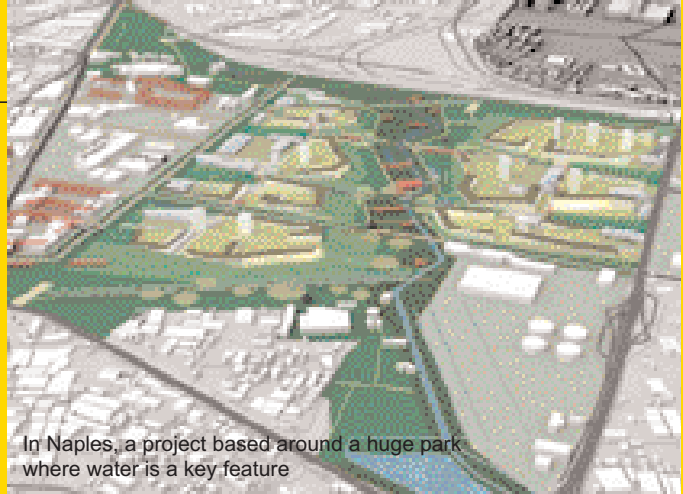
In his film *"Le Mani sulla Città"* (Hands over the City), Franco Rosi denounces property speculation that is spreading urbanisation into the most amazing sites with total disregard for the local urban planning text, the *General Regulatory Plan* (PRG). Following an initial period that ended with the urbanisation of the hills around Naples, with building of mediocre quality, a second phase, in the 1970s, saw the illegal construction of buildings, especially in *Pianura*, a district on the northwest outskirts of

Naples. Then, at the end of the 1980s, expensive and unnecessary road infrastructures were built, generating a wave of 'urbanistic consumerism' that decimated the city's financial resources. The public good is subjugated to the private interests of property speculators, who take advantage of the corrupt political authorities. Consequently, the city is being transformed with no respect for the historical and environmental heritage. Throughout this period, the deteriorating quality of urban life has led to growing awareness of environmental issues on the part of a section of the city's inhabitants. This citizens' movement is gaining ground and a local political opposition force has formed. This citizens' action has led to improvements insofar as concerns protecting the heritage and cultural identity of Naples.

1993 - a turning point

In 1993, the deteriorating quality of the city and the inefficiency of the local authorities led to the election of a new mayor, Antonio Bassolino. Urban planning was one of the priorities set out in the new city council's political agenda. A new regulatory plan founded on a double strategy of preservation and urban renewal served as the basis for sustainable urban development. It aimed to achieve a satisfactory standard of urban environment, seen as the essential prerequisite for sustainable social and economic development in the city. Preservation mainly implies the historic centre and the rare residual green spaces. Urban renewal primarily covers two former industrial areas, with the aim of making Naples economically competitive internationally.

The new *General Regulatory Plan* combines intervention, preservation and transformation. There are no plans to extend urbanisation but rather to revitalise urbanised areas. The new PRG introduces shared rules into local urban development policies, thereby favouring social cohesion. In particular, it provides incentives for business players to gear their initiatives toward promoting the development of a healthy market instead of property speculation. Transforming the outskirts of the city,



In Naples, a project based around a huge park where water is a key feature

© CSTB/DR

especially industrial brownfields, is intended to promote economic and social development thanks to new facilities. To this end, the redevelopment of two major industrial areas of the city, Bagnoli and the East industrial area, is a major project under the PRG.

Improving links between the centre and the outskirts

Redeveloping the East industrial area amply demonstrates the urban regeneration policy promoted by the new PRG. This area is atypical in that it is close to the city centre and diverse urban functions are combined there. Located on the edge of Vesuvius, it has good water resources and includes farms, housing, factories and workshops, although mainly industrial sites. The site is poorly adapted for modern economic development due to the run-down state of the urban spaces, the limited existence of urban amenities and oil depot and oil pipeline. There are also many gaps in the urban space created by oil pipes and road infrastructures that cross the area without catering for it.

This area has the advantage of being located just on the edge of the city centre and linked to a new metropolitan rail network. The regeneration project for the city, which includes a high-density zone and a low-density zone, provides for 420 hectares of business districts, an urban park covering 170 hectares and crossed by the River Sebeto, 18 hectares of urban boulevards, linking the project site to the high-speed train railway station. Redevelopment work at this site will consolidate the centrality of the city and the links between the centre and the outskirts. In addition to this project, the commune's transportation plan provides for the extension of the metropolitan network and does away with motorway access interchanges that are not suitable in environmental and operational terms.

Maintaining mixed use

In this area, the project provides for a new marina and leisure facilities; relocation of the Engineering Schools and the Faculty of Law; a new hospital to be built and the central national police headquarters.

The urban regeneration process is funded through public and private investment. Factories are being converted in line with criteria relative to the integration of buildings, roads and public space. The project approach allows for a certain degree of flexibility, but makes it more difficult for the local commune authority to control quality. This process places greater responsibility on the latter, since it designs the urban regeneration programme covering the various projects. The urban planning department monitors the various urban operations to check their coherence and keep public funding to the minimum. This regeneration process raises the value of land and the public authorities, especially the regional authority and the commune authority of Naples, have a substantial arbitration task to prevent, for example, large shopping malls being built instead of production companies. To this end, they provide support for setting up production activities that are environment-friendly.

Transforming an area while ensuring environmental quality and attracting businesses

The low-density area is currently home to oil depots and these must be relocated for the urban redevelopment operation to go ahead. This is a costly and complicated operation since several institutions are involved. In these relocation operations, the oil companies are supported by a semi-public development company, *Napoli Orientale*, made up of representatives of the commune, the region, the province, the port authorities, employers' unions and the workers' unions. The main idea of the project is to organise urban regeneration of the area around the development of a 170-hectare park. The aim is to recreate a landscape where water is a main feature and to house business activities related to the environment in the mills and the farm and industrial buildings. This urban park will be surrounded by

sports and leisure facilities compatible with sustainable development. It is still too early in the day to assess this project, but the new urban planning regulations seem to be in line with the objectives of sustainable development since they take account of Naples' historical and environmental heritage, and also allow for economic growth, space-saving schemes and the conservation of the city's cultural identity.

The urban redevelopment plan for the East industrial area, which covers over 200 hectares, is aimed at replacing the former industrial sites with high-tech activities in a quality urban environment. A huge urban park is planned, together with road infrastructure and new metropolitan railway stations. A number of players are directly or indirectly involved in redeveloping these industrial sites. This implies conflicts of interest, especially between the oil companies, which do not all agree to relocating, the Naples port authority which is looking for new urban spaces to expand its own activities, and the citizens' associations who want more public space of better quality. Implementation of this urban renewal plan comes up against various obstacles - high costs and lengthy time schedules for transferring oil activities and the rising prices of property following approval of the new general regulating plan, which may make it difficult for new production companies to locate to the area.

Sustainable urban development in Germany

Denis Bocquet

Researcher at the CNRS-LATTS, Ecole Nationale des Ponts et Chaussées, University of Marne-La-Vallée

Analysis of the German position not only allows us to consider what a sustainable city is and how it can be built, but also highlights the ambiguities inherent in the sustainable city discourse. What are the objectives of the sustainable city and how can they be achieved? How can choices at the local level be tied in with those at the national level? How can the same people make choices at the local level while approving contradictory choices at the national level? Political ecology in Germany is engaged in a balancing act between local and national interests. Analyses of sustainable urban development at the local level need to be reconsidered in light of these national interests. We must break away from the idea - often expressed in France - that Germany is a country where local government prevails. In Germany, the federal government and the *Länder* play an important role, including in urban planning. We must not lose sight of the fact that Germany is still the driving force behind European industry and the discourse on sustainable urban development is no longer politically opposed to growth and anything that sustains it.

The question of sustainable urban development can also be posed in terms of quantity. It is surprising that Germany organises urban forums on the recycling of household waste, but does not do for energy policy choices, which are far more important in quantitative terms. While he was Chancellor, Mr Schroeder decided to build the German energy sector entirely around Russian gas and imported coal, committing the country for at least five decades. Although this decision was made at a time when the "Green" party was in the government, no resignations were handed in. Germany's choice was to do with energy security and building normal relations with Russia and had little to do with sustainable development ideology.

The country has nevertheless defined new ecological standards concerning sustainable cities at various levels of government, particularly in the area of housing.

The specific feature of the German approach to sustainable urban development can be seen in construction quality and participation.

German urban planning has largely inherited the ideology of the "green city", one of the great classics of 19th century urban theory. At the end of the 20th century, however, the green - but sprawling - city has become the subject of debate in a period where the compact city is considered more virtuous in terms of energy balance. This reversal in values opens the debate on the value of the green urban model, a situation which is quite the opposite of that seen in France, where the compact city is the starting point. What corrections can be made to this inherited urban form and what urban form should be promoted? How can home ownership be encouraged in a country where most of the population rent their homes, without contributing to urban sprawl? Some changes in society are inconsistent with the notion of sustainable urban development.

Germany is well ahead of the field as far as building standards aimed at improving the energy balance are concerned, as well as in its efforts to encourage experimentation in energy use in housing. Many questions are being raised, however, in the field of transport. For what is the future of public transport in a country where the personal vehicle is so central to life, where the motor industry contributes so much to the country's exports and where the image of the national territory is based on the motorway network? The other major question is what will become of regional planning? Germany has a longstanding tradition of debate in this area but, paradoxically, as sustainable urban development moves to centre stage, the country has begun to challenge regional planning mechanisms at both the institutional and political levels.

Munich, a thriving western city

Ever since the 1990s, Munich has managed to build an urban marketing discourse on sustainable urban development that is tied in with a considerable amount of work on urban form. In 1993, the city set up a sustainable urban development programme aimed at fighting sprawl and promoting urban concentration. It played a pioneering role in giving due consideration to the quantitative value of CO₂.

In the mid-1990s, one municipal department turned its attention to energy balances and ways of improving them, in particular by reviewing transport networks.

The chief aim is to combat "radial" networks in an attempt to promote urban development around transport nodes instead of following the controlled sprawl model adopted previously.

The city also has a multi-tier road system with the widespread use of "Tempo 30 Zones" and increased use of 30 kph speed limits in districts bounded by major roads.

Channelling traffic flows and organising them around a multi-tier system makes for greater acoustic comfort and a better quality of urban life.

Berlin - difficulties in overcoming its contradictions

In addition to its city-wide Agenda 21, Berlin also has an Agenda 21 specific to each of its districts. Another outstanding feature of the city is its experience of participation, although this has more to do with social than environmental politics. Berlin reflects all the ambiguities of the fight against urban sprawl in Germany and, in spite of incentives, regional planning comes up against difficulties outside the city limits.

Housing estates for Berliners eager to buy their own homes are springing up in all the small outlying communes. The city, which was already enormous, has sprawled even farther along the motorways.

Hanover, a city with a political and socially-aware intercommunal approach promoting sustainable urban development

Ursula Paravicini

Architect and Professor at Leibniz University in Hanover

In Germany, Hanover is looked up to as a model of intercommunal organisation and sustainable development. The city is the administrative capital of the *Land* of Lower Saxony as well as a major North German agglomeration which has begun to occupy a new strategic position at the heart of the enlarged European community. The extremely fast process of de-industrialisation and the shift to a service-based society, combined with the massive influx of often poorly-skilled people of German descent from the former Soviet Union, Poland and Hungary, is reinforcing tendencies towards social polarisation and inequalities regarding access to the city's resources. Faced with this situation and the scattered peri-urbanisation that the agglomeration is currently experiencing, the big question that Hanover must answer is how to reconcile the goals of social and geographical equality with the desire to stimulate and boost economic growth to make the agglomeration competitive. For Hanover, the answer lies in its urban policy and intercommunal structure.

The fact that citizen participation has become such an integral part of intercommunal management and of sustainable development as an urban planning objective is closely related to the demonstrations on social issues in the 1970s fuelled by the 1968 student movement and later by the Green militants. However, it was not until a Social Democrat was elected as Mayor of Hanover in the early 1980s and a Social Democrat (SPD) – Green (*Bündnis 90/Die Grünen*) coalition came to power in the *Land* government that the intercommunal approach began to play a major political role in Lower Saxony. The process of building intercommunal administration led to the creation of *Region Hannover* in 2001, which brings together small and medium-sized towns and rural communities around the central city. Politics and citizen participation are reflected in three main aspects of intercommunal management:

A politico-institutional structure elected by universal suffrage that establishes citizen participation as a legal right

Intercommunal affairs are managed by the intercommunal assembly, the intercommunal council, the parliament of *Region Hannover* and the President, who is elected by universal suffrage. According to the principle of citizen participation, citizens may launch initiatives and, in a number of clearly defined cases, make decisions.

A sustainable development policy rooted in a creative Agenda 21 initiative

The intercommunal sustainable development policy follows on from the one implemented by the city of Hanover. In 1995, the city signed the *Aalborg Charter* to implement a local Agenda 21 initiative, providing for: local democracy based on citizen participation; the safeguard of collective resources such as climate, water and green spaces; incentives to promote responsible lifestyles and consumer attitudes; balanced spatial planning; improved mobility for all citizens; preventive healthcare; support for an innovative local economy and overall responsibility for local action.

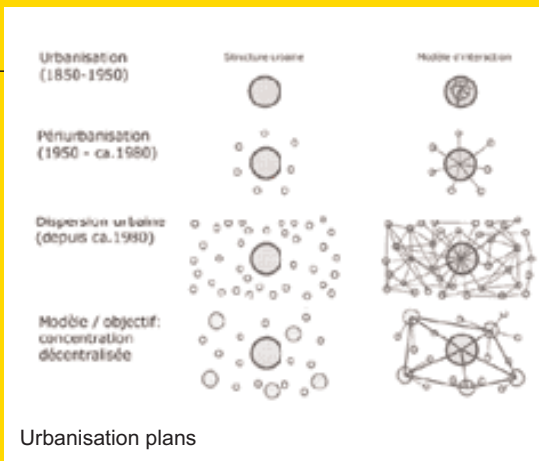
Hanover's Agenda 21 initiative has an eye to the long term and is based on solidarity between generations, countries and social groups. It seeks to combine social, economic, environmental and political aspects.

It places local democracy at the heart of things by initiating many forms of citizen participation.

Areas of responsibility of intercommunal bodies and the principle of financial equalisation among communes

Intercommunal bodies are responsible for public transport, spatial planning, economic affairs and employment, hospitals, social welfare, support for young people, vocational schools, waste collection and planning and promoting social housing. This list shows that intercommunal bodies are chiefly responsible for spatial planning, economic affairs and employment. Grouping these responsibilities together within a single organisation makes for consistent urban policy. Doing so is crucial to - though does not absolutely guarantee - the sustainable development of the agglomeration.

In legal terms, *Region Hannover* is a regional authority which exercises direct administrative authority over the communes within the intercommunal area and guarantees that their



activities are legal. The financial equalisation principle is vital if the intercommunal area is to assume its responsibilities. Even if the responsibilities of the intercommunal area and its administrative authority are clearly defined, the various intercommunal bodies act as a moderator between the communes and their citizens. The intercommunal approach adopted in Hanover is built on a culture of negotiation and consensus.

Initiatives and concepts aimed at sustainable development

We should remember the role played by associations, militants and, later, the elected representatives of the Green Party in the creation of the Agenda 21 initiative, at both the local and intercommunal levels. Bearing that in mind, it comes as no surprise that ecological and environmental concerns and objectives are central to sustainable development initiatives. The Agenda 21 initiative was kicked off in 1992 with a commitment to reduce CO₂ emissions by 25% by 2005 (based on 1990 measurements) and to abandon the use of nuclear power. The same year, the Hanover city council launched a climate protection programme, applied throughout the intercommunal area, aimed at cutting greenhouse gas emissions by 60% in ten years. A host of local, private and public players took part in the programme, including the Hanover city council, *Region Hannover*, the Hanover gas and electricity company, many associations and chambers of commerce and industry. The programme includes a number of outstanding provisions, such as the creation of a municipal gas and electricity company that uses biomass, incentive and awareness programmes on energy saving that target businesses, households and schoolchildren and the implementation of a cross-sectoral sustainable (or “soft”) mobility strategy at the intercommunal level. Despite this, the energy sector is where the biggest contradictions and obstacles are to be encountered. Germany is the most motorised country in Europe and the motor lobby is particularly powerful there. Lower Saxony is home to the *Volkswagen* motor company, which weighs heavily on the economy of the city and the *Land*. Conflicting interests between citizens-cyclists and motor lobbyists are manifest. In this scenario of diverging interests, it is all the more important for

intercommunal organisations to act as mediator and to promote a wide range of incentive and awareness programmes aimed at drumming up citizen support for jointly defined objectives as part of Agenda 21.

The intercommunal authorities are responsible for spatial planning all across the intercommunal area with a view to sustainable development.

This means that planning is extremely restrictive with a strategic element that incorporates urban planning, environmental protection and economic and social development. If sustainable development is to be achieved, spatial planning must overcome a series of major problems, including: de-industrialisation and the spread of industrial wasteland, peri-urbanisation and residential dispersion into outlying areas, social and ecological inequalities and demographic ageing and stagnation. It can do this by exploiting economic and environmental assets that must be brought to the fore in an effort to enhance the city’s appeal. To address these issues, sustainable spatial planning is based on two central concepts:

The “**city of short distances**” is a cross-sector sustainable development concept which combines a social aspect (amenities and services accessible to all) with an ecological and environmental aspect (cutting down on mobility and protecting the environment).

“**Decentralised concentration**” organises urban development throughout the intercommunal area around prioritised growth centres. For this purpose, urban planning documents define urban growth rates and tight restrictions on the location of residential and economic activities. Thus, communes with poor commercial infrastructures and few local community-based services are only entitled to 50% urban growth at the very most. The permissible urban growth rate, however, is chiefly determined by public transport. Just like the “city of short distances”, this “decentralised concentration” concept incorporates social and environmental aspects with a view to sustainable development.

Spatial planning puts the environmental aspect well before the social aspect.

The preservation and coherent development of green spaces have always been a priority for spatial planning in Hanover right across the intercommunal area. It is worth noting that, green spaces apart, very little attention has been given to urban public spaces.

The *Kronsberg* district was built as part of a model sustainable housing project for Hanover's Expo 2000. The project was awarded special subsidies from both the federal and *Land* governments.

In a country which has stopped building social housing, *Kronsberg*, with its social housing complexes standing alongside private houses, is quite unlike any other current project in Germany. The contradiction between the sustainable development objectives of Hanover's current intercommunal authority and national policies is quite blatant here. The *Kronsberg* project is experimental in ecological and environmental terms. This experimentation has covered every aspect of design and construction: urban planning for building a "green" district and fitting it in with the landscape, systems for collecting rainwater and runoff in a landscaped environment and experimental approaches to thermal insulation, energy saving and solar energy generation.

Building on these experiments, Hanover has managed to initiate knowledge transfer right across the intercommunal area. New regulations on energy saving and rainwater runoff have been enacted, applying to both existing and new buildings. Builders, architects, urban planners and landscapers have adopted new, more eco-friendly methods.

Hanover stresses that sustainable development must be understood as an ongoing process with an eye to the long term, incorporating social, ecological, economic and political aspects. When it comes to putting spatial planning into practice, the ecological and environmental aspects are the chief concerns, while the social aspect is treated as the poor relation. There is a gap between professed sustainable development ambitions and the initiatives and resources made available. The lack of any social housing policy is the most serious handicap. That being the case, spatial planning cannot be considered as a success. Hanover can be seen, however, as an example of a political and socially aware approach to intercommunal administration. Strategic sustainable development policies are defined in association with various forms of citizen participation. This motivates local players to work towards sustainable development objectives, put their collective intelligence into general interest projects and unite their efforts to solve priority problems. The limits of this type of process are the cumbersome procedures it entails. These can, however, be largely offset by obtaining citizen support for jointly defined projects.

Jean-Loup Dubrigny

Secretary General of the French National Council for Cities, Director of the URBACT Programme

An international conference on land use has just been held in Stuttgart. Germany's Federal Minister of Transport, Building and Urban Affairs declared that the federal government was very concerned about the consumption of space. At present, the building sector is consuming 115 additional hectares per month across the country. The government's goal is to reduce this figure to 20 hectares per month by 2020. These figures are striking and no French minister has ever made a strategic declaration of this type. The debate is, of course, related to the use and reappropriation of available space in German cities. Urban upgrading is about recovering abandoned spaces and "reinventing" the compact city and so on. In some cities like Leipzig, however, this model cannot be developed because so much was destroyed during the war. This has led to the invention of an extremely interesting concept known as the "perforated city". The city has been mapped out and sectors for development and sectors to be maintained have been defined. Other sectors have been set aside, either for the development of green spaces or as transitional spaces for possible future use. In addition, the Mayor of Stuttgart has declared that within the coming five years, more than 50% of children attending the city's schools will be of immigrant origin. Demographic change has an extremely strong impact in Germany as well as in much of Eastern Europe and some parts of France.

An ageing population and a drastic drop in birth rate are among the major challenges facing many European cities.

There are a number of important points to be considered here. Issues relating to demographic change are having an extremely rapid effect on our cities. Migratory flows are extremely impressive, particularly in Eastern Europe, although cities such as Barcelona and, to an even greater extent, Seville, are also affected. A major reversal of migratory flows can be seen in these cities where emigration outweighed immigration as recently as ten years ago. This phenomenon brings with it economic and cultural problems. Issues relating to globalisation and its economic consequences must also be considered, particularly in terms of the arrival of new companies and the departure of those previously based in the city. Cycles have become extremely fast.

Some companies installed in the wealthiest East European countries, such as Hungary and the Czech Republic, are now moving farther east to Romania and Bulgaria and then on to Moldova, Georgia and Ukraine. These successive moves take place in less than a decade.

The pace of change is staggering. Cities must react to situations which can change in less than ten years and follow a new direction. How can a sustainable city be built under these conditions?

Produced by the MUST-CSTB laboratory

Contact: lydie.laigle@cstb.fr

For further information, contact

Evelyne Lemerrier - PUCA - evelyne.lemerrier@equipement.gouv.fr



ministère
de l'Écologie,
du
Développement
et de
l'Aménagement
durables

ministère
du Logement
et de la Ville

Direction générale
de l'urbanisme
de l'habitat et
de la construction

Since it was set up in 1998, the Urban Development, Construction and Architecture Plan, or PUCA, has focused on developing incentive-based research and experimental and pilot schemes, as well as providing support for innovation and the development of scientific and technical advances in the areas of town and country planning, housing, construction and architectural and urban design.

The PUCA is divided across four major departments specialising in key areas of research: **Urban societies and housing**, which deals with urban policies and the underlying social and economic stakes; **Territories and urban development**, which is concerned with the issue of sustainable urban development and planning; **Cities and architecture**, which covers the issues of architectural and urban quality; **Technologies and construction**, which deals with innovation in the building sector; the PUCA also develops incentive-based research projects on the **Future of the City in light of the concept of sustainable development**.

The 2007-2012 Plan includes eight completed programmes whose research goals are intended as a response to future urban challenges. These programmes are supported through themed workshops held to review knowledge and know-how, as well as through cross-cutting programmes at regional level, in cities and at European level, thanks to PUCA's involvement in European research networks. PUCA also covers the Permanent Secretariat for the research programme on energy efficiency in buildings.

plan urbanisme construction architecture

► Le gouvernement des villes et la fabrique du bien commun

Planification sociale de l'urbain et services publics
Citoyenneté et décision urbaine
Intercommunalité et métropolisation
Normes et fabrique du bien commun

► Le renouveau urbain

Rénovation urbaine et mixité sociale
Renouvellement et recomposition des quartiers
Créativité et attractivité des villes

► L'avenir des périphéries urbaines

Territoires urbains et sûreté
Architecture de la grande échelle
Habitat pluriel : densité, urbanité, intimité
Systèmes périurbains et coûts d'urbanisation
Dynamiques et pratiques résidentielles

► Comportements résidentiels et défis démographiques

Vieillesse de la population et choix résidentiels
Habitat et services aux personnes âgées
Évolutions démographiques et inégalités territoriales

► Accès au logement

Trajectoires résidentielles
Recompositions institutionnelles de l'offre de logement
Modes et formes de l'hébergement
Économie foncière et immobilière

► L'innovation dans l'architecture et la construction

Le futur de l'habitat
Logements optimisés : coûts, qualité, fiabilité, délai
Concept qualité, habitat, énergie
Observatoire des bâtiments durables
Palmarès de l'innovation
Évaluation énergétique du patrimoine existant (PREBAT)
Bâtiments démonstrateurs (PREBAT)

► Territoires et acteurs économiques

Espaces urbains et dynamiques économiques
Lieux, flux, réseaux dans la ville des services
Développement économique local et mondialisation
Économie de l'aménagement
Attractivité des territoires

► Vers des villes viables et acceptables

Politiques territoriales et développement durable
Risques technologiques : enjeux économiques et territoriaux
Villa urbaine durable
Quartiers durables
Aménagement et démarches HOE
Collectivités locales et politiques énergétiques (PREBAT)
Collectivités locales et défi climatique (PREBAT)

PUCA - plan urbanisme construction architecture

Grande Arche de la Défense - Paroi Sud
92055 La Défense cedex
tél. 01 40 81 24 72 - fax 01 40 81 63 78
www.urbanisme.equipement.gouv.fr/puca