

ARTICLES

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**ENVIRONMENTAL POLICIES AND URBAN PLANNING
IN SWEDEN.**

Goals, instruments and strategies

Abstract: The main topic of this paper is Swedish environmental policies and urban planning in the framework of the Rio declaration and the Agenda 21 document. Aside from the introduction the paper is in four parts. Taking its point of departure in a survey of the development of Swedish environmentalism during the 20th century until Rio 1992, the paper in the second part analyses the goals and instruments as formulated in the flood of official documents following the Rio Conference. The regulatory, financial and other instruments proposed to fulfil the official strategies are also examined, with special regard to the role of local government in implementing environmental policies. In the third part, some examples of urban environmental planning and policies are presented and critically discussed. In conclusion we briefly highlight some issues of principle to be addressed when examining the processes and outcomes of urban environmental policies and planning.

Key words: environmental policy, urban planning.

1. INTRODUCTION

At the beginning of the 1990s Sweden was still a country with increasing industrial production, marginal unemployment and a comparatively high degree of equality between classes and social groups. Within a year or two the situation had become radically different. Economic growth was on the decline, unemployment had risen to an unprecedented 8–9%, and growing social and regional inequalities were reported by researchers and the media. Neo-liberal economists and non-socialist politicians commonly described Sweden as a nation

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on the verge of bankruptcy, this symbolised by a state budget deficit amounting to one third of total state expenditure. Whatever the reasons, in 1995 there was a decreasing state budget deficit and increasing economic growth. However, unemployment remained at the 8% level, social and ethnic problems were frequently reported, as were corruption and scandals both among national and local politicians and administrators, and among political scientists it became commonplace to talk about the 'crisis of democracy' and 'the end of the Swedish Model'. The surprisingly low voting turnout in the EU parliamentary elections held in Sweden in September 1995 – 41.3% as compared to 86.8% in the parliamentary and 84.2% in the municipal elections in 1994 – was commonly regarded as a sign of political distrust, earlier unheard of in modern Swedish politics.

The crisis of the welfare state in conjunction with the pressures of globalisation has provoked reactions at sub-national levels of government. These reactions have been shaped by particular political contexts and local cultural values. One urban policy strategy that currently seems to be common to many municipalities, towns and cities all over Europe is the **entrepreneurial strategy** aiming at successful competition for capital and jobs. Alongside this growth-orientated strategy we have also seen a strategy of quite another intent, i.e. that of making municipalities, towns and cities **ecologically sustainable**. Of course, the latter strategy has been triggered by the 1992 Rio Conference and its *Agenda 21* declaration, although one should not underestimate its foundation in earlier environmentalist ideas and practices, and in locally articulated needs and demands.

Looking at the strategies pursued by Swedish municipalities, they do not easily fit into either of these two categories, but one is rather struck by the somewhat contradictory co-existence of the two: they seem to indicate the presence of competing urban coalitions/regimes, i.e. urban growth coalitions/regimes and environmental coalitions/regimes. Some municipalities seem willing to become number one with regard to entrepreneurial skill/economic prosperity as well as sustainability, and they display an impressive variety of policy innovations to approach these goals. However, there is one issue that seems to have lost ground in the current debates and policies on urban entrepreneurship and sustainability, i.e. the **social dimension**, and this despite the fact that social and ethnic segregation lately has appeared in Swedish municipalities to an extent earlier unheard of. Thus concentration of immigrants on certain estates has gone so far that the term 'ghettoisation' has even been applied, and the number of people dependent on social allowances has grown immensely, just to mention two manifestations of growing social problems.

Taking this brief survey of current trends in urban policy development in Sweden as a point of departure, the impact of the Rio declaration and the

Agenda 21 document on Swedish environmental policies and urban planning is the main topic of this paper. Aside from the introduction the paper is in four parts. Starting with a survey of the development of Swedish environmentalism during the 20th century until Rio 1992, the paper in the second part analyses the goals and instruments as formulated in the flood of official documents following the Rio Conference. The regulatory, financial and other instruments proposed to fulfil the official strategies are also examined, with special regard to the role of local government in implementing environmental policies. In the third part, some examples of urban environmental planning and policies are presented and critically discussed. In conclusion we briefly highlight some issues of principle to be addressed when examining the processes and outcomes of urban environmental policies and planning.

2. SWEDISH ENVIRONMENTALISM BEFORE RIO¹

The history of Swedish environmentalism during this century describes a route from preservation to sustainability, and covers a number of changes in environmental perspectives and policies which influence the character of the environmental movement as well as its interaction with other spheres in society. From the turn of the century up to First World War concern for local and occasional environmental problems was mostly connected to the pollution of air and water. The effects of these problems seemed immediate and easy to detect. They were regarded as “an archipelago of local problems” (Svedin, 1991). Environmental concern focused on the preservation of specific features of nature for scientific or cultural reasons. There seemed to be no need to protect nature as a whole, even though nature was an important ideological concept with regard to health and nationalism.

During the inter-war period the interest in outdoor recreation increased, adding new reasons for the protection of nature. Locational conflicts around e.g. hydropower plants became more common, an issue that was to remain important throughout the 1960s and 1970s. The organisational basis of environmentalism was very homogeneous and dominated by one organisation – the Swedish Society for the Conservation of Nature (Svenska Naturskyddsföreningen; SNF), which was created in 1909. Focusing on the preservation of areas of scientific, aesthetic or cultural value, particularly through the creation of national parks, the SNF joined together ideas of nature preservation and nationalism. Although its members had a ‘scientific elitist’ perspective on nature, the SNF had nature preservation as its dominant interest and aimed at a broad membership on

¹ This part of the paper draws upon Elander *et al.* (1995).

a nation-wide basis. The creation of the SNF is therefore considered the starting point for the Swedish environmental movement. By 1919, the SNF had grown to 3400 members. When facing both a membership drop and financial problems in the beginning of phase two, the SNF moved from preservation (protection of nature against man) to conservation (protection of nature to the benefit of man). This ideological shift went well with the increased interest of the state and labour organisations in recreation, tourism and outdoor life. In 1948, the SNF established a youth organisation, the Field Biologists, that became an important breeding ground for later environmental organisations.

In the mid-1950s it was increasingly emphasised that different parts of nature were interconnected in complex and delicate structures, a fact that was now discussed in ecological terms. Human disturbances spread through ecosystems, and their unforeseen effects posed a threat even to humans at the apex of food chains. A systematic approach to the environment as a whole was therefore needed. Together with a widespread environmental debate, this led to the creation of state administrative units responsible for natural resources and natural protection. Ecological science and comprehensive planning emerged as dominant instruments for environmental policies. The rising environmental debate during this phase brought the SNF a fourfold increase in membership (20 000 in 1963). However, being an advisory organisation to the state, the SNF only slowly abandoned the traditional perspective of nature conservation. The managerial efficiency of the state was believed to be able to solve environmental problems; a belief that contributed to keeping the environmental debate within established channels for information and the articulation of demands.

The last years of the 1960s a global perspective on the environment was gaining ground, manifested by the UN Conference on the Human Environment in Stockholm 1972 and the creation of the Swedish branch of The Friends of the Earth. Environmental concern became more far-reaching in the sense that both cases and causes of environmental destruction were attacked. This led to a questioning of industrial society and a search for alternatives to the dominant societal paradigm. The breeding ground for this new kind of critique was the more radical and activist political culture of the late 1960s, coupled with a boom for ecological science. The political answer was more comprehensive planning aided by increasing use of ecological science. This phase entailed quantitative and qualitative changes in the SNF-dominated environmental 'movement'. The more activist and participatory political culture and the increased knowledge of environmental hazards fostered a huge number of environmental groups. Environmentalism became a social movement. Although many groups embraced ideas of a radical environmental perspective, the loose structure of the movement made it hard to develop common visions. Therefore, the movement appeared pragmatic and technical in ideology, including but few examples of the kind of

hippie-anarchist 'back to the earth' movement that was more common in other countries, e.g. Denmark. National co-operation was largely limited to groups within the MIGRI (the National Organisation of Environmental Groups). Built around the microbiologist Björn Gillberg and members of health organisations, the MIGRI focused on the dangers posed by poisons in food products. But the MIGRI was only one branch of the diverse movement. There were also urban environmental groups, 'working environment' groups and the SNF/the Field Biologists.

From the mid-1970s until the referendum in 1980 the environmental debate focused on the question of nuclear power. Together with the economic crisis of the 1970s, this broad issue strengthened and broadened the search for societal alternatives. However, the issue of nuclear power became so politicised that environmental aspects of the issue were to some extent overshadowed. The catch-all character of the opposition to nuclear power also made the debate more mainstream and technically oriented. Environmentalism kept its character of a social movement, organising around the struggle against the world's most ambitious nuclear programme. After a remarkable silence in the 1950s and 1960s, opposition grew fast, leading to the nation-wide People's Campaign Against Nuclear Power (Folkkampanjen mot Kärnkraft) in 1978. The campaign organised a broad spectrum of groups and organisations, including environmentalists, peace activists and women's liberation activists. The most prominent environmental organisation was the Environmental Union (Miljöförbundet), created when the MIGRI was split into two in 1976. The remainder of the MIGRI and the Field Biologists also took part in the campaign, while the SNF remained ambivalent. Inspired by a merger of socialist and environmentalist ideals, the People's Campaign also spread ideas of a future resource-preserving society with meaningful work for everyone. Ideas for an alternative society thus came to the fore. Organisations like The Friends of the Earth and The Future in Our Hands (Swedish branch in 1976) contributed new values, a focus on life-styles and a global outlook.

In the 1980s the environmental debate became more professionalised and success-oriented, with the quest for societal alternatives losing ground. From the mid-1980s, there was a large increase in the environmental interest, leading to parliamentary representation for the Environmental Party in 1988. The global character of environmental problems also became more pronounced (the ozone layer, climate changes), and attention shifted to diffuse and prognosticated problems. It was realised that environmental problems cut across sectoral borders in society and demanded the co-operation of state, civil society and the market for their solution. The number of actors involved in environmental problems therefore increased dramatically. Environmental problems appeared as complex societal problems, involving also Third World development and North-South issues, and requiring changes in consumption, transportation etc. in the

industrialised countries (World Commission..., 1987; *Agenda 21*). At least verbally the goal of sustainability replaced the search for solutions balancing environmental and economic demands which was characteristic of the 1960s and the 1970s. However, during 1992 the word 'ecocycles' (referring to ecological cycles in nature) seems to have outdated sustainability as the catch-word in the environmental debate. Thus, in late spring 1993 the parliament approved the Government Bill 1992/1993 no. 180 on guidelines for the ecocyclical development of Swedish society. We will return to this in more detail in the next part of the paper.

Swedish environmentalism lost its character of a people's movement in the 1980s, as environmental organisations grew more professional and success-oriented, this perhaps illustrating the inevitable (?) split between pragmatism and idealism. It was the 'deputy-activism' of Greenpeace (Swedish branch in 1983) and the expert-based pressuring by a revitalised SNF that proved to be organisational models well adapted to the environmental consciousness of the 1980s and early 1990s. The SNF experienced an exponential growth in membership between 1985 and 1987, reaching a membership of 150 000 in 1987 and 200 000 in 1992. The rise of Greenpeace was even more spectacular, with this newly established organisation reaching 170 000 in 1992. Organisations that were more directly based on member participation like The Friends of the Earth, The Future in Our Hands and the Environmental Union, experienced a decline in membership. The difficulties of the Alternative Campaign launched by a number of organisations in the early 1980s are also in vivid contrast to the success-stories of the SNF and Greenpeace. This professionalisation was accompanied by politicisation. However, the political branch of the movement – the Green Party – was largely disarmed in the early 1990s as older parties recognised the political power of environmental issues and adjusted their policies accordingly. Efficiently making use of the symbolic dimension in politics (cf. Edelman, 1964), all political parties allegedly became 'environmentalist'. Environmental issues were thus largely absorbed by the traditional left-right dimension in Swedish politics.

3. AFTER RIO: GOALS AND INSTRUMENTS

In 1987 the Brundtland Commission presented its final report *Our common future* (Swedish version published in 1988). According to the Brundtland definition sustainable development is "development that meets the needs of the present without compromising the ability of future generations to meet their own

needs" (World Commission... , 1987: 8). Similar definitions are commonplace. Bhatti (1993: 100) for example defines sustainable development as:

...the process where society is able to produce and consume at a level that conserves the Earth's resources for future generations and causes the minimum amount of pollution and waste.

Considering the general character of these definitions and others of the same kind, it is no wonder that sustainable development has been criticised for offering different meanings to different interests. It has been adopted enthusiastically by environmentalists and is now a commonplace in official reports and a slogan for politicians. Business has enthusiastically embraced it to help legitimate its activities (Blowers 1993: 786).

However, despite its catch-all character the concept of sustainable development has already developed from being just a vague concept to becoming a set of objectives and policies requiring implementation. Ever since the publication of the Brundtland report in 1987 sustainable development has been the accepted goal of environmental policy at all levels of society, nationally as well as internationally. However, the concept of sustainable development is open to various interpretations, not only due to its vagueness. It challenges fundamental principles of contemporary society, such as the sovereignty of the nation state and the free market. Indeed, the issues of production, consumption and pollution form the core of political, economic as well as social struggles and structures in the urban reality of today. Thus, the development of society towards sustainability will extensively affect politics, values and lifestyles. Moreover, such a development has to proceed from basic ecological principles, forcing a recognition of the broader framework for human activities.

3.1. National policy goals

In the preparations of the Rio Conference the Swedish government strongly argued that environmental policy had to be reconciled to democracy, market economy and economic growth, i.e. environmental policy was regarded as part and parcel of the comprehensive welfare policy. This is well in accord with the Brundtland Commission report, which says that economy and environment must go hand in hand, and which defines 'sustainable' as including social, economic and ecological dimensions.

The declarations and conventions adopted by the Rio Conference were all ratified by the Swedish parliament, i.e. the Rio declaration, *Agenda 21*, the Forest Protection Principles, the Climate Convention and the Biological Diversity Convention. On the basis of these documents the Swedish government formulated a national strategy for a sustainable society, comprising the following

main objectives: (1) to protect human health, (2) to maintain biological diversity, (3) to manage natural resources to ensure their long-term use, and (4) to preserve natural and cultural landscapes. In 1992 sustainability was replaced, or rather supplemented, by the term ecocycle (*kretslopp*) as a key concept indicating the long-term goal of environmental policies in Sweden. Creating a ecocycle society (*kretsloppssamhälle*) means the opposite of the hitherto governing principle of linearity. Thus all material of products in society should be integrated into chains of recovery and recycling, which would diminish the use of raw materials and energy. The national aim therefore is to make manufacturers assume increased responsibility for their products 'from the cradle to the grave'.

To reach the stipulated objectives of environmental policy the Swedish Government has adopted a number of fundamental principles, i.e. (1) respect for man's and the environment's tolerance limits; (2) use of the best available technology and good environmental practice; (3) use of the substitution principle; (4) use of the precautionary principle; (5) use of the polluter pays principle (PPP); (6) respect for each country's supremacy over its environment; and (7) adherence to *Agenda 21*. Taken together, the four main goals of environmental policy and the seven principles of environmental protection represent a highly ambitious and comprehensive approach towards a sustainable society. To what extent these objectives and principles are really adhered to in policies and practices is not a simple task to investigate, and at the moment any assessment has to be partial and tentative.

3.2. Environmental policy instruments

According to the National Environmental Protection Agency, "a variety of policy instruments and strategies aimed at different players are necessary for the transformation to a more resource-conserving society with environmentally sound habits" (SNV, 1993: 6). Among the actors emphasised are citizens, private companies and the municipalities, with a crucial role assigned to the latter. Therefore special attention will here be devoted to the role of local government in environmental policy-making. However, before discussing local government responsibilities more in detail, something needs to be said about general instruments to be used in environmental policy and planning.

Policy instruments can be classified in different ways, i.e. in terms of regulatory, administrative, economic/financial, non-economic, social, preventive or other kinds of instruments (Kågeson, 1993; Loftsson *et al.*, 1993). Following Wolfe (1989), three different forms of moralities, or moral codes, guide human action in modern society, i.e. a political, an economic and a social morality. Each of these codes corresponds to a particular institution or practice, i.e. state, market

and civil society. Without making any further substantial connections to Wolfe we consider his categorisation as fruitful for our own elaboration and discussion of policy instruments.

A political approach means that government through **administrative/regulatory instruments** – permission standards, prohibitions and restrictions, different kinds of target levels etc. – steers different activities. This kind of instrument is based on centralised coercive authority – the trespassers will be prosecuted by the state. An economic approach means that the state through **financial instruments**, creates a situation where action guided by self-interest and rational choice will lead to good environmental solutions. Here the state steers through economic incentives, and then the actor – be it a producer or a consumer – can choose how to act. Lastly, a social approach means that actors are seen as learning agents who have the capacity to recognise their dependency on other human beings as well as on a healthy biosphere. Action is here steered through **social instruments**, i.e. voluntary, pedagogical and informative activities. Worth mentioning is that not only the administrative instruments but also the financial and the social ones have direct and explicit relations to government decisions, recommendations and legislation. Financial instruments, for example concerning the introduction of certain environmental taxes, always have a legislative base. Social instruments imply that an authority recommends or sometimes by legislation demands that certain activities be carried out, or that certain goals should be achieved. Historically, the central state in Sweden has used mainly administrative instruments for environmental protection. However, increasingly the government has attached greater importance to financial and social instruments.

3.2.1. Administrative/regulatory instruments

As shown earlier in this paper, environmentalism in Sweden has a long history, and one should not be astonished to find that the environmental issue got an early institutionalisation. Thus Sweden in 1967 was the first country in the world to establish a national environmental protection agency. Two years later – in 1969 – environmental legislation (the Environmental Protection Act, SFS 1969, 387) was created. No legislative act in Sweden has ever had such a broad field of application, and in a comparative perspective it has been regarded as the first example of ‘the new politics of pollution’, i.e. a policy aimed at an integrated pollution control. This is in sharp contrast to the fragmentary view of the old policy, according to which specific media and substances were treated separately (Weale, 1992: 97ff.).

However, the legislation soon became obsolete: the environmental problems now have a more global character than 30 years ago. Furthermore, the

Environmental Protection Act was not the only legislation in this policy domain – several other acts addressed environmental issues. At the beginning of the 1980s political initiatives were taken to collect all environmental legislation in one all-embracing legislative code. Arguably, co-ordination of the different environmental laws would make the environmental legislation more lucid, efficient and applicable, and a Government Commission was set up with the task of co-ordinating the environmental legislation in such a way that it would be possible to prevent new environmental problems from arising and to manage old problems more efficiently. In Spring 1994, the non-socialist government presented a proposal for an Environmental Code (*miljöbalk*). In its introductory section, the central principles for sustainable development in line with the Rio declaration were presented. However, when the new Social Democratic government came to power after the September 1994 elections, it promptly cancelled a number of government bills prepared by the previous government. Among those was the Environmental Code Bill (*miljöbalkspropositionen*). The official argument given in favour of cancellation was that different parts of the environmental legislation should be more strongly integrated than proposed by the previous government, and thus the Social Democratic government has announced a new bill to be presented to the parliament in Spring 1997.

3.2.2. Financial instruments

In the middle of the 1970s financial instruments were introduced into Swedish environmental protection. Today the use of fees, taxes, subsidies and other economic instruments rather than administrative ones is becoming increasingly important. Some of the economic instruments are reactive, as in the case of the polluter pays principle (PPP), which does not get its meaning until environmental harm has occurred. Other instruments are preventive, e.g. environmental fees and taxes.

In 1987, the Social Democratic government stated that the use of administrative instruments in environmental policy should be complemented by an increasing use of economic ones (Governmental Bill 1987/1988, 85). The new thing was that financial instruments were legitimised by their steering capacity, not as a way to increase the public revenues, which had been the case so far (the total income flowing from environmental taxes 1993/1994 amounted to SEK 40 billion). The rationale behind the financial instruments is that both producers and consumers through economic considerations will be stimulated to change their actions and behaviour.

During the following years, the parliament introduced or raised the level of environmental taxes on petrol, oil, energy use, nitric oxides and carbon dioxides. Today, the carbon dioxide tax is seen as one of the most important instruments

for promoting a more efficient use of energy and for substituting renewable energy sources for fossil fuels (SNV, 1993).

All political parties were positive to the introduction of financial instruments, but in the beginning of the 1990s some ideological differences were made explicit in the parliament. When the Social Democrats presented the Governmental Bill on environmental issues (1990/1991, 90, *En god livsmiljö*), the Conservatives (Moderata Samlingspartiet) and the Liberals (Folkpartiet) raised demands for a considerable increase in the use of financial instruments. In addition, the Conservative Party put emphasis on transferable emission rights as a way to create a more effective environmental regulation.

The changing character of the environmental problems – from manifest and concentrated to invisible and prognosticated problems – was referred to as an argument by the Government Commission report on environmental taxes in favour of going from administrative to financial instruments (Ds 1994, 33). However, one major problem is that environmental issues in many cases concern global commons that have no defined property owner, and this is a fact that gives low credibility to spontaneous market solutions. Later, a Government Bill (1993/1994, 100) stated that it is important to give natural and environmental resources a value in monetary terms. Arguably, if the environmental costs are included in the price system, producers as well as consumers will behave in a way that is more friendly to the environment.

In the 1990s a radical change in the tax system – a ‘tax exchange’ – was under discussion whereby increased environmental and energy-related taxes/fees were exchanged for lower tax on wage earnings. In 1990 a tax reform was implemented which had an element of tax exchange: tax on work was reduced and taxes on energy were increased, an exchange estimated at about SEK 10 billion (*Government Ministry report*, 1994, 33).

According to the Government Bill (1993/1994, 111), evaluations have found that environmental fees and taxes have been efficient both from a socio-economic and an environmental point of view. The Bill also argues that financial instruments sometimes will result in more cost-efficient solutions than will administrative instruments. Especially the Centre Party and the Green Party see this change in the tax system as being decisive for creating a sustainable society.

Thus, we can see an increasing use of economic instruments in environmental policy, and even if there are some differences due to ideological reasons, all parties in the parliament agree that mechanisms of the market have an important role in the creation of sustainable development. However, there has not only been a shift from administrative towards economic instruments but also towards a greater emphasis on social instruments, i.e. ways to increase voluntary citizen involvement through changing life-styles and consumption patterns.

3.2.3. Social instruments

According to a report from the Swedish Environment Protection Agency (SNV, 1993), environmental policy would profit from toning down 'end-of-pipe' solutions in favour of a more integrated approach, including an arsenal of preventive tools. Arguably, with the help of these preventive tools producers and consumers would make decisions which were 'environmentally friendly'. In a Governmental Bill (1990/1991, 90), the principle of prevention was explicitly mentioned as crucial to Swedish environmental policy. Examples of these preventive environmental tools are Environmental Impact Assessment, Life Cycle Assessment, Environmental Auditing and Environmental Labelling. Many such tools are social instruments where the government through information and education tries to favour necessary changes in the production system as well as in citizens' life-styles and consumption patterns. For example, lately the parliament has introduced a system of voluntary recovery of paper, glass bottles and glass jars, batteries, aluminium cans etc.² In this paper we will focus on an example that particularly illustrates the potential of citizens to influence environmental policy, i.e. Environmental Impact Assessment (EIA).³

3.3. Environmental Impact Assessment

The non-socialist government considered EIA in the framework of the concept of sustainable development (cf. the Government Bills 1990/1991, 90: 166; 1991/1992, 5: 3; 1992/1993, 60: 22). However, the concrete meaning of sustainable development and how EIA should be related to it are not discussed in detail. Later, when the non-socialist government presented its bill on the Rio declaration (Government Bill, 1993/1994, 111), the Social Democrats objected that the bill did not give precise guidelines for action.

Citizen participation in the making and implementation of public decisions is increasingly mentioned by the authorities as a goal worth striving for. An example of this attitude is the scope that such participation has been given in a number of Swedish laws, e.g. the Planning and Building Act (SFS, 1987, 12). Another example is the discussions surrounding Environmental Impact Assessment (EIA), which public authorities often feel and hope will result in

² To some degree this recovery is made through economic incentives – there is a deposit on all aluminium and certain glass bottles. However, in the case of all paper recovery and most of the batteries and glass bars there is no monetary incentive for a citizen or company to take these things to a recovery station.

³ From an applicant's perspective, Environment Impact Assessment is an administrative/regulatory instrument. At the same time EIA is a social instrument in the sense that it creates an opportunity for the citizen to voluntarily take an active part in the planning process.

increased citizen participation. Many countries – among them Sweden – emphasise that EIA should not be seen solely as a product (a document – Environmental Impact Statement – to be used as a basis for making a decision) but also as a process, that is, a way to think and plan. In this way, EIA becomes a way for public authorities to make better decisions (EIA, 1993; Roberts, 1991). This means that EIA must not be reduced to gathering information about the environmental consequences of some planned activity and finding a suitable site for that activity. It also includes the involvement of citizens in decision-making processes. The idea is that if environmental considerations are taken into account through EIA, citizens will gain influence at the same time as it becomes possible to make use of the knowledge and the views of the public. Arguably, this would also lead to a better common understanding on environmental matters.

In Sweden, EIA is a political instrument, aiming to increase the environmental concern and make it possible for the public (and others affected) to take an active part in the planning process. It concerns natural resources, ecology, aesthetics and human health in relation to other aspects such as economic and social ones. For almost every project that has a considerable impact on the environment an Environmental Impact Assessment is required before approval. The intention of EIA is that environmental concerns must be paid regard to at an early stage of the planning process. The environmental consequences should have the same weight as the economic ones (Government Bill, 1993/1994, 111).

EIA is intended to be a process characterised by a high degree of openness. To make this possible, EIA should be commenced in connection with the development of the project idea. As early as the beginning of the preliminary study, the applicant ought to get together with other people concerned and discuss the project, its possible consequences and alternative approaches. However, recent evaluations of EIA in Sweden indicate that this has not occurred (Kvarnbäck, 1996; RRV, 1996). The evaluations observe that the EIA author often seems to strive to convince the reader that the investigated activity will not have any serious environmental impact. It is the applicant that is responsible for EIA, and the evaluations found that most often the applicant's own arguments for a siting are involved in EIA. The EIA author and the applicant seem to have great possibilities of giving arguments in their own cause. This goes against the openness towards other perspectives and persons that is a crucial element of the EIA intentions, which state that the EIA document should mirror different arguments and viewpoints. Thus, in reality the possibilities given to citizens for influencing the EIA process have been limited. On the one hand, EIA provides the applicants with a forum to influence the consciousness and viewpoints of those affected. On the other hand, the dialogue among all involved rarely occurs. Indeed, Burkhart (1994) recently found that EIA was not a forum able to answer – or even discuss – political and moral questions raised

by the citizens, such as “why should a hitherto undisturbed natural area be destroyed?”

However, the importance of citizen participation is not limited to that of EIA. The Rio declaration also emphasises the importance of citizen participation with regard to involving the citizens in the work for a sustainable development. As stated by the *Agenda 21* document:

Due to the fact that many of the problems and solutions that are discussed in *Agenda 21* have their roots in local activities, it is the work and co-operation of local authorities that should be a decisive factor for realising the goals. . . As the form of governance that is closest to the people, it plays a central role for enlightening and activating the public as well as responding to the public demands concerning the promotion of a sustainable development (*Agenda 21*: 461).

Thus it is high time to discuss the role of local government with regard to promoting sustainable development in an urban setting.

3.4. Local planning and public involvement

The scope of municipal responsibilities has become wider and wider in Swedish society, not least in the environmental field. Thus during recent years there has been an increasing transfer of environmental responsibilities to municipalities and other sub-national actors. In the bill concerning environmental policy for the 1990s (Government bill, 1987/1988, 85) the government mentions the role played by municipalities in environmental policy only in passing. Six years later, in the Governmental Bill on the Rio declaration 1993/1994, the municipality is acknowledged as having a key role for the **national** strategy geared to promote sustainable development. The municipalities are expected to feel responsible for reaching the national environmental goals, and also for creating the due strategies. The main reason given for this is that policy and planning to a large extent is **implemented** at the local level. It is also argued that many global environmental problems must be solved locally at each single source of emission.

In the *Government Commission report* concerning the local *Agenda 21*, it is stated that the municipality is unique when it comes to influencing the environmental situation (SOU, 1994, 128). Thus the municipality is supervisor, planner, producer, entrepreneur, manager, purchaser, educator and informant, and it is stated that different groups – for example youth, women, voluntary organisations and private companies – should be involved from a bottom-up perspective. The report does not give any concrete recommendations **what** a local *Agenda 21* should contain, but instead it is stated that every local

Agenda 21 is presumed to develop according to a democratic process which mirrors the local conditions in each municipality.

There seems, however, to be a potential tension between two central policy goals, i.e. democracy and sustainability. On the one hand, the broadly accepted democratic ideology in Sweden says that citizens should be involved in the planning and decision-making processes; on the other hand, the goal of sustainability may be difficult to reach without a certain degree of centralised planning and decision-making. It is an important political task and a challenge for the municipalities to work in collaboration with local organisations and in consultation with citizens to translate the global programme into local action programmes (SNV, 1993: 13). Indeed, the parliament also states that the municipalities should feel a responsibility for approaching the national environmental goals, and thus they should produce strategies concerning how that should be done ("Official Letter from the Parliament", 1994/1995, 120).

4. TOWARDS A GREEN URBAN POLICY?

Today, the need for more 'sustainable' cities is frequently argued for by researchers, practitioners, policy-makers and the public. Besides the obvious fact that societies like Sweden are urbanised to such a great extent, a major reason for this increasing interest in ecological aspects of urban development is the changing nature of what are considered as 'environmental problems'. During the 20th century the focus of the environmental debate has shifted from preservation of specific natural areas to environmental planning and on to sustainability and ecocycles. It has been a process **from** scattered local problems due to various emissions from industries and municipalities and the preservation of some specific areas from human intrusion; **to** diffuse, large-scale threats like the 'greenhouse effect' or the decreasing ozone layer. Strikingly the latter kind of problem is closely linked to value-systems anchored in the daily life-style of ordinary people (consumption, transport, etc.), which is thus becoming a main arena for environmental issues. Therefore, when it comes to many environmental questions of tomorrow, both their causes and their remedies are deeply rooted in the kitchens, refuse rooms and transport systems where most of the people live, i.e. in the cities.

In the vast and increasing literature on environmental issues, until lately comparatively little attention was paid to cities (McLaren, 1992: 56; Stren 1992). Astonishingly, not even the Brundtland report, published in 1987, and commonly regarded as a turning point for sustainable planning, has much to say about the cities of the industrial world. The reader easily gets the impression that no special changes of course are necessary for urban development in industrial

countries, and that the problem for the Third World's cities is that they have been without the necessary resources to reach the level at which the cities of the industrial countries are today (Naess, 1989: 46).

Neither when three *Government Commision reports* published in 1990 analysed the city (SOU, 1990: 32; SOU, 1990: 33; SOU, 1990: 34) were environmental issues seen as restrictions on further urban growth. On the contrary the tight infrastructure of the city was regarded as a precondition of sustainability. Following Olof Eriksson (1991), former head of the Swedish Council for Building Research, the environmental chapter in the first of the three reports is fundamentally one-sided, completely dismissing the fact that the city is the main producer of pollution and waste.

However, the publication of the EC *Green book* on the urban environment in 1990 marks a turning-point with regard to bringing sustainability onto the urban policy arena. Today sustainable city development has become commonplace in the set of policy goals given high priority by the political elites in various countries. Strikingly, the focus of the EC *Green book* is laid on the city centres of the West European big cities. But in Sweden we have only three cities (Stockholm, Gothenburg and Malmö), and their centres are comparatively small, as is still more the case in the Swedish towns. The urban agglomerations in Sweden are spread out in the countryside, and most of them are still literally 'green' in the sense that their dwellers can always reach parks and green belts at a relatively short distance. Considering these two circumstances, Swedish towns may have a comparative advantage when it comes to solving the practical problems connected with sustainability. The smaller scale combined with the more sparsely built environment, for example, may make it easier to develop systems of ecocyclical waste management (Bjur and Engström, 1993). Orrskog (1993: 233) even goes as far as to conclude that:

Scandinavian cities built on the neighbourhood structure, with green fingers into the city, and with quite good public transport, present relatively good conditions also for sustainability (as quoted from its English summary of chapter 6).

However, ecological perspectives were not unknown to Swedish policy-makers before Rio, but had entered the field of urban housing, building and planning as early as the beginning of the 1970s, and this on two different, although related paths. The first one was the path of national, comprehensive planning starting with the 1972 Act on National Land-use Planning. The second one emerged from the all-European urban renewal initiatives around 1980. A little later feminist ideas also contributed to the development of ecological consciousness in planning, although they hardly left any impression on planning practice until lately (Forskergruppen for Det nye hverdagslivet, 1987; Kaul, 1991).

The Swedish parliament's 1972 decisions on the Acts on National Land-use Planning (Fysisk riksplanering, FRP) and Regional Policy may be seen as landmarks of Social Democratic comprehensive planning (Forsberg, 1989: 9). By the Social Democrats themselves, the two decisions were together announced as the 'Sweden plan' (Elander and Strömberg, 1992). Prime Minister Olof Palme in his public presentations of FRP dwelled extensively on environmental issues, and tried to make ecological care an integral part of Social Democratic ideology. However, neither in the preparatory work nor in the Government Bill was the ecological principle and its practical consequences clarified. Nevertheless, FRP may be regarded as the central state midwife of environmentalist aspects that are currently – 20 years later – on the verge of being implemented.

The decision in the parliament in 1972 did not make the FRP a law in a strict sense. It was rather a broad guideline for planning authorities, demanding subsequent specification at the regional and the local levels. The FRP regulations were not transformed into the Natural Resource Act (Naturresurslagen, NRL; SFS, 1987, 12) until 1987. Not dealing with the natural resources of the country in a comprehensive way, this act prescribes that land and water areas of importance to certain activities as well as specified geographical areas with considerable natural and/or cultural values are of national interest. In its preamble the NRL prescribes that land and water should be used so that an ecologically, socially and publicly sound economy is supported. These concepts should be considered in the local development plans, foremost in the comprehensive municipality plan. This puts the major responsibility for implementation on the municipalities.

However, bringing ecology in as an ideological concept on a par with economics and social welfare is easier said than done, as was revealed already in the parliamentary debate preceding the decision on the act. The compromise reached by the Social Democrats and the Centre Party implied a paradoxical marriage: "the industrial society's ideology of growth together with the ideology of careful treatment of nature for an ecological society" (Ödmann, 1987). The qualitative stipulations in the act were given a very vague wording under a preamble of solemn declaration, as aptly summarised by the phrase "vague norms in a tough reality" (Ödmann, 1987). Thus, the test of the compromise was postponed to the stage of implementation, as currently illustrated by issues like the Öresund bridge, or the Dennis-package, i.e. the plan for building a new highway around Stockholm. In these two cases the Social Democrats side with the Conservatives (Moderata Samlingspartiet) and the Liberal Party (Folkpartiet) in favour of the projects, while the Centre Party takes a negative stance.

The vagueness of the NRL norms appears even more striking when one takes into account the character of the new act on physical planning that also came into force in Sweden in 1987 (*Plan- och bygglagen*; SFS, 1987, 10). As in the case of similar acts adopted in Denmark 1977 and Norway 1986, the

Swedish act states that all disposal of real estate is under public control and that land may not be used for development unless it has been proved to be suitable for the purpose from a comprehensive view and with due regard to the natural resources and the economic and social development of municipalities. However, unlike in Denmark and Norway the municipal comprehensive plan in Sweden is a very weak instrument in legal terms, only having an advisory character (Ödmann, 1987). Thus there were no legal instruments given to reinforce the ecological principle in planning.

The middle of the 1970s represents the high-tide of rationalist public planning in Sweden. Inspired by central place theories with specified demands on the size of various social services, the municipal amalgamation reform had been fully implemented in 1973, the quantitative goal of the Million Dwellings programme of housing had been reached in 1974, and the 1972 'Sweden plan' symbolised the determination of Social Democracy in Sweden to fulfil long-term planning ambitions. However, as far as ecological care was concerned no major steps of realisation had been officially taken. The basic ideology was still mainly one of economic growth and social welfare (Elander, 1978).

When stagnation began to haunt the Swedish economy during the 1980s the ideology of rationalist planning was on its way out. Although structure planning was given a prominent position in the Planning and Building Act and the Natural Resources Act, its power could be disputed, as it was only given a guiding role, with no decisive power for future land use (cf. Eckerberg, 1995; Khakee, 1995). The property boom coupled with decentralisation and deregulation of public services signified a gradual marketisation of policy (Elander and Montin, 1990) and the introduction of the concept of negotiative planning. Thus, when the ecological dimension was on the threshold of entering municipal planning, planning itself was changing its character in a less demanding direction. Although becoming "the most important unit for public environmental planning in practice" (Eckerberg 1995: 115), the Swedish municipality has to carry out its task with quite nebulous instruments. Following Ödmann (1987), the municipalities now have to implement "vague norms in a tough reality". The 1990s represent an even tougher reality to the municipalities, as they have been sternly pressed by central state cut-back policies (Elander, 1996, forthcoming). However, regardless of central state policies, initiatives increasingly taken by municipalities and other local actors today mean that "sustainability is little by little entering municipal planning and policy" (Malbert, 1992), and we will end this part of our paper by giving some examples.

While during the 1980s a number of 'ecovillages' were born in Sweden (e.g. Malbert, 1992), it was not until the first years of the 1990s that the corresponding development took off in the urban environment. The *Agenda 21* document adopted by the Rio Conference was the trigger of municipal initiatives

on a broad scale. Today a growing number of municipalities have declared themselves 'eco-municipalities', and still more are currently preparing for the creation of their own local Agendas 21, as illustrated by this quotation:

A local plan of action for the 21st century distinguishes itself from the current environment care programme, partly through the longer time horizon, partly through its ambition to encompass all municipal activities. To reach the latter goal as many actors as possible must get involved in the process – from individual citizens to business managers and organisations (*Miljövårdsprogram – Örebro, 1994–1998. Remissupplaga 1*).

Environmental goals now have a prominent position in municipal planning and policy-making, although it is becoming increasingly clear that the prospects for the environmental goals to be implemented are precarious (Eckerberg, 1995; Khakee, 1995). Nevertheless, it is not difficult to find local examples of attempts geared to approaching sustainability. Thus, in a report published by the Swedish Society for the Conservation of Nature (Svenska Naturskyddsföreningen; SNF) 50 examples are briefly presented covering such topics as waste management, energy saving, transport, biodiversity and housing (Magnusson, 1993). We will not go any further into this kind of examples as they are the focus of Anders Bro's contribution in this volume. Let us instead take housing as an example to see to what extent sustainability may be realised in its Swedish context.

Following Priemus (1992: 39–40), sustainability in housing has at least three dimensions. One dimension pertains to **the construction process**, meaning reduction of non-renewable raw materials in building and a reduction of harmful building materials. A second dimension refers to **housing management** consistently directed towards energy-saving, including recycling of waste-products. Thirdly, sustainable housing could be an element of a **compact city policy**, i.e. concentration of building activities within and around the city, in order to limit the commuting distance between work and home and to promote collective transport. Of course, this does not exclude the presence of 'green fingers' and 'green islands' within the urban landscape. Thus Schéele (1995) shows the example of a recent attempt at planning and building a modern eco-futuristic town, including elements of the kind pointed out by Priemus (cf. the contribution of Ann-Cathrine Åquist in this volume). However, as the housing stock has a very long durability, there is a special interest in seeing what could be done to develop a more sustainable **management** of this stock. Considering the prominent role played by the municipal housing companies in Sweden as housing landlords – they are the owners and managers of more than one fifth of the total housing stock – one may ask whether these companies have anything to contribute as regards sustainable housing.

The Swedish Association of Municipal Housing Companies (SABO) in 1993 published a detailed check-list on how to make management better adapted to the

requirements of green housing. The check-list comprises 56 points listed under seven headings: waste treatment, saner dwellings, energy, water and sewage, traffic and transport, neighbourhood, and organisational activities. Although the check-list is not mandatory to the individual companies, it is an expression of growing green consciousness among the public landlords in Sweden (*Checklista*, 1993). The way this green message is presented to the renters can be illustrated by the text in a leaflet distributed to the households on one of the estates owned by a municipal housing company (ÖBO, 1993):

Why should we sort our refuse?

Because . . .

- in 1991 about 250 kg of refuse went to our refuse mountain from every inhabitant of the Municipality of Örebro;
- in 1991 about 24 000 tonnes of household refuse went on to the Atle tip;
- 27 refuse lorries are used every day to fetch our refuse and take it to the tip;
- harmful polluted fluid from the refuse can leak from the tip;
- the presence of large volumes of food waste and paper on the tip contributes to the greenhouse effect through the formation of methane;
- our resources are limited. In the long run it is no good just using things briefly and then throwing them away – we have to use things again;
- the goal in Örebro is to reduce the volume of refuse by 50% by 1994;
- refuse tips are not things we want our children and grandchildren to inherit;
- you can reduce your costs for refuse collection;
- thrifty use of the earth's resources is a question of survival!

In the same leaflet detailed recommendations are given to the households with regard to proper waste treatment (cf. table 1).

Although the examples given indicate the presence of a broad, locally based movement in Swedish society working for sustainable urban development, this should not be mistaken for Sweden having almost fulfilled the visions of a radical environmentalist approach. It remains to be seen whether this movement can stand up successfully against the countertendencies indicating heavy infrastructural investments in favour of high economic growth like in 'the good old days' of the 1960s and 1970s.

Indeed, these conflicting tendencies were recently made visible by different reactions to the *Government Commission report* on traffic policy (SOU, 1996, 26). A number of powerful interests deemed it as an unscientific document that, if implemented, would cause tremendous harm to economic growth in Sweden. The Government Commission, which was chaired by the Director-General of the Swedish Environmental Protection Agency, proposed that the state support to roads be reduced by 50% by the year 2007, that planned highway constructions be cancelled, and that the taxes on petrol be increased substantially. Some of the most powerful critics of the report arranged a press conference to make their opinions publicly known ("Sverige i rörelse", 1996, 2):

Table 1. How you can sort?

Type of waste	Sorting in your flat	Sorting elsewhere
Households waste: food left-overs, used tea-bags, withered flowers, etc.	Container in sink cupboard	Composter in stair-well
Paper packaging: milk cartons, cardboard boxes, corrugated cardboard, etc.	Container in sink cupboard	Container in sorting building 2
Hazardous waste: paint, solvents	Lockable storage area in 'Buster' hall cupboard	Take to OBO's service office
Electronic waste: radios, hair-dryers, etc.		Sorting building 1
Other: plastics, metals, etc.	Container in sink cupboard	Container in sorting building 2
Returnable cans and glass or plastic bottles	'Buster'	Take to the shop
White and uncoloured glass	'Buster'	Put in different openings inside sorting building 1
Newspapers and magazines	'Buster'	Special container inside sorting building 1
Medicines and mercury thermometers	'Buster'	Take to chemist's
Textiles	'Buster'	Put in opening in sorting building 1
Fluorescent lamps and small batteries	'Buster'	Put in different openings in sorting building 1
Car batteries		Sorting building 1
Bulky refuse		Container in sorting building 1

Source: From a 'green' leaflet distributed to the households on one of the estates owned by a municipal housing company (ÖBO, 1993)

... we are greatly worried about the jerky policy on infrastructure and the devastating consequences with regard to economic growth if the Government Commission's proposal should become reality (Bo Bergren, Vice Chairman of the Swedish Association of Industry; Industriförbundet).

The report implies that the state abstains from one of the few existing means in favour of growth and employment, namely the investments in infrastructure ... The report strongly exaggerates the environmental costs caused by road traffic (Kjell-Olof Feldt, former Minister of Finance, at present chairman of the Swedish Road Association; Svenska vägföreningen).

In a period when unemployment and a huge budget deficit demand rapid economic growth, support for the labour market and measures to stimulate entrepreneurs, the committee destroys the bases of all endeavours to reconstruct welfare (Lars Gunnar Tannerfors, Director of the Swedish Road Association).

In a later newsletter ("Sverige i rorelse", 1996, 4), similar criticism was articulated by Sören Gyll, managing director of Volvo:

An increasing investment in the railways, as the commission advocates, means to put the clock back to solve the problems of today through yesterday's solutions. This is neither reasonable nor efficient.

The Swedish Road Association, the Swedish Association of Industry, Volvo and the Swedish Building Constructors (Byggtrepreneurerna), who were also represented at the press conference, can all be seen as powerful members of a national economic growth coalition, whereas the chairman of the Government Commission behind the report represents something of a national environmental coalition. One may wonder how it came about that an official report on traffic had a chairman representing the green tendency in Swedish politics. However, the report was initiated when the non-socialist coalition government led by Prime Minister Carl Bildt was still in power, and when the Ministry of the Environment was in the charge of two Ministers representing the Centre Party (Olof Johansson and Görel Thurdin), who had gone into the coalition very much to boost its green profile.

Space does not allow a deeper discussion of the complex relationships between the values and interests of economic growth and environmentalism in Swedish politics. However, one may find some clues as to interpretation by looking at the two tendencies as represented in the declarations of government of 1991 (Carl Bildt), 1994 (Ingvar Carlsson) and 1996 (Göran Persson). Although the declaration of government (*regeringsdeklarationen*) is not a legally binding document it has a symbolic load, expressing the will of the government with regard to its term of office.

The Bildt declaration of government presented in 1991 raised four overriding goals:

- (1) to bring Sweden into the European Community;
- (2) to put an end to economic stagnation and to reconstruct Sweden as a nation with a strong and high economic growth;
- (3) to improve welfare and social care by implementing a 'revolution of freedom' (*frihetsrevolution*); and
- (4) to create a long-term sustainable development towards a society characterised by clean air and water, living lakes and forests.

Ranking number four among the stated goals, a number of environmentally "good things" are mentioned in the text, e.g.

Environmental policy must not depart from what nature in the long run can stand. We do not have the right to devastate for future generations. The precautionary principle (*försiktighetsprincipen*) must be our guidance ("Från riksdag och departement", 1991, 30: 20).

The Carlsson government declaration in 1994 presented five main goals, briefly mentioning as the last one "to realise the ecologically sustainable industrial society", and also mentioning a few of the "good things" regarded as necessary so as to reach this goal ("Från riksdag och department", 1994, 31: 8).

The Persson government declaration of March 22 1996, a much briefer text than the two others, mentioned the environment as number three out of four main priorities:

The environmental threat also is a threat against life itself. The ambition of the government is to make Sweden an international driving force and a forerunner when it comes to creating a sustainable society. The ecological demands may lead to the next big leap in growth. To foster extensive thinking along ecocylcal lines demands active citizens and a distinct policy ("Från riksdag och department", 1996, 11: 7).

The quotation hints at a potential positive link between ecological demands and economic growth, and this is exceptional when looking at the three declarations as a whole. The general impression is that environmental policy is ranked lower than economic growth, and there is no discussion of the relationship between the two. This was also visible in the directives to the above-mentioned Government Commission report on traffic policy, so heavily criticised by industrial representatives. The directives not only included the goal to create an environmentally adapted transport system but also that this system should contribute to increased welfare and economic growth.

5. CONCLUDING REMARKS

Today's debate on environmental issues is dominated by the global problems such as the decreasing ozone layer and the greenhouse effect. Comprising ecological, social and economic dimensions, the concept of sustainability is commonly stated as an all-encompassing solution of these problems. However, in Sweden sustainability in the 1990s was exchanged for development based on ecocycles as the key concept of national environmental policy. The Swedish term *kretslopp* is by the authorities themselves translated into English as 'ecocycles'. However, literally the notion *kretslopp* has no ecological implication and a more appropriate translation therefore would be 'cycles'.

One may have good reason to ask how it has come about that the concept of the ecocyclical society (*kretsloppssamhälle*) has so swiftly become accepted as the number one symbol word in the current political debate on environmental issues in Sweden. Arguably, this may reflect the ambiguity and the vagueness of the concept. On the one hand it can be defined and applied in a way that is in

accordance with the principle of sustainability, on the other hand it can be applied so as to minimise damage caused by a system which is basically built upon extensive use of raw materials that cause substantial damage to the environment (Wärneryd, Hallin and Hultman, 1995: 96). In its everyday usage the concept of the ecocycle does not have an ecological content at all, it only says that any material circulates, i.e. the concept refers to what flows and how it flows. In sum, a cyclical society does not necessarily mean an ecologically sustainable society.

Despite the fact that the environmental issues are increasingly focused upon in the public debate, there are few signs that there have been any major changes with regard to how society treats natural resources and flows of materials. Remedies are still commonly being applied at the end of the resource treatment chains, when harm has already been caused. Although the principle of recycling has the potential of becoming a battering-ram in favour of clean production, it has rather meant a revival of looking upon waste as a resource (Skillius, 1995: 34). Instead of minimising the material used and the production of waste, we recover and recycle it and by that more and more material will flow in society, i.e. the more waste we produce the more 'resources' we get! It is not a coincidence that the terms recycling and ecocycle nowadays are frequently used by firms in the refuse collection and junk dealing businesses, e.g. advertising themselves as 'RagnSells – part of the ecocycle', or 'Gotthards – from junk dealer to recycling technician'.

Another important aspect is that such ecocycles are consciously created and steered by man, and in most cases dependent on energy supply from outside, foremost fossil energy. Many ecocycles demand a relatively high input of energy, which is decisive when it comes to whether an ecocycle is compatible with ecological sustainability or not. Thus, there exist ecocycles that are in accordance with ecological sustainability and there exist others that are not. Today there is a risk that the increasing usage of recycling as the key concept signifying environmental policy ambitions will legitimise further excess exploitation of natural resources (not least fossil energy). At worst this might become just one more example of what Edelman (1977) called 'words that succeed – policies that fail'.

Aside from the dubious usage of ecocyclical society as a synonym of sustainable society we will conclude this paper by highlighting three other issues that should be addressed when assessing the prospects of future development in this field, i.e. (1) the issue of economic growth versus ecological sustainability, (2) the issue of democracy versus science, and (3) the issue of contradictory urban coalitions/regimes.

5.1. Economic growth or ecological sustainability?

As early as 1986, the EC's fourth environmental programme emphasised that:

... as a key factor in economic decision-making, environmental protection policy and strict environmental protection standards are no longer an optional extra but a *sine qua non* for the quality of life expected by the citizens of the Community (EC, 1986: 3).

In the Brundtland report, this argument was developed: strong environmental protection was seen as a precondition of long-term economic development. Thus, most nation states agree that environmental degradation threatens the social and physical resources upon which prosperity depends. However, in the short run it is common to contrast economic and environmental goals, as nations may state that the present economic situation (e.g. the high rate of unemployment) does not allow too costly an environmental policy. Environmental protection in this case is perceived as an economic cost.

The tension between economic growth and ecological sustainability has existed ever since the creation of environmental policy in Sweden. Already the Government Bill proposing an Environmental Protection Act (Government Bill, 1969, 28) emphasised the importance of not putting too high demands on industry because that would lead to decreasing international competitiveness. However, even in cases when the interdependency between economic growth and environmental protection is taken into account, it can be problematic from an environmental point of view. By this emphasis it becomes possible to state that good environment and economic growth are both primary goals. The fifth environmental action programme of European Union – entitled *Towards sustainability* – states that:

...[the programme is] intended to reflect a policy and strategy for continued economic and social development without detriment to the environment and the natural resources on the quality of which continued human activity and further development depend (CEC, 1992).

Thus, economic growth does not seem to imply a threat to the environment – something which environmental researchers have criticised the Brundtland report for. As the secretary general of UNCED, Maurice Strong, summarises the Brundtland report's attitude to technology and economic growth (cited in Willums 1992: 19):

Economic growth in all parts of the world is essential to improve the livelihoods of the poor, to sustain growing populations, and eventually stabilise population levels. New technologies will be needed to permit growth while using energy and other resources more efficiently and producing less pollution.

This view is echoed in principle 12 in the Rio declaration which states that nation states should co-operate to promote an open international economic system which will contribute to economic growth and sustainable development in all countries, and thereby better manage the problem of environmental pollution.

At the same time there exist signs that economic growth can be in conflict with good environment. In the finance plan it is stated that "the necessary increase in economic growth has to be combined with the demand for an ecologically sustainable shaping: a decreased state debt cannot be exchanged for an increased environmental debt" (Governmental Bill, 1993/1994, 100: 7).

Being the outcome of a dynamic process of interaction between a wide diversity of interests not simply confined to the environment (Weale, 1992), environmental policy transcends conventional boundaries and is most often a compromise between environmental, economic and other interests. Thus developing society towards sustainability is not a simple task. Actors and initiatives for sustainable development have to confront economic conditions and legal rules that may give incentives against sustainable development, established routines and habits, as well as actors resisting change.

5.2. Democracy and science

Even if there are deep democratic reasons for advocating the ideal of citizen participation, doubts have been raised as to whether extensive participation is consistent with policy-making and planning for sustainability. Does not a development towards sustainability imply that experts' knowledge of today's environmental situation must be guiding, whatever the opinions of different citizen groups (and other non-scientific interests)? Examining the adequacy of different normative planning theories for meeting the demand for sustainable development, the Norwegian planning researcher Peter Naess (1994) supports this standpoint. Systematically evaluating the advantages and limitations of five dominant planning ideals in relation to the goal of sustainable development, Naess argues that while synoptic planning (at least potentially) is well suited to ensuring long-term management of natural resources and environment, incremental planning has a number of inherent properties which are difficult in relation to such long-term stewardship. With the very limited analyses of consequences offered by incremental planning it is hard to foresee where the aggregation of small steps will lead us (for instance with respect to emissions of greenhouse gases in the atmosphere). Also incremental planning may have unfortunate effects in relation to the local environmental concerns. Incrementalism creates no opportunity to consider future effects and aggregated, long-term consequences.

Thus, there seem to be good reasons for limiting citizen influence on environmental policy-making, leaving this to experts with their knowledge and calculations. This can be found in some ecological economists' solutions for the environmental problem, where it is stated that in a sustainable society a woman should only be allowed to have one child and that unions and strikes should be prohibited so that constant demands on economic growth and increased material welfare should not be articulated (Daly, 1992: 51ff.).

The environmental policies of most nations indicate that lay people have had little influence on environmental policy: few policy areas have been so dependent on scientific expertise and certain epistemic communities (Weale, 1992). From this point of view it can be stated that information about lay people's attitudes and behaviour does not add any substantial knowledge with regard to environmental planning. The reason for obtaining informed about how lay people think and act is instead that they are a part of a political reality which must be taken into consideration: environmental politics for sustainability needs, at least in the long run, some kind of public acceptance in a democratic state. The alternative, at worst, might be the creation of an eco-fascist regime dictating what should be correct behaviour with regard to sustainability.

5.3. Urban growth coalitions/regimes and environmental coalitions/regimes

Narrowing the discussion of sustainability and recycling down to the local level of state and society, the overall picture is far from simple. One can easily find tendencies going in opposite directions. One urban policy strategy that currently seems to be common to many municipalities, towns and cities all over Europe is the **entrepreneurial strategy** aiming at successful competition for capital and jobs ('city marketing'; 'selling places'). Alongside this growth-orientated strategy we find the strategy of making municipalities, towns and cities **ecologically sustainable**. Looking at the strategies pursued by Swedish municipalities, they do not easily fit into either of these categories, but one is rather struck by the somewhat contradictory co-existence of the two. They seem to indicate the presence of competing urban coalitions/regimes, i.e. urban growth coalitions/regimes and environmental coalitions/regimes. Some municipalities seem willing to become number one with regard to entrepreneurial skill/economic prosperity **as well as** sustainability, and they display an impressive variety of policy innovations to approach these goals, as has been briefly exemplified earlier in this paper.

Indeed, the local economy is important for the municipality, and this may cause severe tensions with regard to the siting of environmentally harmful industries. A current example of this is the municipality of Arjeplog in the northern part of Sweden, which – four days after receiving the news that its main

industry (mining) would close down – announced its willingness to be a candidate for the siting of the deep disposal of the highly active radwaste. Thus the political majority of the municipal council regard the siting of radwaste positively, stressing the work opportunities it would provide. However, in other municipalities (for example Storuman) a majority of the local population and their elected representatives have seen radwaste siting as a threat directed not only against biological and social reproduction (perceived as an extra-ordinary hazard to human health and existence), but also against material reproduction: a siting might cause other industries to leave the area and make it unattractive for the location of other kinds of industry. The discussion in Arjeplog and Storuman concerning to what degree a radwaste repository would affect the local tourist industry is an illustrative example of this.

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