Local Agenda 21 in Europe. The second phase of ecological modernisation in local government

Ecological modernisation as a theoretical construction has mainly dealt with changes on a national level and in connection with industrial and economic development. However, the role of local government has also increasingly become one feature of interest within the modernisation process. Local level governance plays a crucial role especially concerning the second phase of modernisation – that of involving inhabitants, stakeholder groups and smaller production units towards a common goal of sustainable development. Many of these activities in Europe are conducted under the organisational headline of Local Agenda 21. European local governments have been in the forefront of taking up the new challenge. In this paper we will show how local governments in different parts of Europe have responded to this task. The empirical material will be based on our large dataset collected within DISCUS research project.
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Keywords: Ecological modernisation, environmental governance, Local Agenda 21, local government/authorities, sustainable development.

JEL classification number: H11, H70, H83.

1. INTRODUCTION

Modernisation is argued to bring along an inevitable ecological crisis. Ecological modernisation theory indicates the opposite, postulating that the change that is visible in environmental policies is actually in harmony with both societal modernisation and the environment:

‘Ecological modernization stands for a major transformation, an ecological switch of the industrialization process into a direction that takes into account maintaining the sustenance base. Like the concept of sustainable development, ecological modernization indicates the possibility of overcoming the environmental crisis without leaving the path of modernization’


Ecological modernisation theory is perhaps today the leading theory describing the change in environmental governance from the late 1980s onward. But, ecological modernisation theory is also changing. The early ecological modernisation debate saw technical and policy innovations as the core elements in the modernisation process. Today, however, the picture is more diversified. The economic sphere of society, the international community, the local government level, as well as civil society, are all assuming increasing responsibilities in environmental governance. This article discusses the ecological modernisation process of local government in Europe. Local level governance, often introduced in cooperative efforts as local Agenda 21,
plays a central role in the second phase of ecological modernisation – that of involving inhabitants, stakeholder groups and smaller production units towards a common goal of sustainable development.

This article will examine the changing concept of ecological modernisation from the perspective of local government. We will also investigate the expected central changes that should be visible if an ecological modernisation process is at hand at the local level (based on findings in Joas 2001). These expectations will be finally tested with the help of empirical material on European local governments pursuing policies for sustainable development. The empirical material is based on findings from DISCUS project (fully reported in Evans et al 2005).

2. THE ECOLOGICAL MODERNISATION PROCESS AND THE ENVIRONMENTAL PROBLEM

The relationship between society and environment was often seen as highly problematic, even contradictory, by authors such as Beck (1986).

‘[T]he eco-alarmist connotations of their empirically based future-oriented projections and the overall pessimistic outlook on the possibilities of controlling and managing environmental problems using modern institutions at first sight seem to run counter to the perspective of [...] ecological modernisation’

(Mol and Spaargaren 1993: 454).

However, this seems not to be the case anymore since the concept of ecological modernisation has been broadened. Giddens (1998: 67), for example, sees ecological modernisation as one option among several to handle the complex relationship between humans and internal and external environments. However, he still accepts the basic argumentation of ecological modernisation and its limitations:

‘In an era of ecological risk, modernization cannot be purely linear and certainly cannot be simply equated with economic growth. [...] Modernization that is ecologically sensitive is not about ‘more and more modernity’, but is conscious of the problems and limitations of modernizing processes’

(Giddens 1998: 67).

Giddens (1998: 68) argues that ecological modernisation should be working within the scope of democratic political control. This is important due to the fact that almost all ‘modern’ environmental problems are caused by the everyday behaviour of individuals. They are externalities of, what is in most ways, acceptable and even desirable activities, and these new problems highlight even more the importance of the local level knowledge. Ostrom (2000) warned governments and policymakers not to “crowd out” local people, as it may have a negative effect on democratic institutions over time:

‘Thus, much of contemporary policy analysis and the policies adopted in many modern democracies crowd out citizenship. They do this by crowding out norms of trust and reciprocity and by crowding out the knowledge of local circumstances and the experimentation needed to design effective institutions’

(Ostrom 2000: 13).

In the following discussion we will focus on the changing theory of ecological
modernisation – from a centralised industrial theory towards a decentralised political theory. These changes indicate that there seems to be a simultaneous movement of political power up to transnational levels of government and down to the local communities. Moreover, this trend of governance also applies to non-governmental agents such as civic organisations and even loosely constructed networks (Gibbs 2000: 11).

2.1. First and second phase ecological modernisation

This first attempt to interpret the new empirically visible changes in the society-environment interface resulted in a technological view of ecological modernisation:

"Ecological modernization describes, in its narrower sense, the wide spectrum of possible improvements that can be achieved through innovations beyond the purely end-of-pipe approaches" (Gibbs 2000: 11).

This first phase of ecological modernisation was often defined as a (partly policy based) process of change within industrial society aiming at ecologically sound development through technical pollution prevention innovations, and also limited structural changes towards foresighted prevention in policy choice (Weale 1992: 76, Lundqvist 2000: 2). A principle of precaution was seen as the policy rationale behind this form of ecological modernisation (Andersen & Massa 2000: 338).

There was a clear disagreement among environmental policy analysts and researchers as to whether ecological modernisation should by definition include structural changes within all sectors of society or alternatively should the approach be used just to describe this as efficiency improvement. This would, according to Andersen & Massa (2000: 342), 'underscore how intimately the concept is linked to approaches of [...] long-term effort to promote other paths of development'.

The second phase of ecological modernisation shifted the focus from pure technological changes towards culturally and institutionally based changes, that is, radicalising ecological modernisation (Dryzek 1997: 147-150). To use ecological modernisation as the overall term for the development enhances the character of a still continuing process of change, a change from traditional industrial end-of-pipe policies via a technological shift towards a real institutionally based structural change of society.

The second phase of the ecological modernisation theory was further elaborated during the 1990’s by Mol (1996), Spaargaren (1997), Hajer (1995) and Cohen (1997). Ecological modernisation theory moved the environment from an unimportant periphery to the core of the processes of social change. The change is visible at least regarding the scientific knowledge of ecological problems, the economic dynamics and markets favouring ecological reforms and the changing role and importance of the state in favour of non-governmental and sub-governmental agents (Mol 1996: 307, 313-314; Weale 1992: 75-79).

The early theorists did not give governments much room for manoeuvre. They saw the role of the government
varying between a laissez-faire state (Huber 1982) and an enabling state for policy and technological innovations (Jänicke 1992, 1995). Even if Mol & Spaargaren (1993) admitted that an intervention by the state was to a certain degree essential, they still had largely decided not to analyse this dimension in depth. Analytical studies of the changing role of the state, as well as the institutionalisation of ecological concerns into government, administration and politics, was seen as important but still missing in ecological modernisation theory:

‘Thus, a full-blown theory of ecological modernization must ultimately be a theory of politics and the state – that is, a theory of the changes in the state and political practices (and the theory of the antecedents of these changes) which tend to give rise to private eco-efficiencies and overall environmental reforms’

(Buttel 2000: 58).

The governmental dimension of ecological modernisation saw the nation state and transnational agents as the European Union as the only relevant political units to be analysed. Spaargaren & Mol (1992) saw the core features of the theory – the intensification of international social and economic relations, as well as time and spatial distances within modern societies – as problematic to the role of the local (political and non-political) level:

‘...the realisation of these goals in the context of local experiments, which are thought to be exempt from power relations and market forces operating on a worldwide basis, less plausible and realistic’

(Spaargaren & Mol 1992: 331).

The ecological modernisation approach was used only in a few studies to analyse changes at sub-national levels of government. However, Gibbs (2000: 13-14) argued that especially the theoretical construction of environmental policy capacity (Jänicke 1992) was well suited to analyse local changes. The changes at the local level are dependent on local contexts.

2.2. A definition of ecological modernisation

The gradual development of ecological modernisation theory has, during different phases of development, exposed new features of social change. This development indicates that the number of changes have been growing from pure innovative industrial policies towards more fundamental changes of political institutions. The change is dynamic following a development from a change within industrial processes towards a change of the whole society. The broader definitions of second phase ecological modernisation do not disregard the changes that are at the core early ecological modernisation. Hajer (1995) defines ecological modernisation as a...

‘...discourse that recognizes the structural character of the environmental problematique but none the less assumes that existing political, economic and social institutions can internalize the care for the environment. For this purpose ecological modernization, first and foremost, introduces concepts that make issues of environmental degradation calculable’

(Hajer 1995: 25-26).

For Hajer it is the change in the societal debate or discourse. However, ecological
modernisation is much more than a debate or a discourse. It is also about fundamental changes in the basic institutions that define the society-environment relationship. New institutions are created, old institutions are reformed, although the basic institutions within our societies are able to handle these changes. It is not a revolution, rather an evolution of contemporary society.

Mol & Sonnenfeld (2000: 6-7) identified five core issues describing social and institutional transformations in ecological modernisation theory: 1) An increasing role for science and technology, 2) an increasing role for economic agents and the market, 3) a changing position and role of social movements, 4) a transformation of the role of the state, and 5) an emerging new belief-system or ideology. In this article we will only look at the changing role of the state and government, and especially highlight the effects of these changes on local government.

3. THE TRANSFORMATION OF THE ROLE OF THE STATE AND GOVERNMENT

The change in the politico-administrative institutions of the ecological modernisation process has been neglected in the theoretical literature since the early ecological modernisation capacity-building studies. Empirical studies did to some extent analyse policy changes, but institutional changes were seldom analysed in studies involving a broader concept of ecological modernisation. Mol (2000: 46) however, has summarised the central theoretical findings of the changing role of the government and the nation-state: 1) The policy style has changed from centralised, static and hegemonic to decentralised, flexible, deliberative and consensual, 2) non-state agents participate actively in the policy processes at all stages, including implementation, and 3) supra-national, international institutions take over partially the tasks of the nation-states.

Based on empirical findings in Joas (2001), analysing changes in Finnish local government, we are going to examine more closely following expected changes to occur in local government in Europe if ecological modernisation changes are present:

1) Capacity-building at the level of local government

2) The creation of new local level institutions including new forms of governance (i.e. participation and public involvement), and finally

3) Internationalisation of local practices and policies.

3.1. Capacity-building

Jänicke & Weidner (1995: 16-18) listed five sets of conditions explaining good environmental policy performance, that is, policy success. The first of these categories was structures- the political, economic and cultural framework conditions for policy action. Also some of the other conditions highlighted the importance of capacities for policy action, so even if the environmental policy performance is influenced by various input factors, there is still evidence that political input can make a difference. In fact, the early ecological modernisation
The role of the state was a controlling and commanding one, and the main instruments were legal and administrative in traditional coercive fashion.

The capacities needed for development of the society vary in the different phases of the modernisation process. Enablers for the modernisation process are a certain level of economic capacity and actual performance, socio-cultural capacity to handle conflicting situations in a consensual style. The political and administrative systems were seen central in a sense that institutional capacities must exist or be created in order to react on environmental pressures. On the strategic side Jänicke required from the political and administrative system that there must be enough decision-making resources (competence, staff and material resources). Further, they have to work in a long-term, open and integrated fashion, in order to enable the innovation capacity building for the economic sphere (Jänicke 1995: 39).

During the 1980’s these basic capacities were built in most European countries and thus enabled the early modernisation phase as industries were forced to modernise their production processes.

3.2. Participation and institution-building

However, the policies and instruments from this era largely failed to address the ‘new’ dispersed pollution (see Weale 1992). Solutions to these problems involve a higher degree of structural, institutional change. Early ecological modernisation discourses lifted central political institutions into the debate.

Corporatist traditions were again seen as a key feature in reaching consensual policies in close cooperation with economic agents. The constitution of these network-based policy communities differ naturally from the traditional ones as new agents are involved. In addition, state borders are no longer issue borders. Depending on the type of topic, these network structures are also to a high extent flexible – in some matters the debate can be in the hands of a close policy community, in others discussible within a large issue network (Marsh & Rhodes 1992).

At the local level, the type of governance is found to be a key factor when related, for example, to the level of conflict in environmental management. Kettunen (1998) found out that the degree of openness plays a role with regard to the level of the conflict. In closed policy settings it was not easy to lift environmental matters onto the agenda, and conflicts were therefore reactions to administrative actions. In open type of administrations the conflicts were more easily put on the agenda, but there were nevertheless fewer conflicts due to the openness:

‘This indicates that municipality residents demand openness and the right to participate. If the right to participate is not
allowed, the residents will activate themselves in environmental issues, and in order to be heard the method they use is one of conflict’.

(Kettunen 1998: 11-12).

These results indicated the central role of public and stakeholder participation as a key feature for modern democracy (see also Evans et al 2005). Consensus, instead of conflict, enhances the possibility to achieve results. Also Buttel (2000: 63) stressed that embedded political autonomy and state-civil society synergy were crucial in order to achieve environmental policy effectiveness.

However, these political interaction patterns are still changing as new participation patterns broaden democratic processes (Hajer 1995). Local level environmental discussions were earlier largely between a national expert organ, the local official and the target firm – and at best also with neighbours and political agent. Today there are in many cases where local level civic organisations are also involved, and even citizen participation, for example through local Agenda 21 activities.

Furthermore, a divisional or compartmental environmental administration was often seen as the only type of organisational feature that would create a sufficient resource base for successful environmental policies (Jänicke 1992). These already existing political and administrative institutions are expected to be able to handle the new phases of change as well. They should be able to internalise the ecological concerns into the policy process (Hajer 1996: 253). The central role of the state is not questioned, even though several of the former duties of government have been privatised or decentralised (Mol 1996: 314, 317). Empirical studies show that existing institutions have been adapted as well as new institutions created, within the sphere of national governments in order to (re)gain control of policy processes of modernisation (Lundqvist 2001: 323).

‘Rather, the role of the state in environmental policy changes from curative and reactive to preventive, from ‘closed’ policy-making to participative policy-making, from centralised to decentralised, and from dirigise to contextual ‘steering’”


The new dispersed environmental problems have been widely acknowledged to have global effects, but the possibilities of the international level to handle them seem to be limited. Environmental policy objects have changed from a calculable number of large-scale industrial producers to a much larger number of small scale producers (such as agriculture) and consumers. This means that the ‘contact surface’ between state authorities and objects has to be increased somehow. The decentralisation of the commanding, controlling and information duties closer to the objects, the public, increases the importance of local knowledge (Mol 1996: 317). In this case, local government can be seen as the natural unit of government authority (O’Riordan 1996).

The new policy objects, the ordinary citizens and small-scale producers, are agents who have to learn the same language as the technical and political elite, in order to discuss environmental problems within the same frame of reference – that is a common understanding of the problems. In order to achieve a better common
knowledge – ‘environmental citizenship’ (Sairinen 2000: 79) or ‘governmentality’ (Neale 1997:3) – informative and participative practices are of central importance. This relationship between decision-makers and experts to inform and educate individuals to be involved in environmental self-governance is evident for ecological modernisation (Neale 1997: 3). Once again, it seems to be rather natural for the local level to enter into such dialogues, for example through local Agenda 21 activities.

3.3. Internationalisation

A third change has emerged from the international arena. National governments and industries are highly dependent on international agents, not only on other states and inter-governmental organisations, but also via international pressure groups and consumer behaviour. The globalisation thesis is clearly visible within a European context, as much of the central environmental policy-making is in the hands of the European Union, leaving just a limited possibility for member states to act (Sairinen 2000: 78).

The process of globalisation is also visible as a ‘bottom-up’ approach, as an institutional change moving from the local level upwards. A growing number of local governments especially in Europe are involved in networking activities with environmental goals – for example through ICLEI – Local Governments for Sustainability, Climate Alliance and the Union of the Baltic Cities. Such networks are even partially competing with national governments and networks based on their action, for funding, policy influence and activities, even if these would not be in conflict with each other (Bulkeley et al 2003). Local processes have become international processes at the same time as local governments work as easily over national borders as within them. The sub-national cooperation is rather seldom controlled by governmental authorities, and to a limited extent even financed by them. Within the area of sustainability policies it seems in fact to be a competition between national activities and sub-national activities concerning the ‘sustainability market’ (Kern & Löffelsend 2004). National governments have the role of enablers and supporters of this development.

4. THE DISCUS PROJECT

The DISCUS research project was funded by the European Commission and was conducted over a three-year period (2001–2004). Eight partners from across Europe undertook an in-depth investigation of local sustainability policy and practice in 40 European towns and cities, full details of which may be found in Evans et al (2005). Thirty of these cases were drawn from a group that had demonstrated their advanced standing in local sustainability in that they were either past winners of the European Sustainable Cities and Towns Award, or they had been identified as ‘good practice’ cases in the earlier research. These cases were selected on the basis that they had achieved tangible results in sustainable development policies and had some explicit forms of active governance process for sustainability, such as an LA21 programme. They were thus expected to be useful cases for exploring the project research questions. In
contrast, the remaining ten cases were chosen as a control group. As far as the project team could ascertain, these cases had no programme for local sustainability, no known LA21 process and no membership of the European Sustainable Cities and Towns Campaign or other local sustainability networks.

In each town and city, researchers conducted an analysis of relevant documents, undertook interviews with key respondents from local government and civil society, and conducted a survey questionnaire again with local government and civil society representatives. The starting point for the research was that ‘good governance is a necessary precondition for achieving sustainable development, particularly at the local level’.

Our proposition was that existing institutional structures and existing social capital within a society impact upon each other. This interaction is a condition for all forms of democratic government, and even more in forms of governance where a society moves beyond the traditional mode of democratic rule. Furthermore, our assumption was that different forms of institutional structures lead to different levels of institutional capacities for sustainable development policy making. In a societal setting where (local) government capacities are generally at a high level, we could also expect that this would be the case in the sustainable development sector. This approach builds upon the work of Jänicke and Weidner (1995) and is discussed further in Evans et al (2006).

4.1. **Capacity-building in our case towns and cities**

In the DISCUS case towns and cities we identified a number of factors contributing to capacity-building for sustainable development – for example committed officers and politicians; systematic training for sustainable development; the mainstreaming of sustainability into the working practices and ‘norms’ of a local authority; and the existence of confident local authorities, gained through legal, fiscal, and political autonomy.

**The role of key individuals**

The findings have emphasised the importance of key individuals in driving a local sustainable development process forward. These individuals may be paid officials (as in the case of Falkenberg’s Local Agenda 21 officer (Sweden), or a team of dedicated staff, as in Dunkerque Urban Community (France). There were many cases where executive Mayors were perceived by others within the local authority as ‘entrepreneurial’ figures with the charisma and commitment to motivate others and to promote the sustainability agenda, for example Ferrara Province (Italy), Barcelona Province (Spain), Valenciennes (France), Calvia (Majorca in the Balearic Islands), and Dunajiska Luzna (Slovak Republic). In these cases, officers and politicians were prepared to prioritize long-term sustainable development goals and to take often unpopular decisions in support of this.
**Training for sustainable development**

Institutional capacity for sustainable development was also evident in terms of the levels of investment in training for sustainability for both officers and politicians, for example Haarlem (The Netherlands), and Dunkerque Urban Community (France), where specific budgets are allocated for sustainability training.

**Mainstreaming of sustainability practices**

There were a number of examples of the establishment of a ‘horizontal’ organizational structure that encourages cross-departmental working and a stable environment for sustainability policymaking; and the adoption of sustainable development principles for internal practices, such as eco-procurement. In Ferrara Province (Italy), the local authority had integrated ‘green’ purchasing across all departments. Vantaa in Finland had developed an environmental budget, and in Hanover (Germany), environmental services were networked between all the Directorates. In Fano (Italy), it was perceived that LA21 had been instrumental in the development of greater cross-departmental links.

**Strong government and sustainable development achievement**

The findings show that where there is evidence of strong governance processes for sustainability (including active engagement of civil society in local decision-making processes) and where there is also evidence of policy achievement in this field, those local governments also tend to have a high level of fiscal, legal and political autonomy (for example in the cases of Ferrara in Italy, Calvia in Majorca, and also some of the Scandinavian cases). This implies that when local governments are granted higher levels of autonomy and independence, they respond to this by being more proactive and adventurous in their policymaking and implementation. Self-confidence, conviction and self-awareness seem to increase in line with levels of autonomy.

4.2. Creating new institutions for participation at the local level

Many of the case towns and cities were developing new opportunities and institutions for encouraging participation in the sustainable development process by both individuals and civil society organisations.

A number of local authorities were setting up initiatives for providing relevant and ‘user-friendly’ information to citizens on local sustainability issues and policies. For instance Barcelona Province was providing training on sustainable development to civil society; Citizens Commissions had been established in local authorities such as Granollers in Spain; a Consumption Centre had been created in Lahti, Finland for the public to find out information on domestic energy consumption; and a website for citizens to measure their ecological footprint had been established in Stavanger (Norway). Towns and cities such as these where capacity-building initiatives were being implemented also had clear evidence of sustainable development achievements.
The research found that in many instances, where local governments had made real attempts to engage with civil society organisations, in turn these organisations and sectors (listed below) were supportive of local authority sustainability initiatives.

— *The local media.* This was mainly newspapers, with examples of a supportive press being found in Albertslund (Denmark), Gotland (a Swedish island), Stavanger (Norway), and Korolev (Russia).

— *Universities and the education sector.* Examples of this were in Tampere (Finland), Vaxjo (Sweden); Korolev (Russia), and Santa Perpetua de Mogoda in Spain.

— *Business and industry.* There were a number of cases where there was a strong relationship between this sector and local authorities, in support of sustainable development. Notable examples were the ‘expansive Vaxjo’ initiative, aimed at linking the local authority and business, the city of Fredrikshavn in Denmark working with business on energy saving initiatives, Modena Province in Italy encouraging SMEs to adopt EMAS, and Calvia in Majorca working closely with the hotel industry to improve the local environment.

— *Environmental non-governmental organizations (NGOs).* A particular example of a strong influence by NGOs was in Vantaa (Finland), where an umbrella organisation of environmental organisations was in existence, and supported by the local authority.

4.3. **National and international activities in local government**

The role of national and international networks for sustainable development was clearly important in a number of the case towns and cities. Falkenberg (Sweden) engages in many ‘networking’ activities at national and international level and, like two other DISCUS cases in Sweden (Vaxjo and Gotland), it is a member of SEKO – the Swedish eco-municipality network. Vaxjo is also a pilot city for the National Nature Protection Association in Sweden.

A number of the cases are members of European local government networks. Thessaloniki (Greece) participates in several European networks – for example, Eurocities, Med-Cities and Balkan Cities; Tampere is a member of Eurocities; Kuressaare is a member of the Healthy Cities network; Gotland and Stavanger are members of KLIMP (the Nordic equivalent of the Climate Alliance), and both Munich and Hannover are members of Climate Alliance. In addition some cases are involved in European projects, for example both Vaxjo and Ferrara are project partners in the Eco-budget Initiative, co-ordinated by ICLEI – Local Governments for Sustainability. Several of the cases have chosen to promote themselves on the European stage through applying for, and winning, the European Sustainable Cities and Towns Award, for example Dunkerque Urban Community won this Award in 1997; and Munich in 1999.
5. **CONCLUDING: THE SECOND PHASE OF ECOLOGICAL MODERNISATION**

The empirical material reviewed above clearly indicates that new processes, relationships and institutional structures are emerging at the local level which may be viewed as a second phase of ecological modernisation, or more properly perhaps, of ‘sustainable development modernisation’. These processes are increasingly engaging civil society organisations, citizens and international networks and NGOs in the policy process, both as actors in shaping and delivering policy. However, as this process unfolds, it is clear that the discourse is changing. Whereas the early ecological modernisation discourse was clearly focused upon the environmental, the emphasis now is increasingly upon the wider discourse of sustainability, encompassing the social and the economic as well as the environmental.

Whilst there may be some reservations as to how far this emerging sustainability discourse is characterised by rhetoric rather than reality, it is clear that the discourse itself is an integral part of the second phase of ecological modernisation. The DISCUS study indicated that, in most cases, the ‘environment’ is the door through which policy actors must enter the sustainable development discourse – it is a familiar and more easily comprehensible route.

The Agenda 21 agreement reached at the 1992 Rio de Janeiro ‘Earth Summit’ recognised that global environmental problems cannot be addressed by governments alone. The Local Agenda 21 initiative specifically recognised the role of local governments, as ‘the level of governance closest to the people’ and their communities in delivering sustainable development. The evidence of the last decade is that new processes of environmental governance are emerging at all levels – local, national and international, and that it is this second phase of ecological modernisation which has the potential to secure significant changes in environmental policy and practice world wide.

**REFERENCES**


Local Agenda 21 in Europe. The second phase of ecological modernisation in local government


