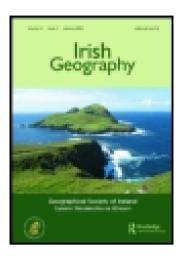
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Waste wars- public attitudes and the politics of place in waste management strategies

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ABSTRACT

Arguments about waste management in Ireland are so deeply contested that they have been conceptualised as cultural wars. Key arguments between the warring factions have revolved around what kind of processes will provide a sustainable waste management strategy and at what scale the conflicts over waste should be resolved. To date much of the research into waste management has been fixated on technical issues, institutional arrangements and the top end of governance structures as significant sites for negotiation about waste. Attention to wider publics in these waste wars has been confined to a surface examination of NIMBYism and the State-based development of information-based awareness campaigns. It is proposed in this paper that in order to approach the strong demands of sustainable waste management through multi-level governance in Ireland, as stipulated by EU institutions, a more serious consideration of the role of publics in waste management needs to be undertaken.

Key index words: waste management, public participation, governance, Ireland.

Introduction

The economic advancement of the Irish State over the past decade has earned it the title of the Celtic Tiger, or more dubiously, the Green Tiger economy. Dubious because the impacts of this economic growth on the Irish landscape have in some cases visibly degraded rather than enhanced environments. Claims to 'greenness' in the Irish economy are met with increasing scepticism amongst the Irish public and greater scrutiny from environmental watchdogs in Europe. In particular, the increasing amounts of waste being generated as a consequence of the rapidly growing economy mean that waste management is emerging as a significant and highly controversial environmental issue. The threat posed by the unwanted by-products of economic expansion is perceived to be so great that the newly appointed Minister for the Environment has written that 'Ireland is in the midst of a grave waste problem' (Cullen, 2002: 14) and academic commentators are framing the debates surrounding the treatment of waste as 'cultural wars' (Boyle, 2001). In particular as landfill sites move towards capacity commentators forewarn of a waste crisis heightened rather than diminished by new strategies for the disposal of large amounts of waste through the introduction of thermal treatment plants, more commonly known as incinerators, for municipal waste. While the Irish approach to developing a waste management policy is not particularly unique it has emerged within a specific historical context relating to the treatment (or non-treatment) of waste and a distinctive set of political circumstances that need to be carefully examined.

From an institutional perspective a pivotal moment in waste management planning in Ireland was the enactment of the Waste Management Act, 1996 which incorporated management plans, licensing, monitoring of implementation and compliance combined with

targets for recycling and waste reduction. This Act marked for the first time an attempt to develop a comprehensive national framework for waste management strategies. Within the Act the production of waste plans by local authorities was seen as the key mechanism by which the strategic management of waste could be developed. In Ireland the main aim of these plans, following directives from the EU, was to reduce the amount of waste – currently around 98 percent of domestic and 70 percent of commercial waste – going to landfill (Taylor, 2001: 100). Under the European Union's (EU) interpretation of sustainable waste treatment disposal to landfill is the least favourable management option, followed by thermal waste treatment (with waste to energy transfer), recycling, re-use and waste minimisation, with prevention the most favoured position (EPA, 2000:1). This stratification of waste management options has become known as the waste hierarchy.

The amount of research relating to waste policy in Ireland is growing and a number of useful texts have emerged in the last few years. Boyle (2001; 2002) focuses on the political ecology of waste, while Fagan et al. (2001) disseminate findings from on-going work on collaborative North-South waste management strategies. It has been suggested by these authors that Ireland's waste policy lacks attention to social context and the principles of good governance. These suggestions are interesting, but they are underpinned primarily by research focused on national and supra-national waste policy frameworks. Research that addresses waste policy processes and impacts on the ground, specifically with householders, is lacking. This paucity of attention means that assumptions are made generally concerning how people and communities comprehend waste issues in social or 'lived' contexts and in particular about interactions between civil society and government in relation to waste. Thus far public positions in relation to waste management have been taken from simple attitudinal surveys (see Drury Research, 2000) and these have been used to justify the development of mass mediated environmental awareness campaigns that focus on information provision as a resolution to negative waste producing behaviour (Davies, 2002). Yet outside Ireland there are increasing challenges to the idea that information alone will provide the answer to waste management problems which are not just technical, but also inherently political issues (Petts, 1997; 2001).

This paper suggests that while there have been some useful analyses of waste management in Ireland, above all those which have highlighted the function of scale in the regulation of waste management activities, these have concentrated on the macro rather than micro level of interaction between actors. The position of publics, in the production and treatment of waste products and their participation in the development of waste management strategies, has so far been given little attention within the Irish policy context. The word 'publics' is used here to signify that 'the public' is not an homogenous mass of like-minded people, but that society is increasingly differentiated across age, gender, ethnic and socio-economic variables. This inattention to publics is problematic given the participatory ethos that lies at the core of sustainable waste management, to which the Irish Government is (at least rhetorically) committed and the demands that will be placed on the consumer if the higher echelons of the waste management hierarchy are to be achieved.

As a first step to expand debates within waste management this paper has two main components, the first presents a brief summary of the waste issue as it has evolved in Ireland, the second considers the issue of public participation in environmental policy making, specifically reviewing how publics have been treated in terms of Ireland's waste management. Potential mechanisms for incorporating a public dimension to waste research within an Irish context provide the concluding component of this discussion.

The waste crisis

As with other concepts in the environmental field, pinning down a definition of waste can prove elusive. One person's waste can be a resource to others, particularly in different geographical, temporal and cultural contexts. For the purposes of this paper the definition used coincides with that derived from OECD and elaborated by Boyle (2001: 73) in which 'waste' refers to materials that are residual to the needs of the individual, household or organisation at a particular time and thus need to be disposed of. Articulated in this way, waste can exist in a variety of states from solid, through liquid to gas and can be generated by a variety of processes from agriculture, industry, construction to household and commercial (see Boyle, 2001, for a more detailed analysis of the variety of waste sources); the latter two processes are generally referred to as municipal waste generators, the focus of this paper.

Although the field of waste management incorporates a variety of different sectors there has been an increase in the production of waste in Ireland across the board during the last decade (see Table 1). Indeed over the last twenty years the amount of waste generated in Ireland has more than doubled. In the benchmarking document 'Ireland's Environment: A Millennium Report' (Stapleton et al., 2000), the Environmental Protection Agency (EPA) is clear that waste generation appears to be increasing in line with the rising economy. The report states that 'a comparison of waste collected by or on behalf of local authorities between 1984 and 1998 indicates an increase of over 100 percent' (EPA, 2000: 55). Sustainable waste management though demands a decoupling of waste generation and economic growth and it is towards this challenge that Europe and Ireland's environmental policies are oriented.

Table 1: Major sectors of waste arisings in 1998 and 1995 (adapted from EPA, 2000: 57).

Waste Category	Waste tonnes 1995	Waste % 1995	Waste tonnes 1998	Waste % 1998
Agricultural	31, 000, 000	73.4	64, 578, 724	80.7
Manufacturing	3, 540, 226	8.4	4, 876, 406	6.1
Mining & Quarrying	2, 200, 002	5.2	3, 510, 778	4.4
Municipal waste	1, 848, 232	4.4	2, 056, 652	2.6
Construction and Demolition waste	1, 318, 908	3.1	2, 704, 958	3.4

All areas of waste management have specific issues that require public attention and for people to be fully participative in the development of waste management strategies there should be a general public awareness of these issues as a totality. Nonetheless in the first instance it is the field of solid household waste that the National Government sees as the primary focus for public attention to waste management. The Environmental Protection Agency defines household waste as being 'produced within the curtilage of a building or self contained part of a building for the purposes of living accommodation' (EPA, 2000: 93). Although by no means the most voluminous area of waste generation (see Table 1) – a particular bone of contention for those who oppose the introduction of waste charges in Dublin – household waste still accounts for over 1 million tonnes annually and 'the average Irish individual generates about 580 kg of municipal waste per annum, far in excess of EU

neighbours' (Cullen, 2002: 14). Therefore dealing with household waste is seen as an important part of an overarching integrated waste strategy.

The dominant method for disposing of household waste in Ireland is landfill and it is this practice that has been the cause of many waste wars both past and present. Equally there are likely to be more conflicts over landfill in the future following the Waste Management Act, 1996, which seeks to consolidate and improve existing landfills. According to the EPA (2000) over 90 percent-of municipal waste is disposed of by landfill with only 9 percent being recovered and in addition more than 50 percent of all landfill sites in Ireland will be at capacity within three years. The capacity of these landfills given current trends in waste production will be breached in most of Ireland by 2012 (see Figure 1) while the number of active municipal landfill sites has fallen from 87 in 1995 to just 50 in 2000 (Forfás, 2001). The dominance of landfill can be traced to its relative cost-effectiveness in the past, although in many cases this apparent efficiency evolved as a result of poor maintenance and environmental standards below that required by EU legislation. The reliance on landfill is coupled with what can, at best, be described as an embryonic recycling infrastructure.

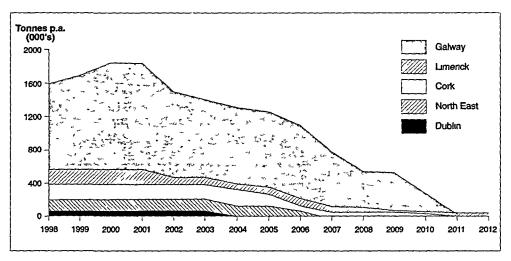


Figure 1: Projected available landfill capacity in five regions (Galway, Limerick, Cork, North East, Dublin) Adapted from Bacon & Associates, 2002: 27.

There have been increasingly voluble social, environmental and health concerns voiced against the continued use of landfills in the public arena. Apart from the negative impact on house prices that living next to a landfill can engender there have also been scientific studies into the pollution of groundwater, the atmosphere and increased incidence of particular cancers and birth abnormalities that may be associated with landfill practices (Boyle, 2001). In combination, the pressures of public concern, European Directives, and the imminent breaching of landfill capacity stimulated a consolidated revamping of waste management strategies in Ireland during the 1990s, which culminated in the Waste Management Act, 1996. The Act, later expanded in planning regulations (1997) and through the policy statement Changing our Ways (DoELG, 1998), was a strategy aimed at reducing the amount of waste sent to landfill and redirecting waste to treatment methods further up the waste management hierarchy. The Changing our Ways document placed great store in tangible expressions of this shifting focus in waste management stating that 50 percent of household waste should be redirected away from landfill and the number of landfills should be reduced and the

remainder upgraded in size and environmental quality standards. In addition to rationalising municipal waste landfill sites there was a Government commitment to the development of alternative waste recovery facilities such as composting, recycling and biological treatment (DoELG, 1998). Although the number of recycling sites has been steadily increasing throughout the 1990s (Fahy, 2002) the actual rates of recycling still compare unfavourably to European averages. The increased provision of recycling facilities alone seems not to have had a significant impact on behaviour as yet and aside from the recent introduction of charges on plastic bags there have been few external measures adopted to encourage positive behaviours in relation to waste. It should be noted however that the infrastructural provision of recycling facilities is still low in comparison to many other EU countries.

As a means of attaining European targets the Act required the development of waste management plans, both for hazardous and non-hazardous waste. The responsibility for hazardous waste management planning was relocated to the Environmental Protection Agency, while non-hazardous waste management remained a reserved function of local authorities. The capacity of local authorities to rise to this task of not only formulating, but adopting and implementing these waste management plans has been identified as a crucial component of the Waste Management Act (Boyle, 2001). In particular local authorities had to incorporate the concept of integrated waste management by bringing together a range of waste management options, including segregated collections of waste, composting, recycling, and thermal treatment facilities, within the plans (DoELG, 1998). Local authorities were encouraged to work on a regional basis to formulate their plans (see Table 2 and Figure 2). This national strategy of regionalisation and its implications for waste management strategies are considered in more depth by Boyle (2002), but suffice it to say here that economies of scale in terms of large-scale waste treatment facilities formed a major justification for adopting this scale of governance for waste. Only Wicklow and Kildare County Councils elected not to join other local authorities in the formation of regional plans instead opting for individual county-based waste plans, while Donegal worked with Northern Ireland to develop a cross-border plan. In the process of developing local waste management plans, two key issues have emerged: (a) the role of experts in systems of multi-level waste governance and (b) public participation in waste management planning.

Table 2: County breakdown of regional waste management plans.

Regional plan	County Councils		
North East	Cavan, Louth, Meath and Monaghan		
Dublin	Dun Laoghaire-Rathdown, Fingal, South Dublin, and Dublin City Council		
Midlands	Laois, Longford, Offaly, North Tipperary and Westmeath		
Connaught	Galway, Leitrim, Mayo, Roscommon, Sligo, and Galway City Council		
Limerick/Clare/Kerry	Clare, Kerry, Limerick, and Limerick City Council		
Cork	Cork, and Cork City Council.		
South East	Carlow, Kilkenny, South Tipperary, Waterford, Wexford, and Waterford City Council		

Note: The local authorities in the South East region have adopted individual plans that meet EU requirements. They have since prepared a regional plan that at the time of writing is awaiting publication. (from Fahy, 2003).

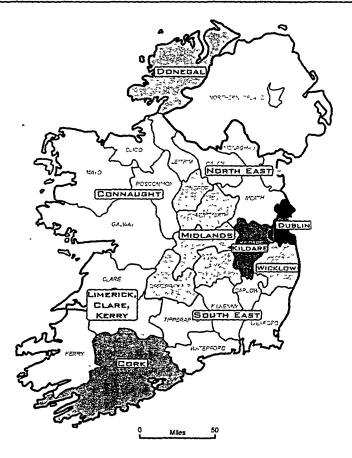


Figure 2: Waste management planning regions.

The role of expertise in multi-level governance for waste management planning

Boyle (2002) identifies a number of cultural readings of waste that have flourished under the Government's regional strategy and there is reference made to publics in one of these. The reading is one of wily local communities wisely adopting health and environmental concerns to mask what Government politicians and the consultants involved in drafting the waste plans, saw as a simple NIMBYist aversion to the location of waste facilities. This is reflected in the views of the current Minister for the Environment who notes that 'waste treatment options are controversial, and there is strong public opposition to proposals for any significant waste infrastructure. Indeed as recent cases illustrate, even proposals for relatively benign bottle banks and recycling centres attract criticism' (Cullen, 2002: 14). The official Government response to public health fears over incineration and landfills has been to label them as alarmist and without sound scientific evidence. The Government is clearly attempting to reassure publics that science, engineering and technology can resolve what they consider to be technical difficulties with the processes of incineration. The reassurance that seeks to demonstrate governmental commitment to public health and environmental protection though is undermined by regular news stories of illegal toxic waste dumps resulting from a poor regulatory history in the treatment of waste (Taylor, 2001).

Engineering consultants based in Ireland drafted all the Waste Management Plans. Fehily, Timoney & Company produced the Joint Waste Management Plan for the South East, Tobin Environmental Services Ltd., were the consultants for the Cork plan while M.C. O'Sullivan and Co. Ltd. prepared the remainder. There is a remarkable similarity both in presentation and content of all the plans, each one recommending thermal treatment alongside recycling, biological treatment and reduced landfill. These consultants were characterised as 'waste experts', with their role defined as information provider and educationalist to local authorities, industry, business and publics. In the particular context of waste management in Ireland the consultants have to be seen as key decision-influencers in the waste management debate and they were pivotal in defining the strategic vision for waste in Ireland. Specifically it was this identification of the need for municipal incineration facilities for the first time in Ireland that was to cause the most problems in the process of adopting waste management plans. So challenging did some local authorities find reaching agreement about incineration that by 2000 six out of 28 of them still had no plan in place. During 2001 Europe was beginning to lose patience with the lack of progress in adopting waste management plans in Ireland and the threat of being taken to the European Court of Justice had been voiced. This potential intervention from Europe created tensions between national and local government. At a national level the Government needed to move the waste plan adoption process forward in order to avoid confrontation with Europe. At the local level environmental and health concerns against thermal treatment methods were voiced by anti-incineration lobby groups composed of local people and assisted by national environmental groups such as Earthwatch and trans-national environmental networks such as Global Anti-Incineration Alliance, Building incinerators was seen by these groups as regressive with fears that not only might health and environmental quality be put at risk, but also that once constructed they would require continuing volumes of waste to remain economically efficient thus diverting attention and resources away from the more desirable 're-use, recycle, reduce' aspects of the waste management hierarchy.

While the environmental and health issues around the various waste management strategies were still being hotly contested during 2001 the National Government was keen to resolve the deadlock over the adoption of plans. Attention to scalar politics of waste management and the design of appropriate structures for democracy were key to the Government's strategy for achieving movement in the planning process. In a decisive act, which was to fuel rather than contain heated debates about democracy, the Minister for the Environment intervened in the stalemate in March 2001 when he introduced the Waste Management (Amendment) Bill, 2001. Alongside the more progressive developments contained within the Bill, including an environmental levy both on plastic bags and waste sent to landfill, was the transfer of the responsibility for the adoption of waste management plans from the elected members of local authorities to local authority managers. As noted by Boyle (2001) the aim of this transfer was to remove the adoption decision from the electoral process, but by doing so it was also open to criticism for eroding fundamental aspects of local democracy. It appeared to some, particularly opposition TDs, that at this stage of the process the Minister for the Environment simply wanted plans adopted irrespective of the local appropriateness of the strategies contained within them.

Since the 2001 Act the incumbent Minister for the Environment has moved the debate regarding the process of adopting waste management plans to another stage. In August 2002 he launched a proposal to circumvent local democracy by 'fast-tracking' decisions about

incinerators, landfill sites and other waste management facilities directly to An Bord Pleanála, the Irish Planning Appeals Board. Coverage of his proposal focused on the Minister's labelling of the waste management planning process as 'over-democratised'. However even fast-tracking the plans to An Bord Pleanála might not result in a quick decision as the Bord already has a backlog of appeals to deal with and the plans would still be subject to public debate. Opposition TDs have been quick to label the proposal anti-democratic fearing a sense of disempowerment for local communities. The Minister himself refutes this anti-democratic position stating that he does not want to remove the rights of any individual or organisation to express their views, rather he wants to reduce the number of levels on which those representations can be made. The legality of such a move to switch participation in the waste management planning process to the national stage is not yet established and environmental organisation, An Taisce, has stated its intent to seek legal advice on the constitutionality of removing the waste management planning process from the arena of local democracy.

Public participation

It is important to acknowledge that under the current system for waste management plans there is a statutory duty on the part of the local authority to incorporate publics in the waste planning process. As noted in the Limerick/Clare/Kerry Plan, '[t]he Waste Management Act 1996 stipulates that the public must be given an opportunity - over a minimum two-month period - to voice their opinions on any Draft Plan being developed, and following the display of the Draft Plan a further two month period is allowed for consultation with the public on its content' (2000: 75). This is reflected in all the regional waste management plans as each has a section relating to the public participation process adopted, the responses received and the actions taken by the local authority as a result of those responses. For the most part each plan articulates the importance of public participation such that '[p]ublic consultation forms a fundamental part of the waste planning process' (Limerick/Clare/Kerry, 2000: 75) and that there has been 'ongoing public involvement' (Connaught [draft plan], 2001: 92). On closer inspection the majority of these processes of participation have revolved around media announcements of the plans development and information leaflets distributed to interested parties and sections of the public. The responses have, numerically, been concomitant to the size of the populations in the regions. Looking across three plans - Connaught (Draft), Dublin, Limerick/Clare/Kerry (L/C/K) - there are, however, some noticeable differences in where those responses come from (see Table 3 below).

Table 3: Participation in statutory planning phase of waste management plans.

Sector	Connaught	Dublin	· L/C/K	
Public/Individuals	5	45	37	
NGO	7	12	4	
Commercial	12	39	1	
Public Representatives	18	37	N/A	
Total	42	133	42	
	(Post Draft 49)			

The Connaught plan, which includes Galway, stands out because of its low le el of public responses in contrast to the Limerick/Clare/Kerry plan where the majority (88 pc cent) of written submissions came from that sector. Connaught's low response rate in the formal

process is in stark contrast to the publics' reaction to the incinerator question in Galway where thousands of individual submissions were made to local authority in connection with the campaign against the proposed location of the incinerator in the city. The question is why this apparent discrepancy between public participation in statutory waste planning mechanisms and in informal protests against waste management facilities exists. Looking at the methods selected for encouraging participation both Connaught and L/C/K have very similar strategies of media messages and briefing leaflets, yet they engendered different (albeit both low) levels of participation from the public. In the Dublin case the approaches were more innovative including web-sites and mobile displays as well as media launches and public information leaflets. Dublin's Plan notes that '...public involvement process has emphasized the need for a strong community aspect to future waste management in the Dublin Region and the importance of the community role in achieving waste minimisation and recycling ... the emphasis will be on personal contact with appropriate bodies rather than over-reliance on promotional literature' (1999: 96). There should be a careful monitoring of this more inventive approach to public participation in order to establish whether it generates greater levels of participation and also whether it influences the type of management strategies adopted. There are still conflicts about the relative benefits and costs of different waste management strategies being played out in the public sphere visible through media coverage of local protests and NGO campaigns yet the formal channels for statutory consultation are barely used by publics. While on one level mechanisms for participation are undoubtedly in place it does not appear that they are seen by publics as appropriate or efficacious fora in which to articulate their views on waste management strategies. In terms of sustainable development's call for inclusive participatory democracy enshrined in Agenda 21, Ireland's waste management process follows the letter rather than the spirit of the law. Issues relating to the role of local democracy and in particular the relationship between experts, politicians and lay publics in the preparation of waste management plans lie undisturbed beneath the clinical policy-speak of the waste management plans.

Incorporating publics in waste management planning

Increasing public participation in policy making within the environmental sphere has been proposed as a means to establish institutional credibility, develop citizen empowerment, foster social responsibility and enhance information dissemination. Justifications for improved public participation are often couched in terms of the rights of citizens to have an influence on decision making (ideological bases) and as a mechanism through which a range of views in a diverse and complex society can be accessed (practical bases). However the broad calls for greater participation in environmental policy emanating from international regimes such as Agenda 21 (UNCED, 1992) belie the range of activities that can fall into that category.

Public participation in Ireland's waste management policy

At a general policy level the role of publics in environmental policy making in Ireland has traditionally been marginal, particularly in the developmental stages of policy. Despite signing up to Agenda 21 at Rio in 1992, and assigning Local Agenda 21 (LA 21) officers in each local authority, the development of LA 21- in which a central tenet is public participation in policy making—lags behind other European nations (Mullally, 1998; Lafferty, 2001). In many cases civil servants are nominated as LA 21 officers in addition to their pre-existing

duties, leaving such initiatives under resourced. Perhaps as a consequence of this underfunding the reality of public participation in the formation of environmental policy is minimal. With respect to waste management policy publics have tended to be characterised as uninformed, or worse misguided, having been led into moral panics by organised resistance to the siting of waste facilities, or conversely having allowed themselves to be ruled by selfish NIMBYism. This can be codified as a traditional conception of the public that portrays ordinary citizens as an homogeneous mass who are, as Wynne puts it, 'epistemically vacuous' (1996: 60), with their contributions to policy making deemed of little authority outside their 'parochial, subjective and emotional world' (Wynne, 1996: 62). This position is being increasingly challenged and researchers have demonstrated that generalised expert-lay public divisions are misleading (Wynne, 1996; Burgess et al., 1998; Owens, 2000). In modern society where knowledge is progressively specialised and politicised most people will be 'lay-publics' in relation to certain complex issues, at some time and in some places. Wynne's (1996) work regarding the relationships between farmers and scientific knowledge following the Chernobyl nuclear disaster is a classic study in this regard. Yet in the field of waste management in Ireland the expert, in this case the environmental consultant, is still presented as key information provider, educationalist and primary decision-influencer (if not decisionmaker), holding privileged and legitimate knowledge.

Ireland's current approach to public participation in waste management adopts an information-deficit model for environmental planning. This model sees public participation as predominantly a means to 'correct' public positions so that they concur with those expressed by experts through a process of information provision. This process of information provision or education often involves publics being presented with 'the facts' of the matter under discussion. The information flow about the environment is one-way and top-down from experts to publics (Blake, 1999). Proponents of the information-deficit model adopt the perspective that environmental inaction on the part of publics (such as not recycling) or negative reactions to environmental regulations (such as actions against incinerators) are simply the result of a public ignorance of the facts - they have the wrong values and need to be given the 'right' ones through the provision of information. The deficit model underpins Government-led citizen's awareness campaigns throughout Europe, including the Irish Government's current programme 'it's easy to make a difference' (DoELG, 1999), where the assumption is that the communication of information will produce a shift in values and an increase in environmental action. Such assumptions are at best partially flawed and may in fact reinforce scepticism about participation because of the lack of influence that publics actually have in the process. Indeed Fagan et al. (2001: 44) note that community activists in Ireland were wary of public consultation exercises in relation to waste management because they were perceived to be superficial and simply a means to rubber-stamp proposals that had already been pre-defined. In addition work by researchers in the USA (Kempton et al., 1995), Sweden (Jaeger et al., 1993), The Netherlands (Burgess et al., 1998) as well as the UK (Blake, 1999; Davies, 1999; 2001; Smith et al., 2000) all conclude that cultural norms and social structures are more influential in moving environmental values into actions than the availability of scientific information. As noted by Owens (2000: 1144), if this is the case then what is required is 'democratic engagement - in the formation and articulation of values, and in policy formulation and implementation- moving beyond prescribed responses to predefined problems and far removed from the quest for passive compliance with technological imperatives'.

A new direction for public participation in Ireland's waste management strategies?

Researchers involved in challenging the basis of the information-deficit model do not deny the necessity for expert information on environment issues. It is undoubtedly better to be informed than ignorant even if no action follows, but if the reasoning behind public attitudes and [in]actions can be established - for example by involving them in policy development - then policies can be altered to encourage positive environmental behaviour more effectively. Such involvement of publics in developing environmental policy has been termed a 'civic' model of participation (Owens, 2000). This model seeks to create the 'right processes' for people to express their values in the policy making sphere. The assumption here is that generating more open and discursive debates will lead to the 'right values' through reasoned debate. The values are 'right' not because they take a particular position (as with the deficit model), but 'right' because they have been established in a legitimate fashion (i.e. through more inclusive deliberation). This is an ideal position and some commentators, such as Goodin (1992), suggest it is erroneous to assume that publics in policy deliberations will necessarily prioritise the environment. Nonetheless the civic model involves a mutual exchange of information, which repositions publics in policy making procedures and recognises local or rather 'lived' experiences as relevant to effective policy making. Practitioners alongside academics within the fields of local government, community development, land-use planning as well as waste have equally been positive about engendering greater public participation in decisions about the environments in local places along the lines imagined by the civic model (Healey, 1997; Forester, 1999; Petts, 2001). Of course putting the theory of civic participation into practice is no easy exercise as the identities of public are complex, motivations for greater participation diverse and mechanisms for facilitating that participation still under development.

Procedurally the civic model proposes the use of mechanisms that provide opportunities for open and inclusive public discussion. The objective of these mechanisms is to encourage publics to articulate their thoughts and to build stronger, more trusting relationships between publics and local authorities through deliberation, where deliberation means the discussion of the reasons for and against a particular proposal. Public engagement in an open and inclusive manner, as directed by the civic model does not mean that 'anything goes', but it does permit challenges to the top-down, expert driven, technical process of environmental policy making. It is envisaged that including the public in discussions about environmental policy might actually help to identify what the problems are as well as suggesting potential solutions. The publics in this model have to have confidence in the institutions and mechanisms that surround the deliberative processes, feel able to question assumptions and trust that their contributions will be seriously taken into account (RCEP, 1998). As a result the effectiveness of the civic model of waste management planning is intertwined with the development of social capacity, empowerment and citizenship alongside information provision and the development of a knowledge base about waste issues. Achieving these nebulous goals is notoriously difficult and time consuming, however there are transformative research mechanisms that can be used to initiate greater discursive relationships between local authorities, waste management experts and local communities.

As in Ireland, English local authorities are being forced to respond to the challenge of dealing with increasing volumes of waste and to comply with EU Directives demanding that waste disposal to landfill be reduced. In response to these pressures Community (Citizens') Advisory Committees (CAC) have been piloted in a number of local authorities as a means

to enhance public involvement in waste planning and generate fair and competent processes. CACs are a long-standing feature of government in the USA (see Vari, 1995) and aim to provide a space in which small groups of citizens can participate in decision making over a lengthy period. Members of CACs are generally selected from specific positions that the organisers (in this case local authority officers) think are relevant and by bringing these different positions together as a committee attempts are made to reconcile the diverse viewpoints and formulate a set of recommendations about policy development. Petts (2001) reviews the experiences of Hampshire and Essex, in the south of England, where CACs were run over a lengthy period (nine months in Essex and six months in Hampshire) as part of the process of developing waste management strategies. She notes that three groups from different parts of each county, made up of between sixteen and twenty people, were formed. The groups included people with a range of interests and these groups participated in regular meetings, site visits and a concluding seminar where management options were discussed. The Hampshire meetings included an initial overview of the challenge for waste management, an assessment of waste flows and needs, barriers to reduction, reuse and recycling, and other disposal options. Hampshire extended its deliberative processes after the six-month CAC concluded by forming a core group who provided feedback and assistance to the county council as well as running additional group discussions with members of the public in an attempt to broaden the participation in the policy process and to engage what Petts terms the 'silent majority' (2001: 211). Both counties made considerable moves to involve individuals who might be representative of broad diversity of interests within the community, as opposed to representatives of specific groups, although given the time commitment demanded by the process and the finite number of participants not all interests could be incorporated. In addition the CACs sought to give participants some control over the agenda, although it was necessary for the county councils to set a preliminary schedule of tasks. Areas of conflict, particularly over incineration issues, were openly discussed and participants felt that the periods of disagreement had been productive in working through the issues. However in some cases a lack of available information on such things as the relative costs and health impacts of different waste management options made discussions frustrating and formulating recommendations difficult. The processes were not without problems, as Petts notes '[n]o process can operate in isolation from existing views and tensions in an authority ... [and] there is little doubt that the conclusions of both CACs were strongly influenced by a mistrust of regulatory, institutional and corporate mechanisms and priorities' (2001:221). Despite some concerns about the level of representativeness and the availability of information that would enable the credibility of various waste management options to be tested, overall the CACs were seen to be successful in fostering transparent, open deliberation, engaging with difficult areas of conflict in relation to waste, promoting a consensus and making a difference to policy decisions through the recommendations that emerged from the process.

In the light of these positive experiences of deliberative processes in waste management in England, Irish waste managers could do well to consider the benefits of adopting similar mechanisms and move towards a more civic model of participation. Adopting more deliberative mechanisms, such as CACs, will not remove difficult issues and conflict is likely to remain intense between areas faced with the construction of an incinerator or extended landfill for the benefits of others in another county and as a result of the regionalised waste management structure of Ireland. Nonetheless within the CAC structure each group has equal standing in deliberations and the reconciliatory approach means that a consensus is sought

between all groups in terms of recommending an overall waste management strategy for the given region. A consensus was established in the pilot CACs in the UK where there were similar conflicts about incineration. The success of CACs in Ireland would hinge on whether the National Government would be willing to let local people, through these committees, really influence the waste management strategy for their region and whether local people would be willing to work with the local authority in the process. Commitment is required from all parties for such deliberative mechanisms to be effective.

However before that civic participation can be developed there needs to be a better understanding of publics views and visions about the environment and the governance structures that mediate their relationship with those environments. In-depth analysis of institutional structures with particular communities in 'lived' environments could provide such information, help identify barriers to environmental action and potentially build stronger, more effective environmental policy-making frameworks.

Existing research in the field of waste management (Boyle, 2001, 2002; Fagan et al., 2001) provides a useful initiation of debates, but does not take the issue forward into the realm of public participation. What is required is an expanded research framework that incorporates consideration of public positions in relation to waste management. Three main questions are of particular interest here: (1) Why is there a mis-match between public concern about waste and their participation in processes to deal with that waste? (2) What alternative practices might encourage more active and widespread participation waste management process? (3) Would these alternative practices offer more competent and fair procedures for waste management? In order to answer these questions a greater understanding of the expert/public interface in relation to waste issues and policy making procedures is required. Not only is it important to establish the values and behaviour of publics in relation to environmental issues such as waste, and examine the social contexts which shape those values and actions, it is also vital to consider how those publics perceive the structures that govern waste management and their role within those processes. Such work would extend quantitative research initiated by the Department of Environment and Local Government on general environmental attitudes and actions (Drury Associates, 2000). The research by Drury Associates demonstrated an increased level of environmental concern among the Irish population, but still identified low levels of environmental action. The mismatch between attitudes and actions - frequently termed the value-action gap - is not clearly understood and quantitative surveys are limited in their ability to gain a deeper understanding of what is a social/political as well as individual/psychological condition. As a result a research methodology that engages with social context as well as individual responses is essential for understanding the dynamics of decision processes (Davies, 2002).

Implementing a more in-depth research framework would also function as a preliminary deliberative mechanism for local authorities and communities, facilitating greater understanding and awareness between these two groups. In this way the research would seek to generate positive communication between local authorities and local communities regarding waste management strategies by providing outreach fora for public discussion of waste issues in a non-threatening environment with independent researchers as facilitators. There are many ways in which such a framework could be organised, but it is likely to include qualitative interviews alongside more discursive and active research techniques such as focus groups (Davies, 1999), citizens' juries (Petts, 2001) and model household trials, where volunteers participate in 'ideal' waste behaviours including composting and waste separation

exercises. Feedback mechanisms between trialists and local waste managers would be an essential component of the research following the gathering of information from participants and these could take place within the community rather than focused on the local authority offices. With respect to issues of inclusion and participation it is also important to incorporate marginalized sections of society within the research framework, targeting those groups identified by Agenda 21 as pivotal to, but often marginalized from policy making such as children, women and ethnic groups. The research could, as a result of establishing better relations between waste management actors, also act as a springboard for more complex deliberative mechanisms— such as Community Advisory Committees (CACs)— to be introduced in the environmental policy making sphere. The development of CACs elevates the role and concomitant responsibilities of publics in policy making processes.

Conclusion

Waste management issues are without doubt of critical importance in the governing of environmental impacts in Ireland. Waste issues arise across all sectors and occur throughout the island. The regulation of these diverse waste issues is contentious, placing new burdens of responsibility on all sectors from business and industry to local government and citizens. While business and industry are well organised and largely familiar with regulatory procedures, publics have less experience with formal processes of policy making, particularly within the environmental field in Ireland. It has been suggested in this paper that the marginalisation of publics from waste management planning procedures is problematic and that efforts need to be made better to understand the value-action mismatch of publics in relation to waste and also to establish public views on different systems of waste governance.

Drawing on the experience of other European countries it has been proposed that waste management planning in Ireland might benefit from a more civic model of public participation in its policy processes. Using more deliberative mechanisms for gathering information about attitudes to waste and behaviour resulting from those attitudes could act both as a research methodology and as a means of initiating more communicative relationships between publics and other waste management actors.

While there are no guarantees that adopting deliberative and participatory approaches in waste management policy making will produce a consensus of opinion throughout society there is a sense in which the processes will be more transparent and defensible. Adopting a civic model of waste management planning could lead to a decrease in the occurrence of waste wars and lubricate the currently intransigent confrontations over waste management strategies with inclusive fora acting as the location for reasoned debate about developing a sustainable waste management strategy in Ireland.

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References

- BACON, P. and ASSOCIATES (2002) Strategic review and outlook for waste management capacity and the impact on the Irish economy. Dublin: Celtic Waste.
- BLAKE, J. (1999) Overcoming the value-action gap in environmental policy: tensions between national policy and local experience, *Local Environment*, 4, 257-278.
- BOYLE, M. (2001) Cleaning up after the Celtic Tiger: the politics of waste management in the Irish Republic, Journal of the Scottish Association of Geography Teachers, 30, 71-91.
- BOYLE, M. (2002) Cleaning up after the Celtic Tiger: scalar 'fixes' in the political ecology of Tiger economies, *Transactions of the Institute of British Geographers*, 27(2), 111-125.
- BURGESS, J., HARRISON, C. and FILIUS, P. (1998) Environmental communication and the cultural politics of environmental citizenship, *Environment and Planning A*, 30, 1445-1460.
- CONNAUGHT (2001) Waste Management Plan for the Connaught Region. Dublin: M.C. O'Sullivan & Co. Ltd.
- CULLEN, M. (2002) Irish Times, Sunday, 11th August 2002.
- DAVIES, A.R. (2001) What Silence Knows planning, public participation and environmental values, Environmental Values, 10, 77-102.
- DAVIES, A.R. (1999) Where do we go from here? Environmental focus groups and planning policy formation, *Local Environment*, 4(3), 295-315.
- DAVIES, A.R. (2002) Mass-mediated Environmental Awareness Campaigns towards a research framework. Trinity Papers in Geography. Dublin: Trinity College Dublin.
- DoELG (1998) Changing our Ways. Dublin: Department of Environment and Local Government.
- DoELG (1999) It's Easy to Make a Difference. Environmental awareness campaign. Dublin: Department of Environment and Local Government.
- DRURY RESEARCH (2000) Attitudes and Actions: A National Survey on the Environment. Dublin: Department of Environment and Local Government.
- DUBLIN (1999) Dublin Waste Management Plan. Dublin: M.C. O'Sullivan & Co. Ltd.
- EPA (2000) National waste database report, 1998. Wexford: Environmental Protection Agency.
- FAGAN, H., O'HEARN, D., McCANN, G. and MURRAY, M. (2001) Waste Management Strategy: a cross border perspective. Working Paper Series 2/2001, Maynooth: National University of Ireland.
- FAHY, F. (2003) Talking rubbish waste management strategies in Ireland. Trinity Papers in Geography 8. Dublin: Trinity College, University of Dublin.
- FORESTER, J. (1999) The Deliberative Practitioner: encouraging participatory planning processes. Cambridge MA: MIT Press.
- FORFÁS (2001) Key Waste Management Issues in Ireland. Dublin: Forfás.
- HEALEY, P. (1997) Collaborative Planning: shaping places in fragmented societies. Basingstoke: Macmillan.
- JAEGER, C., DURRENBERGER, G., KASTENHOLZ. G. and TRUFFER, B. (1993) Determinants of environmental action with regard to climate change, Climate Change, 23, 193-211.
- KEMPTON, W., BOSTER, J. and HARTLEY, J. (1995) Environmental Values and American Culture. Cambridge MA: MIT Press.
- LAFFERTY, W. (2001) Sustainable Communities in Europe. London: Earthscan.
- LEROY, P. (1995) Environmental science as a vocation, text of Inaugural lecture delivered at the faculty of Policy Sciences of the Catholic University of Nijmegen, Nijmegen 9 June. Copy available from the author, Department of Environmental Policy Sciences, Nijmegen, 6500 HK.
- LIMERICK/CLARE/KERRY (2000) Limerick/Clare/Kerry Waste Management Plan. Dublin: M.C. O'Sullivan & Co. Ltd..
- MULLALLY, G. (1998) From Earth Summit to Local Agenda 21: working towards sustainable development. London: Earthscan.
- OWENS, S. (2000) Engaging the public: information and deliberation in environmental policy, *Environment and Planning A*, 32, 1141-1148.
- PETTS, J. (1997) The public-expert interface in local waste management decisions: expertise, credibility and process, *Public Understanding of Science*, 6(4), 359-382.

PETTS, J. (2001) Evaluating the effectiveness of deliberative processes: waste management case-studies, Journal of Environmental Planning and Management, 44(2), 207-226.

- ROYAL COMMISSION FOR ENVIRONMENTAL POLLUTION (RCEP) (1998) Setting Environmental Standards Cm4053. London: The Stationery Office.
- SMITH, J., BLAKE, J. and DAVIES, A.R. (2000) Putting Sustainability in Place: Sustainable Communities Projects in Huntingdonshire, *Journal of Environmental Policy and Planning*, 2, 211-223.
- STAPLETON, L., LEHANE, M. and TONER, P. (2000) Ireland's Environment: a Millennium Report. Wexford: Environmental Protection Agency.
- TAYLOR, G. (2001) Conserving the Emerald Tiger: the politics of environmental regulation in Ireland. Galway: Arlen House.
- VARI, A. (1995) Citizens advisory committee as a model for public participation: a multi-criteria evaluation, *In:* Renn, O., Webler, T. and Wiedman, P. (eds) Fairness and Competence in Citizen Participation: Evaluating Models for Environmental Discourse. Dordrecht: Kluwer.
- WYNNE, B. (1996) May the sheep safely graze? A reflexive view of the expert-lay knowledge divide, *In:* Lash, S. and Szerszynski, B. and Wynne, B. (eds) *Risk, Environment and Modernity: towards a new ecology.* London: Sage, 44-83.