**Environmental justice challenges in UK infrastructure planning: lessons from a Welsh incinerator project**

**Abstract**

In the United Kingdom, the development of nationally significant infrastructure projects (NSIPS) such as power stations, waste management facilities and airports, has become subject to recent changes in legislation and planning practice that have significant environmental justice implications for locally affected site communities. This discussion paper examines UK infrastructure planning policy through a procedural environmental justice lens – specifically examining the changing role of community consultation and decisional influence in project plans, and industry-stakeholder relations between developers and citizens from economically and socially marginalized backgrounds. The procedural justice dimensions of UK NSIPS are examined with reference to the case of a proposed waste incinerator project in South Wales under the auspices of the (now defunct) Infrastructure Planning Commission (IPC). The conclusions section outlines specific policy recommendations for the UK IPC’s replacement - the Planning Inspectorate’s Infrastructure Planning Unit.

**Key Words:** UK Planning Act 2008, Localism Act 2011, Major Infrastructure Planning Unit, Infrastructure Planning Commission, procedural justice, citizen participation.

**Introduction**

 Procedural environmental justice is a critical issue for the planning of major infrastructure projects such as power stations, roads and waste management facilities. It concerns the making and implementation of decisions according to fair processes, whereby affected citizens are treated with respect and dignity, have access to key technical and policy actors and relevant information, and have decisional influence over planning outcomes. For developers, procedural justice is a key issue of project success. When decision-making is fair, and open project opponents are more likely to accept decision outcomes that they may not like, suggesting that *fairer* processes increase such acceptance [[1]](#footnote-1). For communities, procedural justice is necessary because siting processes inevitably distribute local environmental, social and economic impacts unevenly across multiple geographic, temporal and governance scales; and so involvement of community representatives as legitimate stakeholders is necessary in order to negotiate just outcomes, otherwise localised opposition invariably results [[2]](#footnote-2); particularly when misinformation about health risks, ecological impacts, and costs and benefit distribution come to the fore of planning dialogue [[3]](#footnote-3). Opposition is costly to both affected communities and to developers due to planning delays and loss of institutional trust [[4]](#footnote-4). Moreover, a lack of procedural justice reveals deeper imbalances of power relations between communities, developers and planning bodies within local politics [[5]](#footnote-5) and so critical examination of the procedural justice implications of infrastructure plans is necessary in order to reflect upon the ethical dimensions of national infrastructure policy-making.

**Discussion**

Where public opposition occurs, the oft-cited solution is to involve communities in planning through consultation and engagement activities. This issue of *community involvement* arose to particular prominence in the UK planning system under the former Labour Government in 1997, whose policies clearly espoused the devolution of power, and the involvement of citizens in decision-making, management and the delivery of public services [[6]](#footnote-6); alongside a local government modernization agenda emphasising the renewal of democracy at the local level, devolving power to communities through direct forms of democratic practice [[7]](#footnote-7). Local community involvement became embodied in both legislation through local development frameworks and Regional Spatial Strategies [[8]](#footnote-8); and more broadly, it became the backbone of Labour’s sustainable development strategy [[9]](#footnote-9).

Democratic renewal and modernization became principal components of UK infrastructure planning policy reform in 2007-2008. A long-standing policy debate concerns how to expedite the protracted planning processes for large infrastructure builds where construction is hampered by long, and often adversarial public inquiry processes. Under Labour modernization became synonymous with accelerating, simplifying or `streamlining' processes of forward planning and development control, couched in the terminology of efficiency, i.e. regulation reduction and decreased opportunities to challenge project proposals. Thus The Planning Act 2008 emerged after a long Parliamentary debate. The Act repositions the *need case* for infrastructure at the national level, defined through a series of National Policy Statements (NPS) on respective infrastructure types. Each NPS undergoes public consultation and parliamentary scrutiny before designating the statement. If the relevant national policy statement or statements were in place then the Government-appointed but non-elected Infrastructure Planning Commission (IPC) could take the decision on each application it receives, if not, then the Secretary of State would make the decision. However, although public consultation was a component of each NPS, the influence that non-institutionally affiliated citizen stakeholder actors could play in shaping the outcomes of these policy statements was inevitably constrained, as no Government resources were put into *actively* seeking public input, through for example deliberative polls, referenda or consensus conferences. Former IPC chairman Sir Michael Pitt described the change as the long-overdue shake-up of the planning regime for national infrastructure, marking the separation of policy-making from decision-making for the first time in UK planning history. The IPC promised the delivery of an efficient and equitable planning process, alongside estimated taxpayer savings of £300 million annually, by bringing eight former consent regimes into one and reducing the time taken to make a decision from an average of 100 weeks previously, to less than a year [[10]](#footnote-10).

At the stage of individual planning proposals the IPC assured “heavy front loading” of public consultation, meaning that developers had to demonstrate consultation with local people on their project proposals and show that they have acted upon public feedback prior to submitting an application for a development consent order (DCO). The IPC had 28 days following submission to accept or reject the proposal. Upon acceptance, the public could register to provide their views in writing to IPC, and participate in open-floor hearings and to cross-examine evidence. In principle the IPC process offered opportunities for public involvement, however, the extent to which local community actors could actually influence the outcomes of decision-making has been highly contested, due in part to low levels of public knowledge about the IPC, its form and function,the constrained time period for response, and a lack of developer communication with publics on the planning process and its outcomes [[11]](#footnote-11). More fundamentally, however, the political powers of the IPC raised questions about legitimacy and democratic accountability in decision-making - whether the separation of planning and policy-making frames land-use change primarily as a technical activity or one which involves the making of political choices [[12]](#footnote-12), thus requiring a greater level of active citizen involvement in order to achieve just, socially robust outcomes.

*Procedural justice in the Planning Act 2008 and Localism Act 2011*

Within the Act itself, the provisions for community involvement in decision-making were criticised in print and broadcast media as curtailing democratic involvement in the planning process. The Act and the IPC reflect a fundamental conflict of policy objectives that pervaded the former Labour Government’s over-arching cultured of governance. As Inch [[13]](#footnote-13) suggests, Labour’s policy platform was constructed around building a power base for central government through vertical integration, making the public sector the delivery vehicle for governance, alongside a professional empowerment culture evident in the setting up of appointed, independent expert committees to oversee the implementation of planning and policy making in the public sector (the IPC being a pertinent example). Yet, Labour’s concurrent commitment to a local empowerment culture exemplified in bottom-up community consultation policies around sustainable development stood in sharp contrast. What is clear is that the governance objectives of UK planning policy were subject to an internal rhetorical and ethical conflict, as procedural justice and democratic legitimacy through deliberative local community involvement is inevitably undermined by the technocratic nature of expert centred planning and development control under the IPC.

This issue was a key point of political reform under the Coalition Government’s *localist agenda*, which quickly abolished the IPC through the Localism Act 2011 and transferred decision-making powers to the Secretary of State. Planning powers currently reside within the Department for Communities and Local Government (DCLG), which the Government argues replaces the IPC system with “fairer, faster decision making” through a Major Infrastructure Unit as part of a revised CLG structure that includes the Planning Inspectorate. abolishes the regional tier of spatial planning, replacing it with a system which Prime Minister David Cameron argues is based on “civic engagement and collaborative democracy” at the local level, aimed at decentralisation: “bringing communities together, as they formulate a shared vision of sustainable development” [[14]](#footnote-14). In practice, decisions on NSIPS are made by the relevant Secretary of State rather than an independent committee. Consultation procedures remain essentially the same, except that the final decision for development consent lies with an elected minister rather than a technocratic committee, thus nominally strengthening democratic legitimacy. What is clear however, is that the Localism Act 2011 defines democratic legitimacy in terms of elected representation and democratic oversight at the level of central government, in contrast to the ‘bottom-up’ democratic control of plan-making, oft-referred to as a *deliberative turn* [[15]](#footnote-15), whereby legitimacy is instead evaluated by the opportunities for direct decision-making involvement amongst affected citizens, which has significant procedural justice implications.

*Environmental justice and infrastructure – the energy-from-waste in Merthyr Tydfil*

 To explore these procedural justice aspects, discussion focusses upon a proposed waste incinerator project by US company Covanta Energy at Brig-y-Cwm, near to the town of Merthyr Tydfil on the southern border of the Brecon Beacons national park in South Wales. This example represents something of a critical case of environmental injusticeunder the new planning regime in part due to Merthyr’s status as an economically marginalised, post-industrial town subject to existing economic and health inequalities which would have undoubtedly been worsened by the proposed incinerator project.

The proposal fell under Prosiect Gwyrdd (Project Green): a partnership program between five Welsh Councils, which together make up 40% of the total municipal waste of Wales [[16]](#footnote-16). The project aims at disposing so-called "residual" or non-recyclable waste, through incineration for commercial electricity production. Covanta Energy’s bid for the project began in January 2009, involving application for a development consent order (DCO) to the IPC for the £400m energy-from-waste facility, designed for processing an estimated 750,000 tonnes of municipal and commercial waste annually and in doing so, produce 67MW of electricity (enough to power up to 180,000 homes). Covanta claimed the proposed incinerator would create up to 650 construction jobs and employ 65 people permanently. This was significant, as Merthyr Tydfil and Rhymney regions have some of the most deprived communities in Wales. According to the Welsh Index of Multiple Deprivation 2008 and Office for National Statistics labour market figures, 32% of its areas fall in the 10% most deprived areas in Wales and overall the majority of its areas are more deprived than the Wales average. The same is true for income as **Table 1** illustrates: Merthyr falls below national averages for income and employment [[17]](#footnote-17). Merthyr Tydfil also suffers from substantial health inequalities, as the region claimed the lowest life expectancy rates for men in every surveyed two-year period since 1991. Life expectancy for men in Merthyr is 74.6 year; 5.8 years lower for men than in Ceredigion (an affluent region on the West Coast of Wales) [[18]](#footnote-18). The incineration of mixed municipal wastes would further exacerbate such health inequalities. Incineration produces nitrogen oxides and sulphur dioxide as well as other pollutants such as mercury compounds, and organic compounds including Polychlorinated dibenzodioxin and dibenzofurans (PCDD/PCDF). Dioxins and furans are highly liposoluble compounds which are both environmentally persistent and bioaccumulative – i.e. harmful, carcinogenic pollutants [[19]](#footnote-19). Covanta itself had developed a poor track-record of such emissions control in the United States. An investigation by BBC Wales current affairs program Taro-9 found that Covanta paid $400,000 (£255,000) of penalties over air emissions violations for an incinerator project in Wallingford CT, with dioxin levels more than twice the allowable permit and regulatory level [[20]](#footnote-20). Compounding health inequalities amongst an already socially and economically marginalised community is an example of *peripheralisation* [[21]](#footnote-21)whereby local support for hazardous industries is encourage by promoting the technology as a solution to existing economic deprivation [[22]](#footnote-22) resulting in environmental injustice; in essence a form of economic coercion [[23]](#footnote-23).

In terms of procedural environmental justice, significant concerns were raised over the quality of public participation in the environmental decision-making process and the lack of opportunities to challenge Covanta’s plans through the IPC. As is common to infrastructure planning applications, a two-tier system of *engagement* takes place. Prior to the announcement of the proposed facility, regional stakeholders “deemed [to] have a strategic interest in the project” were contacted, including elected councillors, Assembly Members and Members of Parliament, chief executives of local authorities in Wales, and heads of waste management in Welsh local authorities. Once these stakeholders had been consulted and the project moved into the land use planning stage, Covanta established a Community Liaison Panel of local residents and business, community groups, local organisations and council representatives, to discuss issues in relation to the proposed developments which “provides a channel for the flow of information between Covanta and local people”. This panel does not however have decision-making authority on any aspect of the plan. Thus, as shown in other studies of infrastructure plans, developers conceive of local residents as lacking strategic vision and thus are not considered to be legitimate regional stakeholders [[24]](#footnote-24). Instead of active solicitation of two-way dialogue with residents, communication of project plans to residents occurs through local media, and letters locally delivered to project communities, with project e-mail address and contact telephone number for interested parties (in English and Welsh), and a project website used to collate responses. Within three months of announcing its outline plan, Covanta held a round of *information days* - public exhibitions that provided local people with the opportunity for face-to-face contact with Covanta employees to discuss the project and to answer questions [[25]](#footnote-25), thus showing similarities to other NSIP proposals for energy infrastructures [[26]](#footnote-26).

These consultation measures were particularly controversial due to a perceived lack of information on traffic levels, classification of wastes, air pollution, wildlife and resident health impacts in the public consultation pre-application phase. Moreover, the 'examination stage' at which the application passes to the IPC only allows members of the public to raise concerns in writing - rather than having the right to cross-examine the developer, as under the previous *public inquiry* system, so opportunities for full community involvement were curtailed, and the deliberative capacity [[27]](#footnote-27) of citizens to be involved limited by the structural ‘rules of the game’. These measures create significant democratic deficits for infrastructure siting projects. The reasons for which are based upon a lack of planning guidance on best practice participatory methods, the social construction of objection as due to Not-in-my-back-yard protest (rather than construing opposition actors as legitimate stakeholders) and a lack of experience and expertise in implementing consultation measures under the new system [[28]](#footnote-28).

The perceived lack of quality deliberation and opportunities for communities to have decisional influence on proposals under formal engagement processes led to engagement through uninvited means [[29]](#footnote-29), i.e. through organised opposition under the banner of the United Valleys Action Group (UVAG). UVAG submitted written evidence to the IPC concerning issues of light pollution (the facility would operate 24 hours a day), concerns over water usage and recycling, air quality, plant operating efficiency, waste classification and traffic congestion. Interestingly much of the evidence was drawn from a pool of ‘lay expertise’[[30]](#footnote-30), particularly concerning local topography and weather patterns affecting the distribution of exhaust fumes from the plant, alongside concerns over the effects of the incinerator facility on further industrialising the region and promoting technological stigmatisation of Merthyr Tydfil [[31]](#footnote-31). Partly in response to this information, and the growing public backlash against the proposal, the chair of the Infrastructure Planning Commission decided to extend the examination period of the proposal to extend public consultation. Covanta responded with more of the same: more public exhibitions showing feedback from previous consultation exercises. However, in October 2011 Covanta revered their decision, dropping the proposal at Bryg Y Cwm, stating:

“We wanted to place our multi-million pound inward investment at Merthyr Tydfil which is one of the most depressed towns in Wales.  It would have been transformed by this level of investment. However, the local authorities have adopted a fragmented approach - not a national approach - to dealing with residual waste. This makes the plant unviable. We have therefore decided to terminate the planning process and concentrate on our other UK projects.”[[32]](#footnote-32)

Despite clear opposition (a 13,000 signature petition was submitted against the application), Covanta declared that the abandonment of the project had "nothing to do with local opposition", rather that Welsh waste authorities fragmented the waste management infrastructure to a larger number of smaller firms. Despite this, across the activist organisations, local Labour council representatives and Friends of the Earth that spearheaded the campaign, the opposition movement was considered a success of local grassroots activism is stopping environmental injustice. However, it is clear that Covanta’s loss in Prosiect Gwyrdd only served to displace rather than halt the environmental and health impact of Covanta’s energy-from-waste investment, as they instead focussed their attention on a new proposal for a Resource Recovery Facility (RRF) at Rookery South Pit, a former brick clay extraction pit, near Stewartby in Bedfordshire, currently undergoing planning review.

**Conclusions**

 Though opposition to the Merthyr Tyfil incinerator project could be considered a local success for environmental justice, what it clearly illustrates is the spatial and governance re-scaling of planning processes for infrastructure projects in a manner that prevents access to decision-making for community actors in any significant way. This is because local community activists are not construed as strategic actors with a voice in regional waste planning: implying that local people cannot take a view that goes beyond local-level concerns with amenity and household property values, thus they are *imagined* as NIMBY protestors [[33]](#footnote-33) rather than as legitimate stakeholders. In particular, as Johnstone [[34]](#footnote-34) notes, infrastructure planning involves *post-political* decision-making –reinforcing top-down, expert driven governance at the expense of local community involvement, counteracting the ethos of the deliberative turn espoused in both former Labour policy frameworks and in the *Big Society* rhetoric embodied in the Coalition Government’s Localism Act 2011. In essence this scaling of infrastructure planning decisions, whereby the notion of *nationally significant* infrastructure should be decided at the level of central government through National Policy Statements and the community involvement should be at the local level, downstream of planning applications by specific developers, reinforces an oppressive politics of scale. The invited (written responses to the IPC) and ‘uninvited’ (activism and protest) engagement of opposition movements such as United Valleys Action Group (UVAG) serves to highlight the “jumping of scales” [[35]](#footnote-35) that takes place, as environmental injustice through inadequate local community decisional influence is corrected by protest actions aimed at rescaling local decisions (on where an incinerator is sited) to national and indeed global levels of environmental impact and decision-making (for example refocussing debate on the nature of Welsh waste management practice, the CO2 emissions from incineration, and the structure of UK planning policy). Though this proved successful in the Merthyr case for shifting project siting away from the affected community, ultimately the developer Covanta had the opportunity to simply shift the geographic scales of political conflict by moving sites - concentrating strategic development efforts in a different community in a different place. Until Government policy on infrastructure planning can join these respective geographic and governance scales to allow public actors significant voice in the strategic development of regional and national infrastructure planning then patterns of procedural injustice will be repeated and reinforced with each new development application.

 There are however, potential solutions to this problem. It is important that upstream public engagement processes on National Policy Statements are implemented; going beyond the piecemeal consultation on the need case for infrastructure provision currently available. The Coalition Government’s platform on localism must ensure that citizen actor deliberation occurs on issues of national significance at a point before any discussion of local-level siting at the level of developer proposals. By directing planning through the Planning Inspectorate, the system is inherently political, and involvement of citizens is paramount in order to achieve fair outcomes within a democratic society. A process of national-scale public consultations that actively solicit citizen input to infrastructure provision through deliberative mechanisms (such as consensus conferences, deliberative polls, citizens juries or other activities) would serve to ensure strong deliberative democratic control; the precedence for which lies in similar upstream engagement processes for genetically modified organisms, nano-technologies and radioactive wastes [[36]](#footnote-36) that have shown degrees of success for establishing socially robust technology policies. The scope for such national conversations on infrastructure, though initially costly to the taxpayer, serves to ground public support for energy, waste, transport and communications developments in a process that rescales decisions to achieve procedurally just outcomes.

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