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Sustainable Development in Energy Policy: A Governance Assessment of Environmental Stakeholder Inclusion in Waste-to-Energy

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ABSTRACT

The inclusion of environmental interest groups in policy-making is said to provide greater legitimacy (Bernauer and Gampfer, 2013), accountability (Feldman and Blokov, 2009), new policy preferences (Bunea, 2013) and, ultimately, pro-environmental outcomes (Bohmelt and Betzold, 2013). This paper focuses on the development of inclusive governance structures and processes (with regard to environmental interests) in waste-to-energy policy designed to facilitate pro-environmental outcomes in the generation of 'clean' renewable energy within the national context of France. Empirically, the paper argues that change in long-term exclusionary patterns in energy policy remains enduringly weak. Normatively, environmental 'inclusivity' (i.e. the construction of meaningful pluralistic structures and processes) as a mechanism for achieving the prioritization of environmental concerns should become a central objective for energy policy, and more generally in the environmental policy integration literature. Copyright © 2015 John Wiley & Sons, Ltd and ERP Environment

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Introduction

THE ROLE OF NON-GOVERNMENTAL ACTORS HAS BEEN A KEY CONCERN FOR SUSTAINABLE DEVELOPMENT AND ENVIRONMENTAL policy in the form of research on participation (Carpini *et al.*, 2004), the inclusion of environmental organizations (Lafferty, 2004; Steurer and Hametner, 2010), public engagement (Petts and Brooks, 2006), social acceptability and environmental justice (Cowell *et al.*, 2011) and deliberative and reflexive democracy (Dryzek, 2002; Fischer, 2003). The investigation here is centred on the inclusion of environmental interests in energy policy. In other words, this paper seeks to assess the normative and empirical reach of 'inclusivity' (i.e. the development of meaningful pluralistic structures and processes) as a key component in environmental policy integration (EPI) when applied to the energy policy sector (Saikku *et al.*, 2007). More specifically, the paper questions whether the French (as a European leader now in waste-to-energy technology) approach to including environmental interest groups in decision-making on waste-to-energy (WtE) from 1992 to 2012 has been successful.

With reference to new institutionalisms and political science, and in response to calls for more politics-based approaches in this area (Soderbaum 2009), the paper is concerned with understanding change and continuity across

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time in how inclusivity is and should be approached in energy policy and more generally the environmental policy integration literature (Barzelay and Gallego, 2006). From a historical institutionalist (HI) perspective, the paper explores changes in governance structures and processes (Peters *et al.*, 2005; Pollitt, 2008; Sanders, 2008; Thelen, 2004). It is evident in this case that energy policymakers continue to largely exclude environmental interests. A discursive institutionalist (DI) approach allows for an assessment of changes in levels of engagement with environmental organizations and favourable policy outcomes (Béland, 2009; Carpini *et al.*, 2004; Fischer, 2003; Schmidt, 2010). It is revealed later that engagement on environmental issues has been more productive than that on energy concerns.

A Conceptual Framework: Policy Integration, Events and Discourse

A defining feature of EPI, and its 'mother principle' sustainable development (Jordan and Lenschow, 2010; Steurer and Hametner, 2010; Storbjork and Isaksson, 2014), is the focus on the prioritization of environmental concerns in non-environmental policy sectors (Keysar, 2005; Lafferty and Hovden, 2003). Inclusive governance structures and processes are important principles or more precisely *mechanisms* for achieving pro-environmental outcomes (Briassoulis, 2010; Watson *et al.*, 2008). In this way, we need to consider the normative reach of EPI mechanisms in addition to the standard normative questioning of the end point (Watson *et al.*, 2008). A core tenet or mechanism of sustainable development, and environmental policy, is the inclusion of environmental interest groups in order to achieve one of the central goals in EPI as ensuring 'mutual benefits and mak(ing) policies mutually supportive' (Collier, 1997). Their inclusion has assisted in ensuring the popular legitimacy of environmental policy (Bernauer and Gampfer, 2013), albeit without such inclusion itself solving an enduring larger democratic deficit in environmental policy-making (Bernauer *et al.*, 2013).

Energy and climate policies have, on the other hand, a worse track record in seeking, ensuring and innovating inclusion of environmental organizations in governance modes, with some notable exceptions (see, e.g., Bulkeley, 2012). Environmental groups are perceived more as a hindering excluded force to the development of energy infrastructure (Simpson, 2013) and new renewable energy sources (Lima and Gupta, 2013; Saikku *et al.*, 2007). Both developed (Foxon, 2013) and developing (Chaturvedi, 2013; Gunningham, 2013; Tsang and Kolk, 2010) nations have advanced modestly in pluralizing energy governance. Within this context, we must remember that inclusivity is a central normative mechanism for achieving sustainable development (Lafferty, 2004). The emphasis here is placed on exploring the potential of consensus-based (Habermasian) – as opposed to confrontational (Foucauldian) approaches (Aylett, 2010). More research is therefore needed in exploring how policy-makers are dealing with environmental interest groups in national energy policies.

This paper assesses the success of the French approach to including environmental interest groups in waste-to-energy policy. In order to do so, we explore how this approach has (1) developed across time and (2) generated significant changes in governance and engagement practices. Figure 1 outlines how historical and discursive institutionalism can assist in our understanding of EPI. As outlined thus far, EPI is considered from the perspective of

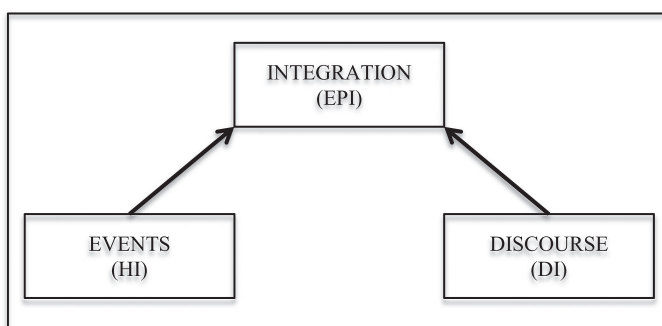


Figure 1. The conceptual framework

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Goal\Type	Weak	Strong
Structures	No or little informal environmental representation	Clear institutionalized environmental representation
Processes	No or little engagement with environmental interests	Clear engagement with environmental interests
Outcomes	No or little evidence of pro-environmental change in decisions made	Clear evidence of pro-environmental change in decisions made

Table 1. Environmental inclusivity

Source: adapted from Béland (2009), Bull *et al.* (2010) and Petts (1995).

the 'level of environmental interest group inclusion'. In terms of operationalization in Figure 1, EPI is positioned as a dependent variable (i.e. to be explained), whereby HI and DI provide different 'explanatory' (independent) variables, i.e. 'events' and 'discourse' respectively. In other words, HI suggests that certain events across time may result in significant changes in levels of integration, or in this case environmental inclusivity. In contrast, DI posits that the discourse of various actors, such as environmental interest groups, is more critical.

A sophisticated framework for analysing events and change has emerged in HI studies. Scholars in this area have developed key temporal notions of 'path dependency', 'critical junctures' and more recently 'punctuations' as a means of theorizing on the importance of persistence and change (Pollitt, 2008; Thelen, 2004). This approach allows us to comprehensively question what type of change takes place and how significant it is. DI literature has, in contrast, built various schemas for assessing discourse and engagement processes (Liao *et al.*, 2010; Loring, 2007). It seeks to understand perceptions, attitudes and sentiments inside and outside formal participatory structures towards a given policy (Eltham *et al.*, 2008; Graham *et al.*, 2009; Pidgeon *et al.*, 2008). In following it, innovative processes of engagement may result in new forms of policy outcomes (Johnson *et al.*, 2013; Petts and Brooks, 2006).

We finally apply the EPI–HI–DI framework to governance structures, processes and outcomes. It is argued here that strong pronounced changes in environmental inclusivity are distinguished by interventions (both events and discourse) in existing structures and processes as well as the outcomes of increased engagement and favourable decisions (Béland, 2009; Schmidt, 2010). This paper assesses such changes in inclusivity with reference to WtE governance in France. Table 1 sets out the basic tenets for environmental inclusivity that will be assessed in the case of WtE policy in France. A strong version of environmental inclusivity expounds an institutionalized form of environmental interest representation with real engagement and influence in pro-environmental policy outcomes (and weak vice versa).

Background, Case Selection and Methods

The comparatively high number of WtE plants (currently 129) in France provides, first, an intriguing context for exploring the inclusion of environmental interest groups in governance structures and processes. France treated significantly less waste in 2012 via WtE than Germany – 12.7 million tonnes in comparison to 17.9 million tonnes – in spite of its superior count in WtE plants (ISWA, 2012). Brousse (2005) explains that France has a peculiar mix of many small-and large scale plants (in contrast to the uniquely large scale plants in Germany¹). Indeed, the geographical spread of the existing plants in France reveals concentration in both urban and rural centres. WtE plants are currently present in the nation's 22 regions. The scale of this policy represents a significant challenge for a French state with long-term exclusionary tendencies with regard to environmental interests (Hazareesingh, 2002).

The French case is, second, chosen for its recent modernization of WtE infrastructure, leading to a position as a key renewable energy contributor. WtE has become the second most productive renewable source in France behind

¹Similarly to France, the UK and Denmark have prioritized small-scale WtE plants. Due to word count restrictions, a fuller comparative study is outside the scope of this paper.

wood. A mass expansion in 1992 witnessed a doubling (since 1973) of energy output from 122 to 239 toe (tons of oil equivalent).² Despite a drastic reduction in plant numbers, new technological advances doubled again the energy output of waste between 1998 (297 toe) and 2011 (587 toe). Its substantial renovation has indeed placed WtE output as the third (in 2012) largest producer of renewable electricity in France (behind wind and hydropower). Overall, WtE is now the fourth (in 2012) most important renewable energy source for electricity and heating combined (measured by toe). France is therefore placed as a European specialist in developing WtE technology.

Research Design and Methodology

The paper seeks to question whether the French approach to including environmental interest groups in decision-making on WtE from 1992 to 2012 has been successful. The focus of this research project³ was, therefore, to explore the role of environmental interest groups in WtE governance structures, processes and policy outcomes. The epistemological approach taken was largely social constructivist. A discursive, equally known as a constructivist, institutionalist approach is used for an assessment of changes in levels of engagement with environmental interest groups and pro-environmental policy outcomes (Schmidt, 2010). Historical institutionalism (traditionally aligned with more rationalist epistemological tendencies albeit highly debated – see Sanders, 2008) is used to explore changes in governance structures and processes (Pollitt, 2008).

The evidence presented here is derived from a qualitative research design based upon interview data and documents collected. The interview sampling approach was purposeful snowballing, in line with previous similar research on interest group involvement in marine governance (Dreiling and Wolf, 2001). Phase one of the research was to collect on-line documentation on all environmental groups involved in WtE plant management or advisory boards in the 129 cases across France. A total of 12 semi-structured interviews were conducted in phase two with a member of each of four selected environmental interest groups (selected on the basis of their high level of involvement in the 129 cases) at their national offices – France Nature Environnement (FNE), WWF-France, Greenpeace-France and les Amis de la Terre (Friends of the Earth France). Phase three involved five follow up oral history interviews with longstanding members from each organization. Finally, six semi-structured interviews were conducted with figures in government and business involved in WtE relations with the four environmental interest groups.

In terms of analysis, all interviews were transcribed, coded and categorized with NVivo software. Ethical approval was subject to anonymity for interviewees. Three key themes were identified as structures, processes and outcomes. Analysis focused on exploring participants' personal experiences in all three cases in relation to WtE. The paper equally draws upon documentary evidence assessed through content analysis on local waste contracts (both interim and completed reports) and the minutes of national meetings on waste-related discussions within the working groups under the so-called Grenelle I and Grenelle II national stakeholder consultation processes explored below.

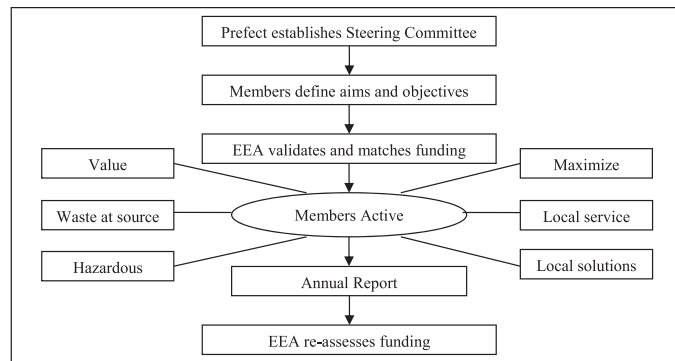
Avoiding Environmental Inclusivity on Energy Issues (1992–2007)

Private companies (EDF, SITA France, Suez France) played a key role in the development of WtE as an integral solution in both the national waste and energy mix. Before 1992, central state agencies developed waste management strategies in accordance with a national plan of action. The decentralization of waste policy in the 1990 Lalonde Green Plan offered non-governmental actors a new venue for action in implementation and decision-making processes. However, an assessment of the period 1992–1998 revealed that only private business enjoyed any increased

²The 1992 Waste Act (transposing EC directives 89/396 and 91/156) decentralized waste management in France through a clear delineation of powers where local (département) and regional authorities managed household waste and industrial waste respectively. This resulted in large-scale investment in WtE as part of a modernization in waste treatment.

³This project is part of a wider British Academy grant on investigating WtE in Europe.

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Source: The Environment and Energy Agency (EEA)

Figure 2. The steering committee and waste contracts

formal access to policy-making, as local authorities focused on public–private partnerships. A representative from NOVERGIE commented that

(I)t was simple, government needed money... (A)t the time, we certainly discussed how we could improve public engagement on the issue... (w)e knew the expansion in numbers of (W)tE plants would cause social anxiety. We certainly never considered talking to environmental groups... (w)e were ideologically opposed. You have to understand, back then, they were just mad!⁴

SITA and Lyonnaise des Eaux (currently owned by NOVERGIE) developed a program of small-scale waste incinerators with local authorities (as well as regional authorities in terms of industrial waste) without any attempt to include any environmental interest input (Bertolini, 1998).

A review conducted in 1998 by the Environment Ministry underlined the need for more dialogue with societal actors in local waste management strategies (MEDD, 1998). In the same year, private companies involved in establishing new WtE plants proposed a programme of 'voluntary incentive schemes'.⁵ They offered local community representatives in affected areas greater opportunity to participate in siting decisions. At this stage, the siting of a WtE plant was uniquely decided between the mayor, the prefect, the departmental council, trade unions, EEA (Environment and Energy Agency – known in France as ADEME) representatives and the private company involved (either SITA or Lyonnaise des Eaux). The proposed scheme expanded the list of stakeholders to any interested locally based interest group. In return, the company offered to part-fund (with the EEA) any associated activities (communication strategies, meetings, public debates) of a sustained community based dialogue.⁶

All 15 projects identified (in West and Central France) failed to endure longer than one year.⁷ The minutes from debates under the remit of four pilot schemes⁸ reinforced the health-based concerns of local residents. Environmental interest groups in all four cases expressed strong opposition to any waste incinerator in their area. A long-term campaigner in the FNE umbrella group against the establishment of a WtE plant in Niort (West France) noted 'they (Suez) were not interested in debating if we wanted one of these things (WtE plant – or as it was termed, 'incinerator')... only where (we wanted it)'.⁹ The 1998 government review indeed highlighted the 'failure of private sponsored schemes to successfully address local concerns on waste matters' (MEDD, 1998, p. 62). Consequently, WtE was an issue to be resolved in existing decentralized public–private waste management structures without any environmental interest input.

Comprehensive government sponsored 'Local Waste Contracts' (Contrats Territoriaux Déchets) emerged in December 1998 as a formal mechanism for including environmental interest groups in waste policy decisions. The contractual agreements resulted in the establishment of local steering committees (see Figure 2) under the

⁴Interview 1 with NOVERGIE.

⁵Interview 2 with NOVERGIE and interview with *Deux-Sèvres Nature Environnement*.

⁶Interview 3 with NOVERGIE and Ministry for the Environment and Sustainable Development.

⁷Interview and minutes provided by EDF-France.

⁸Any debates in the remaining (11) pilot schemes could not be uncovered or did not take place.

⁹Interview with *Deux-Sèvres Nature Environnement* as part of the FNE umbrella group.

management of the EEA. The stated aim of such committees was to 'improve meaningful dialogue with local stakeholders' (EEA 2008). Figure 2 outlines the process in more detail, to which I now refer. The prefect designates the members of the steering committee to include a wide representation of local interests in ameliorating waste management practices, developing new formal and informal relationships and generating new waste solutions.¹⁰ The EEA administers (government) financial assistance for 50% of all costs (maximum 260 000 euros per contract) for a three-year period (EEA, 2008; Lepellier, 2008).¹¹ However, there is only evidence for such committee structures in 45 contracts (out of 112 in process or fully completed). Four (FNE, WWF, Greenpeace and FoE) out of the five environmental interest groups in this study participated in these contracts locally throughout France.¹²

A content analysis demonstrated that the committees have a profound impact upon *waste management* strategies throughout France. The six stated aims of the overall national plan to establish local waste contracts are to (1) ensure value for money service, (2) prevent waste at source, (3) reduce the disposal of dangerous substances by local waste collection, (4) maximize the use of existing infrastructure, (5) ensure a more localized service and (6) develop localized solutions for better waste collection, elimination and incineration. A wide range of actions have been undertaken (in order of most cited in final and interim reports): creating local recycling schemes, encouraging small-scale composting, setting up educational schemes on waste prevention, reducing waste collection frequency and coordinating existing waste management schemes. There is, however, no evidence of such committees dealing with the establishment of new or the renovation of existing WtE plants. The progression in the number and capability of WtE plants took place without any formal input from local waste committees.

On closer inspection, WtE is not mentioned in any of the outcomes in completed contracts (27 in total by 2010). In terms of interim reports, levels of energy capture from waste are cited in 67 cases in the background to the actions of local waste committees. WtE or related energy production is equally not mentioned in any stated objectives. In the EEA annual reports, the WtE issue is raised in relation to one particular national stated objective for the local waste contract programme to develop 'localised solutions for better waste collection, elimination and incineration'. However, there are only two instances where the issue has been explored within the lifespan of two (in Rhône-Alpes and Midi-Pyrenees) separate local waste committees. Both cases produced feasibility studies on using energy capture for burning residual waste from household waste. In Rhône-Alpes, the committee concluded that 'waste-to-energy would not be viable due to infrastructure inadequacies'.¹³ The results of a three-year (2009–2012) feasibility study in Midi-Pyrenees have not yet been made public.

Waste-to-Energy in Focus: Assessing the Impact of Environmental Inclusivity (2007–2012)

A series of high profile national roundtable meetings (known as the 'Grenelle Process for a Sustainable Future') in 2007 (with similar informal meetings taking place between 2008 and 2010 on unresolved or new complementary issues) provided an opportunity for government and non-government interests to discuss WtE policy. The Grenelle Process was itself an *ad hoc* sophisticated governance structure that initially spanned four months (known as Grenelle I) before evolving on a more informal basis into 'Grenelle II' lasting until 2010 (see Figure 3). The composition of each working group included representatives from the state, sub-national government, environmental organizations, employers' confederations and trade unions. As demonstrated in Figure 3, their initial conclusions were then released for discussion in Internet forums, the media, political parties and six formal inter-regional meetings across France. Informally, the working groups have continued to work on implementing more detailed agreements in the form of further working groups (Grenelle II).

Unlike local waste contracts, the Grenelle Process examined the WtE issue in comprehensive detail. In terms of content, WtE was discussed in two (out of six in total) working groups: 'environment and public health' and 'energy'.

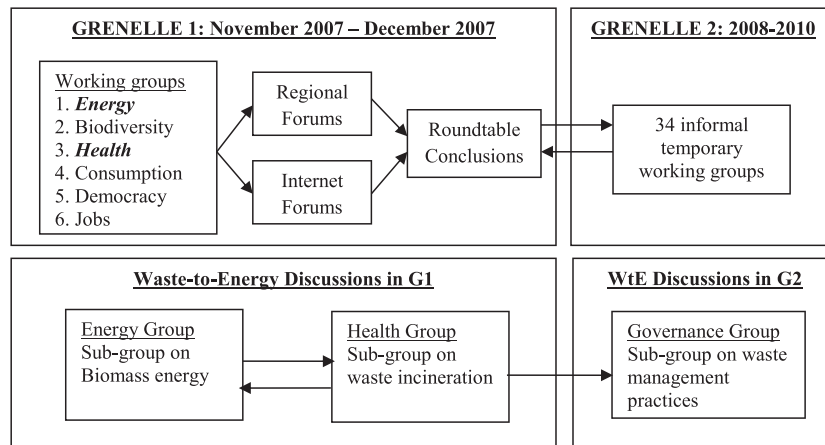
¹⁰Interview with the EEA.

¹¹Instead of fines, incomplete contractual objectives were punished by a reduction in state funding for renewed objectives.

¹²Documentary evidence was collected at each of the interviews with the four organizations.

¹³Interview with a representative from FNE who is currently involved in the Rhône-Alpes case.

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Source: French Ministry for the Environment

Figure 3. WtE and the Grenelle Process

The former comprised 49 representatives active in waste management including four environmental interest groups (FNE, Greenpeace, Les Amis de la Terre and WWF-France) in this study (Maraninchi, 2008). A sub-committee dedicated to waste issues concluded that

The place of waste-to-energy in waste management in France was subject to detailed discussions with little agreement. An important reduction in the levels of incinerated materials was sought by some organisations, and furthermore developed into a call for an outright moratorium on any new plants in some cases. This position was not shared by employer confederations, national and sub-national elected representatives.¹⁴

Most debate focused on the health implications of siting WtE plants throughout France. A representative from Les Amis de la Terre stated 'a clearer distinction was needed between biomass incineration and non-biomass... but it was clear in those meetings that other organizations wanted all forms of incineration stopped... (l)et's say they were frank discussions'.¹⁵

The 'energy' working group also concluded on the future role of WtE (Jouzel and Stern, 2008). It was the most comprehensively attended set of discussions, with 62 representatives (including all four groups), and the only working group to have two independent presidents (a climatologist and an economist). It concluded that 'waste... presents significant potential for energy production, estimated at 35% by Veolia Propreté'. Moreover, the working group underlines that 'we propose a clear prioritization for using waste-to-energy, agricultural bi-products and industrial waste in increasing heat and electricity production'.¹⁶ Discussions in the 'energy' working group were, however, markedly *less* engaged with environmental interests. A member from Greenpeace commented 'it was evident that business interests had primacy there'.¹⁷ A long-standing figure in WWF-France declared

The atmosphere was rather different (to the health working group), there is no doubting that... cameras everywhere... we raised our concerns but we were outnumbered on so many issues... (W)e weren't trying to stop anything (but rather) change their mind-set.¹⁸

¹⁴Interview with the Ministry for the Environment and Sustainable Development and associated report (Maraninchi, 2008).

¹⁵Interview with Les Amis de la Terre.

¹⁶Interview with the Ministry for Energy and Climate.

¹⁷Interview with a member from Greenpeace.

¹⁸Interview with WWF-France.

The national approach to 'governing' WtE was actually concluded in a third working group on 'governance' in 2009. A workshop dedicated to waste management, within the broad 'governance' working group, met six times in 2008 and twice in 2009. It mainly involved members from the initial 'environment and public health' and 'energy' groups.¹⁹ A strong environmental interest lobby (12 members out of the total 51) was present in the new workshop, including all four environmental groups in this study.

The group broadly concluded that 'public-private partnerships should continue to be the primary vehicle for the implementation of waste management objectives at a local level... with increased consultation with local communities especially on the waste-to-energy issue' (Notat, 2008, p. 21). Negotiation between the environmental lobby, government and business resulted in three binding commitments. A proposal (initially raised in the 'environment and public health' working group) to increase taxes on non-biomass based WtE practices was rejected in this workshop. In contrast, a 12% reduction by 2015 in 'needless' (i.e. waste that could be recycled or prevented) WtE practices was agreed upon. A third conclusion stated that a maximum of 43% of total household waste may be incinerated regionally. Environmental interest involvement at a formal (Grenelle I) and informal level (Grenelle II) ensured a sustained level of input into the expansion of WtE as an energy solution.

All three recommendations are reflected with further amendment in the legislative outcomes of Grenelle I and Grenelle II. Article 46 of Grenelle I stipulates that the 'quantity of waste to be incinerated will be reduced by 15% (rather than 12%) by 2012'. A tax on WtE was indeed omitted from final legislation. Article 46 suggests, however, that a proposed general carbon tax may have a potentially 'reductive effect' upon WtE practices, or at least 'lead to a more carbon efficient application of the technology'. Article 78 states that a maximum of 60% of all local (at the municipal level) waste may be incinerated in order to 'avoid discouraging the reduction of waste at source'. Nevertheless, the environmental interest lobby was unable to hinder an overall government commitment to WtE. Article 46 was amended by Grenelle II to include that 'priority should be given to the... energy exploitation of WtE plants'.

Discussion

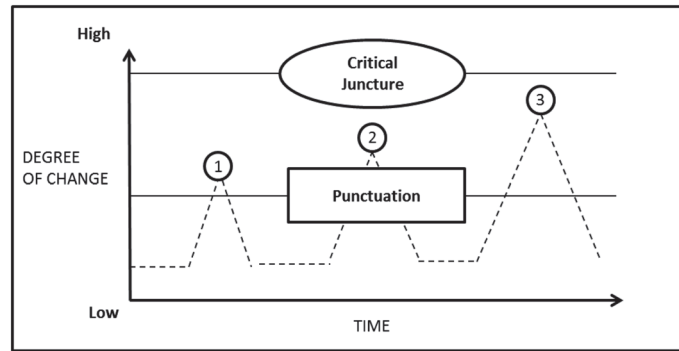
EPI scholars should consider the inclusion of environmental interests – termed here as 'environmental inclusivity' – as a key mechanism for achieving pro-environmental outcomes in energy policy (Collier, 1997; Lafferty and Hovden, 2003; Liberatore 1997). It should not be considered as simply a 'weak' (Jordan and Lenschow, 2010) form of policy integration research. The empirical research above has underlined the variability of environmental interest inclusion in French WtE policy-making throughout the last 20 years. Most notably, this resulted in a confrontational expansion of WtE (both in terms of new sites and renewable energy contribution), with little regard to its environmental impact until 2007. A more sustained (albeit comparatively short-lived) inclusion of environmental interests has recently encouraged a more targeted approach to increasing biomass whilst decreasing non-biodegradable incineration.

The assessment of this inclusion should be approached in a similarly disciplined manner to that found in alternative EPI conceptual frameworks such as multi-level governance (Briassoulis, 2010), policy convergence (Busch and Jorgens, 2005), instruments (Vieira *et al.*, 2007) and learning (Feindt, 2010). This paper applied, first, historical institutionalism (Peters *et al.*, 2005; Pollitt, 2008; Sanders, 2008; Thelen, 2004) as means to better understanding changes in 'environmental inclusivity'. In support of Leach (2008), the paper draws attention to the understated role of path dependency, history and more generally time. The traditional role of the French state is classified as Jacobin, which stipulates that elected governments are mandated with the will of the people directly, without the mediation of other interests (Hazareesingh, 2002). In this paper, a strong and exclusive state is observable within a meso-corporatist framework, depending upon the intimate relations between government and business in the WtE sector.

Moving beyond Leach (2008), we must understand how such change sits within the framework of continuity. Figure 4 shows that all three periods of change in inclusivity amount to 'punctuations' in political time (Thelen, 2004). Punctuations are more frequent events that do not produce 'transformative path departing' trajectories. In

¹⁹No official membership list is publicly available (unlike Grenelle I). Evidence is derived from interviews with members from all four environmental interest groups and a representative from the Ministry for Environment and Sustainable Development.

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Source: Adapted from Collier and Collier (1999), McCauley (2013) and Thelen (2004)

Figure 4. Change in environmental inclusivity over time

this way, *weak* models of environmental inclusivity do not amount to long-term shifts (point 1 – ‘voluntary incentive schemes’ – and point 2 – ‘local waste contracts’ – in Figure 4). The Grenelle working groups did provide an example of a *strong* model of environmental inclusivity – with evidence of new structures, processes, engagement and favourable decisions (point 3 in Figure 4). However, the *ad hoc* nature of the working groups has not left an enduring inclusionary imprint on the French mode of governance. In this way, the working groups do not offer a ‘critical juncture’ where a transformative shift in institutional settings and policy trajectories takes place (Collier and Collier, 1991).

The three punctuations (above) all represent various degrees of restricted shifts in contextual exclusionary tendencies. They indicate, nevertheless, significant *interventions* from business and government designed to integrate more environmental interest input into decision-making. In order to examine these interventions, a second conceptual framework highlighted in this paper is discursive institutionalism (Béland, 2009; Carpini *et al.*, 2004; Fischer, 2003; Schmidt, 2010). Embedded in a constructivist epistemological outlook, the sequential rationality of HI gives way to the importance of agency-based knowledge creation. Discursive institutionalism reminds us that environmental inclusivity should involve the inclusion of environmental interests in meaningful structures and processes. Structural inclusion in policy-making is, therefore, ultimately futile in the absence of engagement (Carpini *et al.*, 2004; Hunter and Leyden, 1995) and pro-environmental decisions (Lafferty and Hovden, 2003).

In stark contrast to the UK context (Petts, 2005), business (first) and (then second) government proved unable to develop an effective formal mechanism for engaging with environmental interests in WtE decision-making (see Table 2). A series of national working groups succeeded in offering the first (albeit *ad hoc*) structure for sustained debate (throughout both ‘Grenelles I and II’) between environmental interests, business and government. Engagement processes in the environment/health and governance working groups proved more successful than in energy discussions. They resulted in the two notable outcomes of securing a reduction in unnecessary forms of

Goal\Type	Punctuation 1. Voluntary incentive schemes	Punctuation 2. Local waste contracts	Punctuation 3. Grenelle Working Groups I and II
Structures	No formal or informal environmental representation	Local waste committees with financial incentives	Energy, health and governance working groups
Processes	no engagement with environmental interests	engagement with environmental interests <i>outside</i> WtE issue	Engagement with environmental interests in health and governance
Outcomes	no evidence of pro-environmental change in decisions made	wide range of pro-environmental outcomes <i>outside</i> WtE	(1) Reduction in non-biodegradable incineration (2) Proposed carbon tax

Table 2. Environmental inclusivity and waste-to-energy 1992–2012

Source: adapted from Béland (2009), Bull *et al.* (2010) and Petts (1995).

incineration through a target of 12% and a carbon tax aimed at incineration pollutants. Increased environmental inclusivity contributed, therefore, to pro-environmental outcomes.

We must remember that pro-environmental outcomes are the desired *end point* of EPI – rather than integration itself. With this in mind, we should not only ask who is driving policy integration, as we find in the work of Lenschow (1997) or Pointvogl (2009). We should focus, rather, on who is driving pro-environmental outcomes and how their involvement can be secured in non-environmental policy-making. Environmental interest groups have inspired such outcomes in a wide range of environmental policy issues locally, nationally and internationally (Bohmelt and Betzold, 2013; Bunea, 2013; Feldman and Blokov, 2009; Gullberg, 2008). With this in mind, environmental inclusivity should be increased in energy (and other non-environmental) arenas as a key mechanism for achieving pro-environmental outcomes. Future research in this area should aim to interrogate further the normative and empirical reach of environmental inclusivity in energy policy-making with recall to well-established theories such as historical and discursive institutionalism.

Conclusion

The reinforcement of global and European commitments to sustainable development has challenged nation states to adapt to new inclusive governance practices. The French case showed that a traditional predilection for excluding interest groups is in confrontation with the 'outside-in' long-term normative pressure of sustainable development. After examining this 'governance challenge' through the example of WtE, it is argued that the sustainability agenda has confronted national and sub-national decision-makers with an important 'interpretation dilemma': when does sustainable development as the inclusion of environmental interest groups apply? Environmental policy-making, in this case waste management, has led the way in demonstrating how new inclusive structures and processes can be implemented. The Grenelle Process in France reveals that energy policy is capable of embracing 'outside' interests. A more sustained approach could assist in quelling social opposition to the implementation of controversial energy policies.

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