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Wind Farms and Community Engagement in Australia: A Critical Analysis for Policy Learning

Richard Hindmarsh

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Abstract In late 2007, after signing the Kyoto Protocol, a new Australian federal government committed to generating 20% of Australia's electricity from renewable energy by 2020, for a transition to a low-carbon economy. With wind energy the most viable technology for such expansion, little recognition, however, was paid to intense social conflict surrounding wind farm location. By 2006, inadequate community engagement had emerged as the primary governance issue underpinning a host of issues that local communities faced with the prospect of hosting wind farms. Acknowledged by all Australian governments as an issue to address for effective renewable energy transitions, current policy responses addressing community engagement are analysed for their adequacy to ensure such transitions in a context of democratic legitimacy and fairness and the issues of place-based local communities. Analysis is informed by comparative cross-jurisdictional policy learning analysis featuring European participatory developments; policy analysis of current Australian governmental policy responses; and prior narrative analysis of the behavioural rationalities (the underlying beliefs, attitudes and perceptions) that inform the qualifications and place-protective actions about wind farm location of local stakeholders at the forefront of wind farm contestation: landscape guardian groups. The conclusion is that current policy responses with regard to community engagement, which encourage a largely inform-consult participatory engagement approach, are inadequate. A more promising approach is the collaborative approach, which can also facilitate social mapping of local community qualifications and boundaries about wind farm location alongside technical mapping of wind resources. This is needed to identify the most socially, economically and technically viable locations to locate wind farms to ensure effective renewable energy transitions.

Keywords Wind farms · Community engagement · Australia · Policy learning

R. Hindmarsh (✉)
Griffith School of Environment, and Centre for Governance and Public Policy, Griffith University, Kessels Rd Nathan, Queensland 4111, Australia

1 Introduction

Against the background of ongoing social conflict around wind farm development in Australia, this paper investigates policy and planning problems related to public engagement with local communities faced with such development. This fits into and builds on wider international suggestions, for example, of the 'need for more innovative relationships between planning, technologies, society and landscape', and of balancing the costs and benefits of wind energy development and their distribution through society (Ellis et al. 2009: 522). Such suggestions question the professional role of planning systems as mediators of spatial conflicts (ibid.), and of policy systems as higher-level brokers of effective renewable energy transitions.

In this broad terrain, this paper undertakes a policy analysis of the adequacy of Australian community engagement around wind farm location for policy learning for effective renewable energy transitions.[1] European developments are especially valuable for comparative analysis here, as wind energy development occurred much earlier than in Australia and the associated adequacy of community engagement has been much discussed. This analysis especially relates to new modes of science, technology, energy and environmental governance. These aim to secure improved social and environmental outcomes through processes that better negotiate expert/non-expert boundaries in contexts of democratic legitimacy and fairness (e.g. Webler and Tuler 2000; Wolsink 2007; Peter 2008), and, here, sustainable energy futures.

Prior research suggests that inadequate community engagement is the primary governance problem contributing to social conflict around wind farm location in Australia (e.g. Hindmarsh and Matthews 2008; Hindmarsh 2009). Policy makers have progressively acknowledged this problem informed by: (a) the need to implement effective renewable energy transitions as a major policy response to climate change (Campbell 2006; NSW 2009; Victoria 2009; EPHC 2010), which places wind at the forefront of such transitions in Australia (ESAA 2007); (b) notable media attention to the many adverse issues of wind farms for 'affected' communities; (c) policy responses specifically addressing community engagement issues around wind farms; and (d) reviews and inquiries involving wind energy.

Most recently, inquiries that addressed community engagement in relation to wind farms as an important issue were held by the States of New South Wales (NSW) and Victoria. The state and territory government level in Australia has responsibility for development of, and approval planning procedures for, wind farms. These procedures include providing guidance to developers concerning community engagement as part of assessing social and environmental impacts at the proposal stage. This level of community engagement bears the brunt of community criticism and is the focus of the paper. In agreeing about inadequate 'community consultation', the NSW and Victorian Inquiry reports align closely to recent draft wind farm development guidelines of the Environment Protection and Heritage Council (EPHC), an all-of-government body. That policy alignment encourages

[1] Data was gathered for this exercise through documentary research from relevant Australian and international sources including the scholarly literature, government reports and papers (including inquiry and review reports, inquiry submissions, legislation and planning reports), research organisations, media, and non-governmental organisations. Key sources are referred to and introduced in the text as they emerge.

wind farm developers to shift from a largely 'inform' community engagement position to an 'inform-consult-involve' position, with an emphasis on the 'consult' position (see Table 1 for a description of these positions, and as discussed further in Section 5). This three-position spectrum encourages increasing community participation but provides no guarantee to affected communities of any decision-making power concerning wind farm location, which increasingly appears their preference. This raises a number of questions pertaining to policy learning for good governance of emergent renewable energy landscapes informed by contexts of democratic legitimacy, fairness and sustainable energy futures:

> Just what is an appropriate level of local community engagement to address issues of wind farm location for communities facing wind farm development? Is the 'inform-consult-involve' position adequate or is something else needed? How consultative was the process of formulating the EPHC draft national guidelines for community consultation? What are the key policy lessons for developing adequate community engagement around wind farms in Australia?

Those questions then inform the primary question of:

> Are current governmental policy responses in relation to community engagement adequate for local communities facing wind farm development to ensure effective renewable energy transitions, and if not, how might they be enhanced?

This paper addresses these questions by first, identifying what appear as appropriate meanings of 'community' and 'community engagement' for this area in the Australian context, as it is important to provide a baseline for addressing the questions; second, by backgrounding the rise of social conflict and the issue of inadequate community engagement around wind farms and policy responses in Australia; third, by reflecting on European experiences for comparative analysis of the adequacy of the responses; and lastly, through critical discussion of the responses. Such analysis provides substantive evidence for a further shift in community engagement practices to the collaborative community engagement position to best facilitate wind energy transitions.

2 'Community' and 'Community Engagement' as Place-Based

A recent report on national wind farm development guidelines by the Environment and Protection Heritage Council states that,

> community includes residents, landowners, community and indigenous groups, businesses (and their customers), tourists, visiting the region, and the broader community in the region that have an interest in the development of a wind farm at a particular location from an economic, social or environmental perspective. (EPHC 2010: 4)

This definition is, however, too broad with regard to any accurate or representative measurement of local community perceptions concerning wind farm location, which is the crux of the matter. A more apt definition of 'community' in

Table 1 The EPHC table of public participation

Levels of participation	Inform	Consult	Involve	Collaborate	Empower
Participation goal	To provide the public with balanced and objective information to assist them in understanding the problem, alternatives, opportunities and/or solutions	To obtain public feedback on analysis, alternatives and/or decisions	To work directly with the public through-out the process to ensure that public concerns and aspirations are consistently understood and considered	To partner with the public in each aspect of the decision including the development of alternatives and identification of the preferred solution	To place final decision making in the hands of the public
Promise from wind farm developer to the community	We will keep you informed	We will keep you informed, listened to and acknowledge your concerns and provide feedback on how public input influenced the decision	We will work with you to ensure that your concerns and aspirations are directly reflected in the alternatives developed and provide feedback on how public input influenced the decision	We will look to you for direct advice and innovation in formulating solutions and incorporate your advice and recommendations into the decisions to the maximum extent possible	We will implement what you decide
Example techniques	Fact sheets	Community information session	Workshops	Participatory decision making processes	Citizen juries
	Web sites	Surveys	Community reference group		Ballots
	Newsletters	Public comment	Deliberative polling		
Spectrum level recommended for stages of wind farm development	Site selection	Project feasibility	Planning		
		Construction	Application		
		Operation	Decommissioning		

These recommended participation levels are indicative only, and may differ with each stakeholder participation activity. Similarly, certain projects may require a higher or lower level of participation than that outlined, during a particular stage

Source: copy of Fig. A-1: IAP2 Public Participation Spectrum and application to wind farm developments (EPHC 2009a: 50; EPHC 2010: 25, although citizen juries and ballots have been deleted from the 'empower' column in the 2010 version)

this context is of a 'place-based local community' (Colclough and Sitaraman 2005).[2] That aligns to the understanding of Dalton and Dalton (1975: 2) of 'community' as 'a relatively homogeneous human population, within a defined area, experiencing little mobility, interacting and participating in a wide range of local affairs, and sharing an awareness of common life and personal bonds'. In that context and in relation to wind farm issues both social and environmental, 'place' poses as a complex construction of biophysical and environmental psychological attributes and meanings that individuals assign to it by way of socio-cultural processes (Stedman 2002; Pretty et al. 2003). Thus, found at the intersection of socio-cultural, biophysical and socio-political elements, place forms an underlying value reference point for the formation of local attitudes to place disruption, such as place protectionism concerning any perceived environmental degradation or spoilage of place (Cantrill and Senecah 2001; Inalhan and Finch 2004; Devine-Wright 2009), including the adverse impacts of wind farms.

The significance of (local) place for wind farm development was informed by Toke (2005: 1527), whose study of the planning outcomes of 51 wind power cases in England and Wales between 1999 and 2003 found that: 'The attitude of the people in the immediate vicinity of proposed windfarms is…the most important influence on decisions made by local authorities'. One measure of local specificity regarding windfarms is given by the visibility impacts of a wind farm, which Graham et al. (2009: 4) cite as a radius of 15 km from proposed wind turbines at which distance their visibility was found to drop significantly. Alternatively, for Nadaï (2007), the key logic defining 'local' in relation to a wind farm is its 'siting, which operates at the level of locality, a level at which the local scale (i.e. a set of spatial relations between the elements composing the local landscape and holding it together as a unified and distinctive entity) and local social links are constitutive of the sense of place'.

What might then constitute community engagement around wind farm location in a local place-based sense? As a fuzzy concept, Cavaye (2004: 86) posits that it broadly involves 'mutual communication and deliberation that occurs between government and citizens', involving 'participation with a community of people, rather than an individual citizen', which can involve different levels. For Cavaye: 'This means that engagement arrangements need to incorporate the diversity and dynamics of communities, issues of community representation and power, and the potentially conflicting goals of sub-communities' (ibid.). Alternatively, Mulligan and Nadarajah (2008: 87) perceive:

> Community engagement…as the process of working collaboratively with groups of people affiliated by geographical proximity, special interest and/or similar situations to address issues affecting the well-being of those groups of people…[where] its aim must be the "empowerment" of individuals and community-based organisations...

Those meanings appear to well reflect the level of community engagement sought by Australian rural communities facing wind farms; as well as most understandings in the Australian debate on the meaning of 'community' in relation to wind farm development. They provide a baseline to build the analysis and are further informed

[2] See Walmsley (2000) for a detailed discussion on the notion of 'community'.

in the ensuing discussion. The next section maps the rise of community concerns in Australia about inadequate engagement and the policy responses that issued.

3 Wind Farms, Social Conflict, Community Engagement and Policy Responses

The record of wind energy development in Australia shows that social conflict is measurably underpinned in governance terms by inadequate public engagement procedures involving rural-based communities faced with wind farm development. By 2006, that had become quite clear (Hindmarsh and Matthews 2008). First, the 2003 review of the Mandatory Renewable Energy Target (MRET),[3] the first Australian Government initiative to create a 'wind rush' in responding to climate change, received a number of community and citizen submissions citing impacts of wind development as reduced property values, community divisiveness and conflict, noise pollution and adverse effects on wildlife and visual amenity (see Fig. 1; Tambling et al. 2003; Wawryk 2004). The submission of the Australian Council of National Trusts noted that such 'hostility to wind farms resulted from inappropriate planning and public consultative mechanisms' (Tambling et al. 2003: 47–60). The review subsequently identified a maze of nationally disjointed planning approval procedures across NSW, Victoria, South Australia and Western Australia with little requirement to involve communities in any meaningful discussion about their concerns.[4]

Second, policy analysts reinforced that affected communities were largely excluded from participating in impact assessments and planning processes, including any assessment of interrelated tourism and economic impacts and costs and benefits (Bunting and Jenkins 2002; Wawryk 2004; Gross 2007). Third, citizen submissions to a Senate inquiry into energy future options (Australian Government 2004) signalled increasing local objections to wind farm proposals (also Bunting 2004: 6), as well as a desire for informed choice over renewable energy development options in the preference for low impact ones. Fourth, much media attention and political lobbying by affected communities for better participation confirmed inadequate community engagement as a major community issue (Campbell 2006; Gross 2007; Hindmarsh and Matthews 2008).

In 2006, the federal minister for the Department of Environment and Heritage argued that inadequate community engagement would eventually stall wind

[3] In more detail, Hindmarsh and Matthews (2008: 220) explain: 'Against the backdrop of climate change, peak oil, and energy policy transformations globally, wind power initially attracted Australian Government recognition through the MRET. Mandated as part of the Renewable Energy (Electricity) Act 2000, MRET came into effect in January 2001. It required purchasers of wholesale electricity to purchase 2% of their electricity from renewable energy sources. A number of interim targets were specified beginning in April 2001 with an additional 300 GWh of renewable energy to be generated, increasing each year with the final target of 9500 GW h to be attained by 2010.'

[4] These procedures direct developers to assess the potential social and environmental impacts of development as part of their application for project approval, but there is no requirement to seek community feedback in community consultation. Generally, developers are encouraged to through stakeholder meetings, especially to surrounding landowners. Typically, developers 'engage' with affected communities through information sessions. Once an environmental impact statement, public environmental report or development report has been released, citizens can 'engage' by lodging submissions about their concerns in a very narrow time frame to a planning authority, which the developer responds to as part of the application for project approval. Variable appeal conditions apply in most Australian states.

Fig. 1 Visual impact of the Palmerston North wind farm on the scenic vista, taken by the author while on holidays in Aotearoa, New Zealand; December 2008

development, which aligned to the UK position (Hindmarsh and Matthews 2008). The minister subsequently proposed a National Code on Windfarms to actively involve local communities in project implementation (Australian Government 2006). Supported by local government, the renewable and wind energy industries, planners and community interests, a federal government-led roundtable began to develop national guidelines. State governments, however, did not participate in rejecting a participatory national code as posing too much red tape for development. State governments also claimed existing public engagement was sufficient. But in following the limited public involvement mode that claim was contradicted by the rise of intense and consistent local contestation, with the new social movement of landscape guardian groups in the vanguard. By 2007, for every second wind farm proposal, a landscape guardian group had emerged to contest it (with 42 wind farms constructed by 2007; Hindmarsh and Matthews 2008: 218). In late November 2007, a looming federal election stalled the roundtable's deliberations.

A year later, informed by a new Labor Australian Government making a commitment to generate 20% of Australia's electricity from renewable energy by 2020, the issue of better community engagement to help achieve such goals prompted a resumption of the development of national guidelines. The Environment Protection and Heritage Council issued The Report on Impediments to Environmentally and Socially Responsible Wind Farm Development (EPHC 2008). Following intergovernmental negotiations, the report, in departing from the prior strong participatory thrust of the proposed guidelines, recommended the guidelines should 'complement existing [state] regulatory arrangements...' (EPHC 2009b). Subsequently, in October 2009, draft national wind development guidelines were released for public consultation (EPHC 2009a).

That, in turn, also confirmed the rather ad hoc way of developing wind energy policy in Australia, as two state government inquiries relevant to wind farms were already underway to facilitate renewable energy to meet 20/20 goals. Notably,

national guidelines could not be binding at the state and territory governmental level, and could not address localised aspects of wind farm development covered by existing state policies and regulations (NSW 2009: 15). While the NSW inquiry reported on 16 December 2009, the same day as the EPHC draft guidelines consultative period ended, the Victorian Inquiry reported on 28 February 2010. Both governments responded to the recommendations 6 months after their respective inquiry reports. In all of these governmental policy responses, community consultation assumed a prominent place, as NSW Inquiry chair Ian Cohen (2009) stressed:

> the development of wind farms needs to better balance the needs of all stakeholders. Local communities feel disenfranchised and uncertain about what they can expect from a wind farm development in their area. Local communities have expressed a particular concern that the current community consultation process for wind farms is not adequate.

Indeed, 64 of the 120 submissions to the NSW Inquiry made overtures that well indicated developers' community engagement processes were inadequate, in being mainly information sessions. That view was generally concurred with by community submissions (eight out of 23 relevant submissions) to the Victorian inquiry (which, in contrast to the NSW inquiry, had a broader renewable energy remit than wind farms).

But before analysing what the policy responses represented in terms of the adequacy of community engagement, what might suggest adequate community engagement in this area? In other words, while the EPHC draft guidelines and inquiries suggest the form of community engagement processes, what informs their adequacy? One contextual method is provided by policy learning involving comparative jurisdictional analysis of others' policy experiences to improve one's own policy choices (May 1992; Geva-May 2002; Dovers 2005), particularly in cross-jurisdictions of similar cultural, political and legislative contexts (Dolowitz and Marsh 2000). The European wind development arena, which began long before the Australian one,[5] is also characterised by enduring social conflict, and of further instruction, is situated in broader European leadership of the so-called 'participatory turn' (e.g. Videira et al. 2006). Featuring enhanced, inclusive or deliberative participation (e.g. Rowe and Frewer 2000), global trends towards collaborative policy and planning approaches have resulted that especially focus on new scientific and technological innovation (Jasanoff 2004; Chen and Wu 2007; Hindmarsh and Du Plessis 2008; Fujigaki 2009), and environmental issues (Koehler and Koontz 2008).

4 International Experiences of Wind Farms and Community Engagement

A typical finding of European analysts about wind farm location is: 'If local interests are not given a voice in decision-making processes, conditional supporters may turn into objectors' (Wolsink 2007). In probing public attitudes to the siting of wind farms, Wolsink (2007) examined data gathered between 1986 and 2002 in comparative studies, impact studies or sociologically defined cross-section surveys.

[5] For example, the Danish Wind Power Programme 1976 (Hamdouch and Depret 2010).

Wolsink found that a relationship existed for local residents between facility siting issues and environmental injustice not only applied to wind farms but also housing, waste management and mineral extraction. Norms of equity and fairness were at stake when local residents developed 'an inclination to resist unwanted activities in the neighbourhood' (ibid.: 1202). However, not only did that reflect 'core values about how society should take such decisions' within the public, but also among all stakeholders involved (ibid.: 1203). That prompted Wolsink to conclude: 'The best way to facilitate the development of appropriate wind farms is...through collaborative approaches to planning' (ibid.: 1204).

Such collaboration thus recognises that 'multiple ways of knowing and claiming reality' exist, 'which shape the way in which problems are understood' (Ellis et al. 2009: 525); the neglect of which has informed the failure of the UK planning process 'to mediate between the developer and the public to evolve a project that accommodates both interests', as one wind farm developer put it (Ellis et al. 2009: 532). Many other studies support these arguments in finding that greater community expectations of participation exist in relation to wind energy (e.g. Ellis et al. 2006; Walker et al. 2010).

That recognition builds on a longer history of civic engagement with regard to environmental management (Wagenet and Pfeffer 2006). To better connect to local communities informed by 'thick trust' that emphasises local appropriateness, consensual outcomes and collective benefits regarding new technologies and development (Walker et al. 2010: 2657), new participatory decision making addresses the failure of traditional expert informed decision-making to resolve persistent and complex environmental problems (Connelly and Richardson 2004: 6). At the core of such failure for many are weak consultative practices of 'passive' (one way) participation, for example, town hall meetings, information sessions, surveys and submissions (Cavaye 2004: 87; McGurk et al. 2006; Wolsink 2007). In contrast, new collaborative practices feature early and 'active' involvement, full information, transparency, inclusiveness, deliberation, participant diversity, partnership in agenda setting and decisional influence (Chen and Deng 2007; Edwards et al. 2008). Improved dialogue between citizens and experts, which seeks understanding through intersubjective rationality (Zografos and Martinez-Alier 2009), have inspired behavioural change and built social capacity and trust in the avoidance, mitigation or resolution of often intractable environmental conflicts (Beierle and Konisky 2000; Cavaye 2004; Melo and Baiocchi 2006). Improved problem framing and policy outcomes have resulted (Clark and Illman 2001; Dovers 2005; Fischer 2006; Hophmayer-Tokich and Krozer 2008).

Concomitantly, some well-worn criticisms of deliberative approaches exist including the time and resources needed to build diversity and representativeness of participants, sometimes, interest; developing appropriate processes and mechanisms; and lack of a committed link to influencing policy outcomes (e.g. Barnes et al. 2003; Oughton 2008). Importantly, Connelly and Richardson (2004) highlight that although the 'ideal consensus process is difficult, if not impossible to achieve', it is important to attempt to gain the inclusion of diverse stakeholders, issues, and outcomes and actions in the pursuit of the best possible outcomes for all interested/involved stakeholders. If this is ignored, 'problems may be suppressed which can re-emerge later in the policy making or implementation process' (ibid.: 13).

With the benefits seen as more convincing, European policy lessons increasingly stress that local collaboration is important to gain input legitimacy of public knowledge and ownership for more effective wind farm planning (Devine-Wright 2005; Meyer 2007; Jobert et al. 2007; Wolsink 2007; Zografos and Martinez-Alier 2009). As Jones and Eiser (2010: 3116) note: 'A burgeoning literature now exists to attest to the many benefits of employing more deliberative approaches to project development…[that] firmly points to the importance of early, sustained and reciprocal interactions'.

5 Current Australian Policy Responses on Wind Farm Community Engagement

5.1 The Draft EPHC National Wind Farm Development Guidelines

In July 2010, the Environment Protection and Heritage Council released its final draft national wind farm development guidelines for a final 1-year stage of consultation with stakeholders, especially governmental and industry ones, of how to put the guidelines into practice. That followed the release of the initial draft for public consultation in October 2009. What was the community engagement thrust of these two drafts, which differ in minor but some significant ways, following the initial consultative period with 79 submissions attracted?[6] The thrust of both drafts was found to reflect weak community engagement; with the final draft further weakening the thrust through removal of any sections referring to involving 'dialogue' at a number of stages of a wind farm project development.

Yet, this finding was not that surprising as first, Australian government agencies are strongly embedded in the limited public involvement model, also agency territoriality in decision making, and thus have little experience in formulating enhanced community engagement initiatives and also appear to lack willingness to develop them. That, of course, all seemed evident in the position of state governments in rejecting the strong participatory position of the earlier proposed national code for wind farms.

Second, in that context, the EPHC working group of federal and state government officials drafting the guidelines were all from state wind agencies responsible for wind farm development and planning (EPHC 2009a). Third, this working group relied on 'a team of expert consultants under the leadership of Hydro Tasmania Consulting' (EPHC 2009b: iii), which is associated with Hydro Tasmania—Australia's leading renewable energy developer, which includes wind energy in its portfolio, as a government business enterprise owned by the State of Tasmania. That all points to what Connelly and Richardson (2004: 5) describe as a form of consensus building associated with the distinct style of partnership-based policy making between agencies, in contrast to the public involvement style.

In other words, in the formulation of methods for the initial guidelines for community engagement (which informed the second updated version with little

[6] That number was given by the EPHC project support officer for this matter (*personal communication* 7 July 2010). Contrary to advice that any invited submissions would be made public on the EPBC website (as the submissions were to the NSW and Victorian inquires), they have not been made public.

differentiation), other stakeholders including communities affected by wind farms were excluded. It was only at the public consultative stage of the EPHC process that other stakeholders were able to have a say, but as the submissions were excluded from public viewing despite prior contrary advice reflecting transparency, it is not known who made the submissions and what their arguments were. Neither was a summation of the submissions posted by the EPHC.

That Hydo Tasmania Consulting devised the two drafts' appendices on 'Community and Stakeholder Consultation' methodology was evident with 'Hydro Tasmania Consulting' badged prominently on the cover page of the initial draft. It, in turn, referred to the Australian Wind Energy Association's (now Clean Energy Council) Best Practice Guidelines for Implementation of Wind Energy Projects in Australia (2006) for preparing public consultation plans (EPHC 2009a: 18). Those guidelines, however, provide little direction for any meaningful community engagement in only briefly mentioning that developers should adopt community consultative processes as early as possible in the development stage of a wind farm, with no detail provided on what that implies or how it might be done.

To inform consultation, developers are instead recommended to gain professional advice and assistance from an experienced community consultation practitioner (EPHC 2009a: 49), or to refer to an EPHC public participation spectrum provided in tabular form of community engagement levels that can be seen to increase in impact of engagement: from 'inform', 'consult', 'involve', 'collaborate', to 'empower', as Table 1 above shows. However, as little contextualisation of their participatory influence for publics is given, and with the ladder of participation terminology of Arnstein (1969) aligning to the EPHC levels of participation given, it is useful to refer to Arnstein to provide a better idea of that potential influence and as another source by which to evaluate the adequacy of the proffered levels of participation. In addition, Cavaye's (2004: 87) spectrum of government interaction with communities and forms of participation is useful. Accordingly, the 'inform' position (as shown in Table 1) is the second lowest rung on Arnstein's ladder or Cavaye's spectrum, and is found in Arnstein's tokenism category along with 'consultation' and 'placation' (which equates to the EPHC 'involve' option). As Arnstein (1969: 217) wrote about 'Informing' and 'Consultation':

> they lack the power to insure [citizen] views will be heeded by the powerful. When participation is restricted to these levels, there is no follow through, no "muscle", hence no assurance of changing the status quo. Rung (5) Placation, is simply a higher level tokenism because the ground rules allow have-nots to advise, but retain for the power holders the continued right to decide.

That indicates to some extent why affected communities raising the many issues of wind farm location see the inform position as inadequate. The 'consult' and 'involve' levels (also of Table 1) likewise suggest inadequate community engagement, as no guarantee of decisional influence for community views is offered there either. As Cavaye (2004: 86) outlined, the two-way communication consult level allows citizen feedback but, in the end, government defines the issues and controls decisions. Moving to the EPHC 'involve' position, Cavaye (2004: 86) nominates this as 'structured community involvement' featuring, for example, 'advisory committees or representative panels that mediate community input'. Here, government and

communities make some decisions jointly, but often project goals are predetermined. In contrast, the 'collaborate' option signifies a shift closer to genuine influence (Arnstein 1969; Clark and Illman 2001; Melo and Baiocchi 2006).

With the reference for the EPHC table format (as again shown in Table 1) being the 'IAP2 Public Participation Spectrum' (2007),[7] where IAP2 represents 'International Association of Public Participation', it is notable that no caveat exists in the EPHC table to signal that any modification has occurred[8]. For instance, in the example participatory techniques in the IAP2 table's 'collaborate' column are 'citizen advisory committees, 'consensus-building' and 'participatory decision-making'. By way of contrast, in the EPHC table, only 'participatory decision making processes' remain. In the 'inform' column, newsletters replace open houses; and in the 'consult' column, community information sessions replace public meetings and focus groups. In effect, these modifications weaken community engagement at each level of the IAP2 format. In doing so, they can be seen to reflect current practices of Australian wind farm developers.

Yet another modification is the addition of an extra row at the bottom of the EPHC table. Labelled 'Spectrum level recommended for stages of wind farm development' it refers only to the inform-consult-involve spectrum. The inform option is listed as the only one for site selection, which suggests a significant flaw when site selection is a primary issue of affected communities (e.g. Wolsink 2007; Formby 2009: 2; Ellis et al. 2009: 526). A more appropriate participatory option is suggested by collaborate, as the European policy lessons of the need for 'sensitive siting' tell us (e.g. Jones and Eiser 2010: 3115).

5.2 The Victorian and NSW Inquiries

The NSW and Victorian inquiry reports, like the EPHC drafts, indicate support mostly for the inform and consult participatory positions. Again, that is not so surprising given earlier state preferences for limited public involvement in this area. In addition, NSW and Victoria are represented on the EPHC as governmental members and also in a representative capacity on the EPHC working party producing the guidelines (as discussed earlier).

The Inquiry into the Approvals Process for Renewable Energy Projects in Victoria (Victoria 2009) found that: 'Community led approaches to identifying suitable sites for wind farms and the establishment of community engagement committees may address some of the negative social and economic impacts of wind farm developments on small communities' (Victoria 2009: 133). Such committees will provide feedback between 'the proponent, community representatives that are on the committees and the elected councillors' (ibid.: 154). Although lacking in detail, at the least this indicates the consult participatory level and at the most, the involve level. That appears confirmed by the Victorian government response, released in August 2010.[9] Lacking firm commitment to anything

[7] See: http://www.iap2.org/associations/4748/files/IAP2%20Spectrum_vertical.pdf

[8] Apart from any implicit suggestion in the heading of the EPHC table as 'IAP2 Public Participation Spectrum and application to wind farm development'; which also suggests the EPHC table format is an IAP2 format, when it is not.

[9] See: http://new.dpi.vic.gov.au/energy/policy/enrc-report/response (accessed 27 October 2010).

meaningful for affected communities it appears more representative of what Hindmarsh and Matthews (2008: 219, see also pp. 227–229) refer to as 'deliberative speak', a strategic language comprising a rhetorical array of terms reflecting deliberative principles and ideals of active public engagement that is accompanied by a lack of appropriate processes and practices of active public engagement to adequately address them.[10]

In response to the Inquiry's Recommendation 6.4 that the Victorian Department of Primary Industries investigate proactive, community-led approaches to identifying suitable sites for wind farms and the findings be incorporated (in) an addendum to the wind farm atlas, the government responded 'support in principle'. But that only lay in the possible inclusion of local input to identify areas suitable for renewable energy development in the preparation of regional land use plans in conjunction with local government. Furthermore, no further details are given as to how that might be accomplished. In addition, reference was made to the planning permit process already providing statutory processes for public participation in planning approval processes, but these are limited to making a written submission for consideration by the 'responsible authority', and opportunity to participate in a public hearing by either a planning panel or the Victorian Civil and Administrative Tribunal, before the permit application is determined. However, in examining this process, Hindmarsh and Matthews (2008: 224–225) found that 'most review panel reports…determined that community consultation processes carried out by developers…[were] poor or virtually non-existent'. All of the panels addressing this aspect recommended that 'proponents should adopt communication strategies to minimise social conflict', as inadequate processes 'directly led to a heightening of community disputes and division'. To make matters worse, 'policy and planning guidelines [were] heavily weighted towards approval of wind farms, which reviewers found compromising' (ibid.: 225).

Finally, in response to Recommendation 6.5 that Regional Development Victoria fund local councils impacted by wind farm and renewable energy projects to establish community engagement frameworks, support was not given. Instead, the government stated it was the proponent's responsibility to lead communication and engagement processes for individual wind farm proposals. To ensure developers developed better practices for that task, the Victorian government provided mechanisms to encourage proponents to adopt good practice principles for community consultation, as informed by the 'Green Door for Renewable Energy' process. Its practices are listed as requiring 'early and inclusive engagement of the local community…at the point of identification of potential sites', 'an open and transparent process', and that 'all relevant information' be made available.[11] While sounding deliberative, the limits of the process are then spelled out thus: 'timely and responsive feedback [is to be given] so that those involved in the consultation have a good idea of how their feedback and comments are being used'. That directive, of course, reflects the limited inform-consult-involve position.

[10] On the issue of including enhanced democratic engagement processes and mechanisms regarding energy transitions, also see Hendriks (2009).

[11] See http://www.business.vic.gov.au/busvicwr/_assets/main/lib60262/green%20door%20for%20renewable%20energy%20-%20final.pdf (accessed 27 October 2010).

In turn, the NSW Inquiry's recommendation in the community engagement area—Recommendation 18—read:

> That the Minister for Planning require, as a condition of consent, that wind farm developers publish within the local community detailed information about all aspects of the wind farm and provide appropriate options for members of the community to discuss their concerns with the developer, such as establishing a phone line, email account or local office to hear and address local concerns (EPHC 2009a: xxii).

Six months later, in June 2010, the NSW government's response (NSW 2010: 9–10) issued:

> Community consultation guidelines will be developed to encourage and assist proponents to improve community engagement…The NSW Government encourages proponents of new wind farms to adopt a proactive approach to community consultation during both the pre-exhibition phase and the post-determination phase. In addition, six regionally based Precinct Advisory Committees are being established. The Committees will provide the community with an additional communication channel, above and beyond existing statutory requirements.

But the terms of reference for the precinct advisory committees was released in October 2009, 2 months before the NSW Inquiry into Rural Wind Farms reported, in response to the 20/20 renewable energy goal and in anticipation of a 'new wind rush' stimulated by a looming expanded national renewable energy target.[12] Developed by the Department of Environment, Climate Change and Water NSW, the six precincts are marked for prime wind resource areas with 'streamlined planning and approval process for wind developers'.

Wind development is to occur through 'better community partnerships', involving 'new dedicated environmental staff' in each precinct 'to drive the clean energy agenda' and 'work with local communities',[13] through precinct advisory committees. Four of the 10 members of each committee are to represent 'a cross-section of community interests (e.g. landowners, industry, environment, local business and township community)'. Networks are to be established for 'wide-ranging consultation' with the wider community; mainly it appears to provide feedback from advisory committee meetings. Amongst the criteria for selection of members is 'commitment and interest in renewable energy', with the role of the advisory committee being to 'disseminate and promote the economic and environmental benefits of wind energy generation', and 'to develop regionally appropriate and consistent approaches to developer contributions into community enhancement programs'.[14]

[12] See http://www.environment.nsw.gov.au/climatechange/windprecincts.htm

[13] See http://www.environment.nsw.gov.au/resources/climatechange/09713WindEnergyPACcharter.pdf

[14] For example, the *Regional State of the Environment Report* 2004–2009 for the Australian Capital Territory reported that the Upper Lachlan Shire Council had 'developed a *Community Enhancement Policy* which requires wind farm companies to provide community enhancement and contributions to infrastructure as part of their *Corporate Social Responsibility*…to ensure that the wider community also receives benefits from wind farm installations (http://www.envcomm.act.gov.au/soe/rsoe2009/upperlachlan/index.shtml).

Though the thrust of conducting community engagement is generally 'positive' in the NSW government's response, the largely top-down precinct advisory committee approach arguably goes beyond deliberative speak. Instead, it appears to represent soft-sell PR in the pursuit of social acceptance of wind farms, which pushes economic and environmental benefits reflecting proponent viewpoints (e.g. see Hindmarsh 2009: 19–23; also Wüsteenhagen et al. 2007). Instead of 'engaging' in dialogue, the script reads persuasion, which would also threaten to undermine the two-way (albeit, already limited) consultative activities recommended by the NSW Inquiry. That positions the precinct and advisory committee approach as a pre-determined policy outcome that, either wittingly or unwittingly, impacted on inquiry submissions seeking improved community engagement. To make matters worse, the NSW Premier declared the precincts 'without any consultation with the affected areas' (Formby 2009: 2). Of relevance here is the finding of Wolsink (2007: 1205) that: 'Consultation after a plan has been announced is more of a trigger for opposition than an incentive for the proper design of acceptable projects.'

6 From NIMBYism to Better Understanding Community Rationalities

What this NSW government policy turn is suggestive of is anxiety about the strength of local contestation as a barrier to achieving renewable energy goals. That, in turn, suggests place-based community activist groups like landscape guardian groups in Australia are influential, and thus the policy intent is to bypass them. International experiences provide traction for this suggestion (Lund 2000; Devlin 2002; Devine-Wright 2005; Owens and Driffill 2008), which is reinforced where local proponents also attempt to discredit local dissenting groups as holding a NIMBY attitude in contrast to wider public support for renewable energy. Such tactics situate these groups as a constraint to wind energy (Owens and Driffill 2008), or as illegitimate and anti-public interest 'NIMBYists' in standing for their own interests rather than the public interest (Diesendorf 2006; Chen and Deng 2007: 79–80).

However, interpreting local opposition to represent prefixed NIMBY attitudes, and to then delegitimise such opposition, reflects two significant problems. First, a reliance on opinion polls, as well as on consultancy reports for wind farm developers, as authoritative indicators of strong local/regional support for wind farms. Typically, opinion polls are at the national level and are unqualified (cf. Bell et al. 2005). In turn, some consultants engage in questionable ad hoc approaches which survey local, regional and far-off populations, as well as visitors, in representations of the local (e.g. see Victoria 2009: 136–137). Second, critical review of the NIMBY concept has found limited support for its validity. Instead, many European studies show that NIMBYism 'in its strictest terms' is quite rare (Jones and Eiser 2010: 3108). Wolsink (2007: 1201) identifies that representation as a type I characterisation of a NIMBY tendency, which displays a 'positive attitude towards application of wind power, combined with an intention to oppose the construction of any wind power scheme in one's own neighbourhood'. Depictions of type I NIMBYism allow proponents to situate that as the cause of

local land use contestation instead of the implications of the development itself, and that this 'anti-public interest attitude' impedes 'essential' development (McClymont and O'Hare 2008). Conversely, types I–IV that Wolsink identifies focus on the implications of the development, in terms of the technology itself, regarding landscape values, other construction impacts or faulty construction plans. Other studies identify top-down policy styles that limit opportunity for local views as another reason for a NIMBY tendency (also Wolsink 2007).

The result of proponents mainly adopting the type I variant encourages ill-conceived policy instruments such as limiting public participation and introducing public education programs aiming to enhance positive attitudes (McClymont and O'Hare 2008; also Wolsink 2006), as the NSW precinct and advisory committee approach suggests. Instead, community distrust and stronger resistance often results, as well-demonstrated internationally (Wolsink 2007; Jones and Eiser 2010). In addition, studies have shown 'hardly any relation' between level of knowledge and attitudes (Wolsink 2005: 6), where the difficulty of producing a positive relationship has been shown to be compounded by variations in behavioural attitudes with regard to place (Devine-Wright 2005; also van der Horst 2007). That reinforces that weak or manipulative community engagement is more likely to form the barrier to renewable energy uptake than strong community engagement, particularly regarding wind farm siting, where local knowledge can significantly inform the viability of siting according to visual amenity, noise and other local social and environmental qualifications.

European studies have also demonstrated that it makes good policy sense to better understand the underpinning behavioural rationalities of place-based local communities that inform such qualifications as an important part of the collaborative approach (Toke 2005; Ellis et al. 2006; Wolsink 2007). As a first step in probing this area in Australia, Hindmarsh (2009) analysed the concerns of (11) operational landscape guardian groups—activist groups at the forefront of community contestation and whose concerns were available through publicly accessible websites.[15] Notably, the relevance of landscape guardian concerns as reliable indicators of broader community ones has been well indicated in the UK, where they significantly inform policy formation and community renewable energy approaches (Walker et al. 2010: 2657; see also Toke 2005). Figure 2 shows the Australian landscape guardian concerns, which were also found in many citizen submissions to the NSW and Victorian inquiries. Inadequate consultation was found the key governance concern (18% of narratives) in relation to environmental (30%), economic (26%) and social (26%) concerns.

[15] An internet search was conducted in March–April 2009 for publicly accessible website materials of landscape guardian groups operational at that time in Australia. A total of 11 groups were found that informed the narrative analysis undertaken (Hindmarsh 2009). This was considered a representative sample of such groups in Australia given they often disappear once a wind farm has been built, as their nature is to contest vigorously at the proposal stage of a wind farm, not once a wind farm is operational. The data was coded using the Nvivo qualitative data analysis software package (Version 9, QSR 2008). The coding framework was used as a sensitising device that helped to specify whether an article offered narratives about meanings, understandings and perceptions about wind farms, that is, *ways of knowing* especially with regard to *practices* (ways of doing) regarding location of wind farms, for example, community engagement practices.

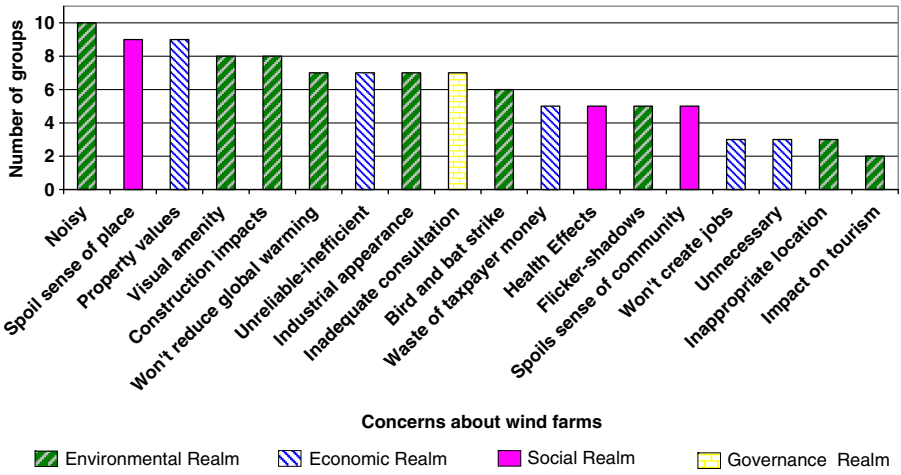

Fig. 2 Landscape guardian narratives about wind farms. Source: Hindmarsh (2009: 27)

In measuring the underpinning social behavioural rationalities, Fig. 1 shows that social concerns comprised 'spoils sense of place' (50% of narratives); 'spoils sense of community' (25%), and health effects (25%). Putting aside health effects (with stress noise impacts), and 'spoils sense of community' (which typically meant location of wind farms 'dividing' a community; see Hindmarsh 2009 for more detail; also Pretty et al. 2003; Devine-Wright 2009), what did 'spoils sense of place' mean as the prominent social concern? First, in building upon earlier discussion, 'sense of place' refers variously to place identify, place attachment, belonging to place, fulfilment of needs by place, perceptions of local distinctiveness and quality, and/or individual's connectedness with place (Hidalgo and Hernandez 2001; Pretty et al. 2003; Devine-Wright 2009).

For Australian landscape guardian group members, three key sub-narratives comprise 'spoils sense of place': 'outsiders' (62%), 'environmental identity' (23%), and 'destruction of our way of way' (15%; Hindmarsh 2009: 28). In the foremost narrative, guardian groups defend their way of life against 'outsiders', who constitute wind farm developers, distant government bureaucrats and overseas businesses like Acciona. These concerns link to the profit motive of the 'outsiders', which is seen to prevent 'outsiders' from objectively assessing wind farm impacts on the landscape and community. That also reflects 'discourses of disempowerment' of place-based local values and of distrust that Ellis et al. (2006) found characterises UK-affected communities. As a social issue, 'outsiders' connected to both 'environmental identity' and the governance issue of 'inadequate consultation, for example:

> The Western Plains…has been the home of many generations of human occupants…who have formed strong attachments to the landscape…We place the highest value on our landscapes and environment, and believe in the development of low impact renewable energy projects where the environmental damage is minimal or none and where there is real and informed community support.[16]

[16] Western Plains Landscape Guardians, see: www.savethewesternplains.org.au

That narrative, again, reflected UK discourses, here, of (visual) pollution; industrialisation and commercialisation of the environment; and 'sacrifice' for external electricity users (Ellis et al. 2006). Finally, like the UK discourses, there was a rebuttal from the Australian objectors that they were 'deniers' about the need for renewable energy to move to a low carbon economy. Instead, like UK communities, they were 'sceptical of "non-local forces" (state and business) coming in and trying to pull the wool over their eyes with PR stunts portrayed as consultations for example' (Ellis et al. 2006: 7). Finally, Australian landscape guardian groups felt their way of life was under threat:

> As well as the destruction of our landscape and wildlife we will suffer damage to our property values, our health and the quiet, convivial character of our neighbourhood. We need your help to prevent the destruction of our properties by an uncaring or ignorant minority.[17]

That minority was particularly seen as local landholders who allowed turbines to be placed on their land, thus reinforcing spoiled sense of community concerns. Such findings then support the appropriateness of collaborative community engagement rather than largely top-down inform-consult-involve participatory options, which Zografos and Martinez-Alier (2009: 1728) further stress in the international context have alienated local communities. That gives substance to the argument of Sullivan and Consideine (2010: 18) that: 'Whether we fully exploit wind's potential in Australia will depend on the limit of what's acceptable to local people, rather than what's technically possible.'

7 Conclusions

In returning to the primary question of this paper of whether current Australian governmental policy responses of community engagement are adequate for local communities facing wind farm development, it appears far more is needed to address this area satisfactorily in terms of legitimacy and fairness to ensure effective renewable energy transitions. A variety of evidence, both substantive and preliminary, supports that finding. Recognising that communities most affected by wind farms are locally (not regionally) place-based ones, with behavioural rationalities that reinforce the appropriateness of adopting collaborative community engagement, is a strong policy lesson of both Australian and European experiences.

Many European countries—particularly the UK, Germany, Denmark and the Netherlands—are now making significant moves to develop off-shore wind. This is not only to capture better wind speed and consistency, but aims to sidestep the social conflict surrounding onshore wind farms. The strategy is to 'site the turbines out to sea, out of sight and out of mind' (Babbage 2010). While a report by the Australian Bureau of Agricultural and Resource Economics (2010: 253) asserts that offshore wind is unlikely to be developed in the short term in Australia, the idea has already been mooted by pro-wind researchers (Messali and Diesendorf 2009).

[17] Residents against Turbines of Tooborac, see http://www.rats.org.au/ataglance.asp

But why persist when existing collaborative community engagement options already offer much promise to significantly mitigate social conflict around onshore wind farms? That question is well supported by a UK study on local attitudes regarding visual amenity and proposed wind farms. Jones and Eiser (2010: 3116) found that: 'it is clear that designing wind-projects and employing community engagement strategies that stand to limit both the anticipated and actual visual intrusion resulting from a proposal is essential', because 'as soon as development is anticipated to be "out of sight" it will likely be considered in largely general terms, and hence deemed relatively acceptable'. Such findings, however, caution that variations exist regarding location; and, of course, that many other issues exist to be considered. The main point these authors highlight is the important and constructive role that community can play in decision making (here, with regard to siting), which Jones and Eiser (ibid.) argue should also be collaborative,

> there is a fundamental difference between showing communities what development will take place within their locale…compared to allowing communities to show developers what kind and scale of development would be acceptable (consistent with more deliberative, bottom-up planning strategies).

Overall, the policy lessons, arguments and findings advanced in this paper challenge any perceived adequacy of the inform-consult-involve community engagement approaches for wind farms, which reflect Australian governmental policy responses so far. While perhaps representing a step in the right direction, the step negotiated appears too narrow. However, undermining even these rather basic levels of engagement is the NSW government's precinct and advisory committee approach. It suggests a regressive approach to community engagement, as a largely social acceptance outing to facilitate wind farm development informed by an 'education' programme that dismally reflects the widely criticised information deficit approach (Wynne 1993). That mistakenly assumes that negative attitudes to wind farms are based on ignorance and misunderstanding on the part of the public. Instead, this exercise to curry favour is more likely to alienate local communities and increase social conflict, as the EPHC working group on the draft national guidelines rather conservatively suggested: 'The Committee is not convinced that Renewable Energy Precincts or precinct Advisory Committees will substantially improve current wind farm consultation processes' (EPHC 2010: 170).

The findings also challenge any perceived adequacy in terms of the democratic legitimacy and fairness of policy formulation and development. For example, the formulation of EPHC draft national guidelines clearly represented a closed corporatist and elite-decision-making affair organised by an expert representative committee of governmental agencies responsible for wind farm development and planning. It farmed out formulation of community engagement methodology to a state-owned renewable energy developer that largely deferred to the limited best practice approaches of the wind energy industry. Participatory practices at the lower impact levels of the IAP2 spectrum, mainly at the inform-consult levels, were supported. Local place-based communities were excluded in such formulation.

Overall, an incremental shift is indicated from inform to inform–consult as the preferred community engagement approach of these policy responses, with some inclusion of the involve position. That encourages developers to stay comfortably

within the boundaries of the limited public involvement model. Effective renewable energy transitions in Australia then seem more at risk than ensured, compounded by a lack of legitimacy as instigated through narrow public inquiry and review processes and other top-down 'consultative' approaches. The latter include the NSW precinct and advisory committee initiative, and the Victorian government's reliance on developers to initiate appropriate community engagement mechanisms rather than encouraging (democratically representative) local councils to develop community engagement frameworks.[18]

Current governmental policy responses to the problem of social conflict and community contestation of wind farms thus appear more about empowering wind farm development than also effectively addressing the important issues raised by those directly vulnerable to the adverse impacts of wind farms. The argument here, which seems vindicated, is that better governance is posed by collaborative approaches that aim to understand local place-based community qualifications to wind farm location and development, informed by a good understanding of behavioural rationalities that underpin such qualifications. Improved problem framing and decision making concerning wind farm location, and thus development, is, in turn, posed. Coupled to the technical mapping of wind resources, a key policy lesson to realise such promise is then to undertake social mapping of community qualifications and boundaries for wind farm location.[19] Integrated social, economic, environmental and technical viability of wind farm location would then be in the offering to better inform effective renewable energy transitions.[20] More broadly, such complementary mapping well highlights both the complexities and benefits of negotiating expert/non-expert boundaries in contexts of legitimacy, fairness and sustainability regarding controversial technoscientific innovation.

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[18] As the federal Department of Innovation, Industry, Science and Research is now developing with regard to enabling technologies, such as nanotechnology and biotechnology.

[19] For example, http://www.unisa.edu.au/barbarahardy/research/Wind.asp

[20] Wolsink (2007) suggests interesting ideas for such a schema with his 'NIMBY tendency characterisations'. See also Ellis et al. (2009: 545–546).

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