

Challenging public engagement: participation, deliberation and power in energy policy design and implementation

Waikato Sustainability Symposium: Transforming Public Engagement on Controversial Science & Technology
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Citizen engagement in policymaking represents an increasingly popular mechanism for civic rejuvenation and policy innovation. Its application in many different policy fora from city budgeting, to housing and energy systems across various national contexts provides, in theory, space for the public to feel empowered, connected to new policy spaces and positions them to aid in design and implementation of more effective solutions to complex social and environmental problems. This engagement takes many different forms, such as: deliberative polling, citizen's assemblies, online referenda and even the creation of community-based ownership in key sectors. However, various forms of engagement are also accompanied by challenges of that can undermine their effectiveness and, ultimately, public confidence in government actors and processes. This short discussion paper outlines some of the key promises and challenges arising from research on citizen engagement in renewable energy policy design and implementation. It is by no means comprehensive in either its coverage of the relevant literature or the variety of energy policy innovations globally. Rather, my hope is that it provides a basis for more informed policy designs and discussions going forward.

Participation, Politics and Power

Political scientists and philosophers stretching back to the ancient Greeks have debated how different forms of participation shape the effectiveness, efficiency and legitimacy of governing. Questions of *who rules?* and *how?* are supplemented by the more normatively driven ones of *who should rule?* and *why?* These questions are no less vital today as a range of increasingly complex and interrelated political, economic and environmental policy challenges confront us. At issue is both the actors that are involved in decision-making as well as the instruments and tools used to implement policies. Indeed, instrument choice—whether through voluntary arrangements, market mechanisms or regulations—is far from a simply technical matter as it reveals a “theorization of the relationship between the governing and the governed.”¹ Many of the issues raised by a shift towards participatory and engaged policymaking reflect this point: that the policy practices reflect actors deeper commitments (or lack thereof) to citizen empowerment and deepened democracy.

On one side of the debate sits those advocating the construction of authoritative rules (policymaking) by political elites from executives, legislatures and the bureaucracy, usually in collaboration with economic and technical elites. This traditional model, via a concentration of power in relatively few expert and political actors was thought to be more efficient than larger and more diverse decision-making groups. It was also generally accepted that the general public would not be able (due to lack of education, for example, or class/gender/race based ‘inferiorities’) or willing (due to disinterest or time constraints) to participate in their own governance². As we will see below, there are serious challenges to many of these claims, but others persist, particularly those relating to the practicalities of deep public engagement.

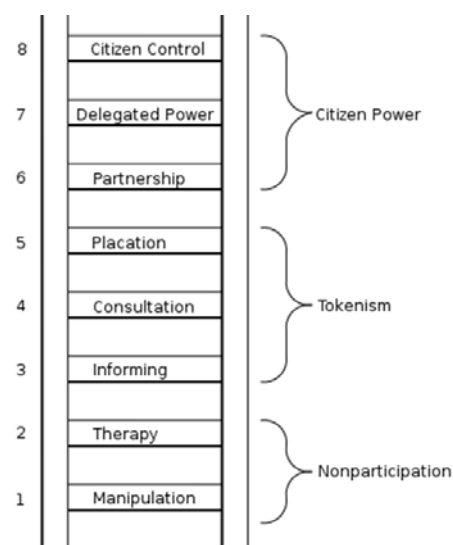
On the other side sit those advocating a ‘democratization’ of governance and policymaking to include broad public participation. There are a number of trends in recent years that have supported this ‘deliberative’ and a participatory turn in policymaking, particularly environmental policymaking³.

⁵. There both instrumental and normatively based arguments⁶. An argument in the former category challenges the ability of democratic governments to effectively steer through conventional policy tools, when the public is either distrustful of elites and governments or does not agree on the basic nature of the problem. On this front, scholars like Fischer⁷ and Salamon⁸ argue that the traditional policy tools like regulation and information provision are far less effective with complex, contested, and highly controversial problems. This has led many to call for more creative and inclusive solutions, including participatory exercises to lead to greater policy uptake and less resistance from social actors. Recent work in the field of renewable energy choices in England, for example, has found that people are more likely to reduce their consumption of electricity if the information to do so flows from within their social networks⁹. In the Netherlands, participation and reflexive policymaking has formed a foundation for their approach to adaptive and phased sustainability '*transitions management*^{10, 11}. In this sense, participation is not a good unto itself, but is a useful tool for state actors to reach their goals.

The normative case for more participatory policymaking rests on a broader claim that elite dominated policy fora are, essentially, less *democratic*. Widening avenues for public participation then, is part of a larger project of enhancing the depth and quality of a democracy toward increased empowerment. For example, Carole Pateman's¹² work on participation made the argument that it led to more empowered, educated and capable citizenry. Another strain within this thinking rests on the issue of democratic legitimacy. In the context of a rather widespread (and well documented) democratic decline in many countries, participatory exercises have become part of a project to enhance trust and faith in state actors and processes. States willing to facilitate public participation and, importantly, act on this input demonstrate a commitment to accountability that sets a foundation for our understanding of democratic state-forms. Following from Pateman and others, democratic renewal through participation then forms part of a mutually reinforcing process where more engagement leads to more informed and skilled citizenry, which leads to more representative policies, more trust in state actors, and so forth.

Participatory policymaking can take a wide range of forms. For example, in *deliberative polls* a random representative group of citizens is brought together to discuss and develop their thinking on a complex policy topic. Researchers and policymakers can use this information to understand how best to navigate policy tradeoffs and interpret often conflicting information from more simplistic public opinion polls. *Citizens assemblies* gather together random cross-sections of a public to discuss, debate and make recommendations on a particularly complex or controversial topic. In the case of the British Columbia Citizens' Assembly on Electoral Reform, the assembly's recommendations were then voted on in a provincial referendum. In *participatory budgeting* exercises, members of a territory or organization discuss, prioritize and allocate public funds. The most famous of these exercises is in Porto Alegre, Brazil, but the practice has spread to more than a thousand cities around the world. Participatory policy engagement can also include *citizen control* through direct ownership of assets and service provision. In this later case, exemplified by moves towards citizen and community ownership of food, energy and financial organizations, publics

Figure 1 Arnstein's Ladder (1969)



become direct stakeholders in sector governance as well as citizen-participants. Nobel prize-winner Elinor Ostrom's work on common pool resource governance illustrates how communities, via these institutions, can make and enforce rules (policies) for local environmental management¹³. Some of these participatory engagement methods will be discussed in more detail in the second section of this paper.

As interest in participatory exercises has increased, the meaning and purpose has also diversified, with many commenters distinguishing between 'meaningful' and 'empowering' participation and 'co-opting' or 'manipulative' participation. One of the earliest articulations of the range is represented by Arnstein's *ladder of participation*¹⁴. She differentiated between three broad categories of: non-participation, tokenism and citizen power. At the lowest level of the ladder sit engagements with the broader public that could be characterized as manipulation, informing or consulting. At the top sits citizen control, with delegated power beneath.

Archon Fung¹⁵ has expanded on and critiqued Arnstein's formulation in useful ways. One important point that he makes is that in the ladder, increasing participation is associated with 'better' outcomes. While this may be the case, it might not be the case across the board, and trying to understand where and when certain types of participatory designs might be counterproductive to particular aims—such as rapid-response decisionmaking—is important. For example, the issue of appropriateness of actors is often commonly raised over issues of scientific expertise (as with controversial knowledge claims in climate science), or in jurisdictions with deep and dangerous political cleavages. Fung then goes on¹⁵ to pose three questions that give analytical traction for understanding the different kinds of participation:

1. who participates?
2. how do they communicate and make decisions?
3. what is the connection between their conclusions and opinions on one hand and public policy and action on the other?

It is within Fung's question 3 that many current issues have arisen with the practice of participatory policymaking. Perhaps rather naively, we often assume that the ability for diverse groups and individuals to participate actually leads to meaningful participation in sectoral governance. Put another way, we may equate 'participation' with power, when empirically this is not the case, as relatively powerless participation is also a possible outcome. In discussions on 'networked' governance, for example, we also see reference to collaborative and open policymaking, presenting one with a picture of open and responsive government. In this arrangement the state plays at least a refereeing role in key strategic sectors like energy policymaking but that non-state actors play a much larger role in the design and delivery of services. Criticisms of this perspective have emerged after empirical studies suggesting that networked governance remains rather elite based, and that governments have long included sectoral elite actors in their inner-circle of policymaking. In the field of renewable energy, for example, one of the issues that emerged was that the market restructuring that took place in New Zealand, Australia, and a range of other countries in the 1990s opened the sector in principle to a wide range of actors but in practice these spaces were dominated by a few key agents and agencies. This did not, in many ways, represent a 'democratization' of the sector. As such the assumption that state-retreats from 'command-and control' policymaking lead to increased participation (in a normatively positive sense) is problematic insofar as for participation to matter it requires resources, will, capacities and political power.

Our discussion so far has raised a number of important challenges to those interested in policymaking. First, there is certainly a clear trend towards—at the very least talking about—public engagement, participation and even in some cases deliberation in policy design and implementation. Second, and perhaps obviously, there is no *one way* to participate. The actors, forums, and degrees of authoritative power differ a great deal. Third, there is a great deal more complexity to the practice of participatory design, particularly over the issue of outcomes. The next section of this discussion will turn to attempts at participatory policy interventions in renewable electricity.

Public Engagement in Renewable Energy Policy

Modern energy systems include the extraction and processing of a range of fuels, both renewable and non-renewable, into transport, heat and power inputs for industrial and domestic use. The authoritative signals that drive which fuels are used, how they are distributed, and their end uses, depend heavily on policy choices and the actors that set and implement them. Energy policy is one clear arena where some of the participatory experiments described above have been put into practice. The sector has historically been highly regulated, elite based and ‘closed’ due to both the infrastructural intensity and socio-economic importance. However, public pressure to transition away from environmentally damaging energy sources have gained traction in recent decades, particularly since many states have been slow to move off high-carbon and energy intensive economic activities.

Identifying and assessing the policy mechanisms that build popular support for greener transitions is important given that political challenges—and not technological ones—explain the persistent failure globally to address complex environmental problems like climate change¹⁶. Indeed, many new ‘green’ technologies are controversial, both with established industrial interests and with ratepayers and rural communities where most projects are sited. At issue is not just the particular policy tools for new renewables, but also much deeper debates including: the purpose and design of energy systems, the veracity of scientific claims, and the distribution of environmental, social and economic impacts of new project development¹⁷. Drawing from the literatures discussed in section one, some states have experimented with innovative forms of citizen engagement that attempt to involve publics in deliberation on and design of energy policies and practices.¹⁸ The sections below briefly outline three of these experiments: 1) Deliberative polling in Nova Scotia, 2) Danish community energy policies and 3) Community engagement in Ontario’s Green Energy and Economy Act (2009).

Nova Scotia Power Deliberative Polling

In the Canadian province of Nova Scotia in 2004 the electricity utility, *Nova Scotia Power*, held the country’s first deliberative poll. The private integrated utility was tasked with increasing its share of renewable power in the Governments’ Renewable Energy Standards policy. Nova Scotia Power generates the majority of its electricity from coal plants (59% in 2012, down from nearly 80% in 2006¹⁹), and was seeking a way to both a) understand public attitudes about environment/economy tradeoffs and b) gather information on possible acceptable responses. Johnson examines the event and its impact,²⁰ outlining that the deliberative poll took place during a two day Customer Energy Forum. The 135 participants of the forum were drawn from a representative sample of the population. Prior to the event they were provided with background information and materials prepared by an advisory committee representing a range of stakeholders and interests in the power sector, including those without a direct financial stake (environmental NGOs and charities, for example). Participants were administered pre-deliberation and post-deliberation surveys to trace the changes in overall attitudes. During the forum, they participated in moderated small group discussions and panel discussions with

experts, ultimately supporting a strong shift toward more renewable electricity generation and demand side management (DSM), despite projected cost increases.

Many in Johnson's study found the event to be a success: the public had an opportunity to both learn about and shape utility energy priorities, and the utility gained confidence that bolder moves would be met with support if the population was able to engage with the issues. However, a number of observers (and some participants) raised questions about the ultimate impact of the forum beyond an exercise in public relations. While it was certainly more inclusive in Arnstein's scale than simple information provision, there was nothing binding about the forum's conclusions and some argued that it was the tightening of provincial renewable standards, rather than any participatory public engagement at the forum that drove changes to the utility's electricity mix.

Danish Community Energy

A rather different experiment in engaging the public in energy systems comes from Denmark and involves community ownership and service provision. While the Danes are not alone in this approach, they do represent one of the most developed and wide-ranging application of it, in both provision of local wind turbine ownership, and development of district heating systems. The general argument advanced for this form of engagement is that citizen ownership is a useful mechanism for a) citizen education on the complexities of energy projects, b) creating a financial stake in new renewable and efficiency projects, and c) a move towards more reflexivity design and implementation²¹. Support for renewable energy transitions is thus enhanced through the creation of a more informed, engaged and active citizens in the particular policy arena. An important difference between this approach and that of NSPower is that the engagement of new ideas is not part of a one-off process. Rather, the intervention in policy development relates more directly to a decentralization of service delivery, and creation of participant groups empowered with increased power and control over projects.

These broadened features of Danish energy policy experiments are often credited for that country's comparatively large uptake of wind turbines and district energy systems. The latest figures from the Danish Energy Agency from 2010 illustrate the important role that renewable energy sources and efficiency technologies in Denmark. Renewables (solar, wind, hydro and biomass) make up nearly 41 percent of total electricity consumption and 23 percent of total energy consumption. Moreover wind turbines account for 29 percent of total electricity generation capacity, and CHP production makes up 76 percent of total district heating²².

In Denmark community wind turbine ownership emerged alongside the development of combined heat and power and district heating¹ as part of a larger move to improve economic and environmental outcomes in the country following the 1970s energy crisis. One example of these innovative Danish projects is the Middlegrunden offshore windfarm in Copenhagen. When it was built in 2000, it was the world's largest offshore wind development at 40 megawatts (MW). What makes it particularly interesting as well is that the project is a 50-50 partnership between a municipal utility (Københavns Energi) and the Middelgrundens Vindmøllelaug co-operative. The co-operative has 10,000 members

¹ Combined heat and power is a system where the heat emitted from electricity generation is captured and used, rather than wasted. This heat can be used by the generation facility for its own purposes or be integrated within a larger area as part of a 'district heating' system, where centrally produced heat (geothermal, solar, heatpumps, thermal power generation) is circulated through a local area to be used for space and water heating. This system typically results in significantly reduced greenhouse gas emissions, cost savings and resource consumption when compared with business as usual scenarios.

with investments ranged from 500 euro to 3000 euro. While the vast majority (85%) of members are individual residents of the city, others are local teachers unions and foundations²³. One of the features encouraging projects like Middlegrunden was that the Danish state made investment income for such projects tax-free. Co-operatives also developed and operated district heating systems. According to the International Energy Agency, "... large power plants were again organized as cooperatives, with electricity distributors as owners. This form of organization, without a traditional profit motive, offered little resistance to government intervention in the sectors for electricity and heat."²⁴

Academic research on wind turbine development emphasizes the importance of local ownership in widespread social acceptability of the technology. For example, Walker et.al.²⁵ argue that the initial 'dash for wind' that occurred in the UK prompted local backlash and 'NIMBYism' (Not In My Back Yard-ism). Others, including myself, have echoed this in other national jurisdictions^{26, 27}. The explanations given for this opposition, despite general public support for renewables, rested on the lack of real involvement of the local community in such project. In the case of Middlegrunden, the project initiators, the Copenhagen Environment and Energy Office (CEEEO) detail²⁸ how the processes of local buy-in, feedback and engagement led to a better designed project. This included a turbine layout that is more visually appealing, which was helped reduce public opposition since the windfarm is visible from the city (including a popular recreation area/beach). For Sørensen, the Middlegrunden project illustrates that community engagement and ownership may lead to: "mitigation of general protests, blocking or delaying projects, and increase future confidence, acceptance and support in relation to the coming offshore wind farms in Europe"²⁹.

Ontario Communities and the Green Energy Act (2009)

The third example of community engagement in the energy sector is that of the interactive role between policy formation and community ownership in the case of Ontario's Green Energy and Economy Act (GEEA) in 2009. Following Danish innovations in community ownership and successes in improving energy efficiencies and installing new turbines, in the 1990s environmental advocates in the province of Ontario began a campaign to increase renewable energy and phase out coal (and nuclear). A key part of this plan was to organize a tour of German and Danish renewable energy projects for key policymakers, and bring the community-ownership model to the province²⁶. Cross-jurisdictional policy-learning emerged from this tour, as well as subsequent meetings with renewables advocates like Paul Gipe (wind-works, World Wind Energy Association) and David Suzuki (David Suzuki Foundation)³⁰. This pressure from grassroots actors, together with innovative 'best practices, in Europe, resulted in the adoption of North America's first Feed-in-tariff (FIT). From the outset it provided financial incentives for community ownership of new electricity projects on the understanding that community ownership formed a key part to building the social acceptance of the technology³¹.

The GEEA was heavily informed by community actors, together with lobbyists from green tech industries, and a provincial government increasingly reminded of the health costs of pollution from coal-plants. While this 'bottom' up pressure for the policy existed, it has not escaped controversy. First, the regulations for the feed-in-tariff program have undergone a number annual reviews since their inception, reducing the rates paid for various project sizes and energy sources. While these reviews are a central part of feed-in tariff designs worldwide, in Ontario there was significant pressure put on the government in terms of what were deemed 'exorbitant' incentives (initially, up to 80 cents a kilowatt hour for solar). Secondly, while the extra payments for community and first-nations owned power helped to stimulate a community power sector in the province, loose definitions of 'community', lack of awareness of non-profit and co-operative models and

underdeveloped institutional support systems frustrated community actors. Some of these actors worked for more than 10 years on volunteer time, money and energy with no project to show at the end of the day. The roadblocks they encountered then led to a renewed engagement with and education of policymakers, energy companies and bureaucrats as to the role and potential of local project engagement. For some, the efforts resulted in the construction of locally owned turbines in key locales (such as the Windshare turbine at Toronto's Exhibition Place), a burgeoning community solar network, and a strengthening group of supportive funding and networking organizations^{26, 32}.

In 2013 Ontario completed its phase out of coal generation facilities, becoming the first jurisdiction in North America to do so. New renewable energy technologies play a large and increasing role in the provinces grid, with a relatively diverse range of actors which includes a small, albeit growing, share for communities. With that said, a number of challenges that have emerged from the Ontario case, including political backlash for the Liberal government in power, international trade challenges (to local procurement requirements), and infrastructural limitations (grid capacity). A strong and vocal 'anti-wind' lobby has emerged in Ontario, as it has in the UK, Australia, and other jurisdictions. While some opponents cite health impacts of the turbines, others focus on the economic transfers from public agencies to private energy companies in times of economic hardship more broadly. Barry, Ellis and Robinson have examined the role of NIMBYs in the UK context and found that the basis for some of the backlash was a lack of trust in government, regulatory processes and windfarm developers: "Those presenting the anti-wind energy position are keen not to be regarded as motivated by self-interest, but are skeptical of "non-local forces" (state and business) coming in and trying to pull the wool over their eyes with what they see as "PR stunts" portrayed as consultations."³³ While supports for community ownership can certainly play a role in shifting a portion of the economic gains from new development to a broader group, the community sectors marginal share in the larger electricity market limits its potential to make the technology broadly acceptable on economic grounds. Indeed, tensions have emerged between 'community' investors in projects and other (non-participant) residents. So, this brings us back to the challenging question of the form and intent of participatory engagement—is it 'consultation', 'manipulation' or mutual collaborative co-governance? The answer is far from simple.

Conclusion

The three brief cases illustrated above are far from exhaustive. Building from our earlier discussion of the complexity within participatory forms of policymaking and citizen engagement three key lessons are clear. First, there is no one way to design participatory mechanisms. Their design, following Fung, can enhance and broaden democratic practices based on the actors, but also based on the nature and quality of dialogues held with various publics. Project ownership is one particularly interesting type of participation that is accompanied by, in some instances, fairly powerful educative ties and supporting incentives. However, it can also be alienating for other local groups. Projects like deliberative polling, on the other hand, present challenges in that actors may feel cheated (and that their time was wasted) if the co-ordinating bodies are not bound in any way by the results of deliberations.

Second, if one side of this coin is ensuring that practices aren't cursory or shallow, another is not to underestimate the amount of time, energy and political contestation that emerges when diverse groups interests are taken seriously. A central claim in engaging publics is that participation can help to revitalize civic practices and spaces, generating more resilient and innovative governance mechanisms. As such feelings of manipulation, wasted time and 'business as usual' are problematic and can, counterproductively, lead to deepened cynicism.

Finally, engaging diverse publics can be problematic based on limitations of participant capacity as well as institutional myopia within established sectoral networks. The potential for engagement to incorporate marginalized and non-traditional actors is deeply dependent on provision of discursive and participatory spaces backed up by funds. This requires taking the particular constraints on these populations seriously, constraints that the more traditional elite actors are unlikely to share. These include lack of time-off from paid employment, caregiving responsibilities, and so forth. Similarly, just as one person's 'ability to participate' is constrained in specific ways, so too are the degrees of openness to different forms of engagement from sector to sector and jurisdiction to jurisdiction. For example, one of the challenges that emerges in the practice of these engagements, particularly in historically closed elite-dominated policy spaces, like energy, is that new engagements run in tandem beneath a deeper network of powerful actors and interests. The specific configuration of these actors and their relationship in a given historical context is subject to change. As such, innovation in one jurisdiction (Denmark, for example) cannot easily, or uncritically, be replicated in others.

Each of these points is aimed at highlighting the complexities of participatory engagement. There are certainly strong arguments, both instrumental and normative, for increasing the depth of citizen engagement with policy design and implementation. The practice of it, however, clearly needs to include more than use of the buzzword to go beyond an exercise in marketing.

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